



Analysis of Leading Sectors Supporting Tourism Using Location Quotient and Shift-Share in East Nusa Tenggara (2018-2022)

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ABSTRACT

This study examines the leading sectors supporting tourism in East Nusa Tenggara (NTT) Province from 2018 to 2022, utilizing Location Quotient (LQ) and Shift-Share analyses. By analyzing the Gross Regional Domestic Product (GRDP) across 21 districts and 1 city, the research identifies the transportation, accommodation, and information and communication sectors as critical contributors to tourism. The LQ analysis reveals that nine regions have transportation as a base sector, while four regions each specialize in accommodation, restaurant, information, and communication. Kupang City stands out with all three sectors as basic. The Shift-Share analysis further indicates that most regions experience growth in the transportation sector driven by national trends, though many still face competitive challenges. These findings highlight the importance of enhancing infrastructure and services in these key sectors to bolster tourism development in NTT. The study offers valuable insights for regional planning and policymaking aimed at leveraging tourism for economic growth.

INTRODUCTION

The tourism sector is a crucial component of the service industry, driving economic growth worldwide. It is often described as complex and fragmented, making it challenging to measure and define due to its constantly changing trends (Yakup & Haryanto, 2019). Tourism development contributes to economic growth through consumption and investment, both of which stimulate the production of goods and services (Pangesti et al., 2024). According to the World Economic Forum's Travel and Tourism Competitiveness Index (TTCI) in 2021, Indonesia ranked 32nd out of 117 countries, an improvement from 44th in 2019, reflecting significant growth in its tourism sector. Sectoral development, which encompasses activities grouped by industry or sector, is essential for achieving regional development goals (Irza, 2021). A key element supporting regional economic growth is the natural resource potential or key commodities of a region (Destiningsih et al., 2019). Each region in Indonesia has distinct characteristics, varying levels of GDP, and economic growth, with unique potentials that set them apart from others (Dhea Pratama et al., 2022). Tourism is currently one of Indonesia's most important sectors, not only as a source of income and taxes but also for creating jobs and introducing visitors to local customs and cultures (Mustofa & Haryati, 2018).





The Indonesian government has prioritized tourism development, as outlined in Presidential Regulation No. 18 of 2020, which includes the 2017 designation of 10 Priority Tourism Destinations (DSP). These destinations were further narrowed down to five Super Priority Destinations: Lake Toba, Borobudur, Labuan Bajo, Mandalika, and Likupang, intended to become "New Balis" to attract more tourists. This development is aligned with the National Tourism Development Master Plan (RIPPARNAS) for 2010-2025, which aims to ensure equitable tourism development across the country (Ministry of Tourism and Creative Economy, 2021).

In Nusa Tenggara Timur (NTT), five National Tourism Destinations (DPN) are recognized: Komodo-Ruteng, Kelimutu-Maumere, Alor-Lembata, Kupang-Rote Ndao, and Sumba-Waikabubak. NTT, located between 8° and 12° South Latitude and 118° and 125° East Longitude, is bordered by the Flores Sea to the north, the Indian Ocean to the south, Timor Leste to the east, and West Nusa Tenggara to the west. The province covers an area of 46,452.38 km², with Timor Island being the largest at 14,088.71 km². NTT is administratively divided into 21 regencies and 1 city.

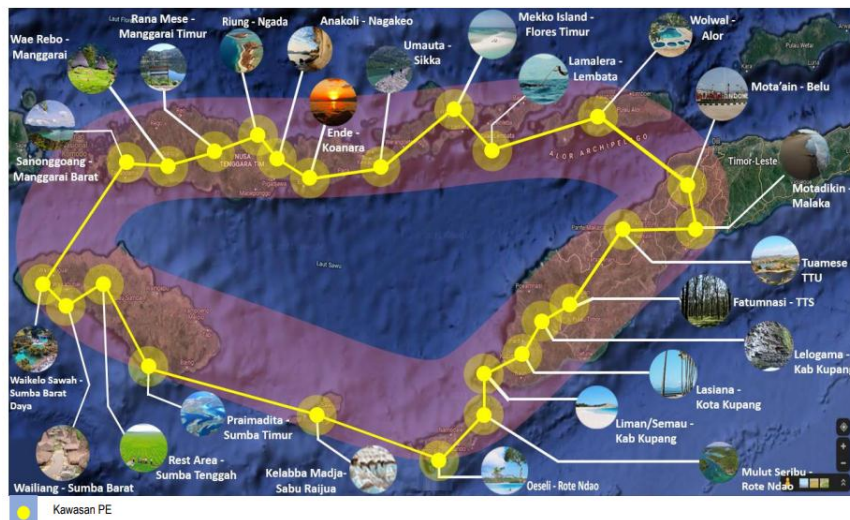


Figure 1. NTT Ring of Beauty Tourism with PE Area as a role model for tourism destination development

