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## The Analysis on Leading industries in Central Java Province

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#### **Abstract**

The purpose of this research is for identifying the types of industriesthat become leading industries in Central Java Province. The methods, used are LQ (SLQ and DLQ) and Shift Share. The result of this research shows that the the leading industries in Central Java Province are beverage industry, tobacco processing industry, textile industry, apparel industry, wood industry, printing industry, furniture industry and other processing industries. In the future, the development of the industry should not only focus on the leading industries but also onnon-leading industries, so that the non leading industries will not be left behind.

Keywords: Leading Industry, SLQ, DLQ, Shift Share

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#### **INTRODUCTION**

According to Kusumantoro (2009: 104), sectoral strategic development policy is a policy of development in the industrial sector. The sector is seen as a sector that has a high level of productivity, so that the advantages will be obtained a high added value. Therefore, the purpose of creating economic welfare of society can be more quickly realized by developing the sector.

However, not all regions have the potential in the sector of that particular regional economy. Development should be based on the potential of each region so that the basic purpose of such development, which is the creation of the society's welfare, can be achieved. Sushil (2010).

According to Alisjahbana (2014: 11) in her study "Policy Direction and Strategy to Accelerate Development of Eastern Indonesia in 2014", the economic corridor that has potential and as a driver of national industry is the Java corridor. This is because many growing industries in the corridor. Based on the data from the Central Bureau of Statistics of the Republic of Indonesia (2014: 1), 83% of industry in Indonesia are in Java, while the rest are outside Java.

Based on Table 1, note that the Central Java province has great potential in the manufacturing sector, although still inferior to West Java and East Java province which has higher value of Gross Domestic Product (GDP) in manufacturing industry. Manufacturing industry has great potential in Central Java province which is supported by the high number of industries in the province.

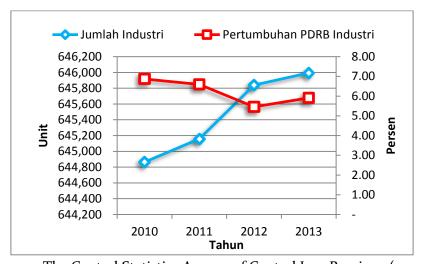
Based on Figure 1, the number of industries in Central Java province continues to increase from year to year during the period 2010 - 2013. During that period, new industries in Central Java province continue to grow and become one of the factors driving the increase in the GDP of the industry.

However, when viewed in greater detail, when the number of industries that continue to rise even GDP growth in the manufacturing industry in Central Java province is declining. The decline tends to indicate that the performance of the sector is likely to decline from year to year. Even in 2012, when the number of industries has significant increase, the decline is significant too. This performance indicates that an increasing number of industries are not always followed by an increase in performance.

**Tabel 1.** The PDRB value of Manufacture Industries in Java from 2009 – 2013 (in million Rupiah)

Provinsi	2009	2010	2011	2012	2013
Banten	43.432.270,00	44.911.370,00	47.034.180,00	48.517.640,00	50.417.710,00
DKI Jakarta	58.447.652,26	60.555.943,29	62.095.761,00	63.591.048,83	65.134.279,33
Jawa Barat	131.432.865,00	135.594.749,00	144.010.048,00	149.677.170,00	157.643.083,00
Jawa Tengah	57.444.185,45	61.390.101,24	65.439.443,00	69.012.495,82	73.092.337,30
DIY	2.610.760,00	2.793.580,00	2.983.167,00	2.915.117,00	3.142.836,00
Jawa Timur	83.299.893,42	86.900.779,13	92.171.191,46	98.017.056,47	103.497.232,68

Source: The Central Statistics Agency of each province in (2012 – 2014), the data is then tabulated by the researcher.



