SINOMICS JOURNAL
International Journal of Social Science, Education, Communication and Economics
ISSN (e): 2829-7350 | ISSN(p): 2963-9441

Economic and Spatial Regional Integration and Its Impacts on Regional Development in North Tapanuli Regency

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Abstract

This research aimed to analyze and understand the impact of Economic and Spatial Regional Integration on Regional Development in North Tapanuli Regency. The data collection technique involved indirect observation, which included reading, collecting, and noting data, information, and their descriptions. The type of data used in this research was quantitative data in the form of secondary time series data. The data included Gross Regional Domestic Product (GRDP) data, geographic data, population figures, distances between regions, regional potential, and other data, sourced from the Central Statistics Agency (BPS) of North Sumatra Province, BPS and Regional Development Planning Agency (BAPPEDA) of North Tapanuli Regency, as well as online sources. The results of the analysis depict substantial GRDP growth and growth rates in both sub-districts: Siborong borong Sub-district with an index value of 184,495,189 and Simangumban Sub-district with an index value of 19,632,902. The analysis also demonstrated consistent and integrated growth across each sub-district and the regency in North Tapanuli. The Gravity Model revealed that North Tapanuli Regency had a strong attraction to its supporting areas, influenced by distance and interactions. The Williamson Index measures income inequality between regions, with results nearing 0, indicating economic equalization between the growth center and its supporting areas. In regional development, the role of North Tapanuli Regency as a growth center contributes to driving economic growth and the welfare of the surrounding communities.

Keywords *Regional integration, economic and spatial, regional development*

INTRODUCTION

Regional development is an effort by the government and society to manage resources with the aim of creating jobs, economic growth and community welfare. Regional development and spatial planning are related to regional development, as well as sectoral development. Regional spatial planning basically means determining the parts of the area (zones) whose use is regulated and there are parts of the area whose use is not regulated. (Duran, 2019).

From a macro perspective, in regional planning there are urban activities and non-urban activities with the main focus on creating a harmonious relationship between the city and its rear areas. In city area planning, the main activities are urban and residential activities so that the focus of attention is the harmony of the relationship between various activities within the city to serve the needs of the urban community itself plus the needs of people who come from outside the city. (Hailudin et al., 2020).

If studied specifically, urban and rural planning are of course different. Therefore, in regional planning it is necessary to determine a residential area or place where various activities take place in an area so that it can be categorized as a city or not. Cities have different functions so their facility needs are different compared to rural or inland areas. In rural areas there are residential locations plus various non-agricultural activities, such as

trade, coffee shops, barbers and clothes tailors. Although in small numbers and intensity and usually only intended to serve the needs of local communities. Because of their different functions, development policies can also differ between urban and rural areas (Tarigan, 2005).

Urban development is usually followed by the development of infrastructure, transportation, communications and social institutions which can naturally increase investment attractiveness (Jin, C., Xu, J., & Huang, Z., 2019). The implication for economic activities that occur in society is how the production results from these growth centers (urban areas) can be used to carry out economic activities for areas around the growth centers (hinterland). On the other hand, how can the production of hinterland products be useful for economic activities in the center of growth? This condition will create a reciprocal relationship which will become an accelerator for regional economic growth.

Urban areas as centers of growth, geographically, are locations that have many facilities and conveniences which cause various kinds of businesses to be interested in locating in these areas and people are happy to come to take advantage of them. The bigger a city, the wider its area of influence. A large city apart from having a back area in the form of an agricultural area also has several small towns (districts). If small cities depend a lot on big cities, then small cities are included in the area of influence of larger cities. This interaction can be in the form of buying and selling various necessities and also the movement of people working, looking for places of education, and various other matters to big cities. (Chapple & Monteno, 2016).

North Tapanuli Regency, as one of the regencies in North Sumatra Province, has several sub-districts that support each other in regional development. Economic and government activities are centered in Tarutung District, which is also the capital of North Tapanuli Regency.

