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ANALYSIS OF REGIONAL LEADING SECTOR DKI JAKARTA PROVINCE USING KLASSEN TYPOLOGY AND LOCATION QUOTIENT (LQ) IN 2017-2019

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ABSTRACT	
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Keywords: Location Quotient;
Klassen Typology; DKI Jakarta;
Economic Growth; GRDP

This study aims to determine the pattern and structure of economic growth and the leading sectors of each Regency/City in DKI Jakarta Province. The data used is secondary data from 2017 – 2019. The analysis technique used is Klassen Typology and Location Quotient (LQ). The results showed that five cities in DKI Jakarta were categorised as regions with high levels of income and growth, while Seribu Island was categorised as low. For LQ analysis, three regions dominate in the agriculture, forestry, and fisheries sectors, and for other regions, they dominate in other sectors.



Introduction

Regional income is defined as the production value of goods and services created in an economy within a region during one year. In Indonesia, the amount of regional income is calculated by Gross Regional Domestik Product or Net Regional Domestik Product (Asha & Juliannisa, 2023).

The difference between the net concept and the gross concept is that the gross concept uses the depreciation component, while the net concept does not use the depreciation component (BPS, 2020). Generally, the GRDP is used as the basis for measurement in each region. However, it can also use PDRN in its measurement.

Knowing the value of regional income means information about the ability to produce and purchase power in a region (Bahasaoan, Rahmat, BTahawa, Tuty, & Lenas, 2022). Information can also be obtained about the economy's structure in the region, which helps make decisions for interested parties. For this reason, regional income is significant in matters of common welfare. There is a need for precise measurements and accountability for the numbers listed on regional income to void errors (Hapsari, Nurfarhana, Renaldi, Arifin, & Sumaryoto, 2023).

From the regional income, the economic growth rate or GRDP growth rate can also be known to know the development of the ability of the population of an area to prosper. This growth can also be used to measure government achievements in efforts to develop the economy. When regional economic growth has a positive and stable trend, it indicates good conditions, and vice versa. If economic growth experiences a downward and unstable trend, the region's economy is unhealthy (Sinaga, Zalukhu, Hutauruk, & Collyn, 2023).

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In this research, the area that will be the target of analysis is DKI Jakarta Province because the province contributes the most significant income to Indonesia, especially on the island of Java, with an amount of Rp. 1,838,500,708.45 million rupiah in 2019 using constant price GRDP. Apart from being seen for its more significant income compared to other regions, the population factor is also one of the reasons. In 2019, the population of DKI Jakarta was 10.55 million people (BPS DKI Jakarta Province, 2020). The contribution of GRDP in each Regency/City has differences between regions with one another (Prabowo, Ananda, & Bintoro, 2023).

Comparing the income of each Regency/City in this province can also determine the various sectors that are the foundation of DKI Jakarta's regional income. Knowing the superior sectors is undoubtedly very helpful for the DKI Jakarta government in making more informed decisions; investors who want to invest and other interested partners can undoubtedly advance the regional economy. For this reason, research on the analysis of income and regional economic growth in DKI Jakarta is needed, considering that this province is one of the provinces of the national economy.

Research Methods

This research uses the Klassen typology and Location Quotient (LQ) analysis methods for the research objectives (Widajantie & Wijaya, 2023). The population of this research is the DKI Jakarta Province area, and the research sample includes six regencies/cities in DKI Jakarta Province from 2015 to 2019. This study's selection of data collection techniques uses literature study techniques, time series, and crosscrosssectional.

Klassen Typology

The Klassen Typology analysis method is used to determine the description of the pattern and structure of economic growth in each region (Nihayah, Mafruhah, & Hakim, 2023). We use the matrix and calculation formula of the Klassen Typology analysis method as follows:

Table 1 Klassen Typology Matrix Average Growth Yi < YYi > YRate **Growth Rate** High growth and high High growth but low income ri > rincome Low growth and low income High income but low ri < rgrowth

Location Quotient (LQ)

The Location Quotient (LQ) analysis method is an analytical technique that can be used to see the level of specialisation of sectors in a region's economy by looking at and using a base and non-base sector approach to the region. In this method, we use the following formula:

$$LQ = \frac{\frac{Y_S}{PDRBs}}{\frac{Y_B}{PDRBp}}...(1)$$

Where Ys = Sector income of a particular regency/city; GRDPs = Gross Regional Domestik Income of the regency/city; Yp = Sector income of a particular province; and GRDPp = Gross Regional Domestik Income of the province. The following are the results of the Location Quotient method calculation. If the LQ value > 1, that sector is classified as a primary sector; if the LQ value < 1, that sector is classified as a non-basic sector. Formulation comparison of base sectors:

$$LQ > 1 = \frac{X}{N} \times 100\%$$
(2)

regencies/cities.