Source: The Central Statistics Agency of Central Java Province (2012 – 2014) **Figure 1.** The comparison of PDRB growth and the number of manufacturing indu

**Figure 1.** The comparison of PDRB growth and the number of manufacturing industry in Central Java 2010 – 2013

Based on these problems, there is a need for the identification of the types of industry that is a leading industry in Central Java province, an immidiate action also needs to be taken to trigger the increase in the performance of manufacturing industry. Because according to Tarin (2007: 28), there is a need to boost growth in a sector basis (leading) to encourage the growth of a region. This is because the growth will encourage the growth of other sectors, namely the non-base. The purpose of this study is to identify the types of industries in Central Java province which are the leading industries.

According to Tarin (2007: 28), the theory of economic basis (economic base theory) basing its view that the pace of economic growth of a region is determined by the magnitude of the increase in exports from the region. In this case, the economic activities grouped on base and events non-base ativities. Only the base activity that can encourage regional economic growth, while non-base ativities can only be used to meet local consumption needs.

In its development, it is necessary to boost growth in a base sector to encourage the growth of a region. This is because the growth will encourage the growth of other sectors, namely the non base. The basic sector is a sector that sell their products outside of their territory or activities that bring in money from outside of the region. Wyld (2010)

According to Tarin (2007: 79), Ricardo proves that when there are two countries that trade with each other and each country concentrated on exporting goods to the country that has a comparative advantage, the two countries will get the benefit. The comparative advantages of a commodity for a country or region is that the commodity is relatively superior to other commodities in the region.

The theory of comparative advantage is put forward by John Stuart Mill in Nopirin (2010: 11), who states that a country will produce and then export a commodity that has the comparative advantage of the total of a commodity that can be produced more cheaply and importing commodities that have

a comparative disadvantage, namely the commodity whose production process requires a large cost. This theory basically states that the value of a commodity is determined by the amount of labor that has gone into producing the goods. The more energy that has gone into producing these commodities, the more expensive the value of the commodity.

According to Tarin (2007: 81), competitive advantage analyses an area's ability to market its products outside the region/ overseas/ global market. The competitive advantage of seeing whether the products can be sold in the global market profitably.

Michael E. Porter in halwani (2005: 36) in his famous book, The Competitive Advantage of Nations, 1990, suggests a direct correlation between the two factors of production (abundant natural resources and cheap human resources) owned by the state and utilized as a competitive advantage in international trading, many countries have a number of very large workforce but have backward international trade competitiveness. So if the wage level is relatively cheap, it is strongly correlated with the low motivation to work hard and excel. The final result, Porter mentions that the role of government is to support the improvement of competitiveness in addition to the available factors of production.

A country's industrial success in international scale is generally backed by four attributes, namely a good production conditions factor, demand and domestic high quality requirements, upstream or downstream of advanced and intense domestic competition. Ray (2012). The competitive advantage that is only supported by one or two attributes alone usually will not be able to survive, because all four of these

attributes interact positively on the country's success in improving competitiveness. Besides opportunities, the role of government is also a significant additional variables such as the application of antitrust policy, regulation, deregulation, or the condition of the consumer. Simranjeet (2015).

If you want to win the competition, there are five forces that must be taken into consideration which includes: character of the competition among competitors. If the competition faced is offensive, most likely the industry is less attractive and less profitable. (2) The threat of the new-comers competitors. If other companies can easily enter the industry, the industry capacity will be enlarged and the price will go down, so that the profits being enjoyed would be jeopardized. (3) The threat of substitute products or services. If a customer has many options to satisfy their needs for products and services produced, then the profitability of the industry will be threatened. (4) The bargaining position of suppliers. A situation where the industry can move from one supplier to another easily. (5) Bargaining position of consumers. If the consumer is stronger than the industry, then the industry will issue a larger overhead.

A research by Tahir (2013) on "Assessing Manufacturing Subsector Small and Medium Enterprise (SME) Featured in Bantul, 2005-2012," which uses analytical tools LQ (SLQ and DLQ), Shift Share, and Overlay indicates that the sub-sector of SME craft in Bantul Regency is a subsector of SME which has both competitive and comparative potentials. Meanwhile, SME subsector Chemical and Materials Building also has a potential for comparative advantage, but this subsector does not have the potential to be competitive. As for the other sub-sectors of SMEs in Bantul,

they are not superior and do not have either comparative or competitive potentials.