Some of the supporting sub-districts that cover Tarutung include Sipoholon District, Pagaran District, Siborongborong District, Siatas Barita District, Adiankoting District, Pahae Julu District, Pahae Jae District, Simangumban District, Purbatua District, Parmonangan District. The determination of Tarutung as a growth center was carried out as one of the basic strategies in regional development in accordance with regional conditions. As the district capital, Tarutung certainly has a better economic level, so it can provide spread effects for the surrounding areas (hinterland) economically.(Rahardjo, 2005)One of the benchmarks is the growth of GRDP value.

Supporting/rear areas are basically areas that are able to interact directly with the growth center (Ali & Vashney, 2013). This region has a contribution to support the activities and growth of the region above it. Hinterland can be a port, where the area is relative and does not recognize the administrative boundaries of an area. Apart from that, the land transportation traffic network; Roads, railways and river traffic also play an important role in these areas. According to (Fifi et al., 2021)The definition of hinterland is as follows;

1) The land directly adjacent to and inland from a coas;
2) A region served by aport city and its facilities;
3) A region remote from urban areas: back country.

SINOMICS JOURNAL
International Journal of Social Science, Education, Communication and Economics
ISSN (e): 2829-7350 | ISSN(p): 2963-9441

Considering that social and economic growth is greatly influenced by the growth rate of the economic sector, especially sectors that have a dominant role, this will have an impact on population development accompanied by increasing mobility. This development will cause changes to the hierarchy and functions related to employment issues (Nischalke & Schöllmann, 2005) And all of this will have implications for the need for urban infrastructure and facilities to support it.

Based on the explanation of the background to the problem above, it can be stated that the importance of integrated regional planning is to achieve economic growth and community welfare, taking into account factors such as the relationship between urban and rural areas, as well as the role of growth centers and hinterlands in regional development. This is supported by research results from(Hailudin et al., 2020)which states that simultaneously the regional growth center (Gerung) and its supporting areas experienced a real increase in economic growth during the observation. Apart from that, Gerung District has a strong attraction to its rear areas, especially to adjacent areas (Kuripan and Labuapi Districts).

Likewise, if we look at the evenness of economic growth, Gerung and its supporting regions are relatively evenly distributed simultaneously. Labuapi District is the most balanced (not unequal) district with Gerung, because it has the lowest Williamson Index value. In this way, Gerung District as a growth center has been able to provide a spread effect on its supporting regions/districts. For this reason, the existence of these conditions must be maintained, by mutual support between local areas in development activities in all fields. The aim of this research is to analyze and determine the impact of economic and spatial regional integration on regional development in North Tapanuli Regency.

METHOD

This research is quantitative descriptive research, which emphasizes fact finding with appropriate interpretation. The research location is North Tapanuli Regency with its geographical and demographic conditions which are quite supportive. This area has abundant natural and water resources, as well as potential tourist locations, making this district have a good future for development in the future.

The data collection technique is indirect observation, namely by reading, collecting, recording data, information and information. The type of data used in this research is quantitative data in the form of time series secondary data. The data in question includes GRDP data, geography, population, distance between regions, regional potential and other data, sourced from the Central Statistics Agency (BPS) of North Sumatra Province, BPS and BAPPEDA of North Tapanuli Regency, as well as on-line sources.

Furthermore, the variables related to this research include:

1) Distance Between Regions

   Distance is the length of a line from one point to another point. So in this research the distance referred to is the distance between Tarutung District and other surrounding districts that are being studied. The unit used is kilometers.

2) Resident
Residents are all people who have been domiciled in a geographic area for 6 months or more and/or those who have been domiciled for less than 6 months but intend to stay. In this research, the population of Tarutung District was recorded using this reference, as well as for other districts. The unit of population variable is person/soul.

3) Gross Regional Domestic Product (GRDP)
Gross Regional Domestic Product (GRDP) is the amount of added value arising from all production units in a region within a certain period of time. The GRDP used in this research is the GRDP of Tarutung District and other surrounding districts based on constant prices in 2000 in rupiah units.

