Analysis Of Leading And Potential Economic Sectors In Bangli Regency To Drive Economic Growth As Implementation Efforts Of The Kerthi Bali Economic Roadmap

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Article Info	ABSTRACT
Keywords: Analysis Leading Economic Sectors Potential Economic Growth Implementation Roadmap of Kerthi Bali	The aim of this research is to examine the economic potential of Bangli Regency from the perspective of sectoral distribution towards economic growth during the period 2019-2023This research employs a quantitative descriptive approach utilizing three analytical methods: LQ-DLQ, Klassen typology, and shift-share analysis. Primary data sources consist of secondary data from the Central Statistics Agency (BPS) of Bali Province and Bangli Regency, complemented by primary data gathered from relevant informants. The study observes the period from 2019 to 2023 to examine the structural changes and sectoral distribution of the economy before and after the COVID-19 pandemic, using GRDP as an indicator. Economic sectors in Bangli Regency are categorized into 17 sectors, evaluated through LQ-DLQ methodology to identify leading sectors and potential economic bases. Findings are interpreted using Klassen typology and shift-share analysis to assess regional economic growth performance and competitiveness. Based on the empirical study conducted, the research findings reveal several key insights into the economic sectors of Bangli Regency from 2019 to 2023. The study identifies significant potential in both basic and non-basic sectors. Basic economic sectors with notable potential include agriculture, forestry, and fisheries; mining and quarrying; manufacturing industry; wholesale and retail trade; motor vehicle and motorcycle repair; government administration, defense, and mandatory social security; as well as other services. Non-basic sectors showing promise encompass electricity and gas supply; water supply, waste management, recycling; construction; transportation and warehousing; accommodation and food services; information and communication; financial and insurance activities; real estate; and corporate services. Furthermore, the research categorizes economic sectors into those demonstrating fast growth and competitiveness versus those with slower growth but still competitive. Sectors exhibiting rapid growth and competitiveness include manufacturing industry; water supply, waste management, recycling; construction; wholesale and retail trade, motor vehicle and motorcycle repair; information and communication; real estate; health and social activities; and other services. Conversely, sectors with slower growth yet competitive aspects comprise electricity and gas supply; transportation and warehousing; accommodation and food services; and corporate services. Moreover, sectors experiencing rapid growth but lacking competitiveness consist of agriculture, forestry, and fisheries; mining and

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quarrying; government administration, defense, and mandatory social security; education services; and financial and insurance activities. These insights provide a comprehensive understanding of how different economic sectors contribute to the dynamic economic landscape of Bangli Regency, guiding future policy directions and development strategies for sustainable economic growth and local community welfare enhancement.

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INTRODUCTION

Undoubtedly, the tourism sector has been the highest contributing sector to Bali's economy. Tourism revenue generated by Bali in 2019 reached USD 9.346 billion, which accounted for 53.65% of Bali's Gross Regional Domestic Product (GRDP) and contributed 55.26% to national travel foreign exchange earnings. However, the COVID-19 pandemic significantly altered this landscape. As a global Tourist Destination Area (DTW), Bali experienced a significant decline in both international and domestic tourist numbers. Consequently, the tourism sector's performance was unable to contribute effectively to Bali's economy during that period, leading to economic growth pressures as depicted in Figure 1.
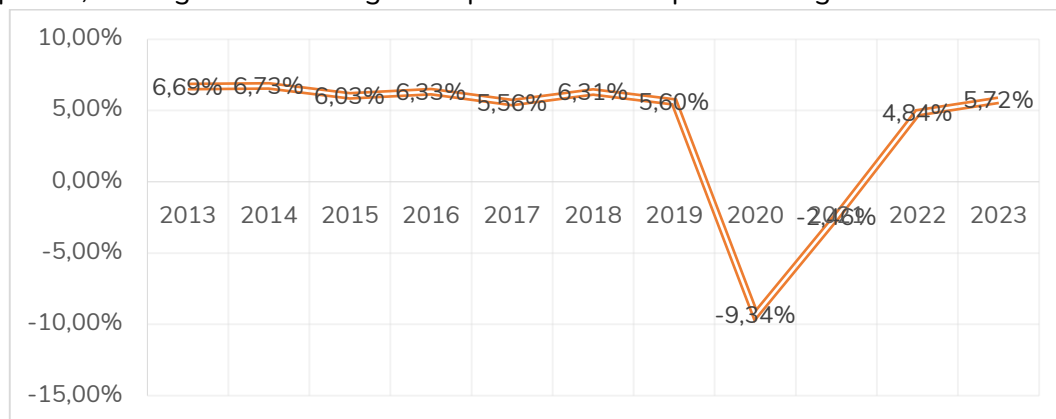
Figure 1. GRDP Growth of Bali Province 2013-2023 (%)
Source: (Central Bureau of Statistics of Bali Province, 2024)

Figure 1 depicts the development of Gross Regional Domestic Product (GRDP) at constant prices, illustrating Bali's economic growth rate from 2013 to 2023. Economic growth declined sharply and experienced a recession in 2020 at -9.34% and in 2021 at -2.46%. This situation occurred due to the paralysis of the tourism sector, which dominates the GRDP and serves as an economic growth indicator. Furthermore, various policies to reduce COVID-19 transmission rates, such as social distancing recommendations, Large-Scale Social Restrictions (PSBB), and the postponement of Meetings, Incentives, Conventions, and Exhibitions (MICE), exacerbated the downturn in the tourism sector that has traditionally supported Bali's economy (Purwahita et al., 2021).