A research by Kusumantoro (2009) on "Disparities and Specialties of Manufacturing Industry in Regencies/ Cities in Central Java" shows that the identification of specialized industry that generate industrial activity in Central Java province that stands out are the food and beverage industry, textile industry, wood industry, items made of wood and wicker, chemical industries and goods from chemicals.

Research by Habibullah (2009) on "Industry Concentration in Rich and Poor States in Malaysia: Location Quotient and Shift Share Analyses" is based on annual data from 1970 and 2000 period, and the results of the analysis of LQ and shift share showed that the poor areas (Kedah, Perlis and Kelantan) marked the main economic activities are concentrated in the agricultural sector, while the rich areas (Penang, Selangor and Wilayah Persekutuan), showed that their manufacturing sector is a major contributor to economic growth.

Research by Quintero (2005) "Regional Development: An Economic Base Study and Shift-Share Analysis of Hays County, Texas" shows results that Hays County has a strong and diverse economy with a strong base in the group of retail, construction, manufacturing, and industrial Although the national health services. slowdown economy shows a manufacturing, this area experienced significant growth in Hays County.

Research by Iseki and Jones (2014) on "Analysis of Firm Location and Relocation Around Maryland and Washington, DC Metro Rail Station" indicates that the LQ analysis identified five industries (finance, insurance and real estate (FIRE), professional services, arts and entertainment, health, as well as

accommodation and food services) have a strong presence within 0.5 miles distance walk from the network 66 WMATA Metro station in Washington DC and Maryland, while some of the industry is also identified as an industry with high growth around transit stations in several other studies.

#### **RESEARCH METHODS**

This type of research is a quantitative study. This research analyzes quantitative data to identify the types of industry that is a leading industry in the province of Central Java. The variables used and analyzed in this study include: The output value of each type of industry in Central Java province: the output value of each type of large and medium industries in Central Java province using the code based on the Standard Industrial Classification of Indonesia (ISIC) 2 digit time series in 2007 - 2012. The output value of every type of industry in Indonesia: the output value of each type of large and medium industries in Indonesia by ISIC 2-digit code in time series in 2007-2012.

The data used in this research is secondary data. Secondary data were used, among others, the output value of each industry in Central Java province and the output value of each industry in Indonesia in time series from 2007 - 2012. The data obtained from the Central Statistics Agency of Central Java Province and the Indonesian Bureau of Statistics.

The technique of data collection in this study is using literature search. This method is used to collect data that is secondary, either from the Internet, books, research reports, government publications, and other sources. While the tools of analysis used in this study is Location Quotient (LQ) and Shift Share (SS).

Location Quotient (LQ) is a method to determine the leading sectors in a region by comparing the role of a sector in a region with the role of the sector at a broader level. LQ analysis resulted in a sector that has a comparative advantage in the areas being analyzed.

According to Warpani (1980: 68), Static Location Quotient (SLQ) analysis is an analysis beginning to know the benefits of a region in specific sector activities. Basically, this technique illustrates a relative comparison between the ability of a sector in the analyzed areas by the ability of the same sector in the wider region. Variables that can be used as a measure to generate SLQ coefficients can be the amount of labor, the value of production, as well as other variables.

SLQ value can be measured by using the following formula:

$$SLQ = \frac{Yij/Yj}{Yiw/Yw}$$

Where:

SLQ: SLQ value

Y<sub>ij</sub>: output value of industry i Central Java Province

Y<sub>j</sub> : total output value of industry Central Java Province

 $Y_{iw}$ : output value of industry i Indonesia

 $Y_w$ : total output value of industry Indonesia

The analysis requirements of comparative advantage through SLQ is when the value of SLQ> 1 then the industry has the comparative advantage. If the SLQ value <1 then the industry does not have a comparative advantage.

