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# Analysis of the Effect of Manufacturing Industry on Indonesia's Economic Growth

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#### Abstract

GDP is the amount of value added generated by all business units in a particular country, or is the sum of the value of final goods and services produced by all economic units. GDP at constant prices shows the added value of these goods and services calculated using prices prevailing in a particular year as a basis, which aims to determine economic growth from year to year. The targeted sector is the manufacturing sector of the 17 sectors in Indonesia with 16 subsectors in the manufacturing industry. The calculation of this research uses Location Quotient, Shift Share and Sectoral Typology methods. The results of this study with the LQ method show that the calculation of ADHK GDP has 10 base subsectors and 6 non-base sectors. It is known by Shift Share analysis that the average value of Pj and Dj in all subsectors has a negative value, but there are still subsectors that in some years between 2015-2019 have a positive value in supporting Indonesia's growth. The LQ calculation was developed using the Sectoral Typology method with the results of 10 subsectors with more than enough meaning that the sector is a basic sector with an average LQ> 1 and based on ADHK GDP its growth is slower than ADHB GDP, and its national growth includes fast growth.

Keywords: Location Quotient, Shift Share, Sectoral Typology

#### Introduction

Economic growth occurs when people acquire more resources, or people find new ways to utilise available resources more efficiently. For economic growth to improve living standards, the growth rate must exceed the population. At this time, in relation to industry in Indonesia, which in its economic proportion can be categorised as an industrial country, the industrial sector is the largest contributor to the national economy with a contribution of more than 20 per cent. According to Boediono (1992: 45) Economic growth is also defined as the output of society caused by the number of factors of production used in the production process without

any change in the methods or technology itself. With the passage of time at this time the textile and clothing industry showed brilliant performance throughout 2019, recording a growth of 15.35%. This achievement shows that development continues to improve amid the pressure of global economic conditions. Significant growth in the textile and clothing industry sector was supported by the increase in clothing production in industrial centres. Based on the Making Indonesia road map, the textile and clothing industry is one of five manufacturing sectors that are prioritised for development. Especially in readiness to enter the industrial era, because the utilisation of industrial technology will encourage increased productivity of the industrial sector more efficiently. In other non-oil and gas sectors that also grew optimally in 2019 were the paper industry, and goods from paper, printing reproduction of recording media by 8.86 per cent in line with increasing foreign demand. Furthermore, the chemical, pharmaceutical and medicine industries. Then the furniture industry reached 8.35 per cent, which was influenced by an increase in foreign demand, thus encouraging exports.

One important indicator to determine the economic conditions in a country in a certain period is the Gross Domestic Product (GDP) data, both at current prices and at constant prices. GDP is basically the amount of added value generated by all business units in a particular country, or the total value of final goods and services produced by all economic units. GDP at current prices represents the value added of goods and services calculated using prices prevailing in each year, while GDP at constant prices represents the value added of those goods and services calculated using prices prevailing in one particular year as a base.

GDP at current prices can be used to see shifts and economic structure, while constant prices are used to determine economic growth from year to year.

Table 1. GDP Series 2010 at Indonesia Constant Prices (Billions)

Business Field		GDP At Constant Prices in Indonesia (billion)							
		2015	2016	2017	2018	2019			
1	Agriculture, Forestry, and Fisheries	1171445.80	1210955.50	1258375.70	1307253.00	1354399.10			
2	Mining and Quarrying	767327.20	774593.10	779678.40	796505.00	806206.20			
3	Processing Industry	1934533.20	2016876.90	2103466.10	2193368.40	2276667.80			
4	Electricity and Gas Procurement	94894.80	100009.90	101551.30	107108.60	111436.70			
5	Water Supply, Waste Management, Waste and Recycling	7369.00	7634.60	7985.30	8429.40	9004.90			
6	Construction	879163.90	925040.30	987924.90	1048082.80	1108425.00			
7	Wholesale and Retail Trade; Repair of Cars and Motorcycles	1207164.50	1255760.80	1311746.50	1376878.70	1440185.70			