4) Income per capita
Per Capita Income is the average income of the population of an area in a certain period. Per capita income is calculated by dividing the GDP of an area by the population of that area. The variable unit of per capita income is the rupiah.

Data analysis was carried out using the following analysis tool approach:

a. Measuring Economic Growth

To measure the level of economic growth in the growth center region and its supporting regions (hinterland), the GRDP growth value for 5 years is used based on constant 2010 prices for the two regional categories, with the formula:

$$\Delta \text{ GRDP} = (\text{GRDPt} - \text{GRDPt-1})/(\text{GRDPt-1})$$

Where:
Δ GRDP = Gross Regional Domestic Product Growth.
GRDPt = Gross Regional Domestic Product for a particular year
GRDPt-1 = Gross Regional Domestic Product of the previous year.

b. Gravity Model Analysis

This model is used for urban planning analysis which assumes that population agglomeration factors, concentration of activities or potential natural resources have an attraction that can be analogous to the attraction between 2 (two) magnetic poles. Gravity model equation (Hendarto, 2014)t his is: Tij =(Pi x Pj)/Dij2
Where:
Tij = movement of residents from place i to place j
Pi = number of residents in place i
Pj = number of residents in place j
Dij = distance between place i – place j

c. Williamson Index

This index is used to measure comparative levels of development between regions. In this way, does a growth center area play a role in the surrounding areas? Formulation
The Williamson Index has 57 statistics as follows (Arsad, 2000):

$$Vw = \sqrt{((yi-y)2(fi/n))/y}, \text{ the reference; } 0 < Vw < 1$$

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ISSN (e): 2829-7350 | ISSN(p): 2963-9441

Where:
yi = GDP per capita of region i
y = GDP per capita average of all regions fi = Population of region i
n = Total population of the entire area

The subscript w is used because the formulation used is weighted so that the index is more stable and can be compared with other countries or regions. Meanwhile, the criteria for this index are: if Vw is close to 1 it means the area is very unequal and if Vw is close to zero it means it is very equal.

RESULTS AND DISCUSSION

Research Area

North Tapanuli Regency with an area of North Tapanuli is 3,800.31 Km2, consisting of a land area of 3,793.71 Km2 and Lake Toba waters covering an area of 6.60 Km2, and the population of North Tapanuli Regency in 2020 is 319,110 people. The highest population in 2020 was in Siborong-borong District, namely 51,383 people or 16.10 percent of the total population and the lowest population was in Purbatua District, namely 8,392 people or 2.62 percent. people, with an average density of 401.17 people/km². Administratively, it consists of 15 (fifteen) sub-districts (Tarutung, Sipoholon, Pagaran, Siborongborong, Siatas Barita, Adiankoting, Pahae Julu, Pahae Jae, Simangumban, Purbatua, Muara, Sipahutar, Garoga, Pangaribuan, Parmonangan), 11 (eleven) sub-districts and 241 Villages.