According to the Directorate General of Agriculture (2015: 12), the advantage of SLQ analysis is that it is a simple analytical tool. It can show the economic structure of a province rather than the national. The

weakness is, the result of static analysis only provides a snapshot at one point in time, which means that the sector being featured this year is not necessarily going to be the dominant sector in the future, and vice versa.

According to the Directorate General of Agriculture (2015: 13), SLQ analysis weakness can be overcome if the rate of growth of a sector in the provinces being studied can be compared to the growth rate of the sector at the national level, namely the method of Dynamic Location Quotient (DLQ). According to Kuncoro (2012: 134), DLQ is a modification of the SLQ to accommodate growth factor subsector from time to time. DLQ is calculated using the following formula:

$$DLQ_{ij} = \left[ \frac{(1+g_{ij})/(1+g_{j})}{(1+G_{iw})/(1+G_{w})} \right]^{t} = \frac{IPPI_{ij}}{IPPI_{iw}}$$

 $g(G) = {\binom{Y_t}{Y_0}}^{\frac{1}{t}} - 1$ 

Where:

DLQ<sub>ij</sub>: industry i potential index in Central Java Province

 $g_{ij}$ : industry i output value growth in Central Java Province

g<sub>j</sub> : average output value growth of all industries in Central Java Province

 $G_{iw}$ : industry i output value growth in Indonesia

 $G_{w}$ : average output value growth of all industries in Indonesia

t : the gap between last year (2012) and first year (2007)

Y<sub>t</sub> : output value in 2012Y<sub>o</sub> : output value in 2007

IPPI<sub>ij</sub>: potential index industry i development in Central Java Province

 $IPPI_{iw}\hbox{: potential index industry}$ 

### i development in Indonesia

The results of DLQ value can be interpreted as follows. If the DLQ> 1, then the potential for industry i development in the province of Central Java is faster than the same industry in Indonesia. However, if the DLQ <1, then the potential for industry i development in the province of Central Java is lower than in Indonesia.

The combination of SLQ and DLQ values used as criteria in determining whether the industries are classified as superior, prospective, pledge, or lagging.

LQ	SLQ>1	SLQ<1
LQ		
DLQ>1	Leading	Key
	Industries	Industries
SLQ<1	Prospective	Under-
	Industries	developed
		industries

Source: Kuncoro (2012:136)

**Figure 2.** The matrix of SLQ and DLQ combined analysis

Shift Share Analysis is an analytical tool that can be used to know which economic sectors are included in the sector that have a competitive advantage or to compete with similar sectors in other regions and sectors that do not have a competitive advantage by seeing the value of Cij on the results. The sector is said to have a competitive advantage if the sector is able to compete with the same sector in other areas.

Cij value can be measured by using the following formula:

$$r_{ij} = \left\{ \frac{\left(Y_{ij} - Y^*_{ij}\right)}{Y^*_{ij}} \right\} x \ 100$$
$$r_{iw} = \left\{ \frac{\left(Y_{iw} - Y^*_{iw}\right)}{Y^*_{iw}} \right\} x \ 100$$

Where:

Cij :competitive value component

Yij : industry i output value Central Java Province

2012

Y\*ij : industry i output value

Central Java Province

2007

Yiw : industry i output value

in Indonesia 2012

Y\*iw : industry i output value

in Indonesia 2007

rij : industry i growth rate

Central Java Province from

2007 - 2012

riw : industry i growth rate

in Indonesia from 2007 -

2012

The analysis requirements of comparative advantage through SS is when the value of Cij showed positive figures, the commodity has competitive advantages. If Cij values indicate negative numbers then these commodities do not have a competitive advantage.

#### RESULTS AND DISCUSSION

According to Warpani (1980: 68), the Static Location Quotient (SLQ) anlysis produces a picture of the types of industries that have comparative advantages in Central Java province in a year. This analysis was calculated based on the value of output produced by each type of analysis for the

industry in the years 2007 - 2012. An industry has a comparative advantage when the value of SLQ> 1. While the industry does not have a comparative advantage when the value of SLQ <1.