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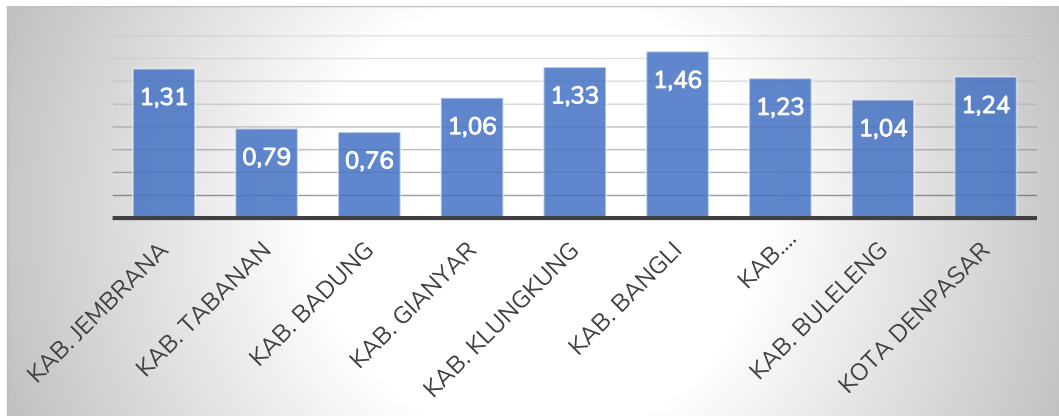
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Various efforts have been continuously made to address these issues, especially by the Bali Provincial Government, involving various related pentahelix components. It is increasingly realized that Bali's future economy cannot rely solely on the tourism sector. Efforts are needed to enhance other sectors, especially the primary sector, to perform optimally and become a strong foundation supporting the flagship sector, tourism, particularly during disruptions in the global economy (Koster & Ramantha, 2022). The Bali Economic Roadmap, known as "Kerthi Bali," is a strategic concept aimed at achieving inclusive economic growth with principles and a spirit of sustainability. The main indicators in this roadmap include a green, resilient, and prosperous economy (Karyada et al., 2022).

A green economy involves not only limiting carbon emissions but also ensuring economic activities are conducted without exploiting natural resources and the environment. A resilient economy is defined as one that is based on self-reliance, excellence, and optimization of each region's potential, enabling Bali to achieve economic independence in the future. Prosperity is not only about general welfare but also considers the happiness index of the Balinese people with their unique characteristics (Oktaviana et al., 2023).

Implementing the concept of Kerthi Bali's economic roadmap is undoubtedly challenging and requires the cooperation and awareness of various stakeholders. When implementing strategic economic policies, it is ideal to start with mapping the economic potentials of each region. This is crucial as a direction and foundation for effective economic development policies (Arsha et al., 2024). Accelerating regional economic development should focus on key sectors that have the potential to positively contribute to economic growth. The structural transformation of the economy in a region plays a crucial role as it impacts not only GRDP but also its growth rate (A. A. S. A. S. Putri et al., 2023).

The economic growth rate of Bali through GRDP at constant prices during the 2013-2023 period, as shown in Figure 1, illustrates economic fluctuations during expansions, contractions, and even recessions during the COVID-19 era (A. A. S. A. S. Putri et al., 2023). One lesson from the recession that pushed Bali's economy to a -9.34% contraction is the identification of resilient and prospective economic sectors that should be identified and developed as new sources of economic growth in the future. Through the identification of prospective economic sectors, these sectors can then become priorities in various economic policy measures aimed at achieving structural economic transformation to create sustainable economic growth (Muljanto, 2021).

The economic growth of Bali Province does not develop uniformly, given the varying potentials and resources of each region. In creating positive economic growth, regions with potential that can have a positive impact on other regional economies need to be developed and specifically considered (Yoga & Diputra, 2024). This potential can be seen through the GRDP at constant prices of each district in Bali Province. GRDP at constant prices is used as an indicator of economic growth to ensure that the information obtained about growth rates is more realistic without being influenced by prices and inflation levels (Azriyansyah, 2022). The average growth data of GRDP at constant prices for each district and city in Bali Province from 2019 to 2023 will be presented in Figure 2.