NTT is rich in natural resources and tourism potential. The province's second mission in the 2018-2023 Regional Medium-Term Development Plan (RPJMD) is to position NTT as a gateway and center for national tourism development ("Ring of Beauty"). This mission aims to maximize the utilization of these resources through the development of tourism estates (PE) as the primary driver of NTT's economy (NTT Department of Tourism and Creative Economy, 2021). Tourism in NTT is anchored by Komodo National Park, recognized as a Biosphere Reserve since 1977 and a UNESCO World Heritage Site since 1991. The park was also listed as one of the New 7 Wonders of Nature in 2012. As of 2021, NTT had 1,391 tourist attractions, including natural, cultural, and historical sites, with Sumba Barat having the most. Despite its rich resources, NTT remains one of Indonesia's poorest provinces, with high poverty levels and low formal education among its rural population (Mauna Nanga et al., 2018; Murniasih et al., 2021).

Given the region's vast tourism potential, it's critical to conduct scientific studies to identify key sectors that support tourism in NTT. Previous studies have largely overlooked the comparison of leading and supporting tourism sectors, making this research both timely and necessary. This research analyzes the key tourism-supporting sectors in Nusa Tenggara Timur (2018-2022) using Location Quotient and Shift-Share approaches. It aims to identify leading sectors and compare their contributions, providing valuable insights for regional economic planning and supporting government decision-making in enhancing tourism-linked economic growth.





LITERATURE RESEARCH

A. Economic Growth Theory

Economic growth measures regional development through increased production across various sectors (Afrizha & Putri, 2023). Malthus' theory emphasizes that national welfare, driven by optimal resource allocation and productivity, is crucial for economic growth (Jhinghan, 2012). Regional disparities are shaped by demand for natural resource-based commodities (Hakim, 2019).

B. Gross Regional Domestic Product (GRDP)

The Central Bureau of Statistics (BPS) defines Gross Regional Domestic Product (GRDP) as a key economic indicator measuring the total value of goods and services produced in a region. GRDP is calculated at current prices and constant prices, reflecting different aspects of economic value added.

C. Tourism

According to Government Regulation No. 50 of 2011, tourism involves multidimensional activities and interactions among tourists, local communities, and governments. Key tourism-supporting sectors include transportation, accommodation, food services, and information access, all of which are essential for developing competitive and sustainable tourism destinations in Indonesia.

D. Economic Base Theory

Douglas C. North's theory (1955) posits that a region's economic growth is driven by its export activities, with the extent of growth determined by demand for exported goods and services. Economic activities are divided into basic (export-driven) and non-basic (local-focused) sectors, with only basic activities contributing significantly to regional prosperity (Taringan, 2015). The Location Quotient (LQ) method is often used to distinguish these sectors by comparing regional sectoral employment or value-added against national levels. An LQ greater than 1 indicates a strong export potential, classifying the sector as basic (Emalia and Moniyana, 2017).

E. Economic Structural Change Theory or Shift-Share

Economic Structural Change Theory, as described by Lewis (Subandi, 2016), explains the transition of economies from traditional agricultural sectors to modern industrial ones, highlighting the critical role of agriculture in supporting economic growth (Anggreani et al., 2023). Lewis categorizes economies into two types: traditional economies, characterized by low productivity and surplus labor, and modern economies, distinguished by high productivity and capital accumulation. Building on this, Todaro (Kuncoro, 2003) and Kesuma & Utama (2015) discuss the evolution of economic structures, emphasizing the significant shift from agriculture to manufacturing and services. The Shift-Share analysis, as detailed by Taringan (2015), provides a framework for examining regional growth by comparing national, proportional, and differential shifts in sectoral employment. This analysis highlights how local sectors perform in relation to national trends and locational advantages, offering insights into regional economic dynamics (Wati & Arifin, 2019; Negara & Putri, 2020).