Results and Discussion

Analysis of Economic Structure Using Production Methods

Table 2 **Economic Structure of Central Jakarta City**

Field of	Central Jakarta (Millions)						
Business	2017	2018	2019				
A	IDR 30,602	IDR 30,707	IDR 30, 830				
С	IDR 3,642,383	IDR 4,013,462	IDR 4,113,837				
D	IDR 1,055,892	IDR 1,313,125	IDR 1,510,946				
Е	IDR 65,345	IDR 71,651	IDR 73,752				
F	IDR 39,878,677	IDR 41,246,816	IDR 41,662,646				
G	IDR 62,551,103	IDR 66,466,279	IDR 70,099,502				
H	IDR 7,522,241	IDR 8,289,653	IDR 9,108,863				
I	IDR 23,088,861	IDR 24,175,580	IDR 25,790,374				
J	IDR 38,016,997	IDR 41,598,703	IDR 45,892,384				
K	IDR 96,599,462	IDR 99,250,363	IDR 107,374,341				
L	IDR 25,075,280	IDR 26,184,124	IDR 27,474,658				
M	IDR 35,708,770	IDR 38,860,404	IDR 42,854,639				
N	IDR 26,808,975	IDR 29,608,750	IDR 30,708,551				
O	IDR 20,170,781	IDR 21,391,982	IDR 22,576,540				
P	IDR 6,262,233	IDR 6,660,273	IDR 7,110,427				
Q	IDR 13,997,294	IDR 15,162,722	IDR 16,438,094				
R	IDR 400,474,896	IDR 424,324,594	IDR 452,820,384				

Based on Table 2, GRDP data on business fields, Central Jakarta has a service industry base, especially finance and insurance, wholesale and retail trade, construction, and information and communication services. So, the economy of Central Jakarta is service-based, especially in finance and insurance. Therefore, it needs to be supported by an exemplary telecommunications network (Subhi & Al Azkiya, 2022).

Table 3
Economic Structure of West Jakarta City

	Decinomic Structure of West Guillaria City						
Field of		West Jakarta (Millions)					
Business	2017 2018 2019						
A	IDR 231,066	IDR 231,308	IDR 231,446				
С	IDR 16,627,437	IDR 17,716,678	IDR 17,340,281				
D	IDR 607,231	IDR 724,886	IDR 815,148				
Е	IDR 139,726	IDR 149,664	IDR 153,709				
F	IDR 43,578,376	IDR 45,016,617	IDR 45,758,489				
G	IDR 48,591,433	IDR 51,559,078	IDR 54,323,982				
Н	IDR 12,277,984	IDR 13,452,068	IDR 14,737,293				
I	IDR 15,267,899	IDR 16,077,489	IDR 17,273,519				
J	IDR 55,566,032	IDR 60,909,324	IDR 67,993,078				
K	IDR 19,627,978	IDR 60,909,324	IDR 21,756,115				
L	IDR 19,702,634	IDR 20,551,225	IDR 21,572,244				
M	IDR 17,883,944	IDR 19,360,259	IDR 21,527,832				
N	IDR 3,369,913	IDR 3,708,754	IDR 3,842,311				
O	IDR 14,146,814	IDR 14,973,323	IDR 15,793,324				
P	IDR 5,125,523	IDR 5,458,056	IDR 5,831,416				
Q	IDR 8,826,537	IDR 9,557,148	IDR 10,406,953				
R	IDR 281,570,527	IDR 340,355,201	IDR 319,357,140				

Based on Table 3, GDRP data on business fields, West Jakarta has an information and telecommunications industry base. The next leading sector is the wholesale trade and repair sector. The telecommunications, information, and trade sectors continue to grow yearly in line with their contribution to DKI Jakarta's GRDP. Other leading sectors in this city are the construction, financial services, insurance, and real estate sectors. It can be concluded that the economy of West Jakarta City is service-based, especially telecommunications and infrastructure. Therefore, it needs to be supported by good spatial governance and human resource management to meet labour needs in the region.

