Variance
Journal of Statistics and Its Applications
P-ISSN: 2685-8738 E-ISSN: 2685-872X

Variance: Journal of Statistics and Its Applications
Volume 7 Issue 1 | April 2025
10.30598/variancevol7iss1page93-104

ANALYSIS OF ECONOMIC GROWTH AND DEVELOPMENT INEQUALITY AMONG DISTRICTS/CITIES IN WEST NUSA TENGGARA PROVINCE USING THE WILLIAMSON INDEX, KLASSEN TYPOLOGY, AND LOCATION QUOTIENT METHODS

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Abstract: *West Nusa Tenggara Province faces low GRDP growth and significant economic disparities among its districts and cities. This study aims to analyze economic growth and development inequality using the Williamson Index, Klassen Typology, and Location Quotient methods. The Williamson Index shows high inequality with values approaching 1 from 2018 to 2022. Klassen Typology categorizes districts into four quadrants: fast-growing (West Sumbawa, Mataram City), developing (Dompu, Bima City), developed but under pressure (West Lombok, Central Lombok, East Lombok, Sumbawa, Bima, North Lombok), and none in the underdeveloped category. The Location Quotient analysis highlights sectors with potential for growth; however, some regions still rely on imports to meet local demand. The findings suggest targeted policies to enhance sector development and reduce economic disparities, fostering sustainable growth and improving welfare in West Nusa Tenggara Province.*

Keywords: *GRDP, Klassen Typology, Location Quotient, Williamson Index.*

1. INTRODUCTION

Regional economic development is a strategic step to create a more just, prosperous, and equitable society. With this development, people are expected to have adequate economic conditions, be able to meet their needs, and realize their desires. The state carries out the utilization, management, and development of existing resources to carry out economic development, which impacts improving living standards so that people are more prosperous. In addition, this development also involves cooperation between local governments and the private sector to encourage the development of economic activities. Therefore, a planning model is needed to find the strengths and weaknesses of economic sectors in a region [1].

Disparities between regions in Indonesia are significant due to differences in natural resource potential, geographical location, quality of human resources, ethnic ties, and other factors. Therefore, a planned development implementation that focuses on reducing disparities between regions is very important in order to support equity efforts in Indonesia.

The GRDP per capita is one of the various indicators used to see how the level of community welfare in a province. The greater the GRDP per capita, the better the welfare of the people, and vice versa. Provinces in Java Island still dominated the spatial structure of the Indonesian economy in the first quarter of 2022, with a contribution of 57.78% to GDP. After that, followed by Sumatra Island at 21.96%, Kalimantan Island at 8.29%, Sulawesi Island at 6.73%, Bali and Nusa Tenggara Island at 2.66%, and Maluku and Papua Island at 2.58%.

Data from the Central Bureau of Statistics shows that West Nusa Tenggara Province falls into a category with low GRDP growth and contribution compared to other provinces in Indonesia. This gap needs to be reduced, although it cannot be eliminated. One of the efforts that can be made is to analyze each region in West Nusa Tenggara Province to provide orientation in reducing the gap. Objective data and information are needed, and specific analysis and interpretation can illustrate the disparities between regions. The achievement of economic development in line with the improvement of community welfare is expected to provide alternatives for adjusting development policies. Therefore, it is necessary to classify districts/cities in West Nusa Tenggara Province based

 Submitted: 2024-09-02 *Accepted: 2025-06-03*

on economic growth and inequality. The purpose of this classification is to place new observations into groups that already have group labels (Johnson & Winchern, 2007). This classification process can be done using several methods, including the Williamson Index Method, Klassen Typology, and Location Quotient. According to [2], the Williamson Index is an analytical tool used to measure regional inequality based on GRDP per capita and population in a region. Meanwhile, the Klassen Typology is used to identify the pattern and structure of economic growth in a region by comparing districts/cities with broader areas such as provinces [3]. Location Quotient analysis provides a relative comparison between the ability of a region and other regions in terms of economic potential.

Based on the problems that have been described, the researcher wants to examine these problems further in a study entitled "Analysis of Economic Growth and Development Inequality Among Districts/Cities in West Nusa Tenggara Province Using the Williamson Index, Klassen Typology, and Location Quotient Methods."

2. METHODOLOGY

2.1. Research Type

The type of research used is a descriptive-quantitative approach. In this research, the data collected is in the form of numbers or can be measured statistically and then analyzed to produce a clear and objective picture of the variables studied. In this research, the author aims to explore the economic growth rate and describe the condition of the development gap in West Nusa Tenggara Province using the Williamson Index analysis, Klassen Typology analysis, and Location Quotient analysis.

