Performance of Manufacturing Industry Sector in Indonesia

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Abstract: Performance of manufacturing industry sector in various provinces in Indonesia is quite diverse. Manufacturing industry is concentrated in Java Island, especially in West Java, East Java, Central Java and Banten. Provinces with rapid development of manufacturing industry outside Java Island are Riau Island Province in Sumatera and West Papua Province. The highest ranking of Province Manufacture Performance Index (PMPI) is West Java at 1.83. It means that manufacturing sector is 1.8 times higher than the regional economy. In other words, every 1 percent of regional economic share to the national economy will be able to encourage the growth of manufacturing industry sector by 1.83 percent. East Nusa Tenggara Province has the lowest rate of 0.0526, which means that 1 percent of regional economic share is only able to create 0.0526% development of manufacturing industry or 94.74 percent below its regional economic capacity.

Keywords: Province Manufacture Performance Index, Manufacturing industry, Regional Economy

Date of Submission: 28-09-2017

Date of acceptance: 28-10-2017

I. Introduction.

The industrial sector's role in a country's economy has been concerned since Classical economists introduce their economic theory. This makes the European countries make the industry sector as a leading sector in moving the country's economy. It creates theories of development on industrialization; even industrialization is considered synonymous with economic development and modernization. The process of industrialization in European countries originated from first industrial revolution in England with a new method discovery of cotton spinning, followed by innovations and new discoveries in processing of iron and steam engines, trains, steamers and so on. After World War II, technological advancements was created as electric power, motor cycles, communications technology revolution, electronics, computers and use of robots. This development changes the pattern of world trade and spurs industrialization process in the world.

The experience of industrialization and economic development of European countries become inspirations for developing countries to adopt economic development theory with industrial sector become a sector to accelerate the economic development. Indonesia as a developing country tries to apply the development economic theory by adjustments to the conditions and characteristics of Indonesia's natural resources, social and culture.

Indonesia since independence began to build the independence principle. At that time Indonesia was included into an inward looking country (Hla Mynt, 1971). The changes occurred since 1966 when the New Order regime began to rule. National development is carried out in accordance with Five Year Development Plan (REPELITA). Every development plan is created; the industrial sector has received serious attention even though the agricultural sector, especially food self-sufficiency is still the first priority. The industrial policy of early 60s reflected in the extreme nature of protectionism and *etatsime*. The New Order government made fundamental changes to policies that foster a better climate for growth of industrial sector. First, system of foreign exchange was changed to make foreign transactions became more free and simple. The consequently, the raw materials or capital goods can be obtained easily. Second, reduction of special facilities reserved for state enterprises and policies that encouraged the growth of private sector together with state sector. Third, issuance of Foreign Investment Law of 1966 which provided interesting conditions compared to the previous regulation. Despite some deregulation in industrial sector, but in reality the government still seems interventionist.

The industrialization strategy in Indonesia stems from substitution strategy with domestic market orientation. Consequently, government implements excessive protection. The result can indeed accelerate the industrialization process but having more negative effects as inappropriate resources allocation and protected industries become inefficient. Debate was occurred between import substitution strategy and export orientation strategy. Habibie was in power, debate began to be directed to more complex orthodox export orientation strategy. This strategy has led to a new debate because it is considered a hi-tech project with great cost.

II. Models

Many studies analyze the performance of economic sector through historical analysis. This paper attempts to present an analysis with a relativity approach. It is linked to the national economy as a whole. To know the performance of industrial sector, especially manufacturing industry in every province, it is Province Performance Manufacture Performance Index (PMPI). PMPI explains how the relative performance of regional manufacturing industry (manufacture by region) on regional economy (economic size relative by region). Methodologically, PMPI has several equation models below.

The performance measures of provincial manufacturing industry sector or Province Manufacture Size (PMS) are as follows:

$$PMS_i = \frac{VMP_i}{VMN}.$$
(1)

Where VMP_i = value added of provincial manufacturing industry sector (Rp trillion) and VMN = value added of national manufacturing industry (Rp trillion). The PMS value is always between zero and one (0 < PMS <1). Higher PMS_i means greater regional size in development of manufacturing industry sector relative to national manufacturing industry.