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Figure 2. Average GRDP at Constant Prices of Districts and Cities in Bali Province 2019-2023 (%)
Source: (Central Bureau of Statistics of Bali Province, 2024)

Figure 2 presents data on the average growth of GRDP at constant prices for each district and city in Bali Province from 2019 to 2023. The highest average growth of GRDP at constant prices first occurs in Bangli Regency at 1.46%, followed by Klungkung Regency at 1.33%, and then Jembrana Regency at 1.31%. In contrast, the lowest growth is in Badung Regency at 0.76%. Despite being known for contributing the highest Local Own-source Revenue (PAD), Badung Regency's economy also saw a significant decline in terms of GRDP at constant prices due to the COVID-19 pandemic. Moreover, Badung Regency heavily depends on the tourism sector, which was completely paralyzed during COVID-19 and only began recovering in the past two years (L. R. Putri, 2020).

The highest average growth of GRDP at constant prices in Bangli, Klungkung, and Jembrana Regencies indicates that these regencies possess resilient and crisis-resistant key economic sectors. This forms the basis for further in-depth studies into both basic and non-basic economic sectors they possess, as well as prospective economic sectors to be developed to drive economic growth in these regencies and other areas. Given this perspective, Bangli Regency, with its highest average economic growth rate of 1.46% over the past five years amidst the challenges of the COVID-19 phenomenon, deserves thorough investigation regarding its potential and prospective sectors in efforts to implement the Bali Economic Roadmap.

The development of potential economic sectors should start with identifying which sectors are prospective for development to ensure positive economic development in the region, especially in Bangli Regency (Masloman, 2020a). Structural economic changes affecting sectoral contributions should be the primary consideration for the local government of Bangli Regency in formulating regional economic development plans (Fabiany, 2021). This is crucial due to its impact on employment absorption and income growth in Bangli Regency. The synergy between the government and local communities is key to successful economic

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development amidst global demands for accelerating economic growth (Negara & Putri, 2020a).

GRDP at constant prices serves as the basis for assessing the real contributions and sectoral distributions in Bangli Regency, unaffected by price fluctuations. This is essential to understand the economic resource capabilities of Bangli Regency, which are likely to influence changes in its economic structure (Ikrimah et al., 2023). Considering the COVID-19 phenomenon's impact on most economic sectors, potential alternative sectors need to be identified for development post-pandemic (Coccia, 2021). Despite facing COVID-19 impacts, Bangli Regency's economic sectors have proven resilient compared to other regencies, making prospective economic sectors a priority for various stakeholders.

Bangli Regency contributes economically through several sectors, including agriculture, tourism, Small and Medium Enterprises (SMEs), agrotourism, and others. In agriculture, Bangli Regency produces commodities such as coffee, spices, oranges, onions, and various vegetables due to its favorable climate for diverse crops. Bangli Regency also serves as a Tourist Destination Area (DTW) offering natural, cultural, spiritual tourism, and agrotourism. SMEs in Bangli Regency mainly focus on handicraft industries supporting tourism and food processing. Table 1 presents data on the sectoral contributions to GRDP in Bangli Regency from 2019 to 2023 (Suryani & Atmika, 2024a).

Table 1. Average Growth of GRDP at Constant Prices by Sector in Bangli Regency 2019-2023 (%)

GDP Category	2019	2020	2021	2022	2023	Average
Agriculture, Forestry, and Fisheries	4.76	-0.69	-0.08	0.54	0.01	0.91
Mining and Quarrying	-1.55	-2.19	-1.75	2.23	2.64	-0.13
Manufacturing Industry	5.53	-4.79	-2.18	2.59	3.04	0.84
Electricity and Gas Supply	2.11	0.39	4.88	4.59	11.27	4.65
Water Supply, Waste Management, Recycling Activities	3.65	5.75	2.32	-1.46	-0.35	1.98
Construction	4.33	0.01	5.23	2.26	1.44	2.65
Wholesale and Retail Trade	6.23	-7.08	-0.01	4.11	5.56	1.76
Transportation and Warehousing	4.65	-8.20	-3.89	4.12	6.31	0.60
Accommodation and Food and Beverage Service Activities	8.14	-19.93	-7.35	10.90	12.36	0.82
Information and Communication	5.16	6.85	4.09	1.01	3.06	4.04
Financial and Insurance Services	9.03	-3.89	-2.29	6.93	13.83	4.72
Real Estate	4.97	0.34	0.12	0.78	0.63	1.37
Business Services	4.40	-3.51	-3.30	4.47	3.87	1.19
Government Administration, Defense and Social Security	3.89	-1.43	1.42	0.03	0.96	0.97
Education Services	5.23	-0.08	2.12	0.15	-0.03	1.48
Health and Social Activities	7.71	0.27	0.76	2.69	1.63	2.61
Other Services	8.31	-5.34	-3.26	9.41	9.96	3.82
GRDP	5.45	-4.10	-0.33	2.80	3.50	1.46

Source: Central Bureau of Statistics of Bali Province, (2024)

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Overall, Table 1 illustrates that the economic sectors in Bangli Regency experienced positive growth amidst the COVID-19 impact from 2020 to 2021. The sector with the highest average growth is financial and insurance services at 4.72%, followed by electricity and gas supply at 4.65%, and other services at 3.82%. Only one sector experienced negative average growth due to the COVID-19 phenomenon, which is mining and quarrying at -0.13%. This is understandable as Bangli Regency is known for volcanic sand mining for construction materials, which saw reduced demand during the COVID-19 period.