According to the following table 2, not all industries in Central Java province has a comparative advantage in 2007- 2012. There are 8 types of industries that have a comparative advantage, namely the beverage industry, the tobacco manufacturing industry, textile industry, apparel industry, wood industry, printing industry, furniture industry and other manufacturing industries. These industries are classified as superior because they have an average value of SLQ> 1. They have high output value and their growth rates are higher than the national average leading these industries to have a comparative advantage.

While 16 other industries do not have comparative advantage, namely the food

industry, leather industry, paper industry, industry, chemical industry, pharmaceutical industry, rubber industry, non-metal mining, basic metal, non-machines electronics, metal goods, electrical machinery, equipment, vehicles, other transport equipment industries, and repair and installation of machinery and equipment. These industries are not superior because it has an average value of SLQ <1. these industries have a low output value and its growth rate is lower than the national average.

According to the Directorate General of Agriculture (2015: 13), SLQ analysis results are only static, so it can not estimate the possible changes that will happen in the future. To overcome these weaknesses, the Dynamic Location Quotient (DLQ) method is used. If the DLQ value  $\geq$  1, then an industry is the leading industry in the future, while if the value of DLQ <1, it indicates otherwise.

**Table 2.** The results of SLQ Analysis of Industries in Central Java Province over the period of 2007 – 2012

KBLI	SLQ Value				4		
Code	2007	2008	2009	2010	2011	2012	Average
10	0,747	0,735	0,791	0,821	0,613	0,485	0,699
11	1,000	1,414	1,500	1,445	2,069	1,427	1,476
12	4,228	4,754	5,442	5,746	5,887	5,226	5,214
13	2,716	3,477	3,994	3,755	3,554	3,817	3,552
14	1,626	2,090	1,691	1,633	1,742	1,998	1,797
15	0,213	0,176	0,212	0,236	0,242	0,274	0,226
16	1,384	2,132	1,833	2,431	3,783	3,771	2,556
17	0,286	0,477	0,278	0,305	0,293	0,309	0,325
18	0,912	0,197	0,321	1,634	1,769	2,362	1,199
19	0,751	0,147	0,053	0,072	0,146	0,132	0,217
20	0,441	0,267	0,331	0,204	0,210	0,230	0,280
21	1,561	0,388	0,241	0,649	0,695	1,988	0,920
22	0,699	0,578	0,573	0,333	0,473	0,759	0,569
23	0,683	0,851	0,762	0,953	0,728	0,946	0,821
24	0,365	0,201	0,371	0,499	0,357	0,396	0,365
25	0,164	0,532	0,121	0,286	0,221	0,245	0,261

KBLI	SLQ Value					Average	
Code	2007	2008	2009	2010	2011	2012	Average
26	0,286	0,143	0,114	0,273	0,226	0,390	0,239
27	0,161	0,094	0,070	0,062	0,120	0,116	0,104
28	1,132	0,533	0,754	0,271	0,396	0,246	0,555
29	0,043	0,217	0,072	0,177	0,310	0,126	0,158
30	0,148	0,123	0,249	0,183	0,268	0,192	0,194
31	2,627	2,611	2,460	3,809	3,501	3,371	3,063
32	0,637	0,594	1,060	1,021	1,406	1,823	1,090
33	1,727	0,197	0,251	0,837	0,745	0,991	0,791

Source: Central Statistics Agency of Central Java and Indonesia Indonesia (2007 – 2012), the data is tabulated by the researcher.