The Province Economic Size (PES) is formulated as follows:

$$PES_i = \frac{PDRB_i}{PDB}.....Q)$$

Where $PDRB_i = gross$ regional domestic product of a particular province and GDP = Indonesia's gross domestic product. GRDP is the main economic indicator of province and GDP become main indicator of national economy. The PES value is between zero and one (0 <PES <1). Higher PES value means greater the province's economic capability relative to the national economy.

PMPI_i can be formulated as ratio between PMS_i and PES_i, that is:

$$PMPI_i = \frac{PMS_i}{PES_i}.....(3)$$

Where $PMS_i = size$ of provincial manufacturing industry sector and $PES = provincial economic size. <math>PMPI_i$ is between zero and infinity (∞). PMPI> 1 means the development of manufacturing industry sector above its regional economic capability. This method is good enough to explain province's ranking in development of manufacturing sector or the contribution of manufacturing sector to the province economic growth. This method has been used by analysts or economic researchers to see the position of certain aspects to know the market competitiveness of a commodity. This method has been used in foreign trade by UNCTAD (United Nations Conference on Trade and Development). Situmorang reviews the performance of provincial co-operatives in Indonesia. Ramly (2013) examines regional export performance. All the studies use aggregative secondary data derived from Central Bureau of Statistics (BPS) in form of GDP data, and GRDP of each province.

III. Macro Variables Measures Of Indonesian Economic

The study of Indonesian economy shows many complex problems as unemployment, inequality and poverty. Some successes have been achieved. The success of economic growth has placed Indonesia as a developing country with moderate per capita income. Indonesia's economic growth in 2015 reaches 4.8 percent in all sectors. The highest growth is financial and insurance services sector of 8.9 percent and the lowest is mining and quarrying sector of 1.06. The manufacturing sector grew by 4.29 percent and ranked 11th out of 17 sectors.

Contribution to Gross Domestic Product is still dominated by Java Island of 58.14 percent, then Sumatera Island is 21.71 percent, Kalimantan Island is 8.76 percent, Sulawesi Island is 5.18 and Maluku Island and Papua is 2, 52 percent. The province with biggest contribution is DKI Jakarta with 16.2 percent. This can be seen in Appendix 1.

This figure shows that spatially the Indonesian economy is more dominated by Java provinces except Yogyakarta. Sumatra Island is dominated by North Sumatra and Riau. The gini ratio for 2011 - 2015 is 0.4. It means the unevenness is moderate. Using the World Bank's size, 40 percent of lowest class society has an expenditure of 17.45 percent. The high unevenness actually happened to the Java Island provinces of 0.41.

The economic sectors with biggest contribution from 2011 to 2015 were manufacturing industry of 24.28 percent, 24.02 percent, 24.07 percent 24.11 percent and 24.02 percent, respectively. Based on this figure, Indonesian economy has started in industrialization process. The industrialization phase in Indonesia is similar to other developing countries such as Taiwan, Hongkong and even South Korea. Initially, these countries use strong import substitution strategies and dispersed industries with development of small-scale industries, using

light technology and supported by agricultural sector. There is a belief that an advanced agricultural sector will increase demand in industrial sector for raw materials (Yustika, 2007).

The type of Indonesia manufacturing industry is very diverse, ranging from household industries to produce household handicrafts to sophisticated industrial groups that produce capital goods or intermediate goods. The location also spread to various provinces. However, large processing industries are more concentrated in Java Island and Sumatera Island.