Table 4
Economic Structure of East Jakarta City

Field of		East Jakarta (Millions)						
Business	2017	2017 2018						
A	IDR 257,893	IDR 257,720	IDR 257,895					
С	IDR 81,728,028	IDR 85,368,120	IDR 85,616,015					
D	IDR 1,347,530	IDR 1,679,549	IDR 1,915,689					
E	IDR 177,284	IDR 190,773	IDR 198,785					
F	IDR 33,179,844	IDR 34,460,964	IDR 35,868,042					
G	IDR 44,310,337	IDR 47,312,364	IDR 50,216,952					
Н	IDR 16,824,435	IDR 18,496,234	IDR 19,507,450					
I	IDR 13,183,033	IDR 14,006,037	IDR 15,224,286					
J	IDR 17,461,770	IDR 19,103,358	IDR 21,397,895					
K	IDR 4,744,221	IDR 4,878,187	IDR 5,267,214					
L	IDR 14,755,623	IDR 15,491,290	IDR 16,276,347					
M	IDR 14,585,281	IDR 15,875,077	IDR 17,786,614					

N	IDR 8,413,027	IDR 9,259,026	IDR 9,645,124
О	IDR 17,879,951	IDR 19,019.686	IDR 20,208,885
P	IDR 4,711,263	IDR 5,018,752	IDR 5,376,743
Q	IDR 7,803,612	IDR 8,458,558	IDR 9,280,993
R	IDR 281,363,132	IDR 298,875,695	IDR 314,044,929

Based on Table 4 of GDRP data on the business field, East Jakarta is a city based on the manufacturing industry. The following leading sectors in the city are the wholesale trade and construction sectors, followed by the information and telecommunications and education services sectors. It can be concluded that the economy of East Jakarta City is a processing industrial area. Therefore, it is necessary to have an industrial area and policies that facilitate industrial activities and environmental management.

Table 5
Economic Structure of South Jakarta City

	Deonomic be	detaile of Bouth bunuit	a city						
Field of		South Jakarta (Millions)							
Business	2017	2017 2018 2019							
A	IDR 245,280	IDR 245,104	IDR 244,932						
С	IDR 5,722,137	IDR 5,917,063	IDR 6,289,925						
D	IDR 417,863	IDR 474,808	IDR 518,103						
E	IDR 113,497	IDR 124,699	IDR 128,320						
F	IDR 47,640,521	IDR 49,469,917	IDR 50,025,116						
G	IDR 56,006,968	IDR 59,166,702	IDR 62,249,072						
Н	IDR 6,953,538	IDR 7,647,873	IDR 8,341,051						
I	IDR 16,275,979	IDR 17,243,922	IDR 18,511,256						
J	IDR 53,582,620	IDR 59,097,498	IDR 65,673,611						
K	IDR 51,845,233	IDR 53,288,157	IDR 57,638,993						
L	IDR 30,390,222	IDR 31,873,265	IDR 33,375,914						
M	IDR 40,371,968	IDR 43,526,132	IDR 48,213,206						
N	IDR 19,131,602	IDR 21,098,331	IDR 21,821,578						
О	IDR 14,753,046	IDR 15,681,013	IDR 16,532,836						
P	IDR 7,075,385	IDR 7,562,879	IDR 8,062,201						
Q	IDR 20,457,648	IDR 22,202,685	IDR 24,120,114						
R	IDR 370,983,507	IDR 394,620,048	IDR 421,476,228						

Based on Table 5 of GRDP data on business fields, South Jakarta is a city based on the trade sector. The second leading sector in this city is the financial services and insurance industry. Another dominant sector is the information and telecommunication sector.

Table 6
Economic Structure of North Jakarta City

Field of	North Jakarta (Millions)							
Business	2017	2018	2019					
A	IDR 402,578	IDR 404,685	IDR 408,013					
С	IDR 102,633,957	IDR 109,459,144	IDR 107,345,873					
D	IDR 892,862	IDR 982,610	IDR 1,065,584					
Е	IDR 190,683	IDR 204,943	IDR 212,792					
F	IDR 47,360,637	IDR 49,443,517	IDR 51,905,374					
G	IDR 49,671,781	IDR 52,739,297	IDR 55,791,600					
Н	IDR 12,775,777	IDR 13,546,175	IDR 14,820,277					
I	IDR 13,517,027	IDR 14,299,344	IDR 15,471,321					
J	IDR 7,170,038	IDR 7,963,887	IDR 8,944,016					
K	IDR 4,974,051	IDR 5,119,267	IDR 5,571,214					
L	IDR 16,786,999	IDR 17,558,729	IDR 18,487,708					
M	IDR 18,132,613	IDR 19,631,071	IDR 22,060,583					
N	IDR 3,928,092	IDR 4,335,423	IDR 4,500,391					
О	IDR 9,881,363	IDR 10,496,928	IDR 11,153,489					
P	IDR 3,823,388	IDR 4,105,442	IDR 4,399,790					
Q	IDR 9,637,459	IDR 10,488,166	IDR 11,521,752					
R	IDR 301,779,305	IDR 320,778,628	IDR 333,659,691					

Based on Table 6 GRDP data on business fields, North Jakarta is a city based on the manufacturing sector. Moreover, the next leading sector in this city is the trade sector. This city's construction sector is also essential, followed by the real estate and corporate services sector. It can be concluded that the economic structure of North Jakarta is a processing industry and trade area. Therefore, facilities and infrastructure are needed to support these business activities and not damage the environment.

