## ANALYSIS OF REGIONAL POTENTIAL AND SMALL MEDIUM INDUSTRY POTENTIAL USING LOQATION QUOTIENT (LQ), LOCALITATION INDEX (LI) AND SPECIALIZATION INDEX (SI) METHODS IN MAJALENGKA DISTRICT (Case Study: Majalengka Regency)

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#### Abstract

This research is motivated by the very rapid development of Small and Medium Industries in Indonesia, this can make economic development in Indonesia even better. In economic development in Indonesia, the role of Small and Medium Industries is quite strategic. Many parties believe that the SME sector business is able to withstand the economic crisis that has been experienced in previous years. On the other hand, the development of the SME sector business cannot be separated from the general characteristics that most of the products produced are for the growth of domestic needs, especially in one district. Various business profiles are briefly reviewed to provide an up- to-date overview of the small and medium industry sector businesses. The type of data used in this study consists of primary data and secondary data. The primary data used is the 2018 sub-district SMI data, while the secondary data includes the name of the SMI, address, product, total production per year, the main KBLI group, KBLI, coordinate points and elevation. Data were collected using the interview method and GPS tracking. The results obtained from this study are the potential distribution of Small and Medium Industries which are spread across 26 Districts in Majalengka Regency, which in 2018 totaled 1747 SMI.

Keywords: Analysis of Regional Potential and Small and Medium Industry Potential

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#### Introduction

The development of Small and Medium Industries in Indonesia is very rapid, this can make economic development in Indonesia better. In economic development in Indonesia, the role of Small and Medium Industries is quite strategic. Many people believe that the SME sector business is able to withstand the economic crisis that has been experienced in previous years. On the other hand, the business development of the IKM sector cannot be separated from the general characteristic that this business is mostly produced for the growth of domestic needs, especially in one district. Various business profiles are briefly reviewed to provide an updated picture of the Small and Medium Industry sector.

From the results of the IKM survey in 2018 conducted by the Indonesian Central Statistics Agency, it was recorded that there were 4.26 million businesses/companies. The island of Java, which is the island with the most densely populated population, is the area that has the most IKM with a number that reaches 58.43 percent. The number of businesses/entrepreneurs in Central Java, East Java and West Java is the largest, each reaching more than 500 thousand businesses/company. This condition is very different from the picture of businesses/companies in the Maluku and Papua regions where the number of businesses in each area only reaches less than 50 thousand businesses/companies. As in the graph below



Figure 1.1 Graph of the distribution of SMEs in Indonesia

From Figure 1.1 the graph of the distribution of IKM in Indonesia shows that the largest distribution of IKM is on the island of Java which has a percentage of 58.4 percent. West Java itself is an area that has a lot of potential for business land based on Small and Medium Industries seen from the many uses of raw materials. local and the creativity of the entrepreneurs so that small and medium-sized industrial areas began to appear in every district in West Java. One of them is Majalengka Regency which has a total of 1747 IKM businesses/companies.

Majalengka Regency as regulated in Law Number 23 of 2014 concerning Regional Government has the opportunity as well as being required to be more creative in exploring, managing and utilizing the potential of local resources. The existence of these local resources has created various social economic activities. One of them is through the process of converting potential resources into various products that have added value, which is commonly referred to as industry.

From data from the Department of Manpower and Industry (DISNAKERIN) of Majalengka Regency, it is recorded that there are more than 1747 Small and Medium Industries (IKM) in the non-self employee category (already have workers other than themselves and have been given formal wages) with a workforce of more than 5 people.

No	Kecamatan	Jumlah IKM					
1	Argapura	18					
2	Banjaran	31					
3	Bantarujeg	21					
4	Cigasong	68					
5	Cikijing	110					
6	Cingambul	88					
7	Dawuan	111					
8	Jatitujuh	15					
9	Jatiwangi	105					
10	Kadipaten	34					
11	Kasokandel	197					
12	Kertajati	37					
13	Lemahsugih	82					
14	Leuwimunding	85					
15	Ligung	58					
16	Maja	36					
17	Majalengka	46					
18	Malausma	56					
19	Palasah	145					
20	Panyingkiran	28					
21	Rajagaluh	55					
22	Sindang	9					
23	Sindangwangi	129					
24	Sukahaji	36					
25	Sumberjaya	101					
26	Talaga	46					
	TOTAL IKM	1747					

Table 1.1 Data on IKM (Small and Medium Industries) Kab. Majalengka Year 2018

From table 1.1 we can see that the number of SMIs in Majalengka in 2018 was 1747 SMIs that have been registered in the database of the Majalengka Regency Industry and Trade Office,

and from the data above, the researcher concludes that regional development is necessary as in Law No. . 26 of 2007 and mapping the potential areas of IKM in Majalengka so that local and outof-town consumers can more easily find where the potential IKM areas are in Majalengka Regency, to assist the research above, the researchers used the Location Quotient (LQ) method to identify areas that competitive advantage at the sub-district level, in the science of regional development planning, mapping of superior commodities is carried out by identifying the economic activities of the commodity area in an area. Advantage can be in the form of comparative advantage or competitive advantage. The comparative advantage of the region can be determined by using the Location Quotient (LQ) analysis approach. LQ analysis itself is an analytical technique used to determine the concentration of an activity in an area within a wider aggregate area coverage. (Edwin Hidayat, 2013).