IV. Result And Discussion

4.1. Province Manufacture Size

The manufacturing sector in each province contributes differently to regional economies. It can be seen from average value added of manufacturing industry sector in Gross Regional Domestic Product (PDRB) during the period of 2011 - 2015. West Java Province is the region with largest contribution from manufacturing industry sector to GRDP, then Riau Islands, Banten, Central Java and East Java at 43.4 percent, 38.6 percent, 36.3 percent, 35.2 percent and 29.1 percent, respectively. It can be said that these five regions have a rapid development in manufacturing sector. Except Riau Islands, other four provinces are located in Java Island. This means that industrialization process is more concentrated in Java Island and Sumatera Island. Provinces outside Java and Sumatera Island with large contribution of manufacturing industry sector are West Papua province of 30.4 percent and East Kalimantan of 18.7 percent. The lowest is East Nusa Tenggara Province at 1.24 percent. (Appendix 1a, 1b)

4.2. Province Economic Size.

Provinces with largest contribution to Gross Domestic Product are DKI Jakarta of 16.2 percent, East Java of 14.4 percent and West Java of 13.05 percent. Even the three provinces exceed the contribution of all 5 provinces of Kalimantan Island of 9.15 percent. The province with lowest contribution is North Maluku, Gorontalo and West Sulawesi, respectively of 0.224, 0.234 and 0.268. These three provinces are located outside of Java Island. This can become an indicator that Indonesia economy has spatial inequality. Economic development is more concentrated in Java and Sumatra. During the period of 2011 – 2015, economic growth rate in Java and Sulawesi is greater than the national economic growth rate. Southeast Sulawesi province has the highest economic growth of 8.6 percent and the lowest is Nangroe Aceh Darussalam Province of 2.1 percent. Indeed, during this period the economic growth of Sulawesi province exceeds the national economic growth. (Appendix 2)

4.3. Province Manufacture Performance Index.

There are only 6 provinces from all 34 Provinces in Indonesia have Province Manufacture Performance Index greater than 1, namely West Java, Riau, Central Java, East Java, Banten and West Papua, respectively at 1.83, 1.63, 1.53, 1.49, 1.28 and 1.23. Riau Islands and West Papua are provinces outside Java Island. Province with lowest Province Manufacture Performance Index is East Nusa Tenggara of 0.0526. (Appendix 3)

The province with highest ranking has developed the industrial sector beyond its regional economic development. The highest figure is 1.83 in West Java Province, it means the performance of manufacturing industry sector 1.8 times higher than other regional economy. In other words, every 1 percent of regional economic share to the national economy will be able to encourage the growth of manufacturing industry sector by 1.83 percent. The lowest figure is East Nusa Tenggara province, it means that 1 percent of regional economic share is only able to create 0.0526 percent growth in manufacturing industry or 94.74 percent below its regional economic capacity.

The difference in Manufacture Performance Index of Province is caused by several factors, among others are:

- Availability of different infrastructure. Java Island has adequate basic infrastructure as transportation, energy, communication, except West Papua Province. While other areas outside of Java is still very limited. This affects the efficiency in production process. In addition, infrastructure development funds in Indonesia are still very low at around 3 percent of total GDP (Basri and Munandar, 2009).
- 2. Initial condition and structure of domestic economy. Java has always had upstream, middle and downstream industries, such as iron, steel, cement, petrochemical, machinery, production equipment, textiles, food and beverages. Therefore, it is easier to develop downstream industries with a high level of product diversification compared to areas outside Java that have no upstream and middle industries. (Tambunan, 2003)
- 3. In addition, population in Java Island is more than the population in other regions which reached 57.49 percent of entire population of Indonesia. This can become a potential market for manufacturing industry commodities. Large markets can create large economies of scale and high efficiency in production process.
- 4. Natural resources. Many provinces outside of Java have natural resource potential, but have not been exploited optimally. It is precisely the potential of natural resources in Java and Sumatra such as mining and

oil and gas, including the plantation that more demanded by investors, thus raising other related industries type.

DKI Jakarta has the largest PDRB but the Province Manufacture Performance Index is in medium category of 0,5814. DKI Jakarta is not an industrial area but more functioning as a center of government, trade and education.