#### 2015-2019 Period

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8	Transport and Warehousing	348855.90	374843.40	406679.40	435336.50	463125.90
9	Provision of Accommodation and Drinking Food	268922.40	282823.40	298129.70	315068.60	333304.60
10	Information and Communication	421769.80	459208.10	503420.70	538762.70	589536.10
11	Financial Services and Insurance	347269.00	378279.40	398971.40	415620.60	443093.10
12	Real Estate	266979.60	279500.50	289568.50	299648.20	316901.10
13	Company Services	148395.50	159321.70	172763.80	187691.10	206936.20
14	Public Administration, Defence and Compulsory Social Security	310054.60	319965.00	326514.30	349277.60	365538.80
15	Education Services	283020.10	293887.60	304810.80	321133.80	341349.90
16	Health and Social Services	97465.80	102490.20	109497.50	117322.20	127487.90
17	Other Services	144904.20	156507.50	170174.80	185405.60	205011.40

Source: Processed National BPS Data 2023

It can be seen from the GRDP at Constant Prices for the 2015-2019 period of Indonesia that the dominant sector in contributing the highest economic potential is controlled by the manufacturing sector, the agricultural sector, the mining sector, the trade sector, and construction. Where the processing industry sector has subsectors: Coal and oil and gas refining industry, food and beverages, tobacco processing, textiles and apparel, leather (leather goods and footwear), wood (goods made of wood and cork and woven goods from bamboo, rattan and the like), Paper (printing and reproduction of recording media), Chemicals (pharmaceuticals and traditional medicines), Rubber (rubber and plastic goods), non-metallic minerals, basic metals, metal goods (computers, electronic goods, optics and electrical equipment), machinery and equipment, transportation equipment, furniture, repair services (installation of machinery and equipment).

### **Literature Review**

### Definition of Economic Growth

Economic growth according to Tadaro in (Jannah, 2020) is the process of increasing output over a period of time as an important indicator in measuring the level of success of a country's economic development. Kuznet (in Jhingan, 2012: 57) says that economic growth is a long-term increase in a country's ability to provide various types of economic goods to its population. Economic growth means the development of the production of goods and services in a country, such as an increase in the amount of production of industrial goods, the development of infrastructure, the development of the service sector and the development of capital goods production. Economic growth depends on the amount of labour and the amount of capital available in the economy. Increased economic growth comes from increased labour

supply, increased physical capital and human resources and increased productivity (Case and Fair, 2007: 313).

Economic growth can be seen from an increase in GDP (Gross Domestic Product) or GNP (Gross National Product). An increase in GNP indicates an increase in per capita income. Per capita income is the income of society per individual. An economy is said to experience economic growth if the amount of production of goods and services increases. In the real world, it is very difficult to record the number of units of goods and services produced during a certain period. The difficulty arises not only because the types of goods and services produced are very diverse, but the units of measurement are also different. Not to mention products that are not measured by physical units, such as consulting services, tourism services and other modern services.

Therefore, the figure used to estimate changes in output is its monetary value, which is reflected in the value of Gross Domestic Product (GDP). To measure economic growth, the value of GDP used is GDP based on constant prices. Because, using constant prices, the effect of price changes has been eliminated, so that even though the figure that appears is the monetary value of the total output of goods and services, changes in the value of GDP also show changes in the quantity of goods and services produced during the observation period.

To analyse changes in the role of various industrial sub-sectors in creating national income, data from six countries were analysed, while data from eleven countries were used to analyse changes in the role of industrial sub-sectors in accommodating labour. In his analysis, Kuznets distinguishes the industry sector into 4 sub-sectors, namely:

1. Mining industry

The mining sub-sector in general is always a small industrial sub-sector in terms of its role in creating national production and accommodating labour. The building sub-sector also undergoes changes of the same nature as the mining sub-sector, namely in most countries observed, its role in creating industrial sector production and accommodating labour becomes smaller as the level of economic development increases.