Based on the explanation above, the authors are interested in conducting research on the development of regional potential and IKM potential in Majalengka district as a Final Project research with the title "ANALYSIS OF REGIONAL POTENTIAL AND SMALL MEDIUM INDUSTRY POTENTIAL USING LOQATION QUOTIENT (LQ) METHODS, LOCALITATION INDEX (LI) AND SPECIALIZATION INDEX (SI) IN MAJALENGKA REGENCY".

## **Research Method**

## Determination of Research Objects and Preliminary Studies/Field Observations.

Determination of the object of this research is done by submitting a proposal to the Head of the Study Program and determining the title of the research to be taken is done by looking at the condition of the issues regarding economic development which is based on the number of home industries which are increasing every year in line with the existing economic conditions. in Indonesia. The research locations are all sub-districts in Majalengka Regency, Responsarat Province which are geographically located at coordinates 60 32' - 70 4' south latitude and 10802' - 1080 24' east longitude, totaling 26 sub-districts (sub-district IKM data in 2018).

## **Types and Techniques of Data Collection**

The type of data used in this study consisted of primary data and secondary data. The primary data used is the sub-district IKM data in 2018, while the secondary data includes the IKM name, address, product, annual production amount, main KBLI group, KBLI, coordinate point and elevation. Data were collected using interview and GPS tracking methods.

#### Data Analysis Method

The collected data was then analyzed using the LQ, LI and SI analysis methods. The LQ value is used to show the value of the activity/sector basis of the IKM, the LI value is used to determine which areas have the potential to develop certain activities, and the SI value is used to see the specialties/distinctiveness of a particular sub-region.

## LQ, LI and SI analysis

In the science of regional development planning, mapping of superior commodities is carried out by identifying the economic activities of these commodities in an area. Advantage can be in the form of comparative advantage or competitive advantage. The comparative advantage of the region can be determined by using the Location Quotient (LQ) analysis approach. LQ analysis itself is an analytical technique used to determine the concentration of an activity in an area within a wider aggregate area coverage. An area is said to have a competitive advantage if within a certain time it has increased compared to other regions (Rustiadi et al. 2011).

## **Results and Discussion**

#### Data collection

This data was collected by means of a direct field survey by a team of surveyors from the Department of Trade and Industry of Majalengka Regency which was carried out in 2018 and the following data were produced:

Nama Kecamatan	Golongan KBLI												Total		
	10	12	13	14	15	16	17	20	21	22	23	25	31	32	PerKe.
Argapora	12		e - 0.	- 0		4		2			<u>.</u>	<u> - 12</u>	1 - 12		18
Banjaran	24		8–8	-8		1	3-3	1	8-8		3	3	1	1	31
Bantarujeg	17	13	8–8	- 6		s	8-8		8-8		3	1	=8		21
Cigmong	17	18	8-8	- 6		7	5-2		05 - 8		43	1	-8		65
Cikijing	26	3	1	\$1		1	8-2		03 - 8		3	3-3	1		110
Cingambul	61	i5	8—6	18		6	5-2		87—8		1	3-3	1	1	88
Dawsan	19	13	1	2		8	2		05-0		83	3-3	2	2	111
Jatitujah	11	3	1	1		1	8-2		05 - 8		3	3-3	1		15
Jatiwangi	31	13	8–8	3	1	1	8-8		1		65	3-3	=8		105
Kadipaten	24	13	8-6	1		8	0-2		05-0	-	7	3-3	2		34
Kasok andel	7	3	8-8	4	1	1	8-2		05 - 8		181	25-3	3		197
Kertajati	12	8	1	2		1	8-2		87—8		18	3-3	3		37
Lenzhs ugih	32	16	3	8		11	5-2		8-8		8	3-3	3	1	82
Leuwimunding	12	8	16	29		20	8-8		8-8		2	1	5		85
Ligong	10		8–8	-8		3	8-8		8-8		37	1	5		58
Maja	28	8	8–8	3	1	1	8-8	1	87 - 8		2	3-3	=8		36
Majalen gita	45	s	8–6	1		3	3-2		8-8		3	3-3	-8		46
M alavama	24		15	-8		2	6-8	2	8-8		1	3-3	=8	12	56
Palasah	126	8	1	9		1	2 3		e s		6	2	8 98		145
Panyingkiran	11	2	8-8	1		2	2 3		6 8		9	2	3		28
Rajagaluh	29	2	8-8	5		4	2 2		5 8		50	1	16		55
Sindang	2	ē	8-8	8		4	2 3		6 8		92	92 - 3	3		9
Sindangwangi	20	2	3	3		46	2 2		6 8	1	41	32 3	14	1	129
S uk shaji	17	-	1	- 28		3	2-2		5 8		9	32-3	4		36
Sumberjaya	22	1	8 R	9	5	8	8 3		is is	1	3	47	3	2	101

