

Analysis Of Micro And Small Industry Development In Indonesia

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Abstract: The purpose of this research is to know the development of production activity and the absorption of labor of micro and small industry in Indonesia 2010 - 2014. In this analysis used production index, production growth, company amount, input value, output value, added value, labor and expenditure for micro and small industry workforce from 2010 - 2014. The results of this study indicate that the provinces in Indonesia that have the development of production activities tend to increase from 2010 to 2014 are North Sumatra South Sumatra, DKI Jakarta, West Java, Central Java, East Java, Banten, West Nusa Tenggara, West Kalimantan, Central Sulawesi, South Sulawesi, Southeast Sulawesi, West Sulawesi, Maluku and North Maluku. The development of micro industries is much higher than that of small industries, as evidenced by the large number of micro-enterprise enterprises rather than small industries. The number of micro industry companies reached 88.34% and small industry only 11.66%. While the absorption of micro industry workforce reached 72.23% and small industry only 27.77%.

Index Terms: Index of Production, Industry, Micro and Small, Input Value, Output Value, Added Value

1 INTRODUCTION

The development of the industrial sector is growing rapidly in the Indonesian economy. The contribution of the industrial sector to the Indonesian economy in 2013 is Rp. 2,152.80 trillion and increased to Rp. 2,394.00 trillion in 2014 or its role of 25.49%. Judging from the division of processing industry in the calculation of Gross Domestic Product shows that the contribution of non oil and gas industry is higher than oil and gas industry. In 2014, the oil and gas industry contributes Rp. 290.29 trillion while the contribution of the industry without oil and gas amounted to Rp. 2,103.73 trillion. Indonesia's economic growth in recent years has been slowing, which in 2014 only grew by 5.06%. The slowdown was also followed by the slowing growth of the industrial sector. In general, the industrial sector in 2014 grew by 4.86%. The slowdown in growth in the industrial sector was mainly due to a correction of oil and gas industry growth of -2.27%. While the industry without oil and gas able to grow by 5.34%. The high contribution of the industry without oil and gas indicates the growth and development of food industry, textiles, wood, fertilizer, cement, metal and others. Among the industries without oil and gas are micro and small industries that contribute to economic growth through the manufacturing sector. In 2014 the industry contribution without oil and gas, among others food, beverages and tobacco Rp. 776.86 trillion, textile of leather goods and footwear of Rp. 186.36 trillion, wood goods and other forest products of Rp. 106.84 trillion, paper and printed materials of Rp. 80.60 trillion, and cement and non-metallic excavation of Rp. 67.93 trillion. Micro and small industries are generally informal businesses, many of which are still not legal entities. Based on BPS data of micro and small industries in Indonesia that are not legal entities, the number continues to increase. In 1996 the number of micro and small industries that are not legal entities as many as 16,780,631 businesses. In times of crisis many of them are out of business so that in 1998 the number became 13,975,255 businesses.

The improvement in Indonesia's post-crisis economy brings a fresh breeze for the growth of micro and small industries, but non-legal entities continue to increase, which in 2004 totaled 17,145,244 businesses. In addition to contributing to improving economic growth, micro and small industries have also provided considerable employment opportunities. In 1996 the number of manpower capable of being absorbed by micro and small industries was 28,876,422 people. Similarly, during the economic crisis 1998 micro and small industries are still able to provide employment as many as 26,020,176 people. After the crisis in 2000, micro and small industries absorbed 27,664,690 workers and continued to increase until 2004 the number of workers employed in micro and small industries was 30,547,132 persons. Based on the above background then the formulation of the problem in this study are (1) How is the development of micro and small industry production activities in Indonesia ?. (2) How is the development of micro and small industry employment in Indonesia?

2 LITERATURE REVIEW

2.1 Industry

The definition of industry in accordance with Act No. 3 of 2014 referred to industry is all forms of economic activities that process raw materials and or utilize industrial resources to produce goods that have added value or higher benefits, including industrial services. According to the 2-digit KBLI, the classification of micro and small industries can be grouped into 23 subsectors (BPS, 2015), namely:

- 1) Food Industry
- 2) Beverage Industry
- 3) Tobacco Processing Industry
- 4) Textile Industry
- 5) Apparel Industry
- 6) Leather Industry, Leather Goods and Footwear
- 7) Wood Industry, Wood and Cork Goods (not including furniture), Rattan Woven Goods, Bamboo and the like.
- 8) Paper and Goods Industry of Paper
- 9) Printing and Reproduction Industry Recording Media
- 10) Industrial Chemicals and Goods from Chemicals
- 11) Pharmaceutical Industry, Chemical Products and Traditional Medicines
- 12) Rubber Industry, Rubber and Plastic Goods
- 13) Manufacture of Non-Metal Products
- 14) Basic Metal Industry

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- 15) Metal Goods Industry is not Machinery and Equipment
- 16) Industrial Computers, Electronic Goods and Optics
- 17) Electrical Appliance Industry
- 18) YTDL Machinery and Equipment Industry (which excludes others)
- 19) Motor Vehicle Industry, Trailer and Semi Trailer
- 20) Other Transport Industry
- 21) Furniture Industry
- 22) Other Processing Industries
- 23) Repair and Installation of Machinery and Equipment

The dynamics of industrial development in Indonesia have ups and downs. In the period 2005-2009 industrial development in Indonesia is still marked by the growth of the manufacturing industry tends to decline, the ability of the manufacturing sector to grow is determined by the amount of investment, the spread of the industry is still uneven in all parts of Indonesia. Approximately 66.9% of the total industry is located in Java, and the rest is outside Java. In the framework of inclusive and equitable economic development, industry development efforts more evenly throughout the territory of Indonesia should continue to be done. (Presidential Regulation Number 5 of 2010). According to Bappenas and BPS (2013), the manufacturing and trading sectors, hotels and restaurants play a major role in the economic growth of 2004-2012. In the economic crisis that hit the world, this sector is still able to become a major source of growth. The oil and gas industry is expected to remain active. Therefore, the development of non-oil and gas industry will be directed to the processing industries of agricultural and mining products, as well as industries utilizing the available human resources as well as the fulfillment of domestic needs. (Bappenas, 2013). Empowerment of Micro, Small and Medium Enterprises needs to be done thoroughly, optimally and continuously through the development of conducive, rewarding and expansive business climate, so as to enhance the position, role and potential of Micro, Small and Medium Enterprises in realizing economic growth, equity and increase in people's incomes, job creation, and poverty alleviation. (Act number 20 of 2008).

2.2 Labor

Setiawan's research (2010) shows that the number of business units, investment value, output value and minimum wage of micro and small enterprise sectors simultaneously have a significant effect on the amount of labor. The number of business units, investment value, and minimum wage partially significant effect on the number of workers, while the output value does not significantly affect the amount of labor. The most influential variable on employment in the SME sector is the number of business units, while the output value variables have the smallest effect among other variables. According Simanjuntak (2001), high the low number of labor used by the company is influenced by the high low number of goods produced by the labor. The high level of goods produced by the company depends on the high amount of goods demanded by consumers. The higher the quantity of goods demanded by the consumer means the amount of goods produced by a company will increase, so the amount of labor used by the company will also be higher. In the SMEs, the ability to absorb labor is faced with the problem of limited capital, lack of skills, lack of smooth supply of raw materials, and weak competitiveness. Analysis Sudarno (2011), shows that the ability of SMEs in absorbing the entire workforce about 73%.

In addition to these problems according to Rante (2010) the problems faced by UMKM is related to aspects of entrepreneurial behavior, natural resources potential, and culture. The performance of micro and small industries that do not require high skill and special make this industry relatively easy to absorb labor with limited skill level. Raselawati (2011) SMEs workforce has no significant effect on economic growth in the SME sector because the labor absorbed is not proportional to the added value generated. Nevertheless, the absorption of manpower in the micro and small industries sector in the economy is still very high. The BPS report (2007) shows that 79.67% of the existing workforce is absorbed by micro and small enterprises, of which 59.57% work on micro businesses, and 20.10% in small businesses.

3 RESEARCH METHODOLOGY

Research sites

The location of this study covers all areas contained in Indonesia consisting of 5 Islands (Sumatra, Java and Bali, Kalimantan, Sulawesi and Maluku, and Papua) or 33 Provinces.

Types and Data Sources

The type of data used in this study is secondary data published by agencies, institutions and agencies related to this research that is using secondary data published by the Central Bureau of Statistics (BPS).