2.2. Data and Data Source

The type of data used in the research is secondary data sourced from the official website of the Central Statistics Agency (BPS) of West Nusa Tenggara Province. This data includes data on West Nusa Tenggara Provincial GRDP by business field (billion rupiah), West Nusa Tenggara Provincial GRDP at 2010 Constant Prices by business field (billion rupiah), GRDP per capita at 2010 Constant Prices by regency/city in West Nusa Tenggara Province (billion rupiah), the growth rate of GRDP per capita at 2010 Constant Prices by regency/city in West Nusa Tenggara Province, and the population of regency/city in West Nusa Tenggara Province with data from 2018 to 2022.

2.3. Operational Research Variable

To avoid misinterpretation or use of terms in this study, the authors present operational definition limits related to the variables used, namely as follows:

1. Economic growth rate is a macroeconomic indicator calculation that measures the percentage of changes in GRDP in each regency/city of West Nusa Tenggara Province from year to year.
2. Development disparity, namely development inequality occurs in the regency/city of West Nusa Tenggara Province.
3. Gross Regional Domestic Product (GRDP) per capita is determined by dividing the GRDP of West Nusa Tenggara Province at constant 2010 prices by district/city in billion rupiah by the total population each year.
4. The total population of West Nusa Tenggara Province is the entire number of units of people who live in each district or city.

2.4. Data Analysis Method

The methods used in this research are Williamson Index Analysis, Klassen Typology analysis, and Location Quotient analysis.

1. Williamson Index

   The Williamson Index is a method that aims to determine the level of development inequality that occurs between regions by looking at illustrations of economic growth schemes and economic growth rates in each region [4]. In performing its calculations, this method uses data on GRDP per capita at constant prices in a

particular province and its population yearly. The following is a statistical Williamson Index formulation used for analysis [5]:

$$Williamson\ Index\ (IW) = \sqrt{\frac{\sum_{i=1}^{n}(y_i - y)^2(\frac{f_i}{n})}{y}} \quad (1)$$

Description:

IW : Williamson Index

y_i : The amount of per capita income in regency/city i.

y : Average per capita income of province.

f_i : Total population in regency/city i.

n : Total population in the province.

The value of the Williamson Index only ranges from zero to one ($0 < IW < 1$) or is positive. This means that the larger the IW value or the value closer to 1, the higher the level of disparity or inequality. Conversely, the smaller the IW value or the value closer to 0, the lower or more equal the level of disparity or inequality [6]. The criteria for development inequality or disparity are as follows [7]:

a. If the value of $IW < 0.35$, then the level of development disparity is low.

b. If the value of $0.35 < IW < 0.5$, then the level of development disparity is moderate.

c. If the IW value is > 0.5, then the level of development disparity is high.

2. Klassen typology

Klassen typology is a statistical analysis method used to determine the economic base sector and determine a region's utilization pattern and economic growth structure. In addition, it can determine the criteria for developed and fast-growing areas compared to the other areas. This method divides the region into 2 main factors: economic growth and GRDP per capita. This analysis will obtain sector projections through four quadrants characterizing different patterns and structures of economic growth, which are shown in the following Table [8]:

Table 1. Four Quadrants Characterized by Different Patterns and Structures of Economic Growth

GRDP per capita (y) **GRDP Growth Rate (r)**	$y_i > y$	$y_i < y$
$r_i > r$	Quadrant I: High GRDP and High Growth (Advanced and Fast-Growing)	Quadrant II: Low GRDP and High Growth (Developing)
$r_i < r$	Quadrant III: High GRDP and Low Growth (Developed but Depressed)	Quadrant IV: Low GRDP and Low Growth (Underdeveloped)

3. Location Quotient

The Location Quotient analysis method is used to determine the role of industry in a region by comparing the results of the LQ calculation obtained to the national level. The LQ technique is often used in the basic economic model as a first step to understanding the sectors that drive growth or measure the relative concentration of economic activity to obtain illustrations in determining the main sectors in industrial economic activity (superior sectors). However, the LQ technique cannot provide a conclusion on the sectors identified as strategic sectors. Nevertheless, this technique is enough to give an initial picture of the ability of a region in the sectors that have been identified. The formula that can be used for LQ calculation is as follows [9]:

$$LQ = \frac{(Xr)/(RVr)}{(Xn)/(RVn)} \quad (2)$$

Description:

LQ : Location Quotient Index

Xr : GRDP of sector i in regency/city in West Nusa Tenggara

RVr : Total GDRP of each regency/city in West Nusa Tenggara

Xn : GDP of sector i in West Nusa Tenggara

RVn : GDP of sector i in West Nusa Tenggara

According to [9], the results of the calculation of the LQ value are categorized as follows:

a. If the LQ calculation value is greater than 1 (LQ> 1), it indicates that the sector is the economic base sector of the region.

b. If the LQ calculation value is smaller than 1 (LQ < 1), it indicates that the sector is not the basis or non-basis of the regional economy.

c. If the LQ calculation value is equal to 1 (LQ = 1) indicates that the sector is not a base or non-base sector of the regional economy.

The results of the LQ method analysis above can be used to overcome community complaints and improve community welfare. Suppose the community's complaints are related to the basic sector. In that case, the government needs to analyze the management of the economic sector, especially regarding the distribution of goods and/or services. management of the economic sector, especially regarding the distribution of goods and/or services. Conversely, if community complaints are related to the non-base sector, the government can optimize efforts to improve the non-base sector. Optimize efforts to enhance the non-base sector so that community grievances can be resolved [10].

3. RESULTS AND DISCUSSION

3.1. Wiliamson Index

In this study, the Williamson Index is an analytical method used to determine development inequality in West Nusa Tenggara Province by dividing the value of Gross Regional Domestic Product (GRDP) at constant 2010 prices by regency/city and the population of each regency/city in West Nusa Tenggara Province from 2018 to 2022. The following are the results of the calculation using the Williamson Index.

Table 2. Williamson Index analysis results of West Nusa Tenggara Province from 2018 to 2022

Year	Williamson Index	Criteria
2018	0.65	High
2019	0.62	High
2020	0.79	High
2021	0.78	High
2022	0.86	High

Based on the table above, the value of the Williamson Index analysis in West Nusa Tenggara Province in 2018-2022 is getting closer to 1. Where the index value experiences a significant increase every year, this means that when referring to the IW criteria, it can be said that West Nusa Tenggara Province is included in the disparate criteria or high inequality. Inequality that occurs in West Nusa Tenggara Province results in uneven conditions of society in terms of economic development and a striking difference between the lower and upper classes. This is also shown through the development graph of the IW results in West Nusa Tenggara Province below.

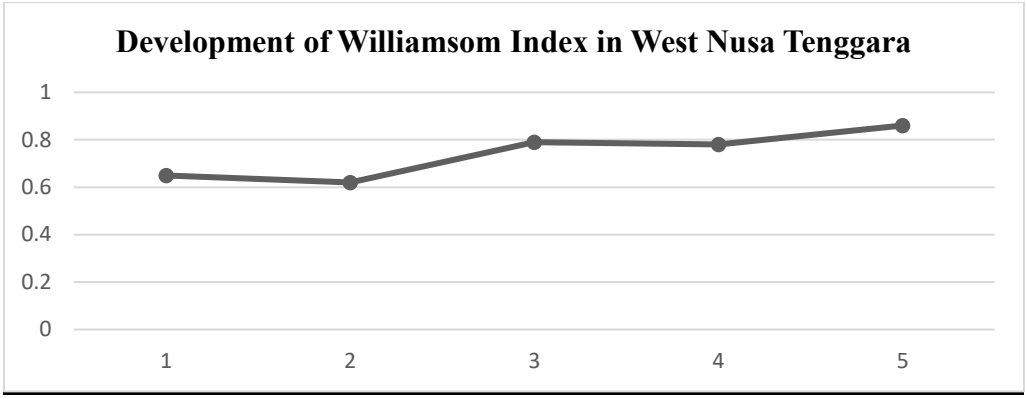

Figure 1. Graphic Williamson Index in Province West Nusa Tenggara, 2018-2022

3.2. Klassen Typology

West Nusa Tenggara in each district/city has different characteristics according to its economic growth. Based on this, Klassen typology is used to understand a region's economic growth pattern and structure. Klassen typology is a method used to analyze and classify regions or sectors based on two main factors, namely economic growth and GRDP (gross regional domestic product). According to the Central Bureau of Statistics, the measurement of economic development planning is one of the leading indicators used in determining regional strategies and policies for developing the region GRDP. The GRDP indicator is also used to see the process of economic development of an area [11]. The following are the results of grouping structures and patterns between economic growth and regional development in various districts/cities in the province of West Nusa Tenggara based on Klassen Typology analysis.

