SUPERIOR SECTOR ANALYSIS IN SOUTH TANGERANG AS DETERMINER OF REGIONAL DEVELOPMENT PRIORITY POLICY

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Abstract

The important thing for regions that have not been recently established such as South Tangerang City is sustainable economic growth. This study aims to identify and analyze the leading sectors in South Tangerang and to project the South Tangerang City Gross Domestic Product in 2017. The data used in the form of the total value added of goods and services resulting from all the economic activities of South Tangerang City and Banten Province economists based on constant prices in 2000. The analysis method uses the Location Quotient (LQ) model and Shift - Share analysis. Based on the Location Quotion (LQ) method, the base sector is nine sectors, namely (1) the Construction Sector; (2) The sector of large and retail trade, and repair of cars and motorbikes; (3) the sector of providing accommodation and drinking meals; (4) information and communication sector; (5) real estate sector; (6) company service sector; (7) educational services sector; (8) health services sector and social activities; (9) other service sectors. Overall, South Tangerang City has the most superior sector in the real-estate sector. It can be concluded that this sector has a competitive advantage and comparative advantage.
Keywords: featured sector, location quotient (LQ), shift - share analysis, GRDP

INTRODUCTION

Economic growth is one of the benchmarks that can be used to increase the development in a region from various economic sectors that indirectly illustrate the level of economic change in the area. Sustainable economic growth is the main condition for the continuity of regional economic development. Regional development is an integral part of national development. To carry out development with limited resources as a consequence must be focused on the development of the base sector (superior). Every change that occurs in the base sector will cause a multiplier effect in the regional economy (Adisasmita, 2005: 28).

One indicator to show the level of prosperity of a region is data regarding Gross Regional Domestic Product (GRDP) on the basis of prices that are valid or on the basis of constant prices. A society is seen experiencing a growth in the prosperity of society if per capita income continues to increase. The Gross Regional Domestic Product (GRDP) in South Tangerang City is basically the same as the Gross Domestic Product (GDP) in Banten Province which consists of 17 (seventeen) sectors or business fields.

Table 1 GRDP Based on Constant Prices of Regency/City in Banten Province 2010 - 2016

Regency/ City	GRDP at constant prices by Regency / City (Billion IDR)						
	2010	2011	2012	2013	2014	2015	2016
Pandeglang	12279.54	12984.40	13738.88	14387.88	15097.10	15996.63	16875.51
Lebak	12572.54	13325.63	14006.21	14887.98	15756.25	16670.89	17620.57
Tangerang	58099.42	62022.49	65848.28	70065.98	73828.38	77782.31	81923.99
Serang	33840.99	35905.34	37849.64	40136.68	42300.93	44425.32	46646.86
Tangerang	66921.38	71864.14	76945.93	81965.31	86183.52	90811.41	95621.89
Cilegon	44676.53	47633.32	51300.21	54732.93	57261.92	59996.74	63028.89
Serang	12549.57	13595.69	14604.64	15670.78	16745.08	17799.01	18906.10
Tangsel	30525.31	33214.82	36091.81	39251.54	42411.47	45465.20	48637.38
Banten	271465.28	290545.84	310385.59	331099.11	349351.23	368216.55	387595.37

Source: BPS Banten Province, 2018

Table 2 GRDP Growth Rate Based on Constant Prices of Regency/City in Banten Province 2011-2016

Regency/City	GRDP Growth Rate at constant prices According to Regemcy/City					
	2011	2012	2013	2014	2015	2016
Pandeglang	5.74	5.81	4.72	4.93	5.96	5.49
Lebak	5.99	5.11	6.3	5.83	5.80	5.70
Tangerang	6.75	6.17	6.41	5.37	5.36	5.32
Serang	6.10	5.42	6.04	5.39	5.02	5.00
Tangerang	7.39	7.07	6.52	5.15	5.37	5.30
Cilegon	6.62	7.70	6.69	4.62	4.78	5.05
Serang	8.34	7.42	7.30	6.86	6.29	6.22
Tangsel	8.81	8.66	8.75	8.05	7.20	6.98
Banten	7.03	6.83	6.67	5.51	5.40	5.26

Source: BPS Banten Province, 2018

Table 1 showed that of the eight regencies/cities in Banten Province, South Tangerang City has a large GDP that is less than some areas in Banten Province. But based on table 2, the City of South Tangerang has the largest growth compared to other regions in Banten Province. This indicates that of the seventeen sectors/business fields in South Tangerang City most of them are superior sectors in Banten Province which are able to sustain the economy well in South Tangerang City.