Analysis Method

This research uses descriptive analysis approach. Analysis of research variables is done by grouping data, determining the value and statistical functions, and present the data in the form of tables, drawings and graphs. So as to provide useful information to be analyzed. In order to draw a general conclusion from the rubberistic data of micro and small industry developments, the average value, number, standard deviation, variance, minimum maximum value, range, and so on are used. In accordance with the purpose of this study, the analysis will be conducted on the first development of micro industrial production, and second to the development of micro and small industry workforce. Data needed in the analysis:

- a. The development of micro and small industry production consists of data
 - Index of production of micro and small industries
 - Growth of micro and small industry production
 - Number of companies of micro and small industries
 - Input value from micro and small industries
 - Value of output from micro and small industries
 - Value added from micro and small industries
- b. The development of micro and small industry workforce consists of data
 - Micro and small industry workforce
 - Expenditures for micro and small industry workforce

4 RESEARCH RESULTS

Development of Micro and Small Industry Production in Indonesia. The development of micro and small industries in Indonesia can be seen from several aspects such as production and labor. The development of production can be seen from production index, production growth, number of company, input value, output value, and added value. While

the development of industries based on labor can be seen based on the amount of labor and expenses incurred for the labor. Production index is an indicator used to determine the changes that occur in production activities or to measure the increase and decrease in production. The average annual changes in production activities in Indonesia based on micro and small production indices from 2011 to 2015 in the first quarter can be seen in Table 1. Based on these data it can be seen that the development of micro and small industry production in the provinces on Sumatra island tends to be unstable from year to year. The provinces of Sumatran island with relatively small increase in production of micro and small industries from year to year are the provinces of North Sumatra and South Sumatra. The development of production of micro and small industries in Java island mostly significant increase every year such as DKI Jakarta, West Java, Central Java, East Java, Banten, and West Nusa Tenggara. While the provinces of DI Yogyakarta and Bali decline in 2012 and East Nusa Tenggara decrease in 2013 and increase in the following

years. The development of micro and small industries in Kalimantan which tend to decrease in 2012 is South Kalimantan and East Kalimantan province and from 2012 to 2015 continue to increase. West Kalimantan Province has increased every year to date, while Central Kalimantan Province has been on a continuous decline from 2011 to 2013. Overall from 2013 to 2015 the provinces of Kalimantan have increased production of micro and small industries. The development of production of micro and small industries on the island of Sulawesi on average increased from 2011-2014. Increased provinces are Central Sulawesi, South Sulawesi, Southeast Sulawesi, West Sulawesi, Maluku and North Maluku. While the province of North Sulawesi and Gorontalo decreased in 2012 increase again until 2014. Papua Province experienced a decline in production of micro and small industries from 2011 to 2013. West Papua Province experienced an unstable production growth due to an increase and decrease every year.

Table 1. Small and Micro Production Index by Province

Province	Average Annual 2011	Average Annual 2012	Average Annual 2013	Average Annual 2014	Average Annual 2015
Aceh	114,45	116,97	109,49	119,65	120,85
Sumatera Utara	101,82	102,53	106,00	110,89	108,93
Sumatera Barat	108,27	105,11	113,06	110,43	106,28
R i a u	101,46	98,22	102,89	108,05	105,19
J a m b i	116,21	102,74	102,01	103,56	109,48
Sumatera Selatan	104,28	106,90	108,62	114,87	111,76
Bengkulu	112,96	105,94	102,05	111,42	111,75
Lampung	102,17	106,62	102,87	107,11	115,90
Kep. Bangka Belitung	109,38	110,62	110,09	110,36	106,26
Kepulauan Riau	103,46	100,35	102,17	110,99	125,83
DKI Jakarta	102,43	109,57	124,13	132,64	139,42
Jawa Barat	105,90	107,73	120,14	121,80	122,95
Jawa Tengah	101,48	105,96	117,12	121,11	125,36
DI Yogyakarta	106,56	100,94	113,40	117,89	113,41
Jawa Timur	109,69	114,93	125,25	130,87	131,82
Banten	103,00	114,05	114,68	122,49	127,37
B a l i	98,52	96,86	115,16	120,68	132,37
Nusa Tenggara Barat	99,19	104,56	111,33	118,30	115,05
Nusa Tenggara Timur	96,53	101,63	99,85	102,80	109,47
Kalimantan Barat	100,57	107,57	114,07	113,66	118,47
Kalimantan Tengah	111,30	106,48	101,30	106,09	111,69
Kalimantan Selatan	100,02	99,52	108,06	113,36	121,00
Kalimantan Timur	102,50	98,18	108,54	111,46	112,43
Kalimantan Utara	-	-	-	-	95,16
Sulawesi Utara	122,95	116,65	117,36	121,56	119,23
Sulawesi Tengah	101,17	110,72	115,33	131,70	137,62
Sulawesi Selatan	100,98	111,49	104,20	116,21	108,60
Sulawesi Tenggara	98,38	106,11	111,57	128,40	132,34
Gorontalo	107,64	104,48	119,74	121,57	132,94