Table 3. Sector Grouping Based on Klasen Typology

No	District/City	Average GRDP per capita (Thousand Rupiah)	Average Growth (%)	Sector Classification
1.	West Lombok District	14737.2	-1.104	Advanced and Fast Growing
2.	Central Lombok District	11984.4	-1.028	Advanced and Fast Growing
3.	East Lombok District	11112.2	-0.552	Advanced and Fast Growing
4.	Sumbawa District	20800.6	-1.106	Advanced and Fast Growing
5.	Dompu District	20432.2	2.492	Relatively Underdeveloped
6.	Bima District	15936.4	-0.068	Advanced and Fast Growing
7.	West Sumbawa District	106486.4	2.256	Potential and Fast Growing
8.	North Lombok District	13953.4	-2.704	Advanced and Fast Growing
9.	Mataram City	29801	3.87	Potential and Fast Growing
10.	Bima City	18152.4	3.044	Relatively Underdeveloped

Table 4. 2018-2022 Klassen Typology Matrix

	$y_i < y$	$y_i > y$
$r_i > r$	Quadrant III West Lombok District Central Lombok District East Lombok District Sumbawa District Bima District North Lombok District	Quadrant I West Sumbawa District Mataram City
$r_i < r$	Quadrant IV	Quadrant II Dompu District Bima City

Based on Tables 3 and 4, the sector grouping according to Klassen's typology produces four quadrants. Quadrant I is a quadrant with high GRDP and growth called "advanced and fast-growing." Quadrant I is a quadrant that includes regions with fast-developing and fast-growing categories based on the conditions of economic growth

rates and higher income levels compared to the average of other city districts. Two regions are included in the fast-developing and fast-growing category: West Sumbawa District and Mataram City. Regions in this quadrant should maintain growth momentum by increasing infrastructure and human resources investment. Improving production efficiency and economic diversification are essential to maintain long-term growth stability. In addition, attention must be paid to creating a conducive business environment so the private sector can continue growing [12].

Quadrant II is a quadrant with low GRDP and high growth, so it is called "developing." Quadrant II is a quadrant for regions in the developing category. Developing regions have high economic growth, but compared to per capita income, these regions are still lower than the average of other districts/cities. Dompu District and Bima City are regions that are categorized as developing regions. Regions in this quadrant must focus on increasing productivity and per capita income. Skills training programs for the workforce, improving the quality of education, and investing in technology that can increase the added value of local products are essential. In addition, economic diversification should also be considered to reduce dependence on specific sectors [13].

Quadrant III is a quadrant with high GRDP and low growth, called "developed but depressed". Quadrant III is a quadrant that shows regions with developed but depressed conditions, meaning that the region has an economic growth rate that is still lower than other regions. Still, its per capita income is higher than the average of other districts/cities. Districts/cities in West Nusa Tenggara tend to fall into developed but depressed areas such as West Lombok District, Central Lombok District, East Lombok District, Sumbawa District, Bima District, and North Lombok District. Regions in this quadrant should focus on revitalizing sectors that have experienced declining growth. Encouraging innovation, research, and technological development can help revive the regional economy. Local governments also need to strengthen infrastructure and create policies that encourage new investment to stimulate growth [14].

Quadrant IV is a quadrant with low GRDP and high low, called "Underdeveloped." Quadrant IV is a quadrant that reflects relatively underdeveloped regions because when compared to the average of other districts/cities, this level of region has lower economic growth and per capita income. No districts/cities in West Nusa Tenggara fall into this category. Regions in this quadrant require strong government intervention through development programs focusing on poverty alleviation, basic infrastructure development, and improved access to education and health services. Investment assistance, subsidies for potential sectors, and labor capacity building are also essential to improve the region's competitiveness [15].

3.3. Location Quotient

West Nusa Tenggara Province has diverse sectors with potential for further development. The sectors active in each district or city reflect the economic activities of the local population. Based on the LQ analysis, sectors are categorized into basic and non-basic sectors. Below are the results of the LQ calculations for each sector in the districts and cities within West Nusa Tenggara Province.