**Tabel 3.** Hasil Analisis DLQ Industri di Provinsi Jawa TengahTahun 2007 – 2012

KBLI	Types of Industry	DLQ
Code		Value
10	food industry	0,570
11	beverage industry	1,252
12	tobacco processing industry	1,085
13	textile industry	1,233
14	apparel industry	1,079
15	leather and shoes industry	1,126
16	wood industry	2,390
17	paper industry	0,947
18	printing industry	2,273
19	coal and oil mining industry	0,155
20	chemical substance industry	0,459
21	pharmaceutical industry	1,117
22	rubber and plastic industry	0,953
23	non-metal mining industry	1,215
24	Basic metal industry	0,952

KBLI	Types of Industry	DLQ	
Code	Code		
25	non-machine metal goods industry	1,313	
26	Computers, electronics and optics industry	1,196	
27	Electrical Equipment industry	0,636	
28	Machinery and equipments industry	0,190	
29	Vehicles industry	2,588	
30	Transport industry	1,135	
31	Furniture industry	1,126	
32	Other manufacturing industries	2,511	
33	Installation and repair service Industry	0,504	

Source: Central Statistics Agency of Central Java and Indonesia(2007 – 2012), the data is tabulated by the researcher.

Based on Table 3 is known that almost all industries in Central Java Province can be expected to be a leading industry in the future as indicated by the value DLQ> 1. There are 15 different types of industries that have the potential to become a leading industry in the future, among others, the beverage industry,

tobacco processing industry, textile industry, apparel industry, leather industry, wood industry, printing industry, pharmaceutical industry, non-metal mining industry, non-machine metal goods industry, electronics industry, motor vehicles, transport equipment other industrial funiture, and other processing industries.

Meanwhile, nine types of industries that do not fit the group does not have the potential to become a leading industry in the future include the food industry, paper industry, coal industry, chemical industry, rubber industry, basic metal industry, electrical equipment, machinery, and repair and installation of machinery and equipment. This is because the DLQ value in these industries are worth less than 1. These industries have a small possibility to be able to become a leading industry in the future because of its growth potential is lower than the potential growth of the same industry at the national level.

According to Kuncoro (2012: 134), the combined analysis results of SLQ and DLQ can produce grouping the types of industries that have comparative advantages.

The merger resulted in the grouping of industries into four categories, namely the leading industry, the potential industry, prospective industries, and under-developed industry. The results of combined analysis of SLQ and DLQ can be seen in figure 3.

Based on the combined analysis of SLQ and DLQ, there are eight types of leading industry, 7 types of potential industry, and 9 types of under-developed industry. The types of industry that is a leading industry in Central Java province, among others, the beverage industry, the tobacco manufacturing industry, textile industry, apparel industry, wood industry, printing industry, furniture industry and other manufacturing industries. This is because in addition to the fact that

these industries excel at present, also has the potential to become a leading industry in the future. They are characterized by the value of SLQ and DLQ whic is >1.

While the types of industry that are potential industries in Central Java province, among others, the leather and shoes industry, pharmaceutical industry, non metallic mineral products industry, non-machinery metal products industry, the electronics industry, the motor vehicle industry, and other transportation equipment industries. This is because although the industries are not the leading industry at the present time, they have the potential to become leading industries in the future and are characterized by the value of SLQ <1 and DLQ> 1.

Hile the types of industry that became under-developed industries in Central Java province, among others, the food industry, paper industry, coal industry, chemical industry, rubber industry, basic metal industry, electrical equipment industry, machinery industry, repair and installation of machinery and equipment industry. This is because these industries are industries that do not excel in the present and does not have the potential to become a leading industry in the future. They are characterized by the value of SLQ and DLQ which are less than one.

An industry can be said to be a leading industry if the industry has had two advantages at once, namely comparative advantage and competitive advantage. An industry tends to have a competitive advantage when the Cij value on shift share analysis is positive. While if the value of Cij on shift share analysis is negative then the industry does not have a competitive advantage.

Based on the analysis of LQ is known that 8 kinds of industries are the leading industries both in the present and in the future. The industries include beverage industry, the tobacco manufacturing industry, textile industry, apparel industry, wood industry, printing industry, furniture industry and other manufacturing industries. However, these industries are only classified based on their comparative advantage and not based on their competitive advantage. Thus, their competitive advantage nedds to also be analysed to be able to know with certainty about the kind of leading industry that has had two advantages at once.