Sulawesi Barat	100,74	105,43	106,78	112,55	125,05
Maluku	107,97	111,11	117,78	126,64	136,88
Maluku Utara	100,98	104,33	123,21	134,69	141,78
Papua Barat	106,61	112,54	106,72	113,24	125,83
Papua	111,57	109,70	106,85	109,03	119,45
Indonesia	104,71	108,97	117,15	122,91	125,56

Data source: CPM, 2015

Overall, the development of micro and small industry production in Indonesia based on production index data can be seen on the graph of Figure 1. Based on the graph, in 2011, always increased every quarter in a row by 1.5 points, 2.27 points, and 4.77 points. In 2012, the average decline in the second quarter. In 2013 and 2014 the average experienced an increase in the second quarter. In 2015, the data available only the first quarter amounted to 125.56 points.



Figure 1 Graph of Production Index of Micro and Small Industry

The average index of production of micro and small industries is proportional to the growth of production data as shown in the graph. Figure 2. In the graph, the year 2011 always increased production every quarter, in 2012, decreased production in the second quarter, 2013 and 2014 experienced an increase in production in the second quarter.



Figure 2. Graph of Production Growth of Micro and Small Industry.

When viewed from the number of micro and small enterprises in Indonesia each year, the growth of micro enterprises is much higher than that of small industrial enterprises. If categorized, micro industry company always increase, this can be seen with the increase of micro industry company from 2010 until 2014. While the development of small industry happened increase and decrease or unstable from year 2010

until 2014. Average percentage comparison between number of industrial company micro and small from 2010 to 2014 was 88.34% versus 11.66%.

The input value is the cost incurred in the production process consisting of the cost of raw materials, fuel, electric power, gas, building rental, machinery and equipment and non-industrial services (BPS, 2015). Based on BPS data from 2010 to 2014, the value of micro industry inputs in Indonesia had dropped considerably in 2011 at Rp. 15.520.641.000, - and gradually increased continuously until the year 2014 is Rp. 146.932.394.000, -. While the use of the industry's small input value of the highest in 2013 amounted to Rp. 201.018.097.000, -. The increase is likely to occur along with rising prices of raw materials, fuel, and others. Visually, the input values used from 2010 to 2014 can be viewed on the graph of Figure 3.

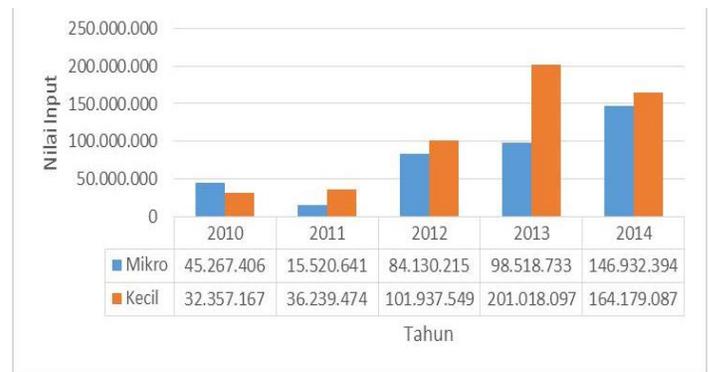


Figure 3. Graph of input value of micro and small industries

In addition to the input value, micro and small industries also definitely have an output value. The output value is the output value generated from the process of industrial activity consisting of the products of the production process, the electricity sold, the received industrial services of the other party, the difference in the stock value of the intermediate goods, and other receipts from non-industrial services (BPS, 2015). Based on BPS data from 2010 to 2014, the lowest value of micro industry output also occurred in 2011 which amounted to Rp.28.227.450.000, -. This is because the input value is also small. While the value of small industrial output also increased in 2013. The development of the value of micro and small industry output can be seen on the graph of Figure 4.