Table 5. Business sectors categorized as basic (LQ>1)

SECTOR	CITY/DISTRICT									
	Mataram	**Lobar**	**Loteng**	**Lotim**	**KLU**	**Sumbawa**	**KSB**	**Dompu**	**Bima City**	**Bima Dictrict**
Agriculture, Forestry and Fisheries			✓	✓	✓	✓		✓		✓
Mining and Quarrying							✓			
Processing Industry	✓		✓	✓						
Electricity and Gas Procurement	✓				✓	✓				
Water Supply, Waste Management and Recycling	✓		✓		✓					

SECTOR	CITY/DISTRICT									
	Mataram	**Lobar**	**Loteng**	**Lotim**	**KLU**	**Sumbawa**	**KSB**	**Dompu**	**Bima City**	**Bima Dictrict**
Construction			✓	✓		✓				
Wholesale and Retail Trade; Repair of Cars and Motorcycles	✓			✓	✓	✓		✓	✓	✓
Transportation and Warehousing			✓						✓	✓
Provision of Accomodation and Drinking Meals					✓					
Information and Communicati on	✓									
Financial and Insurance Services	✓					✓				
Real Estate	✓		✓	✓	✓			✓	✓	
Company Services	✓				✓	✓		✓	✓	
Government Adminis-tration, Defence and Compulsory Social Security	✓			✓	✓	✓		✓	✓	✓
Education Services	✓			✓	✓			✓	✓	
Health and Social Services	✓		✓	✓					✓	
Other Services	✓		✓		✓				✓	

Based on Table 5, it is evident that the business sectors are well-developed and have the potential to drive growth. These sectors not only meet the local community's needs but also generate surpluses that can be exported outside the region. Consequently, they make a significant contribution to the region's economy. Therefore, it is recommended that the government and other stakeholders prioritize further development of these sectors to enhance the region's economic welfare.

Table 6. Business Sectors in the Non-Base Category (LQ = 1)

SECTOR	CITY/ DISTRICT									
	Mataram	**Lobar**	**Loteng**	**Lotim**	**KLU**	**Sumbawa**	**KSB**	**Dompu**	**Bima City**	**Bima Dictrict**
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; Repair of Cars and Motorcycles										
Transportation and Warehousing										
Provision of Accomodation and Drinking Meals										
Information and Communication										
Financial and Insurance Services										
Real Estat										
Company Services										
Government Administration, Defence and Conpulsory Social Security										
Education Services										
Health and Social Services										
Other Services										

According to Table 6, only one sector in Mataram City has an LQ value of 1, which is the construction sector. This indicates that the sector's production is adequate to meet local demand but does not generate a substantial surplus for export outside the region.

Table 7. Business Sectors in the Non-Base Category (LQ < 1)

SECTOR	CITY/ DISTRICT									
	Mataram	**Lobar**	**Loteng**	**Lotim**	**KLU**	**Sumbawa**	**KSB**	**Dompu**	**Bima City**	**Bima Dictrict**
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; Repair of Cars and Motorcycles		✓	✓				✓			
Transportation and Warehousing	✓	✓		✓	✓	✓	✓	✓		
Provision of Accomodation and Drinking Meals	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Information and Communication		✓	✓	✓		✓	✓	✓	✓	✓
Financial and Insurance Services		✓	✓	✓			✓	✓	✓	✓
Real Estat		✓				✓	✓			✓
Company Services		✓	✓	✓			✓			✓
Government Administration, Defence and Conpulsory Social Security		✓	✓				✓			
Education Services		✓	✓			✓				✓
Health and Social Services		✓			✓	✓		✓		✓
Other Services		✓		✓		✓		✓		✓

According to Table 7, it is evident that sectors with an LQ value of less than 1 fall under the non-base classification, indicating that their production is insufficient to meet local demand. As a result, the region must

import goods and/or services from these sectors to fulfill its needs. Although these sectors are currently not strong, they have the potential for growth to serve local demand better and improve economic welfare. Therefore, it is recommended that the government, particularly in West Lombok and West Sumbawa districts, focus on further identifying and developing these sectors to reduce reliance on imports and enhance their contribution to the local economy.

4. CONCLUSION

Based on the results and discussion above, it can be concluded that the level of inequality in each district/city in West Nusa Tenggara, based on the Williamson Index value, shows an increase every year with the inequality that occurs in the high category. Based on the Klassen Typology analysis, which uses two indicators, namely GRDP and Economic Growth Rate, divides the regions into four classifications (quadrants) where fast-developing and growing areas include West Sumbawa District and Mataram City, developing category areas include Dompu District and Bima City, developed but depressed category areas include West Lombok District, Central Lombok District, East Lombok District, Sumbawa District, Bima District and North Lombok District. There are no regions that fall into the category of underdeveloped areas. Based on the Location Quotient analysis, it can be concluded that optimization of the business sector is needed, especially for West Lombok and West Sumbawa districts, because all of their business sectors fall into the non-base category. The government's provision of accommodation and food and beverages in districts/cities is the primary focus so that the welfare of the community can be fulfilled.