METHOD

A. Data Types and Data Sources

This research employs a quantitative descriptive analysis approach, which involves evaluating numerical data and interpreting it with descriptive explanations (Wijaya, 2022). The study utilizes secondary data from 2018-2022, sourced from the Central Statistics Agency (BPS) of Nusa Tenggara Timur Province and its districts. Specifically, the data includes the PDRB by sector at constant prices for both the districts and the province during this period. Data collection is carried out through a literature review, using written documents such as books, articles, scientific papers, and publications to support the research.



**B. Operational Definition of Variables**

In this study, the author specifies operational definitions to minimize interpretation discrepancies of terms. First, the Gross Regional Domestic Product (PDRB) for districts in Nusa Tenggara Timur Province is based on constant 2010 prices, categorized by economic sectors for the period 2018-2022. Second, the PDRB for Nusa Tenggara Timur Province is also based on constant 2010 prices and sector classifications for the same period. The choice of 2010 as the base year is due to the expansion from 9 to 17 economic sectors, resulting in more comprehensive and accurate economic activity records as reported by BPS.

C. Data Analysis Methods**1. Location Quotient (LQ) Analysis**

Location Quotient (LQ) analysis compares the significance of a sector in a specific region to its national significance (Emalia & Moniyana, 2017). The LQ approach is often used to identify basic and non-basic sectors. The formula for calculating LQ is given by (Taringan, 2015):

$$LQ = \frac{x_i / PDRB}{X_i / PDB}$$

where:

- x_i = value added by sector i in a specific region/province
- PDRB = Gross Regional Domestic Product
- X_i = value added by sector i nationally
- PDB = Gross Domestic Product

According to this formula, sectors supporting tourism are categorized as follows: If the transport sector's $LQ > 1$, it is considered a basic or leading sector for tourism support; if $LQ < 1$, it is non-basic. Similarly, the accommodation and food services sector is classified as basic if its $LQ > 1$, and the information sector is also considered basic if its $LQ > 1$, with both being non-basic if their LQ is less than 1.

2. Shift-Share Analysis

Shift-share analysis is utilized to evaluate the changes and shifts in sectors within the economy of Nusa Tenggara Timur Province. This analytical approach compares the performance of sectors in the provincial Gross Regional Domestic Product (GRDP) with national trends (Taringan, 2015). According to Kesuma and Utama (2015), shift-share analysis involves three key components: National Share (N), Proportional Shift (P), and Differential Shift (D).

The National Share component reflects the growth in regional employment if it followed the national growth rate, allowing for a comparison of regional growth against the national average. The Proportional Shift component, also known as the structural or industrial mix effect, measures the net regional shifts based on the sector composition in the area. Positive values in this component indicate that the region specializes in sectors that are growing nationally, whereas negative values suggest a focus on declining sectors. The Differential Shift component assesses net regional shifts due to certain industries growing faster or slower locally compared to national rates, influenced by local factors such as resource availability or operational efficiency. A positive differential shift indicates a competitive local advantage. The shift-share analysis formula is given by:

$$G_{ij} = N_{ij} + P_{ij} + D_{ij}$$

Where:

- G_{ij} = Change in GDP growth of sector i in region j
- $N_{ij} = Y_{ij} (r_n)$ is the national growth of sector i in region j
- $P_{ij} = Y_{ij} (r_{in} - r_n)$ is the industrial mix of sector i in region j
- $D_{ij} = Y_{ij} (r_{ij} - r_{in})$ is the competitive advantage of sector i in region j





With:

- $r_n = (Y^*_n - Y_n) / Y_n$ (Total GDP growth in region n)
- $r_{in} = (Y^*_{in} - Y_{in}) / Y_{in}$ (Growth of sector i in region n)
- $r_{ij} = (Y^*_{ij} - Y_{ij}) / Y_{ij}$ (Growth of sector i in region j)

Explanation:

- i= The economic sector being studied
- j= The region being studied
- Y_{ij} = GDP of sector i in region j at the beginning of the analysis
- Y^*_{ij} = GDP of sector i in region j at the end of the analysis
- Y_{in} = GDP of sector i at the national level at the beginning of the analysis
- Y^*_{in} = GDP of sector i at the national level at the end of the analysis
- Y_n = Total national GDP at the beginning of the analysis
- Y^*_n = Total national GDP at the end of the analysis