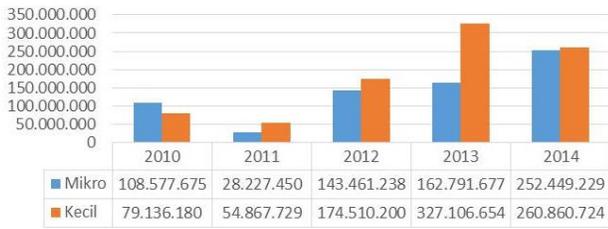


Figure 4. Graph of output value of micro and small industries

The difference between input value and output value is also called value added (BPS, 2015). The highest added value of micro industry from 2010 to 2014 is in 2014 amounting to Rp. 105,516,835,000, -. While the smallest added value of small industries occurred in the year 2013 which amounted to Rp. 126,088,561,000, -. In 2014, the value added of small industries decreased compared to the year 2013. The graph showing the development of value added micro and small industries can be seen in Figure 5.

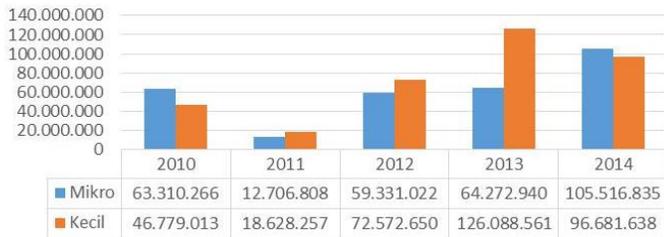


Figure 5. Value-added graph of micro and small industries

The Absorption of Manpower of Micro and Small Industry in Indonesia. The number of workers is the number of workers/employees on average per day of work both paid workers and unpaid workers (BPS, 2015). The number of micro industry workforce in 2014 reached 6,039,855 people (72.23%). The number increased compared with the previous year. The number of small industry workforce decreased in the year 2014 reached 2,322,891 people (27.77%) compared with the previous year. This happens because the number of business units, investment value, output value and minimum wage of micro and small business sector simultaneously have a significant effect on the amount of labor as stated by Setiawan (2010). Although the total number of micro and small enterprises in 2014 has increased more than in 2013, the number of workers in 2014 has decreased more than in 2013. The graph showing the growth in the number of micro and small enterprises in Indonesia can be seen in Figure 6.



Figure 6. Graph of micro and small industry workforce

The development of micro and small industries can also be seen based on the costs incurred for the workforce. Based on BPS data in 2015, spending on micro industry workforce is not directly proportional to the increasing number of companies and the number of workers. Figure 8 shows a graph of costs incurred for micro and small industry workforce. On the graph from 2012 to 2014 shows a decrease in the costs incurred for micro industry workforce. In fact, the number of workers in these years is relatively increasing as seen in Figure 7. However, the costs incurred for small industries are directly proportional to the amount of labor available.

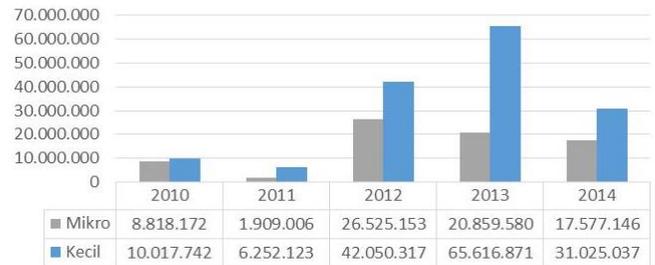


Figure 7. Expenditure graphs for micro and small industry workforce

5 CONCLUSION AND SUGGESTION

Conclusion

- 1) The development of micro and small industries in various regions in Indonesia which tend to increase from 2011 to 2015 first quarter is North Sumatra South Sumatra, DKI Jakarta, West Java, Central Java, East Java, Banten, West Nusa Tenggara, West Kalimantan, Central Sulawesi, South Sulawesi, Southeast Sulawesi, West Sulawesi, Maluku and North Maluku.
- 2) The growth of micro industry tends to increase compared to the growth of small industry from 2010 until 2014. This can be seen from the comparison between the number of micro and small industry companies that is 88.34% versus 11.66%.
- 3) The absorption of micro industry workforce reached 72.23% in 2014 and 27.77% of small industry workforce.

Suggestion

Based on the analysis of micro and small industry development in Indonesia in 2010 - 2014, the authors suggest that although the growth of micro and small industries in most provinces in Indonesia has increased, but there are still some provinces still experiencing instability of industrial growth. Therefore, for provinces where industry growth is still low should be a priority for the government to provide capital assistance, facilities and infrastructure, as well as everything needed to improve the growth of micro and small industries in the region.

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