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A Dynamic Investment Development Strategy on How To Accelerate The Economic Growth

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Abstract - This study aims to build a model of investment development strategy in Subang Regency, West Java, especially in relation to the construction of international port in Patimban, Subang Regency. The method used in this study is the Location Quotient (LQ) Method, and the data used is secondary data obtained from Indonesian Central Bureau of Statistic as well as previous researches and government regulations. The study result finds that most of the economic sectors are the leading sectors, since their LQ value is above the minimum value of 1.0. Nevertheless, in order to maximize the multiplier effect to develop the economic growth, two sectors should be developed first in accordance with the Vision of Subang Regency during the period of 2018-2024, and also with the construction of Patimban International Port is expected to boost the economic development in Subang Regency. This research is expected to provide an input to compose the investment plan of Subang Regency.

Keywords—Investment, EconomicDevelopment, Multiplier Effect, Trickle Down Effect, Patimban, Subang Regency

I INTRODUCTION

Due to global economic competition, the investment policy should be directed to create the national competitive strength as well as promoting a sustainable economic development. The government plays a monumental role in shaping a friendly and conducive investment atmosphere by developing economic activities that are able to transform the comparative advantage to become a competitive advantage.

Arrow, stated that the purpose of holding investment in the region is so that investment can occur consistently, optimally and simultaneously [1]. This can only be achieved if the supporting factors that hinder the investment climate can be overcome, among others, by improving coordination between government agencies, creating an efficient bureaucracy, legal certainty in the field of manpower, and business comfort. With the improvement of various supporting factors, it is expected that the realization of investment will increase significantly. This is in accordance with the opinion of which states that low trade barriers will lead to economic integration and channel multinational capital into the regions (Hwang) [2]. Therefore, to produce a dynamic investment development plan, a strategy that is appropriate to the conditions in the area is needed. So,

the problem in this study is what sectors are the priorities in developing investment that can provide a multiplier effect optimally? And what is the investment development model that can dynamically increase investment in Subang Regency?

Development of capital or investment is the driving force of the regional economy. Regional economies are developed based on the vision of the region. Subang Regency's Vision is:

"The realization of Subang Regency as an area of Agribusiness, tourism and industry that is environmentally, religiously and culturally based through mutual cooperation by 2024"

Tödtling emphasized that the lack of a clear vision resulted in many regions not focusing on designing the right strategy [3]. Therefore, the development of investment in Subang Regency will be directed in accordance with the Vision of Subang Regency by focusing on sectors that are able to provide a multiplier effect optimally. In addition, with the national program for the development of Patimban international port in Subang Regency, another sector that has the potential to be developed are warehousings and transportations. The industrial sector in Subang Regency is one of the potential sectors to develop. The number of companies engaged in the manufacturing industry sector in 2014 can be seen in table 1.

TABLE I. NUMBER OF COMPANIES ACCORDING TO THE INDUSTRIAL CODE IN SUBANG REGENCY 2014

	NUMB: COMP.		LABOR				
INDUSTR IAL CODE	IK / FORM AL / NON FORM AL	PMA / PMDD N / NONF AS	IK / FORM AL / NON FORM AL	PMA / PMDDN / NONFAS			
-1	-2	-3	-4	-5			
Agro Chemical Industry And Forest Product							
a. Chemical	286- 1659	5/20/20 12	1786-4665	5 -/4 511/219			
	286-	0, 0, 0, 0	1786-4665	5 ' '			
Chemical	286-	0, 0, 0, 0	1786-4665 -	5 ' '			



	NUMB COMP		LA	BOR
INDUSTR IAL CODE	IK / FORM AL / NON FORM AL	PMA / PMDD N / NONF AS	IK / FORM AL / NON FORM AL	PMA / PMDDN / NONFAS
-1	-2	-3	-4	-5
a. Forest Product	355/675	-/1/-	2 798/3 078	-
b. PULP/P aper	-	-	-	-
Jumlah I / Total I	647- 5429	5/22/12	4710/1268 0	- /4868/2 19
Industrial M	letal, Machi	ne, Electro	nic and Var	ious
a. Metals, machinery and engineerin	402-595	01/08/2 001	1431/1925	-/173/-
b. Electronics Industry	17/51	01/01/2 003	54/87	-/314/-
c. Various Industry	-	-	-	-
d. Textile Industry	-	-	-	-
Jumlah II / Total II	419-646	02/09/2 004	485/2012	-/487/-
Jumlah (I+II)	1 066/6 075	7/31/16	5 195/14 692	-/5 355/219

II METHODS

This research was conducted in four stages. These stages are:

Preparation. This stage starts with a literature review including legislation and various liters of investment and regional economic development and preliminary data in order to design an inventory study of data needs. The target at this stage is the study design, study methods and approaches.