2. Processing industry

The role of the processing industry sub-sector, including the utilities industry (water supply and electricity), in creating industrial sector production and accommodating labour generally increases as the level of economic development becomes higher. Processing industry units are described as specialised plant, machinery or equipment driven by machines and hands.

3. Building industry

Changes in the role of the transport and transportation sub-sector in creating industrial production and employing labour do not show a uniform pattern. In the United Kingdom and the United States, this role is declining, while in Sweden it remains constant, and in three other countries, Norway, Italy, and Australia, it is increasing.

4. Transport and transport industry

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For the United States and Australia, Kuznets not only calculated changes in the role of various sub-sectors of industry based on prevailing market prices over time, but also based on fixed prices. His recent analyses show, among other things, that the role of the transport and transportation sub-sector in the overall production of the industrial sector at fixed prices has become increasingly large.

The service industry today has played an increasingly important role in a country's economy. In Indonesia, for example, the service sector has developed quite rapidly where there are many industries in the service sector, such as banking services, hospitality services, restaurant services, tourism services, and so on.

Service itself is any activity or benefit offered by one party to another, which is basically formless and does not produce any ownership. Services do not produce any ownership such as products, because services are invisible, but in the form of providing assistance in satisfying customer needs and or desires in exchange for or without certain rewards in return. The rapid growth of the service sector, there are at least several reasons that can explain this phenomenon. Among them are triggered by demographic changes, social changes, changes in the economic environment, changes in politics, law, and globalisation.

#### **Research Method**

The research approach is a research plan and procedure that includes steps from broad assumptions to hated methods in data collection, analysis and interpretation. The data source in the research is Secondary data used in this research is data from Indonesian statistics available at the National BPS in 2015-2019 where data obtained from research results are collected, compiled, and analysed so as to provide complete information for solving the problems that have been faced. The data analysis used in this research is Location Quotient Analysis, the LQ technique is widely used to discuss economic conditions, leading to the identification of specialisation of economic activities or measuring the relative concentration of economic activities to get an overview in determining a leading sector as the leading sector of an economic activity (industry). To get the LQ value using the following method;

LQ=(xi/GDP)/(xi/GDP)

Description:

Xi = Provincial industry sector GDP

GDP = GDP of all provincial sectors

Xi = National industry sector GDP

GDP = GDP of all sectors of the national region

(Source: Tarigan, 2007)

If LQ>1 means the role of the sector in the region is more prominent than the role of the sector nationally. Conversely, if LQ<1 then the role of the sector is smaller than the role of the sector nationally.

Shift share analysis is used to analyse the role of a sector or the shift of a sector in the region towards the same sector in the national economy. This analysis compares the growth rate of a sector in a narrow area against a wider area. Shift share analysis has three components:

- 1. National share, to see how national economic growth affects the region. This is done by analysing changes in aggregate sectoral work compared to changes in the same sector in the reference economy.
- 2. Proportional shift, to measure changes in growth or decline in the region compared to the larger economy as a reference. This measurement can determine whether the regional economy is concentrated in sectors that grow faster than the reference economy.
- 3. Differential shift, to determine how far the competitiveness of an economic sector in the region (local) with a larger economy as a reference.

According to Glasson (1990:95) in Dini (2007:45), the Shift Share analysis method which is a tool to calculate, analyse and determine the shift and role of the economy in the region begins with the formulation:

$$G = Y_{j}t - Y_{j}o$$
$$= \sum (Nj+Pj+Dj)$$
$$Nj = Yjo (Yt / Yo) - Yjo$$
$$(P + D)j = Yjt - (Yt / Yo) Yjo$$

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 $P_j = \Sigma i [(Y_{it} / Y_{io}) - (Y_t / Y_o)] Y_{ijo}$ 