Based on this phenomenon, this study aims to determine what sectors have comparative competitiveness with the Location Quotion (LQ) method, which sectors have competitive competitiveness and specialization with the shift - share method, and project the value of the South Tangerang City Gross Domestic Product in 2017.

The research conducted by Fadillah (2016) shows that the sector which is superior because the sector has a

competitive and specialized advantage in the City of South Tangerang is 1) Construction Sector; 2) Sector of wholesale and retail trade, car and motorcycle repair; 3) Sectors providing accommodation and drinking meals; 4) Sector information and communication; 5) Real estate; 6) Company service sector.

Jamalia (2011) showed that using LQ indicate that the economic sectors that are the leading sectors based on the best are the financial, leasing and business services sectors; services sector, building sector, transportation and communication sector, trade, hotel and restaurant sector, electricity, gas and clean water sector. Based on shift share analysis, the leading sector experienced rapid growth, namely the trade, hotel and restaurant sector.

From the description above, th aim of this study to find out and identify the seventeenth economic sector of the City of South Tangerang in Banten region in formulating planning and implementation of development to increase economic growth in the era of regional autonomy.

RESEARCH METHODS

This research was conducted in South Tangerang City, Banten Province. The South Tangerang City sectoral GRDP and GRDP of Banten Province data was taken from the BPS. The first analysis technique is used Location Quotient (LQ). The formula used to calculate LQ in this study is:

$$LQ = \frac{x_i/v_i}{X_i/V_i}$$ ....(1)

LQ is value of location quotient that consist of sector GRDP value in South Tangerang City (x_i) per total GRDP in South Tangerang City (v_i) divided by sector i GRDP value in Banten (X_i) Province per total GRDP in Banten Province (V_i).

If LQ > 1, it means that the role of the sector in South Tangerang City is more prominent than the role of the sector in Banten Province or the value of LQ > 1, indirectly indicates that the City of South Tangerang has a comparative advantage for the intended sector because it is able to produce these products cheaper or more efficiently, so that sector i is the base or export sector. When the value of LQ ≤ 1, it means that the role of the sector in South Tangerang City is smaller than the role of the sector in Banten Province. In other words, the sector in South Tangerang City is the importing area for the sector i intended so that sector i is a non-base sector.

The second analysis is shift-share analysis to identify whether industries located in South Tangerang City belong to a group of industrial areas that are indeed

developing rapidly in Banten Province and the industry is suitable to be located in the city of South Tangerang or not. Shift-share analysis in this study uses value-added variables (regional income level) or Gross Regional Domestic Product (GRDP) data based on constant prices. The formulas used in this study are:

$$\Delta GRDP_{r,i} = \Delta GRDP_{r,i,t} - \Delta GRDP_{r,i,t-n} \quad (2)$$

This equation applies to total GRDP per sector in South Tangerang City. That is, the increase in GRDP sector i is the number of GRDP sectors i in the final year (t) reduced by GRDP sector i in the initial year (t-n).

This sector GRDP increment can be specified by the influence of National Share, Proportional Shift and Differential Shift as follows:

$$\Delta GRDP_{r,i,t} = (NS_i + P_{r,i} + D_{r,i}) \quad (3)$$

The breakdown from the equation above is as follows:

$$NS_{i,t} = GRDP_{r,i,t-n}(GRDP_{N,t}/GRDP_{N,t-n}) - GRDP_{r,i,t-n} \quad (4)$$

$$P_{r,i,t} = \{(GRDP_{N,i,t}/GRDP_{N,i,t-n}) - (GRDP_{N,t}/GRDP_{N,t-n})\} \times GRDP_{r,i,t-n} \quad (5)$$

$$D_{r,i,t} = \{GRDP_{r,i,t} - (GRDP_{N,I,t}/GRDP_{N,I,t-n})GRDP_{r,I,t-n}\} \quad (6)$$

