

## Analysis of Potential Leading Sectors in the Regency North Lombok 2019-2023

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### ABSTRACT

The study aims to identify the main sectors of North Lombok Regency in 2019-2023 using the Esteban-Marquillas-Layer stock method, the Growth Quota Model (MRP), and overlay analysis. The results of the study indicate that it includes the main sectors of North Lombok Regency and gas procurement, information and communication, education services, health services, social activities, and other services. These sectors contribute significantly to the economic growth of the region. In contrast, sectors such as agriculture, mining and transportation remain challenges in terms of competitiveness and growth. Therefore, the development strategy of North Lombok Regency must focus on strengthening the main sectors and reviving the unpaid sectors by increasing investment, support for guidelines and proper infrastructure.

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## INTRODUCTION

Regional development that emphasizes economic development can encourage changes in the economic sector to achieve a certain goal. The process by which the regional administration and other societal elements manage the numerous resources that are already available and establish a pattern of cooperation in order to generate new employment opportunities and promote the growth of economic activity in the area is known as regional economic development (Faizal et al., 2022).

The potential sector in a region can be determined from the total income of all economic sectors in the Gross Regional Domestic Product (GRDP). A region's economic growth is depicted by its gross regional product (GRDP), which is broken down into a number of sectors, including buildings, wholesale and retail trade, transportation and warehousing, information and communication, financial services, mining and quarrying, agriculture, processing industry, electricity, gas, and clean water (Setiawan et al., 2022).

The Indonesian province of West Nusa Tenggara (NTB) is made up of hundreds of smaller islands in addition to the two main islands of Lombok and Sumbawa. With a total area of about 20,153.15 km<sup>2</sup>, this province is well situated between East Nusa Tenggara in the east and Bali Province in the west. Data from the Central Statistics Agency (BPS) NTB shows positive economic growth in NTB from 2020 to 2022, reaching 2.15% in 2020, 3.38% in 2021, and 5.27% in 2022. This increase was influenced by significant contributions from key sectors such as agriculture, trade, and services. Based on GRDP data.

North Lombok Regency has the highest poverty rate in NTB, which is 25.8% in 2023. One strategic solution to reduce poverty is to develop leading sectors such as tourism, horticulture, and fisheries. The development of this sector can create jobs, increase income, and encourage economic growth. Thus, policies based on leading sectors are key to overcoming poverty while supporting sustainable economic development.

## THEORETICAL REVIEW

### *Economic Development*

According to a number of definitions provided by development economists, the theory of economic development only evaluates economic performance, and the most widely used metrics are economic growth and per capita income. Economic development, according to Meier (1995), is the process by which a nation's per capita income rises over an extended period of time, with the caveat that neither the number of people living below the extreme poverty level nor the income distribution becomes more unequal. The word process indicates that there are certain forces and are interrelated and influence each other so that changes occur towards a better and higher direction (Yulianita, 2023).

### *Economic growth*

According to (Suherman Rosyidi, 2011) One of the most crucial metrics for assessing a nation's economic development is its rate of economic growth. Economic growth indicates how much more money the community will make

during a given time period as a result of economic activity. Economic activity is essentially the process of using production factors to generate output, which will result in a flow of compensation for community-owned production elements. The community's income as the owner of the production elements is anticipated to rise in tandem with economic growth. Many factors can influence economic growth, namely the availability of economic resources, non-economic resources which include the economic system, socio-cultural factors and government policies.

### ***Regional Economic Growth***

The increase in total community revenue that takes place in the region – that is, the increase in all added value – is known as regional economic growth. At first, regional income was calculated using current prices. However, it must be expressed in real value, that is, in constant prices, in order to show the increase from one era to the next (Tarigan et al., 2019).

The theory that discusses regional growth starts from a theory quoted from development macroeconomics by changing regional boundaries and adjusting them to their operational environment, followed by a theory originally developed in regional economics. If in macroeconomics and development economics, the term export or import is trade with foreign countries, then in regional economics it means trade with outside the region (including trade with foreign countries) (Tarigan et al., 2019).

### ***Leading Sectors***

A leading sector is defined as one that plays a significant role in the economy of a region. Furthermore, these components develop further during investment and eventually become business centers. Empowering the potential of the leading industries owned by the region can also help create investment opportunities. The criteria for a leading sector can vary greatly, depending on how big a role the sector plays in the local economy. Some criteria that can be used to determine a leading sector are as follows: they have a high growth rate; they have a relatively high labor absorption rate; and they can also be considered as sectors that are capable of creating value (Rakhmadhani et al., 2018).