 $Dj = \Sigma t [ Yijt - (Yit / Yio) Yijo]$ = (P + D)j - Pj

Where:

Gj = Total GDP growth of the analysis region

Nj = Share Component

(P + D)j = Net Shift Component

- Pj = Propotional Shift of the analysis region
- Dj = Differential Shift of the analysis region
- Yj = Total GDP of the analysis region
- Y = Total GDP of the Province of the analysis region
- o, t = Starting period and ending period

## i = Sector subscriptions in GRDP

Notes: The symbol E (labour) in the original book is replaced with the symbol Y (GRDP) because the data studied is GRDP.

By combining the LQ index with the Dj and Pj components in the Shift Share analysis, the sectoral typology is expected to clarify and strengthen the analysis results. This typology classifies base and non-base sectors as well as internal and external growth components.

	LQ	Dj	Pj	Level
	Average	Average	Average	Potentiality
Ι	( <i>LQ</i> > 1)	$(D_j > 0)$	$(P_j > 0)$	Excellent
II	( <i>LQ</i> > 1)	$(D_j > 0)$	$(P_j < 0)$	Very Good
III	( <i>LQ</i> > 1)	$(D_j < 0)$	$(P_j > 0)$	Good
IV	( <i>LQ</i> > 1)	$(D_j < 0)$	$(P_j < 0)$	More than enough
V	( <i>LQ</i> < 1)	$(D_j > 0)$	$(P_j > 0)$	Enough
VI	( <i>LQ</i> < 1)	$(D_j > 0)$	$(P_j < 0)$	Almost enough
VII	( <i>LQ</i> < 1)	$(D_j < 0)$	$(P_j > 0)$	Less
VIII	( <i>LQ</i> < 1)	$(D_j < 0)$	$(P_j < 0)$	Very Poor

Table 2. Meaning of Economic Sector Typology

## **Result/Findings**

The results of the calculation of the ADHK National Location Quetion for 5 (five) years between 2015-2019 can be seen in the following table. Based on the table, ADHK GDP has 10 basic subsectors, these subsectors are the food and beverage industry, the textile and apparel industry, the paper and paper goods industry; printing and recording media reproduction, the chemical industry; pharmaceuticals and traditional medicines, the rubber industry; rubber and plastic goods, the non-metallic minerals industry, the basic metal industry, the metal goods industry; computers, electronic goods, optics; and electrical equipment, the transportation equipment industry, other processing industries; repair and installation services for machinery and equipment.

Table 3. Average Location Quetiont (LQ) Calculation Results

Location Quetiont						
Business Field/Sector Years					Average	
(Manufacturing Industry)	2015	2016	2017	2018	2019	
Coal and Oil and Gas Refining	0,84	0,97	0,93	0,89	0,88	0,90
Industry	(nb)	(nb)	(nb)	(nb)	(nb)	(nb)