The Bali Economic Roadmap is a strategic effort for future development. In the economic development phase, identifying key and potential sectors is crucial in policy formulation (Karyada et al., 2022). Bangli Regency is selected for study based on various empirical data and phenomena demonstrating its resilience in facing global economic crises. Research into identifying potential economic sectors in Bangli Regency serves as an initial step for local governments to implement the Bali Economic Roadmap in the future.

This is supported by various studies emphasizing the importance of examining regional economic structural changes to determine potential sectors for effective regional economic policy strategies. Effective techniques such as Location Quotient (LQ) analysis are used to identify sectoral contributions to national and regional economies, including Dynamic Location Quotient (DLQ) analysis to predict potential base sectors in the future (Masloman, 2020b).

Previous studies have utilized LQ and DLQ analysis, followed by the Topology Klassen indicator to determine prospective base sectors, non-prospective base sectors, prospective non-base sectors, and non-prospective non-base sectors (Rahayu & Yadewani, 2023). Shift-Share (SS) analysis is employed to assess sectoral growth competitiveness between regions (Negara & Putri, 2020b). The combination of these analyses provides insights into base sectors, prospective sectors, and growth competitiveness of economic sectors, particularly in Bangli Regency (Salakory & Matulessy, 2020).

Based on empirical studies, phenomena, and future economic development policy strategies, the aim of this research is to examine the economic potential of Bangli Regency from the perspective of sectoral distribution towards economic growth during the period 2019-2023. The study seeks to understand how various economic sectors such as agriculture, manufacturing industry, trade, and other service sectors contribute to the regional economic dynamics. Furthermore, the research aims to identify the strengths of each sector in supporting the economic growth of Bangli Regency, with a focus on sectors that serve as economic bases and potential sectors that can be further developed to enhance the welfare of the local community.

METHODS

This research utilizes a quantitative descriptive study employing three analytical methods: LQ-DLQ, Klassen typology, and shift-share analysis. The primary data used are secondary data, supplemented by primary data. The observation period from 2019 to 2023 is employed to examine structural changes and sectoral distribution in the economy using indicators such

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as GDP before and after the COVID-19 pandemic. The main data sources for this research are publications from the Central Statistics Agency (BPS) of Bali Province and Bangli Regency. Quantitative data includes GDP data for Bangli Regency and Bali Province by sector or field of business, sectoral GDP growth rates, and sectoral contributions. Primary data includes information from various relevant sources to explore the economy of Bali generally and Bangli Regency specifically.

Data in this study are collected through GDP ADHB of 17 business sectors forming GDP in Bangli Regency from 2019 to 2023: 1) agriculture, forestry, and fisheries, 2) mining and quarrying, 3) manufacturing, 4) electricity and gas supply, 5) water supply, waste management, recycling, 6) construction, 7) wholesale and retail trade, repair of motor vehicles and motorcycles, 8) transportation and warehousing, 9) accommodation and food services, 10) information and communication, 11) financial and insurance services, 12) real estate, 13) business services, 14) public administration, mandatory social security, and defense, 15) education services, 16) health and social activities, and 17) other services.

One of the most commonly used methods to determine a region's economic base is the LQ method. LQ analysis is used to assess a region's contribution as a supplier or importer for specific economic sectors. It identifies leading sectors as one of its components, measuring the concentration of economic activities in determining the leading sector as the main sector of economic activity. DLQ method is an extension of LQ that considers gradual economic output growth variables. DLQ evaluates the economic growth rate of a specific sector and the economy as a whole over a specified period. DLQ analysis results indicate the potential of a sector to become an economic base in the future. Policymakers can assess the role of a sector in the economy and its prospects by combining LQ and DLQ.

Klassen typology is an indicator used to determine a country's economic base sector. It classifies a country's economic sectors by comparing the economic growth of the observed area with the reference area. Provincial economic data can be used for comparison if economic growth analysis is conducted on a district or city. Meanwhile, shift-share analysis is a method used to measure the economic growth performance of a region. Shift-share analysis divides the economic growth of an area into three parts and calculates the contribution of each part, serving as a tool to measure regional productivity. To measure the economic growth of a district or city on a larger scale, the economic growth rate of a district or city can be calculated by comparing it with the economic growth rate of a province. The growth of the province (PN) in a reference area can be viewed from changes in local production due to changes in reference area production, assuming no economic characteristic differences between sectors and regions. This is an important component in performing shift-share.