Sectors with large contributions and are able to influence the regional economy are sectors that must be utilized properly. Economic sectors that can produce goods or services with high demand, adapt to technological advances, and influence surrounding sectors through their contributions to investment and regional development can make a significant contribution to the value of regional GRDP, so that they can be called leading economic sectors. Based on these requirements, leading economic sectors will ultimately make the largest contribution to the overall GRDP value (Suwarno & Sishadiyati, 2022).

### ***Gross Regional Domestic Product***

One of the macroeconomic indicators that is used to design policies, decide on the course of growth, and assess the outcomes of regional

development is the gross regional product, or GDP. The development of GRDP occurs due to changes in production prices or production indicators. This change causes the contribution of added value of each sector to GRDP to also change. If the development of each sector is not proportional, for example, certain sectors develop faster than other sectors, then in the long term there will be a real (significant) change in the contribution in each sector, this change is known as a change in economic structure.

In theory, the significant role of a sector in the economy does not necessarily indicate a change in economic structure; in practice, however, there has been a shift in economic activity within a specific sector, which is indicated by the growing development of economic activities that support the sector in question. The added value of goods and services determined using annual prices is referred to as GDP at current prices (ADHB). While GRDP at constant prices (ADHK) shows the added value of goods and services calculated using prices in a particular year as a basis. GRDP at current prices is used to see economic shifts and structures. While constant prices are used to determine economic growth from year to year. Regional income is defined as the level of community income in an analysis area. The level of regional income can be measured from the total regional income or the average income of the community in the area (Tarigan et al., 2019).

### ***Shift Share Esteban Merquillas***

Esteban Merquillas' Shift Share Analysis describes the performance of sectors in a region by comparing them to the national economy. A region that shows progress in a particular sector when compared to the wider zone above it will show the region's competitive advantage. This competitive advantage of course occurs due to the movement of development within it. In shift-share analysis, economic change is determined by three components (Esteban-Marquillas, 1972). The first component is Provincial Share (Sp), which aims to calculate how much the value of a region's (district) GRDP is influenced by the economic growth of a higher region, either province or island. The Sp value shows how much the provincial or island economy plays a role in the district economy. If the regional growth value is the same as the growth of the province or island, it means that the role of the region in the province is stable and does not change. The second component is Proportional (Industry-Mix) Shift. This component aims to see how much the GRDP growth of a particular sub-sector at the regional/district level is compared to the total sector at the provincial level. This shows how much the region and province excel in determining the superiority of a particular sector. The last component is Differential Shift (Sd). This aims to calculate the difference in regional (district) economic growth with provincial level values seen from the gross added value of a particular sector. From this difference, it will be seen whether there is a regional advantage or not. If the Sd and Sp values are positive, then the sector is a leading sector in the area studied. If the value is negative, then the sector becomes a field that must be monitored and considered in order to provide a positive contribution to the

economy. Sectors with negative values are compared to the provincial economic structure (Pasaribu et al., 2020).

### ***Growth Ratio Mode***

MRP analysis is conducted to see the description of economic activities, especially the economic structure of the Bangka-Belitung region, which emphasizes growth criteria both externally (province) and internally (study area). The MRP analysis approach can be divided into two, namely: (1) reference area growth ratio (RPR), and (2) study area growth ratio (RPS). RPR compares the growth of each activity in the context of South Sumatra province with the GRDP of South Sumatra province (provincial scope). Further analysis compares the growth of each activity in the context of the Bangka-Belitung region with the GRDP of the Bangka-Belitung region (regional scope). (Yusuf, 1999).

### ***Overlay Analysis***

According to (Yusuf, 1999) Overlay analysis is intended to see the description of potential economic activities based on growth criteria and contribution criteria. There are four possibilities in overlay analysis, namely:

- 1) Growth (+) and contribution (+), indicate an activity that is very dominant both in terms of growth and contribution.
- 2) Growth (+) and contribution (-), Indicates an activity whose growth is dominant but whose contribution is small. This activity can be increased in its contribution to be spurred to become a dominant activity.
- 3) Growth (-) and contribution (+), indicates an activity that has small growth but large contribution. This activity is very likely to be an activity that is experiencing a decline.
- 4) Growth (-) and contribution (-), indicate that an activity is not potential from either the growth criteria or the contribution criteria.

## **METHODOLOGY**

### ***Types of research***

This type of research is quantitative descriptive with a research method using data in the form of numbers which are then analyzed. Descriptive quantitative is a type of research used to analyze data by describing or depicting the data that has been collected as it is (Fauziah, 2018) .