Food and Beverage Industry	1,04	1,00	1,00	1,00	1,01	1,01
	(b)	(b)	(b)	(b)	(b)	(b)
Tobacco Processing Industry	0,96	0,92	0,90	0,89	0,88	0,91
	(nb)	(nb)	(nb)	(nb)	(nb)	(nb)
Textile and Apparel Industry	1,01	0,98	1,01	1,01	1,00	1,00
	(b)	(nb)	(b)	(b)	(b)	(b)
Leather, Leather Goods and	Кј	0,93	0,93	0,93	0,92	0,93
Footwear Industry		(nb)	(nb)	(nb)	(nb)	(nb)
Wood, Wood and Cork Products and	0,97	0,97	0,99	1,00	1,02	0,99
Wickerwork of Bamboo, Rattan and	(nb)	(nb)	(nb)	(b)	(b)	(b)
the Like Industry						
Paper and Paper Goods Industry;	1,01	1,02	0,98	0,97	1,00	1,00
Printing and Reproduction of	(b)	(b)	(nb)	(nb)	(b)	(b)
Recording Media						
Chemical, Pharmaceutical and	0,98	0,99	1,01	1,01	1,00	1,00
Traditional Medicine Industry	(nb)	(nb)	(b)	(b)	(b)	(b)
Rubber, Rubber and Plastic Goods	1,11	1,12	1,09	1,11	1,13	1,11
Industry	(b)	(b)	(b)	(b)	(b)	(b)
Non-Metallic Excavated Goods	1,00	0,99	1,01	1,03	1,04	1,01
Industry	(b)	(nb)	(b)	(b)	(b)	(b)
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Basic Metal Industry	1,06	1,09	1,08	1,08	1,08	1,08
	(b)	(b)	(b)	(b)	(b)	(b)
Metal Goods Industry; Computer,	1,06	1,05	1,06	1,07	1,05	1,06
Electronic, Optical Goods; and Electrical Equipment Industry	(b)	(b)	(b)	(b)	(b)	(b)
Electrical Equipment industry						
Machinery and Equipment Industry	0,95	0,93	0,95	0,96	0,96	0,95
	(nb)	(nb)	(nb)	(nb)	(nb)	(nb)
Transport Equipment Industry	1,03	1,02	1,03	1,06	1,05	1,04
	(b)	(b)	(b)	(b)	(b)	(b)
Furniture Industry	0,97	0,96	0,98	0,98	0,98	0,98
	(nb)	(nb)	(nb)	(nb)	(nb)	(nb)
Other Manufacturing Industries;	1,01	0,99	1,00	1,00	0,99	1,00
Machinery and Equipment Repair	(b)	(nb)	(b)	(b)	(nb)	(b)
and Installation Services						

Table 4. ADHK Shift Share Components Year 2015-2019

Year	Gj	Nj	Gj-Nj
2015-2016	83244	101020	-17776
2016-2017	86589	156510	-69921
2017-2018	89902	157020	-67118
2018-2019	83300	128102	-44802

From the table above it can be seen that in 2015-2016 the ADHK GDP growth component (Gj) was 83244 and the number of ADHB GDP growth (Nj) was 101020, this means a negative deviation of -17776, this indicates that ADHK GDP growth is lower than ADHB GDP growth. For 2016-2017 the component of ADHK GDP growth component (Gj) is 86589 and the amount of ADHB GDP growth (Nj) is 156510, this means a negative increase of -69921, this indicates that ADHK GDP growth is slower than ADHB GDP growth. Then in the following year 2017-2018 the ADHK GDP growth component (Gj) was 89902 and the amount of ADHB GDP growth (Nj) was 157020, this means a negative decrease of -67118, although the two components Gj and Nj each experienced increasing growth, where the component (Gj) increased from the previous year by 89902 and the amount of ADHB GDP growth. In 2018-2019 the ADHK GDP growth component (Gj) was 83300 and the number of ADHB GDP growth (Nj) was 128102, this means a negative decrease of -44802, but there was an increase in progress from the previous year.