Additionally, there are Proportional Growth (PP), which calculates the growth of economic activities in a region within a specified period. Regional Market Share Growth (PPW), which measures the growth rate of a region's economy compared to other regions, is also available. The net shift, or net shift, of an industry can be used to measure economic growth in a specific region. The Net Shift (PB) value is obtained by combining PP and PPW

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parts. The economic base or leading sectors of Bangli Regency are identified using LQ-DLQ analysis results. These results are used as the basis for grouping base sectors according to Klassen typology and then conducting shift-share analysis to determine regional growth performance. Exploring the economic potential of a region, especially its economic base sectors, is crucial for research. While LQ and DLQ approaches identify a region's economic base sectors, a more detailed measurement using shift-share analysis developments can provide a clearer picture. Moreover, shift-share analysis results can be used to determine the competitiveness of a region.

RESULTS AND DISCUSSION

Economic development in Bangli Regency showed several significant advancements in 2024. According to data collected by the Bangli Regency Central Bureau of Statistics (BPS), tourism and agriculture are two primary sectors still contributing to the economic growth of Bangli Regency. Natural resources hold great potential, but their management and utilization still need improvement to achieve optimal results. Ongoing infrastructure development and government programs aimed at enhancing community welfare are influencing regional economic growth. However, several other sectors are expected to have significant roles and future potential for development to support the primary sectors of tourism and agriculture. Below, Table 2 presents data comparing the sectoral distribution of GRDP at Constant Prices between Bali Province and Bangli Regency from 2019 to 2023.

Table 2. Growth of GRDP at Constant Prices by Sector in Bangli Regency & Bali Province 2019-2023 (%)

Code	Sector	Bangli Regency					Bali Province				
		2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
A	Agriculture, Forestry, and Fisheries	-0,35	-0,01	0,00	0,01	0,00	0,03	-0,01	0,00	-0,01	-0,01
B	Mining and Quarrying	-0,38	-0,02	-0,02	0,02	0,03	-0,01	-0,04	0,00	0,05	0,01
C	Manufacturing Industry	-0,25	-0,05	-0,02	0,03	0,03	0,07	-0,06	0,00	0,06	0,02
D	Electricity and Gas Supply	-0,43	0,00	0,05	0,05	0,11	0,05	-0,16	-0,05	0,16	0,14
E	Water Supply, Waste Management, Recycling Activities	-0,20	0,06	0,02	-0,01	0,00	0,06	-0,01	-0,04	-0,01	0,04
F	Construction	-0,30	0,00	0,05	0,02	0,01	0,07	-0,03	0,00	0,04	0,01
G	Wholesale and Retail Trade; Repair of Motor	-0,27	-0,07	0,00	0,04	0,06	0,07	-0,07	-0,01	0,06	0,05

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Code	Sector	Bangli Regency					Bali Province				
		2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
	Vehicles and Motorcycles										
H	Transportation and Warehousing	-0,26	-0,08	-0,04	0,04	0,06	0,05	-0,32	-0,18	0,22	0,25
I	Accommodation and Food and Beverage Service Activities	-0,34	-0,20	-0,07	0,11	0,12	0,05	-0,28	-0,10	0,14	0,16
J	Information and Communication	-0,10	0,07	0,04	0,01	0,03	0,07	0,06	0,03	-0,01	0,02
K	Financial and Insurance Services	-0,30	-0,04	-0,02	0,07	0,14	0,09	-0,04	-0,03	0,08	0,13
L	Real Estate	-0,20	0,00	0,00	0,01	0,01	0,06	0,00	0,00	0,02	0,01
M,N	Business Services	-0,29	-0,04	-0,03	0,04	0,04	0,05	-0,04	-0,03	0,09	0,07
O	Government Administration, Defense and Mandatory Social Security	-0,26	-0,01	0,01	0,00	0,01	0,05	0,00	0,01	-0,04	-0,01
P	Education Services	-0,27	0,00	0,02	0,00	0,00	0,05	-0,01	0,01	0,00	0,00
Q	Health and Social Activities	-0,24	0,00	0,01	0,03	0,02	0,06	0,03	0,06	0,01	0,02
R,S,T,U	Other Services	-0,29	-0,05	-0,03	0,09	0,10	0,08	-0,06	-0,02	0,10	0,08

Source: Central Bureau of Statistics of Bali Province. (2024)

Sectoral GDP data of Bangli Regency and Bali Province for the years 2019-2023 were analyzed using the LQ and DLQ formulas. The results of these calculations indicate the economic sectors in Bangli Regency classified into basic and non-basic categories. Tables 3 and 4 present the data of economic sectors in Bangli Regency compared to Bali Province based on the analysis results of LQ and DLQ formulas.