Table 7
Economic Structure of Seribu Island Regency

Field of	Seribu Island (Millions)								
Business	2017	2019							
A	IDR 233,954	IDR 236,964	IDR 247,335						
В	IDR 2,916,306	IDR 2,939,925	IDR 2,859,428						
С	IDR 122,119	IDR 130,049	IDR 143,841						
D	IDR 1,180	IDR 1,250	IDR 1,337						
E	IDR 1,465	IDR 1,598	IDR 1,688						
F	IDR 82,899	IDR 85,684	IDR 93,098						
G	IDR 156,120	IDR 166,808	IDR 181,893						
H	IDR 13,231	IDR 14,076	IDR 15,383						
I	IDR 119,100	IDR 124,046	IDR 135,035						
J	IDR 29,727	IDR 32,427	IDR 35,423						
K	IDR 9,686	IDR 9,793	IDR 11,302						
L	IDR 9,285	IDR 9,731	IDR 10,224						
M	IDR 14,413	IDR 15,469	IDR 16,541						
N	IDR 43,290	IDR 47,916	IDR 49,693						
О	IDR 22,803	IDR 24,174	IDR 25,818						
P	IDR 48,256	IDR 51,928	IDR 56,925						
Q	IDR 39,915	IDR 42,851	IDR 48,123						
R	IDR 3,863,749	IDR 3,934,689	IDR 3,933,087						

Seribu Island is the only administrative area in the form of a regency in DKI Jakarta Province. Based on Table 7 of GRDP data on business fields, the Seribu Islands is an area with sector-based mining and quarrying. This sector only exists in the Seribu Islands and is the only mining and quarrying sector that contributes to the Provincial GRDP in the mining sector. Other sectors that have become the leading sectors in the Seribu Islands are fisheries, agriculture, and forestry. There are also other leading sectors in the Seribu Islands, namely the trade, manufacturing, accommodation, and food services sectors. Judging from the dominant economic structure in Seribu Islands sis extractive economic activity, regulations are needed to prevent exploitation that impacts natural damage.

GRDP contribution

Based on DKI Jakarta GRDP data on the business field, it can be seen that five leading sectors play a role in accelerating the economic growth of DKI Jakarta Province, namely the wholesale and retail trade sector, construction sector, manufacturing industry, financial services and insurance sector, and information and communication sector, where the trade sector is the leading sector in DKI Jakarta. Each city and district has its leading sector to contribute to DKI Jakarta's economic growth (Yunita, Dewitasari, & Riadi, 2021). The following is a table of the contribution of each region to the leading sector in DKI Jakarta in 2017-2019.

Table 8
Contribution of Each Region to the Leading Sector in DKI Jakarta in 2017

Sect			City and R	egency			DKI
or	Central Jakarta	North Jakarta	South Jakarta	West Jakarta	East Jaka rta	Seribu Islands	Jakarta
G	IDR 62, 551,103	IDR 49, 671,781	IDR 56, 006,968	IDR 48, 591,433	IDR 44, 310, 337	IDR 156, 120	IDR 259,765,2 81
F	IDR 39,878, 677	IDR 47,360, 637	IDR 47,640, 521	IDR 43,578, 376	IDR 33,1 79, 844	IDR 82, 899	IDR 208,861, 695
С	IDR 3,642, 838	IDR 102,633,9 57	IDR 5,722, 137	IDR 16,627, 437	IDR 81,7 28, 028	IDR 122, 119	IDR 207,917, 779
K	IDR 96,599, 462	IDR 4,974, 051	51,845, 233	IDR 19,627, 978	IDR 4,74 4, 221	IDR 9,686	IDR 178,831, 057
J	IDR 38,016, 997	IDR 7,170, 038	IDR 53,582, 620	IDR 55,566, 032	IDR 17,4 61, 770	IDR 29, 727	IDR 172,427, 806

Based on the table above, it can be seen that the city of Central Jakarta dramatically contributes to the trade sector and the financial and insurance services sector. Then, the construction sector is still the same as the previous year; namely, the city of South Jakarta is also a high contributor to this sector, and South Jakarta is also the most significant contributor in the information and telecommunications sector in 2017. The city of North Jakarta dramatically contributes to the processing industrial sector.