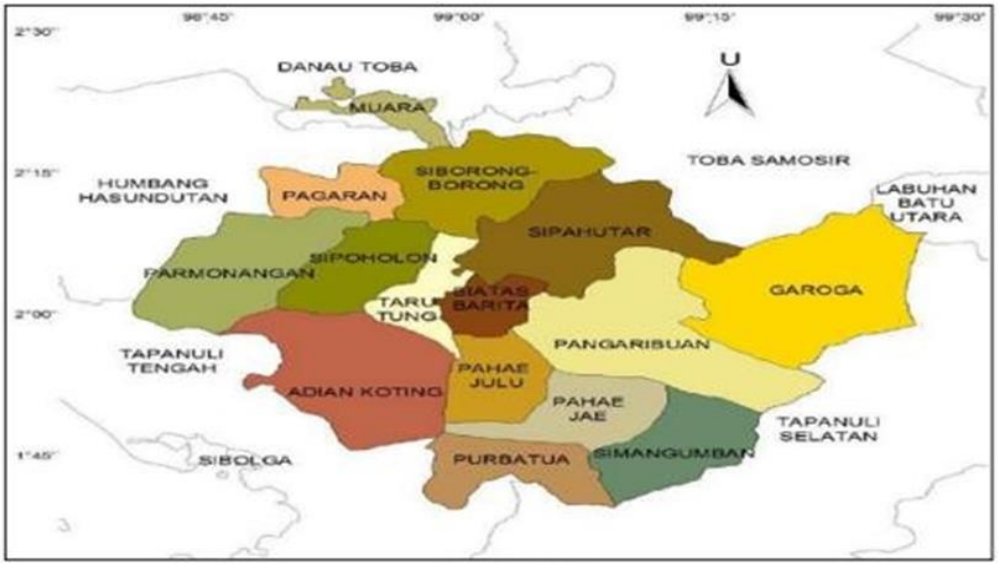

Figure 1. Regional Map of North Tapanuli Regency

Table 1. Population and Population Growth Rate North Tapanuli Regency, 2016 - 2020

No	Subdistrict	Number Of Population (Person) / Year				
		2016	2017	2018	2019	2020
1	Parmonangan	16,366	16,493	17,019	14,952	15,046
2	Adiankoting	16,274	16,521	16,816	15,528	15,475

No	Subdistrict	Number Of Population (Person) / Year				
		2016	2017	2018	2019	2020
3	Sipoholon	25,585	26,129	27,090	24,529	24,644
4	Tarutung	43,034	43,735	45.102	42,882	43,198
5	Siatas Barita	14,783	14,745	15,222	14,430	14,629
6	Pahae Julu	14,527	14,604	15,223	13,685	13,865
7	Pahae Jae	12,618	12,997	13,480	12,406	12,276
8	Purbatua	8,942	9,195	9,450	8,487	8,392
9	Simangumban	9,063	9,244	9,766	8,647	8,668
10	Pangaribuan	31,548	32,271	33,177	30,594	30,355
11	Garoga	18,872	19,283	20,233	18,358	18,475
12	Sipahutar	28,871	29,588	30,388	28,611	28,664
13	Siborongborong	52,925	54,583	56,618	50,294	51,383
14	Fence	20,266	20,801	21,767	19,120	19,257
15	estuary	15,544	15,842	16,366	15,147	14,783
	Regency North Tapanuli	**329,218**	**336,031**	**347,717**	**317,036**	**319.110**

Source: District Population and Civil Registration Service. North Tapanuli, 2021

From an economic aspect, the agricultural, forestry and fisheries sectors still play a dominant role in the regional economy, with a contribution of 43.31 percent. Followed next by the trade sector 15.68 percent, construction 14.14 percent, government administration 9.43 percent and the transportation sector 4.86 percent (BPS North Tapanuli, 2021). Meanwhile, the role of other sectors is not as prominent. However, in general it appears that even though currently the agricultural sector still plays a dominant role, structurally the economic pattern of North Tapanuli is starting to shift from the primary sector to the secondary and tertiary sectors, which of course is something that is good for the economy because it will be able to provide better added value. also in the future.

Economic Growth in Growth Center Regions and Supporting Regions

To measure the economic progress of the growth center areas and supporting areas (hinterland), the GRDP growth value for 3 years is used based on constant 2020 prices in these two regional categories. The rate of economic growth which continues to increase and is consistent can reflect the positive influence of the growth center on its supporting regions

Table 2. Development of GRDP and Growth Rate of Central Region Growth and Supporting Areas