Table 3. Results of LQ Analysis for Bangli Regency and Bali Province 2019-2023

Sector Code	2019	2020	2021	2022	2023	Average	Category
A	1.87	1.77	1.73	1.79	1.84	1.80	Basic
B	1.99	1.92	1.85	1.84	1.90	1.90	Basic
C	1.52	1.47	1.40	1.39	1.43	1.44	Basic
D	0.16	0.18	0.19	0.18	0.17	0.17	Non-Basic
E	0.34	0.35	0.36	0.36	0.36	0.35	Non-Basic
F	0.80	0.78	0.80	0.80	0.83	0.80	Non-Basic
G	1.12	1.06	1.05	1.06	1.08	1.07	Basic
H	0.17	0.21	0.24	0.21	0.18	0.20	Non-Basic
I	0.62	0.65	0.65	0.65	0.64	0.64	Non-Basic

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Sector Code	2019	2020	2021	2022	2023	Average	Category
J	0.75	0.72	0.71	0.74	0.76	0.74	Non-Basic
K	0.64	0.61	0.61	0.61	0.63	0.62	Non-Basic
L	0.77	0.73	0.71	0.71	0.73	0.73	Non-Basic
M,N	0.50	0.47	0.46	0.46	0.45	0.47	Non-Basic
O	2.16	2.02	2.00	2.12	2.21	2.10	Basic
P	0.46	0.44	0.43	0.44	0.45	0.44	Non-Basic
Q	0.67	0.62	0.58	0.60	0.61	0.61	Non-Basic
R,S,T,U	1.93	1.85	1.79	1.82	1.89	1.86	Basic

Source: Processed Data (2024)

From the LQ analysis in Table 3, it can be seen that there are 6 basic economic sectors that serve as the pillars of the economy in Bangli Regency, : (agriculture, forestry, and fisheries), (mining and quarrying), (manufacturing industry), (wholesale and retail trade; repair of motor vehicles and motorcycles), (government administration, defense, and mandatory social security), and (other services). Meanwhile, 11 sectors are non-basic sectors.

Table 4. Results of DLQ Analysis for Bangli Regency and Bali Province 2019-2023

Code Sector	2019	2020	2021	2022	2023	Average	Description
A	0,21	1,37	1,33	1,43	1,39	1,15	Potential
B	0,21	1,49	1,27	1,25	1,43	1,13	Potential
C	0,33	1,42	1,21	1,18	1,36	1,10	Potential
D	0,11	2,77	1,98	0,88	1,21	1,39	Potential
E	0,38	1,48	1,49	1,12	0,99	1,09	Potential
F	0,24	1,42	1,56	1,20	1,30	1,14	Potential
G	0,28	1,32	1,40	1,24	1,33	1,12	Potential
H	0,32	4,25	2,37	0,69	0,66	1,66	Potential
I	0,21	2,00	1,52	1,21	1,18	1,22	Potential
J	0,55	1,13	1,16	1,17	1,16	1,03	Potential
K	0,24	1,38	1,40	1,29	1,37	1,14	Potential
L	0,41	1,24	1,23	1,18	1,26	1,06	Potential
M,N	0,29	1,42	1,39	1,20	1,24	1,11	Potential
O	0,31	1,17	1,26	1,43	1,33	1,10	Potential
P	0,30	1,31	1,34	1,28	1,28	1,10	Potential
Q	0,35	1,21	1,11	1,43	1,31	1,08	Potential
R,S,T,U	0,25	1,39	1,26	1,32	1,42	1,13	Potential

Source: Data Processed (2024)

From the results of the DLQ analysis in Table 4, overall, the economic sectors in Bangli Regency are considered potential for further development to enhance regional economic growth. This finding indicates that all sectors in Bangli Regency have shown progressive growth rates. This has contributed to Bangli Regency's ability to maintain the strongest economic growth among other regencies and cities in Bali Province over the past five years, enabling it to withstand crises such as the COVID-19 pandemic.

After determining the LQ and DLQ values, a compilation and combination were conducted to categorize each economic sector in Bangli Regency. Potential sectors indicate

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a tendency or potential for future development. To enhance economic growth in Bangli Regency in the future, the local government can focus on developing these potential sectors, both basis and non-basis categories. With attention and further development support, these potential sectors have prospects to drive regional economic growth. The combination of basis and potential sectors from each field is classified using the Klassen Typology chart.

Below in Figure 3, the classification of each sector in each quadrant of the Klassen Typology based on the combination of LQ and DLQ analyses is presented.

Quadrant I Potential Base Sectors = Sector Codes A, B, C, G, O (R, S, T, U)	Quadrant III Non-Potential Base Sectors = Sector Code -
Quadrant II Potential Non-Base Sectors = Sector Codes D, E, F, H, I, J, K, L (M, N)	Quadrant IV Non-Potential Non-Base Sectors = Sector Code -

Figure 3. Classification of Economic Sectors in Bangli Regency 2019-2023 (Klassen Typology)
Source: Processed Data (2024)

In Table 5, the classification of Klassen Typology in quadrant I represents basis sectors with potential including: (agriculture, forestry, and fisheries), (mining and quarrying), (manufacturing industry), (wholesale and retail trade; repair of motor vehicles and motorcycles), (government administration, defense and mandatory social security), and (other services). In quadrant II, which represents non-basis sectors yet with potential, includes: (electricity and gas supply), (water supply, waste management, waste recycling), (construction), (transportation and warehousing), (accommodation and food service activities), (information and communication), (financial and insurance activities), (real estate), and (business services).