Thus, the shift-share equation for a specific sector in a specific region is formulated as follows:

$$G_{ij} = Y_{ij} (r_n) + Y_{ij} (r_{in} - r_n) + Y_{ij} (r_{ij} - r_{in})$$

RESULTS AND DISCUSSION

A. Leading Sectors Supporting Tourism in Each Regency/City in East Nusa Tenggara Province

The Location Quotient (LQ) method is a well-known technique for assessing basic and non-basic sectors. It identifies and formulates the composition and shifts of these sectors by using Gross Regional Domestic Product (GRDP). In this study, LQ values are used to compare the GRDP of 22 districts in Nusa Tenggara Timur with the provincial GRDP for 2018-2022. Sectors with $LQ > 1$ are classified as basic, indicating higher specialization at the district level compared to the provincial level, while sectors with $LQ < 1$ are non-basic, showing lesser importance at the district level compared to the province.

1. Transportation and Warehousing Sector

The Transport and Warehousing sector in East Nusa Tenggara (NTT) covers passenger and cargo transport by land, sea, and air, as well as related services like warehousing. Location Quotient (LQ) analysis indicates that out of 22 regencies/cities in NTT, only 9—Alor, Belu, Ende, Flores Timur, Kupang City, Kupang, Malaka, Sikka, and North Central Timor—have a transport and warehousing sector classified as a base sector ($LQ > 1$). The remaining 13 regencies/cities are categorized as non-base sectors with $LQ < 1$. As an archipelagic province bordered by Timor-Leste, NTT requires an efficient transportation system. Currently, NTT has 15 airports and 24 seaports, though some regencies like Kupang and Malaka lack airports. Data shows that Kupang City has the highest number of air passengers, while the Larantuka Port in Flores Timur has the highest sea passenger traffic. Road transport is also crucial, with the longest national roads in Belu and North Central Timor. Improving transportation infrastructure is essential for supporting this sector, including enhancing road quality, and expanding ports and airports to facilitate tourist flows (BPS Provinsi NTT, 2024).

2. Accommodation and Food and Beverage Provision Sector

The Accommodation and Food Service sector is rapidly developing in Nusa Tenggara Timur (NTT) due to its strong natural resources that make it an attractive tourism destination. This growth has driven the construction of hotels, restaurants, and other accommodation services, boosting tourism appeal. According to Location Quotient (LQ) analysis from 2018 to 2022, cities such as Kupang which has a base sector in accommodation and food services. Accommodation involves businesses providing lodging, dining, and other services for payment. In 2022, NTT had 485 hotels with 7,233 rooms and 11,982 beds. The highest numbers of hotels were in Manggarai Barat, Ende, and Kupang. Although Sikka and Sabu Raijua are considered base sectors for this industry, they have fewer hotels compared to Kupang and Manggarai Barat, reflecting high demand and significant economic impact despite lower quantities.

Tourist data from 2021 to 2023 reveals rising hotel guest numbers in NTT, with Manggarai Barat and Kupang leading in international and domestic visitors, respectively. The occupancy rates for star-rated hotels in





2022 show that 4-star hotels had the highest occupancy at 51.90%. Regarding restaurants, the base sectors include Kupang, Manggarai Barat, Sikka, and Sabu Raijua. Kupang had the most restaurants, with 1,178 units in 2023, while other base sectors had fewer establishments. Despite a high number of eateries in non-base sectors, their economic contributions are relatively smaller due to dominant other local economies.

3. Information and Communication Sector

The Information and Communication sector in Nusa Tenggara Timur (NTT) encompasses the production and distribution of information and cultural products, including tools for their transmission, as well as data processing, communication services, and IT consulting. It includes industries such as publishing, film production, broadcasting, telecommunications, and IT services. Based on Location Quotient (LQ) analysis from 2018 to 2022, only four regions in NTT—Kupang City, Manggarai, Manggarai Timur, and Sumba Barat Daya—are identified as having a base sector in information and communication. In contrast, the majority of other regions, including Sumba Barat, Sumba Timur, Kupang, Timor Tengah Selatan, Timor Tengah Utara, Belu, Alor, and others, are classified as non-basis.