Table 9
Contribution of Each Region to the Leading Sector in DKI Jakarta in 2018

Sector		City and Regency						
	Central	North	South	West	East	Seribu	Jakarta	
	Jakarta	Jakarta	Jakarta	Jakarta	Jakarta	Islands		
G	IDR	IDR	IDR	IDR	IDR	IDR	IDR	
	66,466,	52,739,	59,166,	51,559,	47,312,	166,	276,064,	
	279	297	702	078	364	808	329	
F	IDR	IDR	IDR	IDR	IDR	IDR 85,	IDR	
	41,246,	49,443,	49,469,	45,016,	34,460,	684	215,896,	
	816	517	917	617	964		011	
С	IDR	IDR	IDR	IDR	IDR	IDR	IDR	
	4,013,	109,459,	5,197,	17,716,	85,368,	130,	219,717,	
	462	144	063	678	120	049	892	

K	IDR	IDR	IDR	IDR	IDR	IDR	IDR
	99,250,	5,119,	53,288,	60,909,	4,878,	9,793	183,724,
	363	267	157	324	187		901
J	IDR	IDR	IDR	IDR	IDR	IDR 32,	IDR
	41,598,	7,963,	59,097,	50,318,	19,103,	427	189,064,
	703	887	498	230	358		024

Based on the table above, it can be seen that the city of Central Jakarta still contributes significantly to the trade sector and the financial and insurance services sector as in previous years. Then, the construction sector is still the same as the previous year; namely, the city of South Jakarta is also a high contributor to this sector and the information and communication sector. The city of North Jakarta has contributed significantly to the processing industry sector as in previous years.

Table 10 Contribution of Each Region to The Leading Sector in DKI Jakarta in 2019

Secto r		City and Regency					DKI Jakarta
•	Central	North	South	West	East	Serib	Jakai ta
	Jakarta	Jakarta	Jakarta	Jakarta	Jakarta	u	
						Island	
						S	
G	IDR	IDR	IDR	IDR	IDR	IDR	IDR
	70,099,	55,791,	62,249,0	54,323,9	50,216,9	181,	291,555,
	502	600	72	82	52	893	224
F	IDR	IDR	IDR	IDR	IDR	IDR	IDR
	41,662,	51,905,	50,025,1	45,758,4	35,868,0	93,	219,737,
	646	374	16	89	42	098	366
C	IDR	IDR	IDR	IDR	IDR	IDR	IDR
	4,113,	107,345,8	6,289,	17,340,2	85,616,0	143,	217,046,
	837	73	925	81	15	841	499
K	IDR	IDR	IDR	IDR	IDR	IDR	IDR
	107,374,	5,571,	57,638,9	21,756,1	5,267,	11,	199,101,
	341	214	93	15	214	302	639
J	IDR	IDR	IDR	IDR	IDR	IDR	IDR
	45,892,	8,944,	65,673,6	67,993,0	21,397,8	35,	210,976,
	384	016	11	78	95	423	326

Based on the table above, it can be seen that the city of Central Jakarta still contributes significantly to the trade sector and the financial and insurance services sector as in previous years. Then, in the construction sector, the City of North Jakarta contributed the most to this sector in 2019. Still, like the previous year, the City of North Jakarta played a vital role in the processing industry sector in DKI Jakarta. The city of West Jakarta contributed significantly to the information and communication sector in DKI Jakarta in 2019.

Klassen Typology

The method is used to find an overview of each region's economic growth pattern and structure (Fauzan & Hendrati, 2023). The Klassen Typology divides regions based

on two leading indicators: regional economic growth and regional income. Through this analysis, four different characteristics of the pattern and structure of economic growth are obtained, namely: fast-advancing and fast-growing regions (high growth and high income), developed but depressed regions (high income but low growth), fast-growing regions (high growth but low income), and relatively underdeveloped regions (low growth and low income). The following is the matrix and calculation formula for the Klassen Typology analysis method.