V. Conclusion

Province Manufacture Performance Index can be used as a measurement tool to find out how much the contribution of regional manufacturing industry of regional economy in Indonesia. It can also find out how much provincial economic share to the national economy to encourage the growth of manufacturing industry sector. The manufacturing sector becomes important, because it can absorb labor can and become a leading sector to accelerate the economic growth to increase people's income.

The manufacturing industry sector is still concentrated in Java and Sumatera Island. It is widen the unevenness of development between the Western Region and Eastern Region of Indonesia and this could trigger the disintegration of nation. In future, infrastructure development should be distributed more evenly throughout the region to optimize the direction of investment of natural resources in the region.

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Appendix 1a. Contribution of Manufacturing Industry Sector on PDRB Based on Province Year 2011 – 2015 (%)

Na	Province				YEAR		
No	Province	2011	2012	2013	2014	2015	AVERAGE
1	Aceh	8,65	8,61	8,04	7,4	5,89	7,718
2	North Sumatera	21,2	20,66	19,86	19,97	20,21	20,38
3	West Sumatera	11,71	11,53	11,02	10,57	10,25	11,016
4	Riau	22,08	20,6	20,56	20,88	23,87	21,598
5	Jambi	11,15	11,27	11,15	10,94	11,05	11,112
6	South Sumatera	17,52	16,55	17,15	17,36	18,27	17,37
7	Bengkulu	6,09	6,04	6,08	6,29	6,18	6,136
8	Lampung	17,14	17,51	17,65	18,03	19,31	17,928
9	Bangka Belitung	25,27	24,33	23,99	22,85	21,13	23,514
10	Riau Island	38,05	38,57	38,98	38,83	38,63	38,612
11	DKI Jakarta	13,89	13,79	13,54	13,59	13,84	13,73
12	West Java	43,9	43,23	43,22	43,6	43,03	43,396
13	Central Java	34,88	34,95	35,21	35,84	35,25	35,226
14	DIY	14,4	13,26	13,62	13,59	13,05	13,584
15	East Java	29,15	29,28	28,79	28,95	29,27	29,088
16	Banten	38,49	37,5	37,3	34,64	33,48	36,282
17	Bali	6,69	6,53	6,44	6,38	6,52	6,512
18	West Nusa Tenggara	4,84	5	4,89	4,67	3,93	4,666
19	East Nusa Tenggara	1,26	1,23	1,24	1,23	1,23	1,238
20	West Kalimantan	17,41	16,68	16,33	16,47	15,73	16,524
21	Central Kalimantan	14,57	13,99	13,69	16,04	16,15	14,888

DOI: 10.9790/5933-0805035764

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22	South Kalimantan	13,06	13,12	12,92	12,95	13,39	13,088
23	East Kalimantan	18,67	16,89	17,98	19,3	20,72	18,712
24	North Kalimantan	0	0	9,28	9,41	9,73	5,684
25	North Sulawesi	10,99	10,63	10,22	9,81	9,45	10,22
26	Southeast Sulawesi	6,24	5,85	5,67	5,87	9,72	6,67
27	South Sulawesi	13,58	13,49	13,71	13,89	13,81	13,696
28	North Sulawesi	6,56	5,99	5,89	5,97	5,94	6,07
29	West Sulawesi	4,09	4,06	8,18	4,17	4,18	4,936
30	Gorontalo	8,88	8,48	4,01	10,39	10,31	8,414
31	Maluku	5,38	5,33	5,26	5,19	5,3	5,292
32	North Maluku	5,34	5,13	5,08	5,22	5,11	5,176
33	West Papua	31,92	30,8	30,28	30,19	28,76	30,39
34	Papua	2,17	2,2	2,11	2,25	2,17	2,18

Appendix 1.b. Performan	ce of Manufacturing Industrial Sector Based on Province Year 2011 – 2015.
	Year