Based on the analysis in Table 4 below, the entire leading industry that has been classified on the analysis of LQ also has a competitive advantage represented by positive Cij. Therefore, it can be said that the industry is a leading industry when it has two advantages at once, both comparative advantage and competitive advantage. While the industry is classified as a potential industry also has a competitive advantage because of the Cij value on these industries is positive.

	positive.			
SLQ DLQ	SLQ>1	SLQ<1		
DLQ>1	beverage industry (11), tobacco manufacturing industry (12), textile industry (13), apparel industry (14), wood industry (16), printing industry (18), furniture industry (31), dan other manufacturing industries (32)	Potential Industries  leather and shoes industry (15), pharmaceutical industry (21), non metallic mineral products industry (23), non-machinery metal industry (25), Computers, electronics and optics industry (26), vehicles industry(29), dan other transport industry(30).		
DLQ<1	Prospective Industries	Under-developed Industries  Food industry (10), paper industry (17) Coal and oil mining industry (19) chemical substance industry (20) rubber and plastic industry(22), basic metal industry (24), electronic equipment industry (27), machinery and equipment industry (28), and installation and repair industry (33)		

Source: Central Statistics Agency of Central Java and Indonesia Indonesia (2007 – 2012), the data is tabulated by the researcher **Figure 3.** Combined matrix of SLQ and DLQ

Thus, the industry has the potential to become a leading industry in the future and be able to compete with the same industry of other regions. While the industry is classified as an under-developed, three of them namely paper industry, rubber and plastics industry, as well as basic metal industry has a competitive advantage which means that although the resulting output has not been able to export either in the present or in the future, the products of these industries are

possibly competitive when compared with the products from the same industry of other regions in Indonesia. While other underdeveloped industry does not have a competitive advantage because of the Cij value on these industries is negative. Thus, in addition to the fact that this industry has been unable to export at present time and possibly in the future, the industry can not compete with the same industry from other regions.

**Table 4.** The Comparison of LQ and Shift Share analysis for Industries in central Java in 2007 – 2012

		- 2012		
KBLI Code	SLQ Average	DLQ	Cij	Criteria
10	0,699	0,570	-1.612.706.195.560	Under-developed
11	1,476	1,252	48.339.645.032	Leading
12	5,214	1,085	861.012.633.923	Leading
13	3,552	1,233	954.075.888.316	Leading
14	1,797	1,079	142.367.610.862	Leading
15	0,226	1,126	23.514.069.328	Under-developed
16	2,556	2,390	851.809.413.283	Leading
17	0,325	0,947	4.758.585.279	Under-developed
18	1,199	2,273	175.420.225.254	Leading
19	0,217	0,155	-29.388.215.168	Under-developed
20	0,280	0,459	-584.586.753.612	Under-developed
21	0,920	1,117	71.018.065.177	Under-developed
22	0,569	0,953	28.650.993.708	Under-developed
23	0,821	1,215	152.274.097.833	Under-developed
24	0,365	0,952	7.180.029.181	Under-developed
25	0,261	1,313	60.497.673.295	Under-developed
26	0,239	1,196	31.216.170.154	Under-developed
27	0,104	0,636	-44.213.397.956	Under-developed
28	0,555	0,190	-265.582.967.243	Under-developed
29	0,158	2,588	115.455.434.768	Under-developed
30	0,194	1,135	26.611.500.080	Under-developed
31	3,063	1,126	95.391.705.941	Leading
32	1,090	2,511	138.858.428.280	Leading
33	0,791	0,504	-28.409.718.930	Under-developed

Source: Central Statistics Agency of Central Java and Indonesia Indonesia (2007 – 2012), the data is tabulated by the researcher.

#### **CONCLUSION**

The conclusion of this study are the types of industry that is a leading industry in Central Java province, among others, the beverage industry, the tobacco manufacturing industry, textile industry, apparel industry, wood industry, printing industry, furniture industry, as well as other processing industries. The advice given in this study was the development of the industry focused on the leading industry in Central Java province in order to raise the economic growth in Central Java. However, non-featured industrial development should also be increased so that these industries are not getting left behind and become a leading industry in the future.

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