Table 5. Results of Shift Share Analysis for Bangli Regency and Bali Province 2019-2023

Sector Code	Nij	Mij	Cij	Dij	Description
A	-0.03	0.44	-0.06	0.35	Rapid Growth, Non-Competitive
B	-0.03	0.87	-0.43	0.41	Rapid Growth, Non-Competitive
C	-0.02	0.18	0.11	0.28	Rapid Growth, Competitive
D	-0.03	-0.86	1.44	0.55	Slow Growth, Competitive
E	-0.01	0.10	0.11	0.20	Rapid Growth, Competitive
F	-0.02	0.28	0.05	0.31	Rapid Growth, Competitive
G	-0.02	0.09	0.25	0.32	Rapid Growth, Competitive
H	-0.02	-1.15	1.49	0.32	Slow Growth, Competitive
I	-0.03	-0.73	1.22	0.46	Slow Growth, Competitive
J	-0.01	0.08	0.05	0.13	Rapid Growth, Competitive
K	-0.02	-0.13	0.59	0.43	Slow Growth, Competitive
L	-0.01	0.20	0.02	0.21	Rapid Growth, Competitive
M,N	-0.02	-0.12	0.48	0.33	Slow Growth, Competitive
O	-0.02	0.34	-0.05	0.27	Rapid Growth, Non-Competitive
P	-0.02	0.30	-0.01	0.27	Rapid Growth, Non-Competitive
Q	-0.02	0.17	0.11	0.26	Rapid Growth, Competitive
R,S,T,U	-0.02	0.01	0.41	0.39	Rapid Growth, Competitive

Source: Processed Data (2024)

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After obtaining the results of the Shift Share analysis, each sector is identified and categorized into the respective shift share quadrant, as shown in Figure 7. This aims to recognize the strengths and weaknesses of each economic sector in Bangli Regency. The identification through shift share analysis can also be used to understand growth trends and competitiveness in formulating strategic planning and policies that are targeted, effective, and aimed at enhancing economic performance in the future.

Quadrant I: High Growth, High Competitiveness = Sector Codes C, E, F, G, J, L, Q, (R, S, T, U)	Quadrant III: High Growth, Low Competitiveness = Sector Codes A, B, O, P
Quadrant II: Low Growth, High Competitiveness = Sector Codes D, H, I, K, (M, N)	Quadrant IV: Low Growth, Low Competitiveness = Sector Codes -

Figure 4. Classification of Economic Sectors in Bangli Regency 2019-2023 Quadrants (Shift Share).
Source: Processed Data (2024)

The Shift Share analysis in Figure 4 indicates that sectors categorized under rapid growth and competitiveness include: (manufacturing), (water supply, waste management, recycling), (construction), (wholesale and retail trade; repair of motor vehicles and motorcycles), (information and communication), (real estate), (health and social activities), and (other services). Meanwhile, sectors categorized under slow growth but competitiveness include: (electricity and gas supply), (transportation and warehousing), (accommodation and food service activities), and (business services). Sectors categorized under rapid growth but non-competitiveness include: (agriculture, forestry, and fishing), (mining and quarrying), (public administration, defense, and mandatory social security), (education services), and (financial and insurance services).

Based on the combined analysis of LQ, DLQ, and Klassen Typology in Figure 6, the agriculture, forestry, and fishing sectors are identified as both basis and potential sectors. This aligns with the characteristics of Bangli Regency known for its natural resources and agricultural products. This sector has been able to meet local needs within the Bangli region and even export products outside the regency. The mining and quarrying sector is also a basis and potential sector in Bangli Regency, supported by its status as the second-largest sand material producer after Karangasem Regency, sourced from Mount Batur eruptions. The manufacturing industry is also a basis and potential sector because Bangli Regency is a favorite tourist destination, leading to rapid development in creative industries such as culinary and souvenir processing (Suryani & Atmika, 2024a).

Wholesale and retail trade; repair of motor vehicles and motorcycles are also categorized under basis and potential sectors. This reflects positive growth in per capita income, thus increasing purchasing power. Public administration, defense, and mandatory social security in Bangli Regency are considered basis and potential sectors, indicating that local government budgets derived from local revenue (PAD) and other incomes are effectively utilized to meet public service needs. Population growth will increase demand for quality

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public services, which in turn will determine the success of national, provincial, and regional programs, including mandatory social security programs. Other supporting services sectors also represent basis potential sectors in Bangli Regency (Devi & Darsana, 2019).