SUBDISTRICT	2019		2020		2021	
	GRDP	Rate	GRDP	Rate	GRDP	Rate
Parmonangan	1,098,752.47	5.07	1,161,357.37	4.86	1,237,264	5.68
Adiankoting	1,229,379.87	5.13	1,319,427.69	5.15	1,384,359	5.55
Sipoholon	895,863.10	5.25	946,907.73	5.45	1,108,798	5.67
Tarutung	2,229,379.87	6.13	3,999,427.68	7.15	4,384,359	7.55

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International Journal of Social Science, Education, Communication and Economics
ISSN (e): 2829-7350 | ISSN(p): 2963-9441

Siatas Barita	992,973.73	5.09	1,332,458.10	5.99	1,980,332	6.20
Pahae Julu	1,249,379.87	5.13	1,298,427.68	5.15	1,484,359	5.55
Pahae Jae	895,863.10	5.25	946,907.73	5.45	1,008,798	5.64
Purbatua	386,323.59	4.92	408,335.60	4.92	435,025	4.98
Simangumban	692,973.73	5.09	732,458.10	4.99	780,332	5.20
Pangaribuan	1,239,379.87	5.13	1,289,427.68	5.15	1,384,359	5.55
Garoga	895,863.10	5.25	946,907.73	5.45	1,018,798	5.64
Sipahutar	1,229,379.87	5.20	1,222,427.68	5.15	1,384,359	5.55
Siborongborong	1,992,379.87	5.13	2,799,427.68	6.15	3,384,359	6.55
Fence	895,863.10	5.25	946,907.73	5.45	1,008,798	5.64
estuary	1,129,379.87	5.03	1,299,427.68	5.15	1,484,359	5.65

By referring to the table above, it can be explained that the development of GDP at the growth center and its 14 supporting regions shows a trend that continues to increase every year. Likewise, the growth rate tends to show a continuously increasing trend. Three sub-districts (Tarutung, Siborongborong and Siatas Barita), growth has consistently increased.

This situation is certainly very encouraging, considering that the growth center (Tarutung) and supporting areas can grow simultaneously. If we examine these developments in more depth, these regions do have intersections with each other, so that every development movement in one area will have an impact on the surrounding areas.

Tarutung, as a center of growth, certainly has a greater role as a driver of development in North Tapanuli, considering its position as the district capital. And therefore every development activity in various fields will certainly have an impact on the surrounding (supporting) areas. The next effect will be the creation of integrated/joint growth in these regions/regions.

Attraction of the Growth Center (Tarutung) to the Surrounding Area (Supporting)

The support and attraction of one region to another region can be seen from the relationship between these regions which is likened to the relationship between regional magnetic poles which have an attraction that causes interactions to occur. The greater the function of an area, the greater the facilities it has compared to other areas. Places with more complete facilities will have a stronger attraction than other areas. Tarutung sub-district as the center of district government certainly has many advantages compared to other sub-districts in North Tapanuli. Therefore, the relationship between Tarutung District and surrounding (supporting) areas, using the Gravity Model approach analysis, can be seen in the following table: Table 2. Results of Gravity Model Calculations for Gerung District and Surrounding (Supporting) Districts in 2022.

Table 3. Calculation Results of the Gravity Model for Gerung District Surrounding Districts (Supporting) in 2022

No	Subdistrict	Results
1	Tarutung - Parmonangan	20,632,902

2	Tarutung - Adiankoting	54,495,189
3	Tarutung - Sipoholon	124,663,795
4	Tarutung - Estuary	48,211,177
5	Tarutung - Siatas Barita	79,632,902
6	Tarutung - Pahae Julu	54,495,189
7	Tarutung - Pahae Jae	24,663,795
8	Tarutung - Purbatua	21,211,177
9	Tarutung - Simangumban	19,632,902
10	Tarutung - Pangaribuan	54,495,189
11	Tarutung - Garoga	38,663,795
12	Tarutung - Sipahutar	68,211,177
13	Tarutung - Siborongborong	184,495,189
14	Tarutung - Fencing	54,663,795

Source: Data processed

From the results above it can be seen that Tarutung District has a strong attraction to its rear areas, especially to adjacent areas. Distance between regions is one of the factors that influences the gravity index number. The closer the distance between the growth center and the hinterland area, the higher the resulting gravity index number, in other words the level of interaction produced will be stronger.