Table 11
GRDP at Constant Prices of DKI Jakarta 2017-2019

Year	GRDP						
	Central Jakarta	North Jakar ta	West Jakarta	East Jakar ta	South Jakar ta	Seribu Islands	DKI Jaka rta
2017	IDR 400,	IDR	IDR	IDR	IDR	IDR	IDR
	474	301,	281,570,5	281,	371,	3,863	273,
		779	27	163	253		350
2018	IDR 424,	IDR	IDR	IDR	IDR	IDR	IDR
	324	320,	340,355,2	298,	394, 620	3,932	290,
		778	01	875			351
2019	IDR 452,	IDR	IDR	IDR	IDR	IDR	IDR
	820	333,	319,357,1	314,044,	421, 746	3,933	307,
		656	40	929			587
Ave	IDR 402,	IDR	IDR	IDR	IDR	IDR	IDR
rage	098	302,	313,760,9	298,094,	373,	3,870	274,
		204	59	585	205		316

Table 12

GRDP Growth at Constant Prices Based on Business Field in Jakarta Province 2017-2019

Regency/City		Average		
<u>-</u>	2017	2018	2019	
North Jakarta	6.39	6.3	4.01	5.38
Central Jakarta	6.01	5.96	6.72	6.35
East Jakarta	6.25	6.22	5.08	5.84
West Jakarta	6.48	6.4	6.59	6.31
South Jakarta	6.3	6.29	6.87	6.34
Seribu Islands	1.27	1.78	0.01	0.71
DKI Jakarta	5.45	5.49	4.88	5.15

Based on the analysis calculations above, Regency/City areas in the DKI Jakarta Province can be categorised into several categories based on Regency/City by the Klassen analysis.

Table 13 Classification of Regencies/Cities of DKI Jakarta Province According to Klassen Typology, 2017-2019

Growth Rate		Total GDP	
Growth Kate	y1 > y		y1 < y

r1 > r	High income and growth: Central Jakarta, North Jakarta, West Jakarta, East Jakarta, South Jakarta.	High Growth and low- income
r1 < r	High income but low growth	Low income and low growth: Seribu Islands.

Based on the Klasen Typology matrix table, all cities in DKI Jakarta Province, namely Central Jakarta, North Jakarta, West Jakarta, East Jakarta, and South Jakarta, are included in the first category, areas with high-income levels and high growth. Income and high growth) because the average income of these five cities is greater than the average income of DKI Jakarta province, as well as the average income growth of these five cities over the last three years is also higher than the average DKI Jakarta province's income growth over the last three years (2017-2019).

Seribu Islands Regency is included in areas with low income and low growth because the average income of Seribu Islands Regency for the last three years is lower than the average provincial income. DKI Jakarta and regional income growth for Seribu Islands Regency are also lower than the average income growth for DKI Jakarta province (2017-2019). This happens because the Thousand Islands are the outermost region of DKI Jakarta and far from the city centre (the centre of government and economy). Plus, the narrowest area and tiny population mean that the GDP and growth rate are unlike those in cities/districts and DKI Jakarta Province (Irham & Mulyo, 2016).

Location Quotient

LQ analysis is an analytical technique to determine the extent of specialisation of economic sectors in an area that utilises the base or leading sector (Pangow, Memah, Busdan, Rorong, & Maramis, 2023). LQ calculates the ratio of the share of the output of sector I in the city or district and the share out of sector I in the province (Tohmo, 2023).

Table 14
Calculation Results of LQ Base Sector Regency/City at DKI Jakarta Province in 20172019

Field of		Value		Regency/City
Business	2017	2018	2019	
A	1.08	1.07	1.08	East Jakarta
	1.57	1.57	1.61	North Jakarta
	71.16	74.99	82.63	Seribu Island
В	423.26	930.38	468.83	Seribu Island
C	2.28	2.26	2.31	East Jakarta
	2.67	2.70	2.73	North Jakarta
D	1.80	1.87	1.91	East Jakarta
	1.11	1.02	1.00	North Jakarta
Е	1.50	1.50	1.53	East Jakarta

	1.18	1.17	1.16	West Jakarta
	1.51	1.50	1.54	North Jakarta
F	1.21	1.21	1.20	West Jakarta
	1.23	1.24	1.30	North Jakarta
G	1.09	1.08	1.07	West Jakarta
	1.04	1.03	1.05	North Jakarta
Н	1.74	1.75	1.72	East Jakarta
	1.27	1.27	1.28	West Jakarta
	1.23	1.20	1.23	North Jakarta
I	1.09	1.09	1.08	West Jakarta
	1.16	1.15	1.14	Central Jakarta
J	1.38	1.38	1.36	South Jakarta
	1.87	1.87	1.86	West Jakarta
K	1.28	1.28	1.26	South Jakarta
	2.21	2.21	2.19	Central Jakarta
L	1.25	1.26	1.24	South Jakarta
	1.07	1.07	1.07	West Jakarta
M	1.39	1.37	1.35	South Jakarta
	1.14	1.14	1.12	Central Jakarta
N	1.37	1.37	1.35	South Jakarta
	1.78	1.78	1.77	Central Jakarta
О	1.37	1.37	1.39	East Jakarta
	1.08	1.08	1.07	West Jakarta
	1.09	1.09	1.08	Central Jakarta
P	1.02	1.02	1.03	East Jakarta
	1.16	1.16	1.15	South Jakarta
Q	1.47	1.47	1.46	South Jakarta