Through the analysis results using the Williamson Index, Klassen Typology, and Location Quotient methods, the government of West Nusa Tenggara Province can be expected to adopt a more inclusive development policy focusing on reducing inequality between districts/cities. The first step is identifying regions lagging in economic growth and prioritizing resource allocation and development programs specifically for these regions. In addition, regions with high economic potential, identified through Location Quotient analysis, should receive more attention in terms of infrastructure investment and development of economic facilities. Through the Klassen Typology, the government can formulate more focused policies according to the region's classification. Infrastructure development that improves inter-regional connectivity is also key in accelerating equitable economic growth across the districts/cities. This will encourage growth in less-developed regions and strengthen the economy by creating regional synergies.

REFERENCES

[1] R. Tarigan, Perencanaan Pembangunan Wilayah, Jakarta: Bumi Aksara, 2016.

[2] Sjafrizal, Perencanaan Pembangunan Daerah dalam Era Otonomi Edisi Pertama Cetakan Pertama, Jakarta: Rajawali Pers, 2014.

[3] H. S. Octavia, "Analisis Pengaruh Kemiskinan, Tingkat Pengangguran Terbuka dan Investasi terhadap Ketimpangan Pendapatan (Studi Kasus pada Provinsi Daerah Istimewa Yogyakarta Tahun 2009-2019)," *Jurnal Ilmiah Mahasiswa FEB,* vol. 9(2), pp. 3-4, 2021.

[4] Suprianto, M. Sutanty and A. A. Zulkia, "Analisis Pertumbuhan Ekonomi Dan Tingkat Ketimpangan Pembangunan Di Provinsi Nusa Tenggara Barat," *Jurnal Ekonomi & Bisnis,* vol. 10(1), pp. 1-10, 2022.

[5] V. D. Waluyaningsih and A. H. Setiawan, "Analisis Ketimpangan Pendapatan Antarwilayah Di Kawasan Kedungsepur, Barlingmascakeb, Dan Subosukawonosraten Periode 2008-2017," *Diponegoro Journal Of Economics,* vol. 9(2), pp. 123-134, 2020.

[6] D. Mahardiki and R. P. Santoso, "Analisis Perubahan Ketimpangan Pendapatan Dan Pertumbuhan Ekonomi Antar Propinsi Di Indonesia 2006-2011," *Journal of Economics and Policy,* vol. 6(2), pp. 103-213, 2013.

[7] S. Amelia and Guswandi, "Analisis Regional Balance Dan Distribusi Pendapatan Provinsi Sumatera Barat," *Jurnal Ilmiah Plano Krisna,* vol. 19(1), pp. 20-28, 2023.

[8] H. Kusuma, Modul Ekonomi Regional, Malang: UMM Pres, 2017.

[9] Hasanah, "Pemetaan Sektor Unggulan di Kota Pontianak Dengan Metode Tipologi Klassen dan Location Quotient," in *Prosiding Seminar Nasional SATIESP*, Tanjungpura, 2021.

[10] Purnamasari, N. A, "Identifikasi sektor ekonomi di Provinsi Nusa Tenggara Barat menggunakan studi Location Quotient," *Innovative: Journal of Social Science Research,* vol*4*(3), pp 13611-13619, 2024

[11] A. R. Ibramsyah, I. Ramadan and L. Kusumawati, "ANALISIS SEKTOR BASIS DAN UNGGULAN DI NUSA TENGGARA BARAT TAHUN 2019-2021 BERDASARKAN METODE LQ DAN TIPOLOGI KLASSEN," *Jurnal Ilmu Ekonomi,* vol. 3(1), pp. 1-20, 2024.

[12] M. Kuncoro, Ekonomi Pembangunan: Teori, Masalah, dan Kebijakan, Yogyakarta: UPP STIM YKPN, 2012.

[13] M. P. Todaro and S. C. Smith, Economic Development (11th ed.), Boston: Perason Education, 2011.

[14] M. E. Porter, The Competitive Advantage of Nations, New York: Free Press, 1990.

[15] J. D. Sachs, The End of Poverty: Economic Possibilities for Our Time, New York: Penguin Press, 2005.