Data Collection and Processing. Data collection is carried out by conducting observation to the Investment Service and One Stop Services and collecting secondary data from the Central Statistics Agency (BPS) of Subang Regency and West Java Province. After that the data is collected then data processing is done using the Location Quotient (LQ) method to determine the superior / base sectors in Subang Regency

Analysis and Design. After the data is processed using the Location Quotient (LQ) method, the data is analyzed using descriptive analysis and analysis of the results of the LQ calculation. Descriptive analysis aims to study and see more deeply the characteristics and patterns of data as well as detect patterns that apply in aseriesofdata. While the LQ method analysis is a continuation of the calculation using the LQ formula to determine which sectors belong to the base economic sector so that it can be a priority to be developed. Sector determination which is a priority to be developed is related to the Vision and Mission of Subang

Regency as well as with the plan to develop the Patimban International Port in Subang Regency.

Formulating Strategy. After the results of the data analysis, a dynamic investment development strategy is formulated based on the Trickle-Down Effect Theory for the development of investments to accelerate economic development in Subang Regency.

The stages of research implementation can be seen in Figure 1.

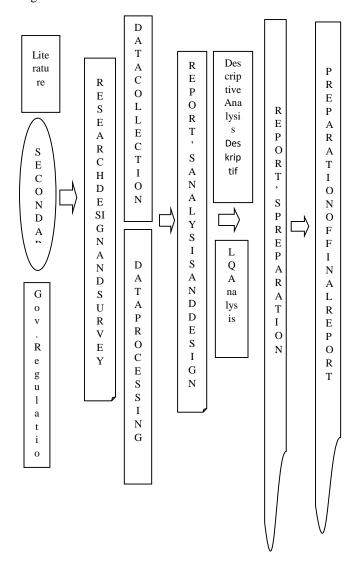


Figure 1 Steps/Research Methodology

Location Quotient (LQ) Method

The analysis method used in this research is the Location Quotient (LQ) analysis. This analysis is used to determine which sector/s considered as priority sector/s to be develop or basis economy in regional economy. Moineddin stated that the Location Quotient (LQ) is a technique that allows the



comparison to be conducted between local area characteristics to the national characteristics [4]. The LQ measures the ratio between local and national share of productive activities of a particular industry in the region [5]. The Location Quotient (LQ) method refer to the formula as follows:

$$LQ = \frac{Xr/_{RVr}}{Xn/_{RVn}} \text{ or } \frac{Xr/_{Xn}}{RVr/_{RVn}}$$

Where:

Xr : production's value of a sector/sub-sector in the Regency/city

RVr : the total GDP in the Regency/city

Xn : production's value of a sector/sub-sector in the province

RVn : the total GDP in the province

The criteria are as follow:

- a. LQ value > 1, the specialty level of sector/sub-sector in the region is higher than the similar level of sector/sub-sector in the province (basis or priority economic sector)
- b. LQ value < 1, the specialty level of sector/sub-sector in the region is lower than the similar level of sector/sub-sector in the province (non-basis or non-priority economic sector)
- LQ value = 1, the specialty level of sector/sub-sector in the region is similar with the level of sector/subsector in the province.

III RESULT

Based on the calculation using the Location Quotient (LQ) method, the production value of each sector in Subang regency can be seen in table 1.

TABLE I. NUMBER OF COMPANIES ACCORDING TO THE INDUSTRIAL CODE IN SUBANG REGENCY 2014

	NUMB COMP		LA	BOR			
INDUSTR IAL CODE	IK / FORM AL / NON FORM AL	PMA / PMDD N / NONF AS	IK / FORM AL / NON FORM AL	PMA / PMDDN / NONFAS			
-1	-2	-3	-4	-5			
Agro Chemic	Agro Chemical Industry And Forest Product						
a.	286-	5/20/20	1786-466	5 -/4			
Chemical	1659	12		511/219			
b. Agro	-	-	-	-			
- food	-	-	-				
- nonfood	615 095	-/1/-	36/4 937	-/357/-			
a. Forest Product	355/675	-/1/-	2 798/3 078	-			
b. PULP/P aper	-	-	-	-			
Jumlah I / Total I	647- 5429	5/22/12	4710/1268 0	3 - /4868/2 19			
Industrial Metal, Machine, Electronic and Various							

		ER OF ANIES	LABOR				
INDUSTR IAL CODE	IK / FORM AL / NON FORM AL	PMA / PMDD N / NONF AS	IK / FORM AL / NON FORM AL	PMA / PMDDN / NONFAS			
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a. Metals, machinery and engineerin g	402-595	01/08/2 001	1431/1925	5 -/173/-			
b. Electronics Industry	17/51	01/01/2 003	54/87	-/314/-			
c. Various Industry	-	-	-	-			
d. Textile Industry	-	-	-	-			
Jumlah II / Total II	419-646	02/09/2 004	485/2012	-/487/-			
Jumlah (I+II)	1 066/6 075	7/31/16	5 195/14 692	-/5 355/219			

The LQ value shows that almost all sectors in Subang district are superior sectors that are able to meet the needs not only for Subang district, but also able to meet market needs in the area around Subang and the province of West Java.