### ***Data Analysis Techniques***

The data analysis techniques in this study are divided into three analysis techniques, namely Shift Share Esteban Merquillas analysis, Growth Ratio Model analysis, overlay analysis which are then processed using Excel.

## **RESULTS AND DISCUSSION**

### ***Esteban Merquillas Shift Share Analysis***

Shift Share Analysis is used to see the competitiveness of the economic sector in North Lombok Regency compared to NTB Province. The Esteban-

Marquillas Shift Share approach evaluates sector performance based on contribution ( $A_i$ ), specialization ( $Y_j - Y'_j$ ), and competitive advantage. Each category is coded with a certain number and has characteristics in the allocation effect ( $a_{ij}$ ) and its components, such as the difference in relative efficiency ( $E_i - E'_i$ ) and ( $r_1 - R_1$ ). The combination of these factors provides an overview of the competitiveness and specialization of each sector.

The results of the analysis show that the accommodation and food and beverage provision sector has positive growth and contributes significantly to the regional economy.

Table 1. Results of Shift Share Analysis of Esteban Merquillas, North Lombok Regency 2019-2023

Business Field	Aij	Specializati on( $Y_{ij}-Y'_{ij}$ )	Competitive Advantage	Code
Agriculture, Forestry and Fisheries	84,173,292.44	2,193,649.16	0.03	4
Mining and Quarrying	80,510.52	277,470.58	3.45	4
Processing industry	80.83	3,734.53	46.20	4
Electricity and Gas Procurement	1.12	61.42	55.05	4
Water Supply, Waste Management, Waste and Recycling	20.11	(213.03)	(10.59)	2
Construction	154.14	7,863.61	51.02	4
Wholesale and Retail Trade, Car and Motorcycle Repair	640.42	18,592.14	29.03	4
Transportation and Warehousing	751.12	14,296.45	19.03	4
Accommodation and Food and Beverage Providers	2,802.06	15,585.83	5.56	4
Information and Communication	854.77	9,504.51	11.12	4
Financial Services and Insurance	22.27	1,677.10	75.29	4
Real Estate	925.29	10,950.09	11.83	4
Corporate Services	24.78	424.01	17.11	4
Government Administration, Defense, and Compulsory Social Security	31.43	2,409.84	76.68	4
Educational Services	54.09	3,080.77	56.96	4
Health Services and Social Activities	384.25	5,840.08	15.20	4
Other Services	7.71	803.05	104.09	4

Source: Processed Data 2025

### ***Growth Ratio Model Analysis***

The Growth Ratio Model is used to determine which sectors have faster growth compared to the average regional growth. The Growth Ratio Model (MRP) analyzes the growth of economic sectors in North Lombok Regency compared to West Nusa Tenggara Province using the RPr and RPs indicators. The results of the 2019-2023 analysis show that Classification 1 ( $RPs > 1$ ,  $RPr > 1$ )

includes the Tourism, Trade, and Construction sectors, which excel in both regions. Classification 2 (RPs > 1, RPr < 1) such as Fisheries and Agriculture, grew rapidly in the district but not in the province. Classification 3 (RPs < 1, RPr > 1) such as the Manufacturing Industry, developed more in the province. Classification 4 (RPs < 1, RPr < 1) such as Financial Services, grew low in both regions. Sectors in Classifications 1 and 2 have great potential for development. The results of the Growth Ratio Model (MRP) analysis in North Lombok Regency for the 2019-2023 period show that seven sectors are included in Classification 1 (superior at the district and provincial levels), namely Electricity and Gas Procurement; Water Procurement, Waste Management, Waste, and Recycling; Information and Communication; Financial Services and Insurance; Education Services; Health Services and Social Activities; and Other Services. The growth of these sectors is driven by increasing demand, technological advances, government policies, and infrastructure investment. Classification 2 includes Government Administration, Defense, and Mandatory Social Security, which excel at the district level but are not prominent in the province, driven by strengthening the bureaucracy, social assistance programs, and post-earthquake rehabilitation in 2018. Classification 3 includes Wholesale and Retail Trade; Car and Motorcycle Repair; and Real Estate, which is growing in the district but is less significant in the province. Its growth is driven by post-earthquake economic recovery, increased purchasing power, and property investment in tourist areas such as Gili Trawangan. Classification 4 includes six sectors with negative growth at the district and provincial levels, namely Agriculture, Forestry, and Fisheries; Mining and Quarrying; Manufacturing; Construction; Transportation and Warehousing; and Accommodation and Food and Beverage Providers. This slowdown is due to minimal investment, limited infrastructure, and the impact of the pandemic on the tourism sector.

