

# Analysis Of The Performance Of The Manufacturing Industry Sector In East Java Province And Implications For Strategy Preparation

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**Abstract:** This study discusses the performance of the manufacturing industry sector in East Java Province and its implications for strategy formulation. The manufacturing industry has the potential to be utilized, so research on industrial performance in East Java Province is important to do in an effort to explain the importance of having planning regarding development policies in this sector. The importance of implementing this policy is based on theoretical considerations that the development policy of the manufacturing industry sector must be in a policy framework that is able to place the priority of industrial sector development in a focused manner on industries with high productivity and high competitiveness so that they are not trapped in broad-based industrial policies (broad base strategy), but does not have a competitive advantage with other manufacturing industry products. In this study, the variables are Output, Industries, Labor, Labor Cost, Input Costs, and Value Added with 11 Subsectors of the manufacturing industry.

**Keyword:** Performance, Output, Industries, Labor, Labor Cost, Input Costs, Value Added, Panels Data

## 1 INTRODUCTION

The economy of East Java Province achieved a rapid achievement in 2011. East Java's economic growth in 2012 was 7.5 %, this is because East Java Province has a large potential compared to other regions in Indonesia. This shows that the economic potential of East Java which refers to its Gross Regional Domestic Product value has a strategic role in the national arena. This rapid economic growth can grow even greater if it is driven by the linkages between good economic sectors. Conversely, if there is a gap, then this can eventually lead to problems, which if examined in a macro context, are very detrimental to the development process to be achieved. The government must also be able to identify what sectors are growing rapidly in the region. The sector must certainly have advantages or have more value to attract markets outside the region or can be exported in the future and can be developed optimally. Sectors that are the leading sectors need to be encouraged, developed, and synergized with other related sectors. Some sectors are said to synergize if the growth of one sector will encourage other sectors to grow. And vice versa so that there is a significant relationship, which in turn will accelerate regional economic growth.

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**Figure 1.1:** Contributors of Three Sectors Gross Regional Domestic Product 2000-2012 East Java Province

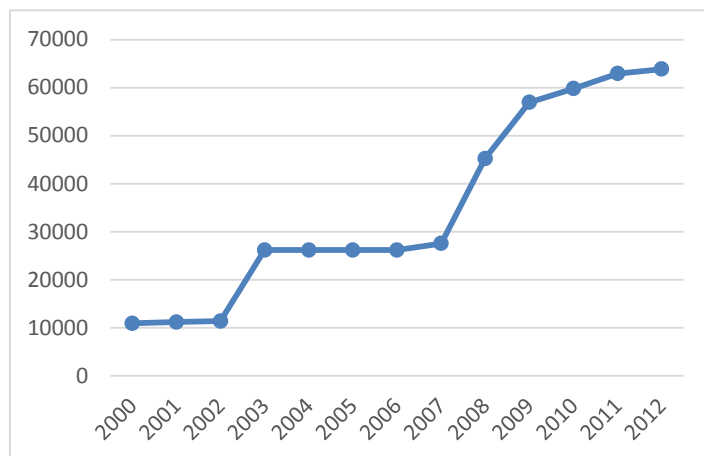


Source: BPS (2018)

Gross Regional Domestic Product can be observed in three sides, the production, income and expenditure sides. There are several items in the sector or sub-sector in gross regional domestic products at current prices, agriculture, mining and quarrying, manufacturing, electricity, gas and water, construction, trade, hotels and restaurants, transportation and communication, finance, leasing and company services and the last is services. However, among the 9 sectors, the most prominent sectors contributing were the trade, hotel and restaurant sector, the manufacturing industry sector, and the agricultural sector with a stable and significant contribution from 2000 to 2012. The growth of the industrial sector in East Java Province is very fast and growing, this is seen from its contribution to economic growth and the many established local companies, and the many foreign companies that enter the East Java Province. Basically, companies that invest in East Java Province are mostly companies based on the food industry. Other industrial sub-sectors that have quite advanced development in East Java Province, industries that are generally engaged in technology. Industries that are engaged in technology are far more developed than in the past 3 years. Free market policy allows the production of goods to be closer to the market share and consumers. Many electronic products of various brands are