Sector	2015- 2016	2016- 2017	2017- 2018	2018- 2019	Average
Coal and Oil and Gas Refining Industry	-225502	-237494	-236263	-232670	-232982
	(i)	(i)	(i)	(i)	(i)
Food and Beverage Industry	-568993	-631242	-687605	-730787	-654657
	(i)	(i)	(i)	(i)	(i)
Tobacco Processing Industry	-88174	-91724	-90886	-92661	-90861
	(i)	(i)	(i)	(i)	(i)
Textile and Apparel Industry	-117931	-120667	-124941	-133788	-124332
	(i)	(i)	(i)	(i)	(i)
Leather, Leather Goods and Footwear	-25125	-27882	-28423	-30631	-28015
Industry	(i)	(i)	(i)	(i)	(i)
Wood, Wood and Cork Products and Wickerwork of Bamboo, Rattan and the Like Industry	-63906 (i)	-66585 (i)	-66489 (i)	-65977 (i)	-65739 (i)
Paper and Paper Goods Industry; Printing and Reproduction of Recording Media	-74240 (i)	-78017 (i)	-78063 (i)	-77984 (i)	-77076 (i)
Chemical, Pharmaceutical and	-173450	-188008	-195996	-190291	-186936
Traditional Medicine Industry	(i)	(i)	(i)	(i)	(i)
Rubber, Rubber and Plastic Goods	-80433	-75367	-77017	-81102	-78480
Industry	(i)	(i)	(i)	(i)	(i)
Non-Metallic Excavated Goods	-69956	-75559	-74702	-75595	-73953
Industry	(i)	(i)	(i)	(i)	(i)
Basic Metal Industry	-80528	-83290	-87941	-94397	-86539
	(i)	((i)	(i)	(i)	(i)
Metal Goods Industry; Computer, Electronic, Optical Goods; and Electrical Equipment Industry	-202581 (i)	-216447 (i)	-221884 (i)	-217201 (i)	-214528 (i)

Table 5. Proportional Growth Components (Pj) and (Dj) of ADHK GDP

Machinery and Equipment Industry	-29725	-31978	-33663	-36299	-32916
	(i))	(i)	(i)	((i)	(i)
Transport Equipment Industry	-191807	-205307	-212275	-217932	-206830
	(i)	(i)	(i)	(c)	(c)
Furniture Industry	-25649	-26389	-27278	-27460	-26694
	(i)	(i)	(i)	(i)	(i)
Other Manufacturing Industries;					
Machinery and Equipment Repair and	-17538	-17415	-17075	-16677	-17176
Installation Services	(i)	(i)	(i)	(i)	(i)
Total	-2035537	- 2173370	-2260500	-2321454	-2197715

Sector	2015- 2016	2016- 2017	2017- 2018	2018- 2019	Average
Coal and Oil and Gas Refining Industry	29088	-18221	-16310	-5323	-2691
	(c)	(i)	(i)	(i)	(i)
Food and Beverage Industry	-33307	-19977	-20698	-9957	-20985
	(i)	(i)	(i)	(i)	(i)
Tobacco Processing Industry	-5184	-4286	-3741	-3053	-4066
	(i)	(i)	(i)	(i)	(i)
Textile and Apparel Industry	-3439	-1170	-3764	-4207	-3145
	(i)	(i)	(i)	(i)	(i)
Leather, Leather Goods and Footwear	-870	-730	-888	-831	-830
Industry	(i)	(i)	(i)	(i)	(i)
Wood, Wood and Cork Products and					
Wickerwork of Bamboo, Rattan and the	-568	-1080	-1148	-314	-778
Like Industry	(i)	(i)	(i)	(i)	(i)
Paper and Paper Goods Industry; Printing	324	-5385	-2825	640	-1812
and Reproduction of Recording Media	(c)	(i)	(i)	(c)	(i)
Chemical, Pharmaceutical and Traditional	-1073	-2077	-5279	-4440	-3217
Medicine Industry	(i)	(i)	(i)	(i)	(i)
Rubber, Rubber and Plastic Goods Industry	-409	-4259	-708	-353	-1432
	(i)	(i)	(i)	(i)	(i)
Non-Metallic Excavated Goods Industry	-900	-1039	-851	-884	-918
	(i)	(i)	(i)	(i)	(i)
Basic Metal Industry	1270	-3474	-2989	-1258	-1613
	(c)	(i)	(i)	(i)	(i)
Metal Goods Industry; Computer,					
Electronic, Optical Goods; and Electrical	-4474	-3626	-5185	-7174	-5115
Equipment Industry	(i)	(i)	(i)	(i)	(i)
Machinery and Equipment Industry	-757	-511	-507	-774	-637
	(i)	(i)	(i)	(i)	(i)
Transport Equipment Industry	-5032	-3753	-371	-4924	-3520
	(i)	(i)	(i)	(i)	(i)