The area that has the strongest interaction with the growth center is Siborong Borong District with an index value of 184,495,189. This situation can be understood considering that the distance between the two poles is quite close (5 km), even though the population of Siborongborong is relatively small. Therefore, the residents of Siborong Borong District have benefited a lot from this condition. On the other hand, the area that has the lowest level of interaction is Simangumban District, with an index value of 19,632,902. This is certainly understandable considering that Purbatua District is the furthest sub-district (34.5 km) from the growth center compared to other surrounding sub-districts. Apart from that, the population of this sub-district is quite large, which reflects that although they have a lot of interaction with the center of growth, they are proportionally smaller due to the distance factor. With the results of the calculations above, it can be seen that each region has a different gravity index value, which reflects the strength and weakness of the relationship between the growth center and the surrounding area.

The Role of Growth Centers (Tarutung) in Supporting Areas

The role of the Growth Center (Tarutung) in regional economic development is demonstrated by the level of income distribution between the growth center and the regionhis supporters. The income gap is an indicator of whether or not the growth center is effective in providing a spread effect or backwash effect on supporting areas.

One benchmark that can be used to see the level of income inequality between regions can be seen from the Willamson Index value. This index provides a reference, if the index

SINOMICS JOURNAL
International Journal of Social Science, Education, Communication and Economics
ISSN (e): 2829-7350 | ISSN(p): 2963-9441

results obtained are close to 0, then the income inequality between regions is getting smaller, and vice versa, if the results obtained are close to 1 then the inequality between regions is getting bigger.

On this basis, the results of calculating the Willamson Index between regions in North Tapanuli Regency can be seen in the following table:

Table 3. Williamson Index Results for Supporting Districts in North Tapanuli in 2020

No	Subdistrict	Williamson Index Results
1	Parmonangan	0.103
2	Adiankoting	0.030
3	Sipoholon	0.003
4	Tarutung	0.013
5	Siatas Barita	0.060
6	Pahae Julu	0.164
7	Pahae Jae	0.030
8	Purbatua	0.064
9	Simangumban	0.137
10	Pangaribuan	0.060
11	Garoga	0.164
12	Sipahutar	0.030
13	Siborongborong	0.003
14	Fence	0.037
15	estuary	0.060
	Average	**0.0586**

Source: Data processed

The results of the Williamson Index calculation for the four sub-districts supporting the growth center in North Tapanuli, all values are close to 0. And the average income inequality between these regions is 0.0586. This indicates that economic growth in the supporting areas in North Tapanuli is relatively even.

Siborongborong District is the sub-district that has the strongest interaction with Tarutung District as the center of growth, with an index value of 0.003, which is the lowest value among other sub-districts. A different value is shown by Pahae Julu District which has a relatively higher level of inequality compared to other districts, namely 0.164. This happens because the population of Pahae Julu District is relatively small, but on the other hand it has a relatively large GRDP. This is what causes the index value to become greater. With this situation, it is hoped that in the future, other sub-districts that intersect with Pahae Julu will have a greater economic impact, so that they can trigger an increase in the sub-district's GRDP. In this way, Tarutung District as a growth center has been able to provide a spread effect on its supporting districts. This low level of inequality also illustrates the success of North Tapanuli Regency in general in implementing regional development policies by placing Tarutung District as a growth center which has been able to have a

positive effect (spread effect) on the surrounding Districts/regions.