### ***Overlay Analysis***

Overlay analysis is a combined method that combines the results of two analytical approaches, namely Shift Share Esteban Merquillas and the Growth Ratio Model (MRP), to obtain a more comprehensive picture of the potential and performance of economic sectors in North Lombok district. The following table 4.2 contains the results of the Overlay analysis and then it can be concluded which sectors have potential in North Lombok district.

Overlay analysis has four predictions, namely :

- a. Growth (+) and contribution (+), indicate that the economic sector is very dominant in terms of growth and contribution.
- b. Growth (+) and contribution (-), indicate the dominant economic sector growth but its contribution is small. The sector needs to increase its contribution to become a dominant activity.
- c. Growth (-) and contribution (+), indicates the economic sector has small growth but large contribution. The sector is likely experiencing a decline.

Table 2. Results of Overlay Analysis of North Lombok Regency 2019-2023

Sector Name	Shift Share Esteban Merquillas	Growth Ratio Model
Agriculture, Forestry and Fisheries	+	-
Mining and Quarrying	+	-
Processing industry	+	-
Electricity and Gas Procurement	+	+
Water Supply, Waste Management, Waste and Recycling	-	+
Construction	+	-
Wholesale and Retail Trade, Car and Motorcycle Repair	+	-
Transportation and Warehousing	+	-
Accommodation and Food and Beverage Providers	+	-
Information and Communication	+	+
Financial Services and Insurance	+	+
Real Estate	+	-
Corporate Services	+	+
Government Administration, Defense, and Compulsory Social Security	+	-
Educational Services	+	+
Health Services and Social Activities	+	+
Other Services	+	+

Source: Processed Data 2025

Analysis of the leading sectors of North Lombok Regency shows that several sectors are still developing with low contributions to GRDP, such as Transportation and Warehousing, Provision of Accommodation and Food and Beverage, Real Estate, and Government Administration. The main obstacles include inadequate infrastructure, lack of investment, and limited human resources and promotion.

Meanwhile, potential sectors that have growth opportunities include Agriculture, Forestry, and Fisheries, Mining and Quarrying, Manufacturing Industry, Electricity and Gas Supply, Water and Waste Management, Trade, Information and Communication, Financial Services and Insurance, and Corporate Services. With the support of strategic policies, investment, and improvements in infrastructure and human resources, these sectors can become the main drivers of economic growth in North Lombok

## CONCLUSIONS AND RECOMMENDATIONS

Based on the research results and discussions that the author has presented above, the following conclusions can be drawn:

- 1) Based on the Results of the Esteban-Marquillas Shift Share Analysis, the leading sectors include the manufacturing industry, electricity and gas supply, trade, financial services, education, health, and real estate. This sector has high competitiveness and needs to be developed through investment and human resource development. Non-leading sectors such as agriculture, mining, and transportation require revitalization through technological innovation and strategic policies to increase competitiveness and regional economic growth.
- 2) Based on the results of the Growth Ratio Model Analysis (MRP), leading sectors such as electricity and gas procurement, information and communication, and financial services grew significantly in NTB and North Lombok. However, transportation, warehousing, and accommodation provision experienced contraction, requiring special attention. Agriculture and the processing industry grew below average, indicating the need for innovation and investment to increase contributions to the regional economy.
- 3) Based on the results of the Overlay Analysis, leading sectors such as electricity, communication, education, health, and other services showed positive growth. On the other hand, agriculture, mining, and transportation still face obstacles. To encourage inclusive economic growth, the main strategies needed are infrastructure investment, increasing the productivity of competitive sectors, product diversification, and strengthening investment in sectors with high social impact.
- 4) To increase economic growth and create economic development, it would be good for local governments to design policies and make decisions that focus more on economic sectors that are superior and have the potential to be further developed, but still not forgetting other non-superior sectors.
- 5) Utilizing other sectors in North Lombok Regency, such as the food and beverage accommodation provider sector, in order to optimize this sector to improve the economy in the North Lombok Regency area.

## FURTHER STUDY

Focus on high-growth and competitive sectors such as Electricity and Gas Supply, Information and Communication, Financial Services, Education, and Health. Increase investment in infrastructure, technology, and workforce training to ensure maximum contribution of these sectors to the regional economy.

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