produced in East Java Province. In line with increasingly advanced technology which can also have a major influence on industrial growth in East Java Province. Based on data from the Staistik Central Agency (2018) industries in East Java Province from 2000 to 2012 experienced steady growth from year to year with a total of 599,994 industries in 2000 to 2012 with the industries continuing to stabilize and increasing to 795,410 industries. It is evident that the industrial sector can be the leading sector or can raise other related sectors such as the agricultural sector, transportation and communication sector, financial sector, leasing and services and other sectors so that it can accelerate economic growth. In this case, it can be known that the progress of a nation's economic decline is usually measured by its success in carrying out the industrialization process. Refers to developed countries where the industrialization process is very important for the country's economy. Along with the increasing industrial growth in East Java Province, labor in this industrial sector has also increased from year to year as can be seen in Figure 1.4 with 2,141,870 people in 2000 to continue to increase by 3,069,575 people to in 2012. This with the indirect growth of industry can also have an impact on the provision of employment and maximizing employment and can overcome the high level of unemployment and reduce poverty in the area. The development and performance of the industrial sector is very rapid, this is seen from the output produced from the industrial activity process, which is the result of the value of production. Components of production value are goods produced from the production process. Industrial production value in 2008 was valued at 100,071 (billion), then increased sharply in 2009 with a production value of 179,926 (billion) and continued to increase in 2010 with a value of 190,107 (billion), in 2011 with a production value of 200,328 (billion) and until 2012 there was only a less significant increase, namely the production value of 203,287 (billion). But in line with its significant growth as a whole, this industrial sector does not always run smoothly, this can be flashbacked back during the monetary crisis of 1998 where not only in DKI Jakarta Province but its impact slowly spread to various provinces, one of which was East Java Province which began rocked by the economic crisis given that East Java Province is the economic and business center of Java. The prices of goods are slowly crawling, especially goods that have imported ingredients. Recognizing the price of daily basic necessities certainly hitting the community, and almost unreachable. The economic crisis that intensified in 1998 was also called the monetary crisis or financial crisis. In terms of investment, the impact after the economic crisis did not only affect the small people and market traders, but also began to afflict large companies, especially the industrial world. Industries that need raw materials that must be imported from abroad have difficulty bringing these materials because the value of the Dollar soars. As a result, their pay for imported goods has fallen sharply. With these conditions it is not possible for investors to invest in East Java Province even though the economic crisis has passed for 2 years.

**Figure 1.2 :** Industrial Investment in East Java Province from 2000 to 2012



Source: BPS (2018)

In Figure 1.2, the investment conditions in East Java province are improving from year to year. Sukirno (2000) argues that the growth of the industrial sector is inseparable from the role of investment. Investment is one of the factors of production whose influence is very dominant in increasing production as reflected in the rate of economic growth. Investment is expenditure made by entrepreneurs to buy capital goods and other expenses for production activities. Investment can be obtained from the accumulation of capital obtained from savings and a portion of current time income which is set aside to be able to increase production and income in the future. Based on this background, it can be seen that the formulation of the problem to be raised in this study is how the performance of the manufacturing industry sector in East Java Province from 2000 to 2013 and how the development strategy of the manufacturing industry sector in East Java Province.

## 2 LITERATUR REVIEW

Theory of production consists of several analyzes of how entrepreneurs should be at a certain level of technology, able to combine various types of production factors to produce a certain number of products as efficiently as possible. So, the emphasis of the production process in production theory is an economic activity that combines various kinds of inputs (inputs) to produce an output (output). In this production process, goods or services have more added value or use. A relationship like this exists in a production function, Soekartawi (1990). Production function as a technical relationship between input and output, where this relationship shows output as a function of input. Production functions in several production economic discussions are in great demand and are considered important because the production function can explain the relationship between production factors and production itself directly and the relationship can be more easily understood and the production function is able to know the relationship between the variables explained (Q), with variables which explains (X) and at the same time is able to know the relationship between explanatory variables (between X and X), Soekartawi (1990). Nicholson (1999), the short term period refers to one or more production factors that cannot be changed. In the short term, a producer can change the input X1 used in the production process, but cannot