Internet access data from 2021 shows that the highest numbers of 4G internet signal coverage were in Manggarai, Sumba Barat Daya, Manggarai Timur, and Kupang City, with Kupang having the most widespread access. Additionally, in 2023, Kupang City had the highest percentage of internet users aged 5 and above, followed by Manggarai, Manggarai Timur, and Sumba Barat Daya. Regions with high internet access but non-basis LQ may use the internet primarily for consumption rather than economic activities, limiting their sector's economic impact. Conversely, areas with a base sector but limited internet access may still significantly support tourism through communication services and promotional activities. To improve the sector, enhancing internet infrastructure in key tourism destinations such as Komodo-Manggarai Barat and Kelimutu-Ende is crucial. Collaborating with major digital platforms and adopting e-ticketing can further boost tourism and digital visibility.

From the analysis of Location Quotients (LQ) across 22 districts and 1 city in Nusa Tenggara Timur (NTT), Kota Kupang emerges as the region with the highest number of supporting tourism sectors.

No.	Regency/City	Sector			Basic Sector
		1	2	3	
1.	Alor	✓			1
2.	Belu	✓			1
3.	Ende	✓			1
4.	Flores Timur	✓			1
5.	Kota Kupang	✓	✓	✓	3
6.	Kupang	✓			1
7.	Lembata				-
8.	Malaka	✓			1
9.	Manggarai			✓	1
10.	Manggarai Barat		✓		1
11.	Manggarai Timur			✓	1
12.	Nagekeo				-
13.	Ngada				-
14.	Rote Ndao				-
15.	Sabu Raijua		✓		1
16.	Sikka	✓	✓		2
17.	Sumba Barat				-
18.	Sumba Barat Daya			✓	1
19.	Sumba Tengah				-
20.	Sumba Timur				-
21.	Timor Tengah Selatan				-
22.	Timor Tengah Utara	✓			1
Total Regency/City		9	4	4	17





According to the table above, we can conclude that there are three sectors—Sector 1 is the Transportation and Warehousing Sector, Sector 2 is the Accommodation and Food Service Sector, and Sector 3 is the Information and Communication Sector. Kabupaten Sikka follows with two sectors, while several districts including Alor, Belu, Ende, Flores Timur, Kupang, Malaka, Manggarai, Manggarai Barat, Manggarai Timur, Sabu Raijua, Sumba Barat Daya, and Timor Tengah Utara have the fewest, each with only one sector. NTT's tourism support sectors include transportation and warehousing in nine regions, accommodation and food services in four, and information and communication in four. Kota Kupang stands out for having all three sectors, reflecting its role as the provincial capital and its emphasis on tourism and mobility services. To develop national tourism, the five key destinations in NTT—Komodo, Kelimutu, Alor, Kupang, and Sumba—require robust support from these sectors. Enhancing these sectors can attract both domestic and international tourists, fostering regional development (Peraturan Pemerintah Nomor 50, 2011)

B. Shift-Share Analysis of Tourism Supporting Sectors in Each Regency/City

The Shift-Share analysis is divided into three components: national share (Nij), proportional shift (Pij), and differential shift (Dij). The analysis uses data from the 2010 PDRB ADHK, focusing on the period from 2018 to 2022 for each district and city, with NTT Province serving as the reference region. The results of the Shift-Share analysis for the tourism-supporting sectors across the districts and cities in East Nusa Tenggara Province are shown in the table.

1. Transportation and Warehousing Sector

Based on the data, the Shift-Share analysis for the transportation and warehousing sector in 22 districts and cities shows positive national share (Nij) values, indicating that growth in this sector is influenced by national trends. However, the proportional shift (Pij) values are negative across all regions, implying that these areas specialize in sectors that are growing slowly or even declining nationally, resulting in slower growth in transportation and warehousing. The differential shift (Dij) component is positive in 16 districts, including Alor, Belu, Flores Timur, Kupang, and others, suggesting that these areas have locational advantages such as efficient transportation infrastructure, making them competitive in this sector. On the other hand, six regions—Kupang City, Ende, Manggarai Barat, Sikka, Sumba Barat Daya, and Sumba Timur—show negative Dij values, indicating a lack of competitiveness due to less favorable locational factors. This finding aligns with previous research, which suggests that a positive differential shift indicates competitiveness, while a negative one reflects the opposite. The table provides detailed Shift-Share analysis results for each district and city from 2018 to 2022.