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No	Province	2011	2012	2013	2014	2015	AVERAGE
1	Aceh	0,0049935	0,0048316	0,0043378	0,0037692	0,002759	0,0041382
2	North Sumatera	0,0426517	0,0422304	0,0414448	0,0414605	0,0418736	0,0419322
3	West Sumatera	0,0074172	0,0074241	0,0071945	0,0069313	0,0066387	0,0071211
4	Riau	0,0572134	0,0563822	0,055508	0,0564322	0,0564388	0,0563949
5	Jambi	0,0061608	0,0063547	0,0064402	0,0063016	0,0062086	0,0062932
6	South Sumatera	0,0211898	0,0205379	0,0213742	0,0211344	0,0220253	0,0212523
7	Bengkulu	0,0010467	0,0010723	0,0010961	0,0011361	0,0011266	0,0010956
8	Lampung	0,0155465	0,0160787	0,0160381	0,0165704	0,0177147	0,0163897
9	Babel	0,0055067	0,0054123	0,005373	0,0051249	0,0046689	0,0052172
10	Riau Island	0,0257613	0,0273808	0,0282883	0,0280546	0,0284538	0,0275878
	Pulau Sumatera	0,1874878	0,187705	0,187095	0,1869151	0,1879079	0,1874222
11	DKI Jakarta	0,0907195	0,0925362	0,0931204	0,0951888	0,0994632	0,0942056
12	West Java	0,239283	0,2389311	0,2418847	0,240421	0,2377899	0,239662
13	Central Java	0,1288558	0,1292513	0,1299073	0,131913	0,1295447	0,1298944
14	DIY	0,0054843	0,0050193	0,0051401	0,0050183	0,0047961	0,0050916
15	East Java	0,1742545	0,1792165	0,1769064	0,1773424	0,1792516	0,1773943
16	Banten	0,0628727	0,0621503	0,0626505	0,0590417	0,0579842	0,0609399
	Pulau Jawa	0,7014698	0,7071047	0,7096094	0,7089253	0,7088297	0,7071878
17	Bali	0,0037361	0,0037731	0,0038475	0,0039717	0,0041834	0,0039023
18	West Nusa Tenggara	0,0017595	0,0016927	0,0016006	0,001516	0,0014654	0,0016068
19	East Nusa Tenggara	0,0003286	0,0003362	0,0003374	0,0003357	0,000341	0,0003358
	Bali dan NT	0,0058241	0,0058019	0,0057855	0,0058234	0,0059897	0,0058449
20	West Kalimantan	0,0089846	0,0087424	0,0086142	0,0086721	0,0083747	0,0086776
21	Central Kalimantan	0,0051199	0,005033	0,0049854	0,0057367	0,0058614	0,0053473
22	South Kalimantan	0,0068837	0,00686	0,0066545	0,0065908	0,0066717	0,0067321
23	East Kalimantan	0,0513013	0,0455986	0,0414776	0,0404501	0,0376793	0,0433014
24	North Kalimantan	0	0	0,00217	0,0022305	0,0022154	0,0013232

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	Pulau Kalimantan	0,0722894	0,0662341	0,0639018	0,0636801	0,0608026	0,0653816
25	North Sulawesi	0,0033626	0,0033286	0,0032306	0,003147	0,0031246	0,0032387
26	Southeast Sulawesi	0,0020203	0,001997	0,0020127	0,0021072	0,0037891	0,0023853
27	South Sulawesi	0,0143702	0,0150937	0,0157736	0,0165581	0,0170977	0,0157787
28	North Sulawesi	0,0019515	0,001899	0,0018589	0,0018665	0,00189	0,0018932
29	West Sulawesi	0,000956	0,0009409	0,0009179	0,0012173	0,0012331	0,001053
30	Gorontalo	0,0003798	0,0003911	0,0003947	0,0004185	0,0004319	0,0004032
	Pulau Sulawesi	0,0230405	0,0236503	0,0241883	0,0253145	0,0275664	0,024752
31	Maluku	0,0006141	0,0006444	0,0006512	0,000654	0,0006602	0,0006448
32	North Maluku	0,0004865	0,0004857	0,0004841	0,0004996	0,0004928	0,0004897
33	West Papua	0,0075356	0,0071585	0,0071341	0,0069918	0,0065543	0,0070748
34	Papua	0,0012521	0,0012154	0,0011508	0,0011962	0,0011965	0,0012022
	Pulau Maluku dan Papua	0,0098883	0,0095039	0,0094201	0,0093416	0,0089038	0,0094115