change the input X2. So input X2 is a fixed input, while input X1 is a variable input. In this case what needs to be considered is that the Total Production curve starts from the origin (in other words it does not have an intercept); because if the manufacturer does not use L input at all then the output is also zero. Output can be changed in the short term by making adjustments to variable (input) resources, but the size (scale) of the business is fixed in the short term. Changes in the level of output in the short term, also changes the costs which consist of two categories, namely fixed costs and variable costs. Fixed costs occur because of fixed resources, and variable costs occur because of variable resources. Long-term fixed resources (inputs) do not exist, because all inputs in the long run are variables, so to change output takes a long time. The length of time this long varies between industries. This is because the nature of each production process also varies. The long term is not just a combination of a number of short-term periods, it should still be interpreted as a planning period. The choice of a combination of inputs in the long run is flexible, and this flexibility applies to companies that have not implemented their plans. One of the basic frameworks in industrial economic analysis is the relationship between Performance Behavior Structure or Structure Conduct Performance (SCP). The simplest relationship of the three variables is a linear relationship in which the structure affects behavior then behavior affects performance. In SCP the relationship between the three components affects each other including the existence of other factors such as technology, progressivity, strategies and efforts to encourage sales. According to traditional groups, monopolistic behavior can be determined based on the theory of market power from the basic form of perfect competition and monopoly. By paying attention to these basic conditions, the company (firm) will carry out a competitive strategy through both price and marketing strategies. Djodipuro (1994) a collection of similar companies is called industry. Company (firm) is a production unit engaged in a particular field. This field can be in the fields of agriculture, processing and services. Industry in the narrow sense is a collection of companies that produce similar products where there are similarities in the raw materials used, processes, end products and end consumers. In a broader sense, industry is a collection of companies that produce goods and services with positive and high cross elasticity (Kuncoro, 2007). Industry in the narrow sense is a collection of companies that produce similar products where there are similarities in the raw materials used, processes, forms of end products, and end consumers. In a broader sense, industry can be defined as a collection of companies that produce goods and services with positive and high cross elasticities of demand (Kuncoro, 2007). Industry has two meanings. First, industry can mean a set of similar companies, the two industries can refer to an economic sector in which there are productive activities that process raw materials into finished goods or semi-finished goods (Dumairy, 1996).

### 3 RESEARCH METHODOLOGY

#### 3.1 Data

The type of research used in this study is a type of quantitative research. This research was conducted in East Java Province with 11 leading industrial sub-sectors namely the Food Industry; Tobacco Processing Industry; Textile industry; Apparel Industry; Leather Industry, Leather Goods and Footwear; Wood industry; Printing Industry and Recording Media Reproduction;

Manufacture of chemicals and goods from chemicals; Rubber Industry, Rubber and Plastic Goods; Motorized Vehicle Industry, Trailers and Semi Trailers; and Furniture Industry. The consideration is that the contribution of the 11 manufacturing industries sub-sector in East Java Province is relatively greater when compared to other sectors and other sub-sectors. Besides that, East Java Province has considerable potential in the manufacturing industry sector which is able to help drive regional and national economic growth. The method of data collection is a systematic procedure and standard in order to obtain quantitative data, besides that the method of data collection has a technical function to enable researchers to collect data in such a way that the numbers can be given to the object under study. The type of data used is panel data which is a combination of time series data and cross section, which uses 13 years from 2000 to 2013 and uses 11 cross sections, namely the manufacturing industry sub-sector. The data sources used to achieve the objectives in this study are fully obtained through literature studies both from the BPS literature, journals and previous research as a method of collecting data, so that sampling techniques and questionnaires are not needed. As a supporter, reference books, printed and electronic newspapers are used, as well as from browsing internet websites related to manufacturing industry performance problems. There are several previous studies related to this study. There are Sagala dan Ibnu (2013), Sitorus (2012), Wadji (2012), Chandran and Munusamy (2009), Ilyas, Ahmad, Afzal, and Mahmood (2010), Hutasuhut (2006), Puspitowati (2001), Landiyanto (2005), Jeni Wulandari (2009), Sri Suhartini (2012), Nur Afni Evalia (2015), Djoni Tarigan (2008).