IV DISCUSSIONS

Investment development in Subang Regency is not only based on LQ calculations, but also on Subang District Vision. The vision of Subang Regency emphasizes economic development in three priority sectors, namely the agricultural sector, the industrial sector, and the tourism sector. Of these three sectors, the industry sector is a sector with the lowest LQ value of 0.294 so that it is not a superior sector in Subang Regency.

However, this happens because the potential of the area designated for the industrial sector cannot be maximized. The area of land use for industrial areas in Subang Regency is 16,244 Ha. However, the new area used was 8,156 Ha (50.20%). While 7,249 Ha (49.80%) has not been utilized for the manufacturing industry sector. The area of land use for industrial areas can be seen in table 2.

TABLE II. THE LQ CALCULATION IN SUBANG REGENCY

SECTO R	GDP /SE CTO R SUB AN G REG ENC Y	GDP TOTAL SUBAN G REGEN CY	GDP/SE CTOR (WEST JAVA)	GDP TOTA L (WES T JAVA)	LQ VAL UE	OR DE R
Agricultu re,	6.66	22.157,6	98.181,6	1.254.9	3,84	1
Livestoc	8,82	9	6	48,62	7	



1						
k, Hunting, Fishing						
Public Administ ration and Defense, Compuls ory Social Security	932, 74	22.157,6	25.731,4	1.254.9 48,62	2,05	2
Financial and Insurance Activities	1.07 2,96	22.157,6 9	33.030,5 2	1.254.9 48,62	1,84 0	3
Accomm odation and Food Service Activities	874, 11	22.157,6 9	32.549,5	1.254.9 48,62	1,52 1	4
Educatio n Activities	855, 45	22.157,6 9	34.885,8 1	1.254.9 48,62	1,38 9	5
Other Services Activities	598, 83	22.157,6 9	26.226,5 4	1.254.9 48,62	1,29 3	6
Water Supply, Sewerage , Waste Manage ment, and Remediat ion	22,3	22.157,6	1.009,02	1.254.9 48,62	1,25	7
Wholesal e and Retail Trade, Repair of Motor Vehicles and Motorcyc les	3.96 7,86	22.157,6	198.887, 07	1.254.9 48,62	1,13	8
Human wealth and Social Work Activities	190, 81	22.157,6	9.723,04	1.254.9 48,62	1,11 1	9
Construct	2.00 7,41	22.157,6 9	103.507, 07	1.254.9 48,62	1,09 8	10
Informati on and Commun ication	880, 49	22.157,6 9	47.856,8 0	1.254.9 48,62	1,04	11
Real Estate Activities	249, 71	22.157,6 9	14.738,0 7	1.254.9 48,62	0,96 0	12
Transport ation and Storage	952, 52	22.157,6 9	61.135,3 4	1.254.9 48,62	0,88	13

Manufact uring	2.85 1,48	22.157,6 9	549.471, 38	1.254.9 48,62	0,29 4	14
Electricit y and Gas	16,7	22.157,6 9	6.139,55	1.254.9 48,62	0,15 4	15
Business Activities	11,4 3	22.157,6 9	5.334,98	1.254.9 48,62	0,12 1	16
Mining and Quarryin g	4,01	22.157,6 9	6.540,83	1.254.9 48,62	0,03 5	17
GDP TOTAL (WIHT OUT OIL AND GAS)	22.1 57,6 9		1.254.94 8,62			

The investment development model in Subang Regency uses a method known as the Trickle-Down Effect or what is known as the drop-down effect. This concept emphasizes large-scale investments to stimulate investment with levels that are below it to grow around it. The main idea the trickle-down effect is the accumulation of welfare generated from high-income people to low-income people because of the increased transfer of the two groups (Aghion, Akinci) [6, 7]. This causes the economic aspects through the investment mechanism to trickle down and increase investment to the level below it as shown in Figure 2.