Non-basis and potential sectors in Bangli Regency, based on the combined analysis of LQ, DLQ, and Klassen Typology, include: (electricity and gas supply), (water supply, waste management, recycling), (construction), (transportation and warehousing), (accommodation and food service activities), (information and communication), (financial and insurance services), (real estate), and (business services). These sectors are expected to be developed in the future to enhance economic growth in Bangli Regency. Through potential non-basis sectors, local governments as policy makers should prioritize these sectors with special attention, adequate budgets, and clear regulations. This opportunity should be utilized effectively to strengthen the economic foundation in Bangli Regency with new sources of economic growth. This is supported by findings from DLQ that overall, economic sectors in Bangli Regency show potential for development, thus demonstrating resilience in facing crises such as COVID-19 compared to other regions (Suryani & Atmika, 2024b).

The Shift Share analysis results in Figure 7 show that sectors such as (manufacturing), (water supply, waste management, recycling), (construction), (wholesale and retail trade; repair of motor vehicles and motorcycles), (information and communication), (real estate), (health and social activities), and (other services) are growing rapidly and competitive. This is consistent with the analysis of LQ, DLQ, and Klassen Typology, indicating that these sectors are potential basis sectors for development. Sectors with potential for development also include sectors with slow growth but competitiveness: (electricity and gas supply), (transportation and warehousing), (accommodation and food service activities), and (business services). Sectors categorized under rapid growth but non-competitiveness are those that have already become the economic basis in Bangli Regency, including: (agriculture, forestry, and fishing), (mining and quarrying), (public administration, defense, and mandatory social security), (education services), and (financial and insurance services) (Devi & Darsana, 2019).

Identifying potential economic sectors and their growth competitiveness in Bangli Regency serves as a fundamental consideration in implementing strategic policies for Bali's economic roadmap. The synergy of the Bali Provincial government in determining economic development guidelines through the concept of Kerthi Bali economy should be understood by local governments not only in a normative but also in an implementative manner. In supporting basis economic sectors in Bangli Regency, various sustainable economic policies ideally focus on developing potential and competitive sectors. Thus, regional economic growth should not only be quantity-oriented but also quality-oriented. Quality economic development is based on local wisdom values, complementing modern economic growth theories. A crucial point in modern economic growth theory is the involvement of entrepreneurial spirit and community innovation in participatory economic development. The Kerthi Bali economic concept further enhances this theory by emphasizing culture as its primary foundation, embodying the spirit inherent in the characteristics of the Balinese community. The hope is that in the future, economic globalization will not degrade the noble

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values of local wisdom in Bali, which are full of tolerance, collective and communal spirit. Implementing this concept ensures that economic progress is felt by all layers of Balinese society, aiming for an ideal economic development involving efforts to achieve sustainable, inclusive growth consistent with the characteristics of Balinese society (Karyada et al., 2022).

CONCLUSION

Economic sectors with potential as basis in Bangli Regency 2019-2023 include: (agriculture, forestry, and fisheries), (mining and quarrying), (manufacturing), (wholesale and retail trade; repair of motor vehicles and motorcycles), (public administration, defense, and mandatory social security), and (other services). Non-basis but potential economic sectors in Bangli Regency 2019-2023 include: (electricity and gas supply), (water supply, waste management, recycling), (construction), (transportation and warehousing), (accommodation and food services), (information and communication), (financial and insurance services), (real estate), and (business services).

Economic sectors in Bangli Regency 2019-2023 categorized under rapid growth and competitiveness are: (manufacturing), (water supply, waste management, recycling), (construction), (wholesale and retail trade; repair of motor vehicles and motorcycles), (information and communication), (real estate), (health and social activities), and (other services). Sectors categorized under slow growth but competitiveness in Bangli Regency 2019-2023 include: (electricity and gas supply), (transportation and warehousing), (accommodation and food services), and (business services). Economic sectors in Bangli Regency 2019-2023 categorized under rapid growth but non-competitiveness are: (agriculture, forestry, and fisheries), (mining and quarrying), (public administration, defense, and mandatory social security), (education services), and (financial and insurance services).

Both basis and non-basis economic sectors with potential in Bangli Regency 2019-2023 should be prioritized in various regional economic development policies due to their growth speed not being accompanied by adequate competitive strength compared to other sectors. This is important considering that potential basis sectors form the foundation of regional economic stability contributing to positive economic growth. Implementative policies can include infrastructure development, enhancement of human resources, support for marketing and digitalization, sustainable natural resource management, partnerships, and governance improvements for these sectors. These economic policies align with the concept of Kerthi Bali economy, emphasizing sustainable natural resource values, local potential-based initiatives, communal values, cultural preservation, and downstream welfare for the Balinese community.

Economic sectors in Bangli Regency categorized under rapid growth and competitiveness against other sectors should maintain their stability through current implementative policies affecting these sectors positively. Additionally, local governments should focus on sectors categorized under slow growth but competitiveness and sectors categorized under rapid growth but non-competitiveness. This approach aims to empower these sectors to leverage qualitative economic growth. Implementation can be through

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regional fiscal policies with various empowerment programs related to these sectors and policies aimed at increasing regional investments.

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