CONCLUSION

Based on the results of the discussion, it can be concluded that simultaneously the growth center and its supporting areas experienced real economic growth together during the observation. Even though it fluctuates slightly (in Sipahutar and Garoga), on average it tends to increase. Tarutung District, as a growth center area, has a strong attraction to its rear areas, especially to adjacent areas (Siborong-borong and Muara). The hinterland area that has strong interaction with the growth center is Siborong-borong District. This situation can be understood considering that the distance between the two poles is quite close and in Siborong-borong an international airfield has been built to support the Lake Toba tourist destination. The opposite occurs with Simangumban District with the lowest level of interaction, because the position of this district is farthest from the center of growth (Tarutung). From the aspect of even distribution of economic growth between growth centers and supporting regions, it shows that growth is relatively balanced and grows simultaneously.

Siborongborong District is a district that has relatively balanced economic equality with growth centers, because it has the lowest Williamson Index value. Pahae Julu District shows a different condition, which has a higher level of inequality compared to other districts. In this way, Tarutung District as a growth center has been able to provide a spread effect on its supporting districts, because it can trigger economic growth in the surrounding/supporting areas. For this reason, improvements and additions to facilities and infrastructure that facilitate mutual interaction are the main concern for construction, such as connecting roads, transportation, permits and others.

REFERENCES

Ali, M. J., & vashney, D. (2013). Spatial Modelling of Urban Growth and Urban Influence: Approach of Regional Development in Developing Economy. Sage Journal, 3(2). https://doi.org/10.1177/0975425312473225

Arsad, L. (2000). Pengantar Perencanaan dan Pembangunan Ekonomi Daerah. BPFE,.

Chapple, & Monteno. (2016). From learning to fragile governance: Regional economic development in rural Peru. Journal of Rural Study, 44. https://doi.org/10.1016/j.jrurstud.2016.01.009

Duran, Hasan E. (2019). Asymmetries in regional development: Does TFP or capital accumulation matter for spatial inequalities? The Journal of Economic Asymmetries, 20. https://doi.org/10.1016/j.jeca.2019.e00119

Fifi, F., Harimuddin, J., Restele, L. O., & Fitriani, F. (2021). Identifikasi Pusat Pertumbuhan dan Wilayah Pendukungnya dalam Pengembangan Wilayah Kota Kendari. JAGAT (Jurnal Geografi Aplikasi dan Teknologi), 5(2), 118. https://doi.org/10.33772/jagat.v5i2.21509

Ghozali. (2018). Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Badan Penerbit Universitas Diponegoro.

ISSN (e): 2829-7350 | ISSN(p): 2963-9441

Ghozali & Latan. (2015). Konsep, Teknik, Aplikasi Menggunakan Smart PLS 3.0 Untuk Penelitian Empiris. BP Undip. SemarangHarnanto. 2017. Akuntansi Biaya: Sistem Biaya Historis. BPFE.

Hailudin, H., Diswandi, D., & Suriadi, I. (2020). Integrasi Wilayah Secara Ekonomi Dan Spacial Serta Dampaknya Terhadap Pembangunan Daerah Di Lombok Barat NTB. Elastisitas - Jurnal Ekonomi Pembangunan, 2(1), 53–61. https://doi.org/10.29303/e-jep.v2i1.20

Hendarto, M. (2014). Makalah Ekonomi Pengembangan Regional. Jurusan Ilmu Ekonomi Dan Studi Pembangunan, Fakultas Ekonomi Universitas Diponegoro, Semarang.

Jin, C., Xu, J., & Huang, Z. (2019). Spatiotemporal analysis of regional tourism development: A semiparametric Geographically Weighted Regression model approach. Habitat International, 87. https://doi.org/10.1016/j.habitatint.2019.03.011

Nischalke, T., & Schöllmann, A. (2005). Regional development and regional innovation policy in New Zealand: Issues and tensions in a small remote country1. European Planning Studies, 13, 559–579. https://doi.org/10.1080/09654310500107217

Rahardjo. (2005). Dasar-Dasar Ekonomi Wilayah. Graha Ilmu. Grahana Ilmu.

Tarigan. (2005). Ekonomi Regional Teori dan Aplikasi. Bumi Aksara.

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DOI: https://doi.org/10.54443/sj.v2i5.233