The role of National Share (NS i) is if the increase in the GRDP of the South Tangerang City sector is equal to the proportion of the increase in the GRDP of Banten Province on average. National Share is used to measure whether the City of South Tangerang is growing faster or slower than the growth of Banten Province. Then the proportional Shift (P r, i) is to look at the influence of Banten province's sector i GRDP on sector i GRDP growth in South Tangerang City. It is positive if the City of South Tangerang specializes in fast-growing sectors in Banten Province, and is negative if the City of South Tangerang specializes in sectors that grow slowly or even decline in Banten Province. Besides that, differential shift (D r, i) illustrates the deviation between the growth of sector i in South Tangerang City and the growth of the sector of Banten Province i. It is positive if the City of South Tangerang has locational advantages such as abundant / efficient resources, and is negative if the City of South Tangerang is locationally unprofitable.

GRDP Projection Analysis

The formula that can be used to projection South Tangerang City GRDP in the coming year (2018) is:

$$NS_{i,t+m} = GRDP_{r,i,t}(GRDP_{N,t+m}/GRDP_{N,t}) - GRDP_{r,i,t} \quad (7)$$

$$P_{r,i,t+m} = \{(GRDP_{N,i,t+m}/GRDP_{N,i,t}) - (GRDP_{N,t+m}/GRDP_{N,t})\} \times GRDP_{r,i,t} \quad (8)$$

$$D_{r,i,t+m} = D_{r,i,t} \times (GRDP_{N,i,t+m}/GRDP_{N,i,t}) \quad (9)$$

Based on the equations, NS is national share, P indicates proportional shift, and D is differential shift. Label N show the national / national territory / Banten Province, then r indicate region or city that is South Tangerang, label i is industrial sector while t is the year. The first year is represented by t-n and t+m show the projection year.

RESULT AND DISCUSSIONS
Location Quotient Analysis

Location Quotient (LQ) analysis is used to find out the economic sectors in GRDP which can be classified into the base and non-base sectors. LQ is a comparison of the magnitude of the role of a sector in South Tangerang City to the magnitude of the role sector's at the Provincial level in this study namely in Banten Province. The results of the analysis show that the base sector (leading sector) in South Tangerang City from 2010 to 2016 was 9 (six) sectors, namely: (1) Construction Sector; (2) The large and retail trade, and repair of cars and motorbikes sector; (3) The sector of providing accommodation and drinking meals; (4) Information and communication sector; (5) Real estate sector; (6) Company service sector; (7) Educational services sector; (8) Health services and social activities sector; (9) Other service sectors.

The LQ average is about 1.490; 1,333; 1,315; 2,969; 2,233; 3,299; 2,530; 3,663; 2,014. Whereas there are 8 non-base (non-superior) sectors, namely: (1) Agriculture, forestry and fisheries sector; (2) Mining and quarrying sector; (3) Processing industry sector; (4) Electricity, gas procurement sector; (5) Water Procurement Sector; (6) Transportation and warehousing sector; (7) Financial Services Sector; (8) Government administration, defense and social security sectors are mandatory. Within LQ mean is about 0.049; 0,000; 0.305; 0.081; 0,534; 0.439; 0.442; 0.585.

The results of the LQ calculation illustrate that the structure or economic pattern of South Tangerang City is dominated by the secondary sector or the service sector which is a specific feature of urban areas. This is in line with the phenomenon of urban areas where population livelihoods are directed towards non-agricultural sectors. This symptom can be understood because several factors that cause, among others, the area of agricultural land in urban areas is very narrow so that it is not possible for residents to have sufficiently large agricultural land and urban land is valuable and very valuable so that economically possible

activities for other sector activities such as industrial estates, shops, or settlements.