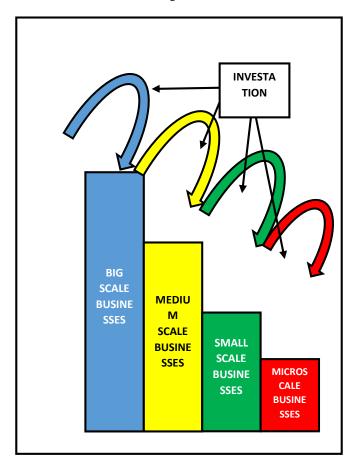




Figure 2. Trickle Down Effect Mechanism

Thus, it can be seen that the land destined for industrial development can be maximized for both domestic and foreign investments, it will provide a multiplier effect on economic development in Subang Regency. In addition, the construction of an international port in the warehousing sectors of Patimban, Subang, is considered important to be developed in connection with the construction of an international port in Patimban, Subang Regency. The development model of warehousing investment sector can be seen in Figure 3.

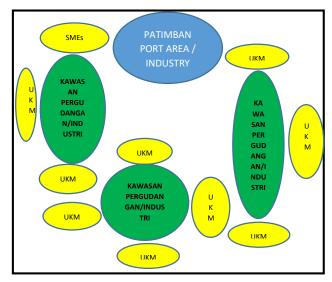


Figure 3. Model to develop Storage Sector in Subang Regency based on Trickle Down Effect

Recommendations that can be given for the development of dynamic investment in Subang Regency are divided into two, namely based on business scales and on superior priority sectors.

- Recommendations based on business scales
 - Law No. 20 of 2008 concerning Micro, Small and Medium Enterprises (SMEs) divides the business scale into micro, small and medium enterprises which are independent businesses and not subsidiaries or branches of the company. SMEs are an important component in economic development as stipulated by MPR No. XVI / MPR-RI / 1998 concerning Economic Politics in the context of Economic Democracy. The recommendations given for the development of SMEs in Subang Regency can be in the form of:
 - Incentives in the form of reduction, relief, or exemption from regional taxes, provision of stimulant funds or provision of capital assistance.
 - Facility in terms of simplification of licensing, provision of data and information on investment opportunities, facilities and infrastructure as well as land and location and various technical provisions.

The incentive and convenience scheme is expected to accelerate the development of investment in Subang

Regency. These recommendations vary depending on the scale of business as shown in table 2.

SECTO R	GDP /SE CTO R SUB AN G REG ENC Y	GDP TOTAL SUBAN G REGEN CY	GDP/SE CTOR (WEST JAVA)	GDP TOTA L (WES T JAVA)	LQ VAL UE	OR DE R
Agricultu re, Livestoc k, Hunting, Fishing	6.66 8,82	22.157,6 9	98.181,6 6	1.254.9 48,62	3,84	1
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GDP TOTAL (WIHT OUT OIL AND GAS)	22.1 57,6 9		1.254.94 8,62			

Recommendations based on superior priority sectors.
 Recommendations given based on superior priority sectors. It is expected that the development of investment in these sectors can provide a maximum multiplier effect on other sectors as well as on SMEs in Subang Regency. Recommendations for investment development based on the leading sectors can be seen in table 3.

TABLE III. AREA OF LAND ALLOCATION FOR INDUSTRIAL ESTATES

				AND USE AL AREAS
NO	DISTRICTS	AREA (Ha)	Usage Area (Ha)	Remaining Area (Ha)
1	Cipendeuy	4.272	3.596	677
2	Cipunagara	1.352	-	1.352
3	Purwadadi	3.528	752	1.766

5	Kalijati Pabuaran	1.979	950	1.082 885
6	Pagaden	191	-	191
7	Cibogo	3.088	1.802	1.286
TOTAL		16.244	8.156	7.249

Source: One Door Investment Services and Integrated Services Subang Regency

In more complete recommendations, investment development in Subang Regency can be seen in Figure 4.

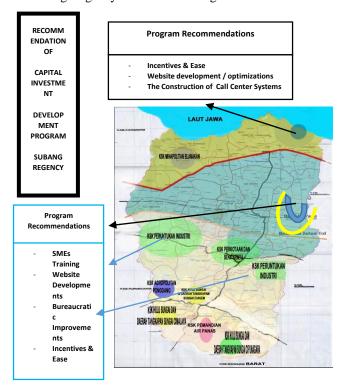


Figure 4. Recommendation to develop investment in Subang Regency

V CONCLUSION

Based on the explanation above, it can be concluded that there are two sectors that would give a maximum acceleration on investment development in Subang Regency. Thus, the priority of investment development in Subang Regency should be directed in accordance with LQ calculation and the Vision of Subang Regency. These sectors are industrial Sector and transportation and Storage Sector. This was later added in relation to the development of international port in Patimban, Suban. There are other sectors to be developed. These sectors are expected to accelerate both Transportation and Storage sector and industrial sector as well as other sectors in Subang Regency.



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