Ар	pendix 2.	PDRB Contribution or	n PDB Based on Province year 2011 – 2015 (%)
	No	Province	Year

No	Province	Year							
		2011	2012	2013	2014	2015	AVERAGE		
1	Aceh	1,38	1,32	1,26	1,2	1,11	1,254		
2	North Sumatera	4,82	4,81	4,89	4,88	4,91	4,862		
3	West Sumatera	1,52	1,52	1,53	1,54	1,53	1,528		
4	Riau	6,21	6,44	6,32	6,36	5,6	6,186		
5	Jambi	1,32	1,33	1,35	1,36	1,33	1,338		
6	South Sumatera	2,9	2,92	2,92	2,86	2,86	2,892		
7	Bengkulu	0,41	0,42	0,42	0,42	0,43	0,42		
8	Lampung	2,17	2,16	2,13	2,16	2,17	2,158		
9	Babel	0,52	0,52	0,52	0,53	0,52	0,522		
10	Riau Island	1,62	1,67	1,7	1,7	1,74	1,686		
	Pulau Sumatera	22,87	23,11	23,04	23,01	22,2	22,846		
11	DKI Jakarta	15,64	15,79	16,1	16,47	17,02	16,204		
12	West Java	13,06	13,01	13,11	12,97	13,09	13,048		
13	Central Java	8,85	8,7	8,64	8,66	8,7	8,71		
14	DIY	0,91	0,89	0,88	0,87	0,87	0,884		
15	East Java	14,32	14,4	14,39	14,41	14,5	14,404		
16	Banten	3,91	3,9	3,93	4,01	4,1	3,97		
	Pulau Jawa	56,69	56,69	57,05	57,39	58,28	57,22		
17	Bali	1,34	1,36	1,4	1,46	1,52	1,416		
18	West Nusa Tenggara	0,87	0,8	0,77	0,76	0,88	0,816		
19	East Nusa Tenggara	0,62	0,63	0,64	0,64	0,66	0,638		
	Pulau Bali dan NT	2,83	2,79	2,81	2,86	3,06	2,87		
20	West Kalimantan	1,24	1,23	1,24	1,24	1,26	1,242		
21	Central Kalimantan	0,84	0,85	0,85	0,84	0,86	0,848		
22	South Kalimantan	1,26	1,23	1,21	1,2	1,18	1,216		
23	East Kalimantan	6,58	6,35	5,4	4,93	4,31	5,514		
24	North Kalimantan	0	0	0,55	0,56	0,54	0,33		

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	Pulau Kalimantan	9,92	9,66	9,25	8,77	8,15	9,15
25	North Sulawesi	0,73	0,74	0,74	0,75	0,78	0,748
26	Southeast Sulawesi	0,78	0,8	0,83	0,84	0,92	0,834
27	South Sulawesi	2,53	2,63	2,69	2,8	2,93	2,716
28	North Sulawesi	0,71	0,75	0,74	0,74	0,75	0,738
29	West Sulawesi	0,26	0,26	0,26	0,28	0,28	0,268
30	Gorontalo	0,22	0,23	0,23	0,24	0,24	0,232
	Pulau Sulawesi	5,23	5,41	5,49	5,65	5,9	5,536
31	Maluku	0,27	0,28	0,29	0,3	0,29	0,286
32	North Maluku	0,22	0,22	0,22	0,23	0,23	0,224
33	West Papua	0,57	0,55	0,55	0,54	0,54	0,55
34	Papua	1,38	1,3	1,28	1,25	1,31	1,304
	Maluku dan Papua	2,44	2,35	2,34	2,32	2,37	2,364