In the agriculture, forestry, and fisheries sectors, starting from 2017-2019, two districts or cities are classified as having base sectors in agriculture, forestry, and fisheries, namely East Jakarta, North Jakarta, and the Seribu Islands. In this case, it can be seen that the Seribu Islands own the highest LQ value for the agriculture, forestry, and fisheries sectors because, geographically, the Seribu Islands are located near the Java Sea with high levels of humidity and water volume (Andriansyah, Nurwanda, & Rifai, 2023).

Meanwhile, in West Jakarta, Central Jakarta, and South Jakarta, the LQ value for the agriculture, forestry, and fisheries sectors is less than 1, so this sector is not a base sector for these three cities. In the mining and quarrying sector, the only district or city with an LQ value above 1 is the Seribu Islands Regency; the LQ value for the Seribu Islands in the mining and quarrying sector reaches hundreds.

Since 2017-2019, no other Regency/City has had an LQ value > 1, so in the DKI Jakarta province in the mining and quarrying sector, only the Seribu Islands can be categorised in the mining and quarrying sector as the base (superior) sector they have. Likewise, we can classify other sectors based on their LQ value, as seen in the table above.

Table 15
Comparison of Base Sectors on LQ > 1 in 2017-2019

Field of Business	2017	2018	2019
A	50%	50%	50%
В	17%	17%	17%
С	33%	33%	33%
D	33%	50%	50%
Е	50%	50%	50%
F	50%	50%	33%
G	33%	50%	50%
Н	50%	50%	50%
I	33%	33%	33%
J	33%	33%	33%
K	33%	33%	33%
L	33%	33%	33%
M	33%	33%	33%
N	33%	33%	33%
O	50%	50%	50%
P	50%	33%	50%
Q	17%	17%	17%

The regions with the largest base sectors are the agriculture, forestry, and fisheries sectors, which comprised three regencies/cities out of 6 regencies/cities or 50% for three consecutive years starting from 2017-2019. Likewise, in the water supply sector, waste management, waste and recycling, as well as the education services sector, which also consists of 3 regencies/cities out of 6 regencies/cities in DKI Jakarta Province, which have an LQ value > 1 and are classified as essential.

The sector with the smallest number is the mining and quarrying sector, with the number of regencies/cities classified as a base sector being only one regency/city out of 6 regencies/cities in DKI Jakarta Province or around 17% for the last three years in a row (2017 -2019), namely Seribu Islands Regency. Other service sectors, where only one Regency/City is classified as a base sector out of all the Regency/Cities in DKI Jakarta Province, namely the city of South Jakarta, or only around 17% over the last five years.

In this case, the government is expected to encourage sectors with a small base value so that each sector can slowly increase its productivity and be more independent in meeting the needs of each sector, especially non-base sectors in each district or city in DKI Jakarta Province (Fadhilah, 2023). Notes: A. Agriculture, Forestry, and Fisheries; B. Mining and Quarrying; C. Manufacturing; D. Electricity and Gas Supply; E. Water Supply, Waste Management, Sewage and Recycling; F. Construction; G. Wholesale and Retail Trade, Repair of Cars and Motorcycles; H. Transportation and Warehousing; I. Provision of Accommodation and Meals; J. Information and Communication; K. Financial Services and Insurance; L. Real Estate; M. Corporate Services; N. Government Administration, Defense and Social Security; O. Education Services; P. Health Services and Social Activities; Q. Other Services; R. GRDP.

Conclusion

Based on the results of the Klassen Typology analysis, it can be concluded that all cities in DKI Jakarta Province, namely Central Jakarta, North Jakarta, West Jakarta, East Jakarta, and South Jakarta, are included in the category of regions with high-income and high growth. Meanwhile, the Seribu Island Regency includes regions with low income and growth. Moreover, based on the location quotient method analysis results, each region in DKI Jakarta's leading sector is seen based on the highest LQ value. East Jakarta, North Jakarta, and Seribu Islands have agriculture, forestry, and fisheries advantages. Likewise, the water supply sector, waste management, waste, recycling, and the education service sector in 3 regions out of 6 regions of DKI Jakarta Province can be called essential sectors because they have an LQ>1. The mining and quarrying sector is the most minor base sector because it is only in the Seribu Island region. Other service sectors are in South Jakarta or only around 17% over the last three years.