The education service sector as a base sector in South Tangerang is evidenced by the increasing number of people who got education services, this can be caused by the availability of educational facilities and infrastructure ranging from school level to high school or equivalent. As noted by the South Tangerang City Education Office that there are 512 kindergarten schools with 2,440 teachers while 94 schools have at least 74 different schools with 445 teachers. The number of elementary schools is 306 schools with a total of 6,001 teachers. The number of 84 ibtidaiyah madrasah schools with 994 teachers. The number of junior high schools is 173 schools with 2,641 teachers. While the number of madrasah tsanawiyah is 44 schools with 746 teachers. people. The number of senior secondary schools is 152 schools with 2,768 teachers. While the number of madrasah aliyah schools is 17 schools with teachers as many as 279 people.

Based on the LQ value obtained, from the superior operational values in South Tangerang City the health services and social activities have the highest LQ value with number 3,663. This is supported by the number of health facilities based on data from the Health Office in 2017 that

there are 17 hospitals, 11 maternity homes, 25 health centers, 820 Posyandu, 386 clinics / health centers. And the number of health workers like 358 medical personnel, 1,622 nursing staff, 616 midwifery workers, 96 pharmacy staff, and 104 health workers. Specific doctors are 629 people, 358 general practitioners, and 104 dentists.

Shift-Share Analysis

Shift Share Analysis is sharper because it can provide an explanation or details the causes of whether the industry that located in South Tangerang City belongs to a group of industrial areas that are growing rapidly in Banten Province and the industry is indeed suitable located in the city of South Tangerang or not.

Based on the calculation results we can see that GRDP in South Tangerang City = Total South Tangerang City GRDP in 2016 - Total South Tangerang City GRDP in 2012 = 48,637.38 billion - 36,091.81 billion = 12,545.58 Billion orr it can be proven by the following formula:

Addition of South Tangerang GRDP = Total Ns + Total P + Total D = 9,004,622 + 2,396,547 + 1,144,407 = 12,545.58 Billion

Based on calculations, it can be seen that there are seven sectors in South Tangerang that have negative Propostional Shift values, namely: (1) Agriculture, forestry and fisheries sector; (2) Processing

Industry Sector; (3) The electricity, gas procurement sector; (4) Water supply sector; (5) The sector of large and retail trade, and repair of cars and motorbikes; (6) The sector of government administration, defense and social security is mandatory; (7) Health services and social activities sectors with Proportional Shift values of: -0,662; -330,021; -9,894; -0,082; -211,317; -0,849; -46,406. This means that the seven sectors do not have structural advantages, meaning that the seven sectors specialize in slow-growing sectors in Banten Province. One of the factors contributing to the electricity, gas sector is slow growth in South Tangerang due to the lack of optimal management of infrastructure in the sector. and public services. Meanwhile, the manufacturing sector is growing slowly due to the lack of harmony in industrial relations in South Tangerang.

The sectors that have structural advantages in South Tangerang are 10 sectors, namely: (1) Mining and quarrying sector; (2) Construction sector; (3) Transportation and warehousing sector; (4) The sector of providing accommodation and food for drinking; (5) Information and communication sector; (6) Financial services sector; (7) Real estate sector; (8) Company service sector; (9) Educational services sector; (10) Other service sectors,

with a Proportioal Share value of: 0; 726,297; 9,750; 49,255; 1,313,084; 67,080; 586,620; 116,333; 60,480; 66,880. This shows that the ten sectors specialize in fast-growing sectors in Banten Province.

From the ten sectors that have structural advantages, the largest information and communication sector has structural advantages because it has the highest Proportion Share value which is equal to 1,313,084. It means that information and communication are the fastest growing sectors in Banten Province. Based on calculations, it is known that there are 5 sectors that do not have locational advantages, namely: (1) Agriculture, forestry and fisheries sector; (2) Construction sector; (3) Financial services sector; (4) Health services sector and social activities; (5) Other service sectors, with Shift Differential values of: -22,299; -15,161; -17,109; -89,272; -49,124. This means that the five sectors are not profitable in South Tangerang.

The other sectors that have locational advantages in South Tangerang are 12 sectors, namely: (1) Mining and quarrying sector; (2) Processing industry sector; (3) The electricity, gas procurement sector; (4) Water supply sector; (5) The sector of large and retail trade, and repair of cars and motorbikes; (6) Transportation and

warehousing sector; (7) The sector of providing accommodation and food for drinking; (8) Information and communication sector; (9) Real estate sector; (10) Company service sector; (11) The sector of government administration, defense and social security is mandatory; (12) Educational services sector, with Shift Differential value of: 0; 120,421; 13,204; 0.142; 83,349; 196,689; 17,411; 194,268; 498,196; 132,071; 29,275; 52,345; This means that the twelve sectors are in a favorable location in South Tangerang.