Appendix 3	. Average the Ranki	ng of Province	Manufactur l	Performance Index
				Vear

Donking	Province	Year						
Ranking		2011	2012	2013	2014	2015	AVERAGE	
1	West Java	1,832183	1,836519	1,84504	1,85367	1,816576	1,836798	
2	Riau Island	1,590206	1,639566	1,664016	1,650269	1,635277	1,635867	
3	Banten	1,607999	1,593598	1,594161	1,472362	1,414249	1,536474	
4	Central Java	1,455997	1,485647	1,503557	1,523245	1,489019	1,491493	
5	West Papua	1,322034	1,301539	1,297105	1,294771	1,21375	1,28584	
6	East Java	1,216861	1,244559	1,22937	1,23069	1,236218	1,23154	
7	Bangka Belitung	1,058985	1,040835	1,03327	0,966958	0,89787	0,999584	
8	Riau	0,921312	0,8755	0,878291	0,887298	1,007835	0,914047	
9	North Sumatera	0,884891	0,877971	0,847541	0,8496	0,852823	0,862565	
10	East Kalimantan	0,779655	0,718089	0,768105	0,820488	0,874231	0,792113	
11	Lampung	0,71643	0,744386	0,752963	0,76715	0,816348	0,759455	
12	South Sumatera	0,730684	0,703352	0,731994	0,738965	0,770115	0,735022	
13	West Kalimantan	0,724562	0,710762	0,694696	0,699361	0,66466	0,698808	
14	Central Kalimantan	0,609516	0,592121	0,586519	0,68294	0,681562	0,630532	
15	DKI Jakarta	0,580048	0,586043	0,578387	0,577953	0,58439	0,581364	
16	South Sulawesi	0,567991	0,573905	0,586381	0,591361	0,583538	0,580635	
17	DI. Yogyakarta	0,602672	0,563967	0,584101	0,576813	0,551277	0,575766	
18	South Kalimantan	0,546323	0,557725	0,549956	0,549232	0,565394	0,553726	
19	Jambi	0,466726	0,477801	0,477054	0,463351	0,46681	0,470348	
20	West Sumatera	0,487971	0,488427	0,47023	0,450084	0,433901	0,466123	
21	North Sulawesi	0,460631	0,449806	0,436562	0,419601	0,400587	0,433437	
22	North Kalimantan	0	0	0,394546	0,398299	0,410265	0,240622	
23	West Sulawesi	0,3677	0,361899	0,353028	0,43474	0,440389	0,391551	
24	Nangro Aceh Darussalam	0,361848	0,366031	0,344269	0,314098	0,248555	0,32696	
25	Central Sulawesi	0,259018	0,24963	0,242488	0,250852	0,411862	0,28277	
26	Bali	0,27881	0,277431	0,274822	0,272031	0,275222	0,275663	
27	Bengkulu	0,255296	0,255304	0,26098	0,270505	0,26199	0,260815	

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28	Southeast Sulawesi	0,274862	0,253203	0,251197	0,252228	0,252005	0,256699
29	Maluku	0,227426	0,230158	0,224544	0,217995	0,227658	0,225556
30	North Maluku	0,221157	0,220755	0,220023	0,217234	0,214261	0,218686
31	West Nusa Tenggara	0,202237	0,211588	0,207872	0,199477	0,166518	0,197538
32	Gorontalo	0,172658	0,170033	0,171612	0,17437	0,179969	0,173728
33	Papua	0,090733	0,09349	0,089905	0,095695	0,091335	0,092232
34	West Nusa Tenggara	0,053005	0,053363	0,052714	0,05246	0,051663	0,052641

Fahrudin Ramly. "Performance of Manufacturing Industry Sector in Indonesia." IOSR Journal of Economics and Finance (IOSR-JEF), vol. 8, no. 5, 2017, pp. 57–64.