Bibliography

- Andriansyah, Nurwanda, Asep, & Rifai, Bakhtiar. (2023). Structural change and regional economic growth in Indonesia. *Bulletin of Indonesian Economic Studies*, *59*(1), 91–117. https://doi.org/10.1080/00074918.2021.1914320
- Asha, Nadira Abia, & Juliannisa, Indri Arrafi. (2023). Analysis of socio-economic conditions in 34 provinces in Indonesia. *International Journal of Research in Business and Social Science* (2147-4478), 12(3), 297–307. https://doi.org/10.20525/ijrbs.v12i3.2563
- Bahasaoan, Awal Nopriyanto, Rahmat, Aswar, BTahawa, Taufik Hidayat, Tuty, Farida Millias, & Lenas, Meldilianus Nabas J. (2022). Analysis of Economic Growth and Base Sectors in West Sulawesi Province 2015-2021. *Jurnal Mantik*, 6(3), 3754–3763.
- Fadhilah, Muhammad Hafiz. (2023). Analysis Of Leading Economic Sectors In Pekanbaru City. *Jurnal Pajak Dan Keuangan Negara (PKN)*, *5*(1), 38–45.
- Fauzan, Muhammad, & Hendrati, Ignatia Martha. (2023). Analysis of Leading Sectors as Supporting the Economy with the Location Quotient, Shift Share, and Klassen Typology Methods in Sukabumi, West Java. *Media Trend*, 18(1), 30–40.
- Hapsari, Ambar Tri, Nurfarhana, Anna, Renaldi, Mei, Arifin, Zainal, & Sumaryoto, Sumaryoto. (2023). Regional Economic Growth Given the Factors Affecting Regional Levies. *Interdisciplinary Journal and Humanity*, 2(2), 92–99. https://doi.org/10.58631/injurity.v2i2.37
- Irham, Irham, & Mulyo, Jangkung Handoyo. (2016). Contribution of the agricultural sector and sub-sectors on the Indonesian economy. *Ilmu Pertanian (Agricultural Science)*, 18(3), 150–159.
- Nihayah, Dyah Maya, Mafruhah, Izza, & Hakim, Lukman. (2023). Application of Klassen typology in the pattern of environmental carrying capacity and its role in regional economic development. *IOP Conference Series: Earth and Environmental Science*, *1180*(1), 12052. https://doi.org/10.1088/1755-1315/1180/1/012052
- Pangow, Ray Julio, Memah, Alen, Busdan, D., Rorong, Ita P. F., & Maramis, Mauna Th B. (2023). The Analysis of Economic Sector Potential in Surabaya using Location Quotient, Shift Share, and Klassen Typology in 2015-2019. *Open Access Indonesia Journal of Social Sciences*, 6(1), 898–905.
- Prabowo, Try Agung, Ananda, Candra Fajri, & Bintoro, Nugroho Suryo. (2023). Analysis of Regional Economic Problems (Case Study: Mapping Regency/City Leading Sectors in Papua Province in 2020). *Journal of International Conference Proceedings (JICP)*, 6(1), 324–335.

- Sinaga, Murbanto, Zalukhu, Rika Surianto, Hutauruk, Rapat Piter Sony, & Collyn, Daniel. (2023). Convergence of regional GDP Percapita among the big islands in Indonesia.
- Subhi, Khusnudin Tri, & Al Azkiya, Azka. (2022). Analysis of Leading Sectors and Characteristics of Provincial Economic Growth in Indonesia: Analysis of Leading Sectors and Characteristics of Provincial Economic Growth in Indonesia. *Jurnal Forum Analisis Statistik (FORMASI)*, 2(1), 44–52.
- Tohmo, Timo. (2023). The SFLQ revisited: Estimating Regional Input-Output Tables for South Korean Regions.
- Widajantie, Tituk Diah, & Wijaya, Riko Setya. (2023). Analysis of the Role of Leading Sectors on Economic Growth in Ponorogo Regency, East Java Province: English. *Tamansiswa Management Journal International*, 9(1), 19–33.
- Yunita, Mega Putri, Dewitasari, Yesi, & Riadi, Septa. (2021). Analysis of Leading Economic Sector in South Jakarta Administrative City. *Majalah Ilmiah Bijak*, 18(3), 19–30.