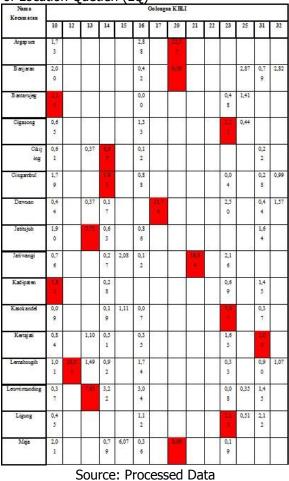
Table 5.1 Data for Small and Medium Industries Kab. Majalengka in 2018 by KBLI Class

Source: Secondary Data from the Department of Trade and Industry Kab. Majalengka

From Table 5.1 Data for Small and Medium Industries Kab. Majalengka Year 2018 According to the KBLI Group, the following calculations can be made:

# a. Calculation of Local Quotien (LQ)

Table 5.2 Calculation of Location Quetien (LQ)



2 regarding the calculation of LO it can be found

From the data table 5.2 regarding the calculation of LQ, it can be found that the potential for SMEs in each sub-district is red because the value that can be entered is in the category of interpretation of the LQ results at point 1 where the LQ value is greater than 1.

# b. Calculation of Localitation Index (LI)

The Localization Index (LI) is used to determine the percent distribution of a particular activity within the region (Isard et.al., 1976). This LI calculation is also still included in the LQ calculation, the calculated data still uses data from table 4.4 which is calculated using the Localitation Index (LI) formula. From the Localizatin Index formula and agreement, the following data is obtained:



From the data in Table 5.4. Calculation of the Localitation Index above, it can be seen that for areas that have the potential to develop a better concentration, they are in Small and Medium Industries which are red in color and have KBLI Group 25, namely the Metal, Non-Machinery and Equipment Industry in Banjaran District, Bantarujeg District, Cigasong District, Lemahsugih District, Leuwimunding District, Ligung District, and Sumberjaya District because they meet the requirements in the LI Interpretation category point 2 where it is written that if the LI value is close to 1 then the observed activity will tend to develop concentrated in one location. This means that the observed activity will develop better if it is carried out in certain locations.

## c. Calculation of Specialization Index (SI)

Calculation of the Specilization Index (SI) This is used to describe the division of the area based on existing activities. The result of this calculation is that certain locations become the center for the activities carried out which in this study are the activities of Small and Medium Industries. From the calculation formula and interpretation of the Specialization Index (SI) equation, the following results are obtained:

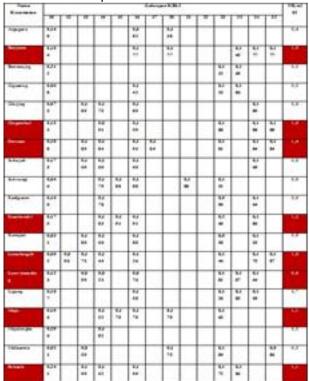


Table 5.5 Specialization Index Calculation

From the data table 4.8 Specialization Index (SI) calculations adjusted for the interpretation of the equation, it is found that the sub-districts that have the potential for distinctiveness are the red ones, Banjaran District, Cingambul District, Dawuan District, Kasokandel District, Lemahsugih District, Leuwimunding District, Maja District, Palasah District. , Kecamatan, Palasah, Kecamatan, Sindangwangi, Kecamatan, Sumberjaya and Kecamatan Talaga because it is included in the interpretation category of the SI equation at point 2, i.e. if the value is close to 1, it means that there is a unique activity. This means that the observed sub-regions have typical activities whose development is relatively prominent compared to those in the sub-regions and vice versa for sub-districts that are not marked in the table, the sub-district is included in point 1 where if the value is close to 0 it means that there is no specific activity. This means that the observed sub-regions do not have typical activities that are relatively prominent in their development compared to other sub-regions.

#### Conclusion

- a. Calculation of Location Quetien (LQ) Based on table 5.2 Calculation of Location Quetien (LQ) the results obtained are in table 5.3 Regional Potential and Small and Medium Industry Potential which this result means that the potential growth of a region cannot only be seen from the state of the region. but it can also be seen from the large number of Small and Medium Industries that exist in the region because when viewed from the state of the region it is not in accordance with the potential of its Small and Medium Industries.
- b. Calculation of the Localitation Index (LI) Based on the results of the calculations in table 5.4 the calculation of the Localitation Index of an area that has a potential tendency for regional concentration can be seen from the number of raw materials and expertise available in the area.
- c. Calculation of the Specialization Index (SI) Based on the data in table 5.5 the calculation of the Specialization Index there are 11 districts that can be said to have regional characteristics, namely Banjaran District, Cingambul District, Dawuan District, Kasokandel District, Lemahsugih District, Leuwimunding District, Maja District, Palasah District, District , Palasah, Kecamatan, Sindangwangi, Kecamatan, Sumberjaya and Kecamatan Talaga,

because it has a value that matches the value of the equation from the Specialization Index (SI) method. However, in the research that the researchers did was to see the potential possessed by Majalengka Regency in the form of numbers not only in visual form.

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