No.	Regency/City	NIJ	PIJ	DIJ	GIJ
1.	Alor	11.326,44	-14.159,97	6.352,81	3.519,28
2.	Belu	14.266,25	-17.835,23	22.064,91	18.495,93
3.	Ende	26.304,64	-32.885,25	-7.213,35	-13.793,96
4.	Flores Timur	19.152,08	-23.943,34	12.372,14	7.580,88
5.	Kota Kupang	134.341,64	-167.949,79	-129.996,25	-163.604,40
6.	Kupang	28.815,70	-36.024,50	33.555,20	26.346,40
7.	Lembata	3.433,16	-4.292,03	496,78	-362,09
8.	Malaka	11.910,82	-14.890,54	12.830,82	9.851,10
9.	Manggarai	10.336,98	-12.922,98	9.277,80	6.691,80
10.	Manggarai Barat	9.827,24	-12.285,71	-4.164,25	-6.622,72
11.	Manggarai Timur	1.446,10	-1.807,87	1.065,97	704,20
12.	Nagekeo	3.858,22	-4.823,43	3.120,64	2.155,43
13.	Ngada	10.276,67	-12.847,58	4.726,06	2.155,15
14.	Rote Ndao	5.988,55	-7.486,71	11.484,35	9.986,20
15.	Sabu Raijua	3.191,86	-3.990,36	2.482,31	1.683,80
16.	Sikka	20.321,60	-25.405,44	-5.993,14	-11.076,98
17.	Sumba Barat	3.227,04	-4.034,35	4.421,61	3.614,30
18.	Sumba Barat Daya	6.074,64	-7.594,33	-6.559,91	-8.079,60





19.	Sumba Tengah	388,59	-485,80	474,41	377,20
20.	Sumba Timur	17.907,32	-22.387,18	-6.330,86	-10.810,72
21.	Timor Tengah Selatan	7.612,63	-9.517,08	6.956,45	5.052,00
22.	Timor Tengah Utara	16.816,29	-21.023,21	7.864,91	3.657,99

2. Accommodation and Food and Beverage Provision Sector

Based on the data, the Shift-Share analysis for the accommodation and food service sector in 22 districts and cities reveals that the national share (Nij) is positive across all regions, indicating that growth in this sector is influenced by national trends. However, the proportional shift (Pij) is negative, meaning these areas specialize in sectors experiencing slow or negative growth nationally, leading to slow sectoral growth. The differential shift (Dij) is positive in 15 districts, such as Kota Kupang, Alor, Belu, and others, suggesting these areas have locational advantages like efficient accommodations and restaurants, enhancing their competitiveness. Conversely, seven districts, including Ende, Flores Timur, and Sabu Raijua, have negative Dij values, indicating less favorable locational factors and lower competitiveness in this sector. The table provides detailed Shift-Share analysis results for each district and city from 2018 to 2022.

No.	Regency/City	NIJ	PIJ	DIJ	GIJ
1.	Alor	850,34	-1.175,05	974,38	649,68
2.	Belu	1.200,52	-1.658,94	1.329,31	870,89
3.	Ende	1.438,75	-1.988,13	-52,41	-601,80
4.	Flores Timur	286,75	-396,25	-98,01	-207,51
5.	Kota Kupang	33.304,50	-46.021,82	1.967,92	-10.749,40
6.	Kupang	720,53	-995,66	559,73	284,60
7.	Lembata	296,19	-409,29	-206,02	-319,12
8.	Malaka	201,18	-278,00	250,93	174,11
9.	Manggarai	1.318,46	-1.821,92	-187,94	-691,40
10.	Manggarai Barat	1.615,41	-2.232,25	2.350,62	1.733,78
11.	Manggarai Timur	218,55	-302,01	177,55	94,10
12.	Nagekeo	200,35	-276,85	141,99	65,49
13.	Ngada	1.083,69	-1.497,50	528,74	114,93
14.	Rote Ndao	348,54	-481,63	217,09	84,00
15.	Sabu Raijua	621,20	-858,40	-243,50	-480,70
16.	Sikka	2.326,89	-3.215,41	282,21	-606,31
17.	Sumba Barat	626,70	-866,00	866,90	627,60
18.	Sumba Barat Daya	94,01	-129,90	-92,30	-128,20
19.	Sumba Tengah	86,50	-119,54	28,63	-4,40
20.	Sumba Timur	1.123,03	-1.551,86	-189,00	-617,83
21.	Timor Tengah Selatan	451,56	-623,98	132,43	-40,00
22.	Timor Tengah Utara	1.824,62	-2.521,35	948,80	252,07