Overall, based on the calculation of Location Qoution and Shift Share Analysis, it is known that there are three leading sectors in the City of South Tangerang. The three sectors are namely with: 1) Sector providing accommodation and drinking meals; 2). Information and communication sector; 3). Real estate sector. The sector is said to be a leading sector because it has a LQ value> 1 and has a Proportional Share value and a positive Differential Shift.

From the three leading sectors, it can be concluded that the real sector is the most superior sector in South Tangerang City, this is because the real estate sector has the highest National Share value compared to the other two sectors. The field of real estate business includes rental, agent or intermediary activities in the sale or purchase from the real estate and the provision of real estate services can be done on their own or owned by others based on contract services. The business field also includes building construction or rental building activities. Real estate is property in the form of land and buildings.

The growth of real estate business is measured by the increase in value added of the property and residential and business needs sectors. The development of property in the form of apartments is growing very rapidly in the City of South Tangerang. This is because South Tangerang geographically has a very strategic position that supports the center of economic growth in South Jakarta, Depok, Sawangan, and South Tangerang Regency.

Apartments are the best alternative place to live to accommodate the younger generation with the ability to buy the equivalent of the upper middle class. With the sale value of land in South Tangerang, which ranges from Rp. 15 million to Rp. 25 million per square meter, you can imagine the high price of landed houses in southern Tangerang. Then as the easiest alternative solution is to buy an apartment. That means the real estate sector is somewhat concentrated in South Tangerang and has a comparative advantage compared to Banten Province.

Table 3 GDRP Projection of South Tangerang City

No	Business Field	GDRP of 2017 (in Billion rupiah)
1	Agriculture, Forestry and Fisheries	92.779
2	Mining and Excavation	0.000
3	Processing Industry	5319.801
4	Procurement of Electricity and Gas	68.556
5	Water Supply	25.394
6	Construction	6973.092
7	Large Trade and Retail, and Car and Motorcycle Repair	8835.488
8	Transportation and Warehousing	1833.342
9	Provision of Accommodation and Eating Drinks	1581.205
10	Information and Communication	8694.367
11	Financial Services	576.073
12	Real Estate	10213.526
13	Company Services	1936.872
14	Government Administration, Defense and Mandatory Social Security	551.883
15	Education Services	3771.819
16	Health Services and Social Activities	1959.471
17	Other Services	1351.563
Total Amount		**53785.23**

CONCLUSIONS AND SUGGESTION
Conclusion

Based on the Location Quotion (LQ) method, which is the base sector (sector that has a competitive advantage) in South Tangerang from 2010 to 2016 as many as 9 (six) sectors, namely: (1) Construction Sector; (2) The sector of large and retail trade, and repair of cars and motorbikes; (3) The sector of providing accommodation and drinking meals; (4) Information and communication sector; (5) Real estate sector; (6) Company service sector; (7) Educational services sector; (8) Health services sector and social activities; (9) Other service sectors. the average LQ is 1.490; 1,333; 1,315; 2,969; 2,233; 3,299; 2,530; 3,663; 2,014.

Overall based on the calculation of Location Qoution (LQ) and Shift Share Analysis, it is known that there are three superior sectors in South Tangerang City. The three sectors are: 1) Sector providing accommodation and drinking meals; 2). Information and communication sector; 3). Real estate sector. The sector is said to be a leading sector because it has a LQ value> 1 and has a Proportional Share value and a positive Differential Shift. Of the three leading sectors, it can be concluded that the real sector is the most superior sector in South Tangerang City, this is because the real estate sector has the highest National Share value compared to the other two sectors.

Suggestion

The two methods used in this study (LQ and SS) are internal analysis, meaning that they only use data from the sectors discussed so that the conclusions are based solely on past data. In order for a sector to really want to be developed, it needs to be supplemented by an analysis of macro conditions and other factors that also influence the development prospects of the sector.

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