Furniture Industry	-498	-423	-665	-576	-540
	(i)	(i)	(i)	(i)	(i)
Other Manufacturing Industries; Machinery					
and Equipment Repair and Installation	-541	-294	-464	-592	-473
Services	(i)	(i)	(i)	(i)	(i)
Total				-	
	-26369	-70305	-66393	44021	-51772

These two shift components separate the elements of growth based on ADHK GDP and ADHB GDP that are internal and external, where the proportional shift is the result of the influence of external elements (industry mix) based on ADHK GDP, and the differential shift is the result of the influence of (environmental) factors.

## Discussion

The Effect of Manufacturing Industry Using Location Quotient Analysis Based on ADHK GDP on Indonesia's Growth

The LQ calculation applied in this study is to see the specialization of activities in Indonesia. This calculation based on ADHK GDP presents a relative comparison between the capabilities of a sector, where regions in Indonesia are calculated with the same sector capabilities based on ADHK. Looking at the results of the above calculations on business field GDP, especially in the Manufacturing Industry sector in Indonesia where from these results there are many basic sectors that have great potential in development and growth rates in Indonesia. While the results of the LQ non-base sector can still be a support in development and increase the growth rate of Indonesia, if the non-base sector is applied certain strategies, care, supervision, and maintenance so that the non-base sector in Indonesia can develop properly.

# The Effect of Manufacturing Industry Using Shift Share Analysis Based on ADHK GDP on Indonesia's Growth

The effect of this shift share analysis on Indonesia's growth is that it can see the role of a sector or the shift of an area from year to year so that new plans can be made to increase the growth rate. In Indonesia itself there are still many potentials and leading sectors that have not been handled properly, the results of the shift share analysis based on ADHK GDP data are "negative" from 2 components, namely Propotional shift and Differenti shift. Propotional shift and Differential shift components applied in Indonesia to measure changes in growth or see a decline in a region, as well as to determine how far the competitiveness of an economic sector in Indonesia using ADHK GDP comparison and the reference is ADHB GDP.

# Effect of Processing Industry Using Sectoral Typology Analysis Referring to the results of Location Quetiont Analysis

An overview of the pattern and structure of economic growth in Indonesia, especially in the "Manufacturing Industry" business sector at ADHK GDP, has not been able to surpass competition in the same sector based on ADHB GDP. However, if you look at the LQ analysis applied in this study, ADHK GDP can actually still increase national income from year to year.

#### Conclusion

The results of the calculation of the ADHK National Location Quetion for 5 (five) years between 2015-2019 can be seen in the table above. Based on the table above, the ADHK GDP has 10 basic subsectors, these subsectors are the subsectors of the Food and Beverage Industry, Textile and Apparel Industry, Paper and Paper Goods Industry; Printing and Reproduction of Recording Media, Chemical Industry; Pharmaceuticals and Traditional Medicine, Rubber Industry; Rubber and Plastic Goods, Non-Metallic Mineral Products Industry, Basic Metal Industry, Metal Goods Industry; Computers, Electronic Goods, Optics; and Electrical Equipment, Transportation Equipment Industry, Other Processing Industries; Repair and Installation Services of Machinery and Equipment. ADHK GDP in the average value of Pj in all subsectors has a negative value even though in the LQ value there are several subsectors included in the base sector where the sector can still increase ADHK GDP growth in Indonesia, but specialize in the same sector but the growth is slower, because ADHB GDP itself similar subsectors grow faster. The Dj value in the table above there are 3 subsectors that are positive in each year but not for the average, while the other subsectors are negative, with the average LQ showing that one of the sectors above, namely Coal and Oil and Gas Refining, is not able to fulfil its own area based on ADHK GDP. Based on the understanding of the potential based on ADHK GDP, it is expected that the most profitable regional development strategy to be applied in the future, namely by prioritizing the leading sector based on ADHK GDP, so as to increase the growth rate in Indonesia.

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