3. Information and Communication Sector

Based on the data, the Shift-Share analysis for the information and communication sector in 22 districts and cities indicates that the national share (Nij) is positive across all regions. This suggests that growth in this sector is positively influenced by national trends. Additionally, the proportional shift (Pij) is also positive for all 22 districts and cities, implying that these areas specialize in sectors that are experiencing rapid national growth. Consequently, the information and communication sector in these regions is growing rapidly.

The differential shift (Dij) analysis reveals that 9 districts and cities, including Kota Kupang, Ende, Kupang, Manggarai Barat, Manggarai Timur, Nagekeo, Ngada, Sumba Timur, and Timor Tengah Utara, have positive values. This indicates that these areas have locational advantages, such as good internet access, which enhances their competitiveness in the information and communication sector. However, 13 districts, including Alor, Belu, Flores Timur, Lembata, Malaka, Manggarai, Sabu Raijua, Sumba Barat Daya, Rote Ndao, Sikka,





Sumba Barat, Sumba Tengah, and Timor Tengah Selatan, have negative differential shift values. This suggests that these regions have less favorable locational factors, making them less competitive in this sector.

No.	Regency/City	NIJ	PIJ	DIJ	GIJ
1.	Alor	13.764,11	22.349,19	-6.804,25	29.309,05
2.	Belu	13.740,33	22.310,57	-3.902,46	32.148,44
3.	Ende	20.751,12	33.694,20	4.136,86	58.582,17
4.	Flores Timur	18.950,36	30.770,26	-14.575,42	35.145,21
5.	Kota Kupang	235.070,75	381.691,23	189.801,12	806.563,10
6.	Kupang	23.971,96	38.923,98	2.448,56	65.344,50
7.	Lembata	9.681,59	15.720,27	-4.208,62	21.193,24
8.	Malaka	12.168,16	19.757,79	-8.487,34	23.438,61
9.	Manggarai	28.925,75	46.967,58	-31.784,12	44.109,20
10.	Manggarai Barat	17.253,40	28.014,85	803,63	46.071,87
11.	Manggarai Timur	24.366,19	39.564,10	2.196,21	66.126,50
12.	Nagekeo	7.748,91	12.582,14	798,50	21.129,55
13.	Ngada	12.637,96	20.520,62	7.347,36	40.505,94
14.	Rote Ndao	9.957,80	16.168,77	-1.813,67	24.312,90
15.	Sabu Raijua	662,37	1.075,51	-16,38	1.721,50
16.	Sikka	27.115,01	44.027,44	-4.035,57	67.106,88
17.	Sumba Barat	8.537,61	13.862,77	-12.308,98	10.091,40
18.	Sumba Barat Daya	25.882,41	42.026,02	-3.008,83	64.899,60
19.	Sumba Tengah	5.521,42	8.965,29	-9.607,71	4.879,00
20.	Sumba Timur	18.455,58	29.966,87	8.258,53	56.680,98
21.	Timor Tengah Selatan	39.906,83	64.797,89	-12.601,73	92.103,00
22.	Timor Tengah Utara	16.740,03	27.181,28	2.322,63	46.243,94

CONCLUSION

The Location Quotient (LQ) analysis across Nusa Tenggara Timur's districts identifies several tourism-supporting sectors: transportation and warehousing are predominant in nine districts, accommodation and food services in four, and information and communication in four. Shift-share analysis reveals: for transportation and warehousing, 22 districts show positive National Share (Nij) but negative Proportional Shift (Pij); 16 districts have positive Differential Shift (Dij). For accommodation and food services, 22 districts have positive Nij and negative Pij; 15 districts have positive Dij. For information and communication, all 22 districts have positive Nij and Pij, with 9 districts showing positive Dij. Local governments should enhance transportation infrastructure, including roads, ports, and airports, to better connect tourist destinations. Development of higher-standard hotels in high-potential areas is advised, alongside active promotion and investment support for the hospitality sector. Additionally, improving internet infrastructure in major tourist spots will attract more visitors and facilitate superior digital services. Strategic promotion of regional tourism is essential for greater visibility and exploration.

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