#### 3.2 Methodolgy

The analytical method used in this study is a panel data analysis method that combines time series and cross section data. In the panel data analysis method there are several models that must be tested to determine which model is most suitable to use, including the Common Effect, Fixed Effect, and Random Effect. In determining which model is appropriate, several tests will be carried out which include the Chow Test, Hausman Test, and the Lagrange Multiplier Test.

The equation for each model is as follows:

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \varepsilon_{it} \quad \text{eq. (1)}$$

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \alpha_{it} + \varepsilon_{it} \quad \text{eq. (2)}$$

$$Y_{it} = \beta_0 + \beta_1 X_{it} + w_{it} \quad \text{eq. (3)}$$

Equation (1) is the equation on Common Effect, equation (2) for the Fixed Effect model, and equation (3) for the Random Effect model. Where Y is the dependent variable, X is the independent variable,  $\beta$  is the coefficient of each variable, i shows individuals from data cross section, t shows time series data,  $\varepsilon$  is error,  $\alpha$  shows intercept, and w is random and not error correlates with the explanatory variables observed. With the equation model used in this study are :

$$NO_{it} = \beta_0 + \beta_1 IND_{it} + \beta_2 TK_{it} + \beta_3 LC_{it} + \beta_4 BI_{it} + \beta_5 NT_{it} \varepsilon \quad (4)$$

### 4 RESULT

Based on the results obtained from the panel data estimation by testing to determine the model between Common Effect, Fixed Effect, and Random. Here is a summary of the estimation results for performance of industries :

**Table 1** : Estimates of Common Effect, Fixed Effect, and Random Effect

Variabel	Common Effect		Fixed Effect		Random Effect	
	$\beta$	Prob	$\beta$	Prob	$\beta$	Prob
Jumlah Industri	-7478177.	0.0000	5494689.	0.0248	-7307378.	0.0000
Jumlah Tenaga Kerja	84457.89	0.0000	65554.42	0.0000	85328.21	0.0000
Labor Cost	-1.040.439	0.1419	0.413756	0.3643	-0.978647	0.0209
Biaya Input	1.040.187	0.0000	1.041.968	0.0000	1.037.479	0.0000
Nilai Tambah	0.872529	0.0000	0.568269	0.0000	0.870243	0.0000
R-Square	0.983068		0.994557		0.983123	

Source: BPS (2018)

In Table 1 shows the results of the model ability estimation in explaining the variations of each independent variable used by the R-Square number can be approved by the Number of Industries, Number of Labor, Labor Costs, Input Costs, Value Added model of the effect remains good in explaining the related -one variable. Based on the estimation results attached in Table 1, the results show that for the Industry Total variable has a positive coefficient with a value of 5494689, the Number of Labor has a positive coefficient with a value of 65554.42, Input Cost has a positive coefficient with a value of 1.041968, and Add Value also has a positive coefficient with the value of 0.568269 means that the increase in each of these variables can increase the variable Output Value (Performance) of the East Java Province. While the Labor Cost variable has a positive coefficient of 0.413756 but the probability is not significant with a probability value of 0.3643 greater than the significance level of 0.05 or 5%. Whereas for the coefficient value for each cross section which shows differences in behavior, the coefficient value of each individual is different so that the impact on industrial performance if differentiated by cross section will give different effects. Where the coefficient values for 10 (Food Industry), 13 (Textile Industry), 14 (Industrial Apparel), 15 (Leather Industry, Leather Goods and Footwear), 16 (Wood Industry), and 22 (Rubber Industry, Goods from Rubber and Plastics) have negative values for each coefficient,  $-1.34E + 10$  for 10 (Food Industry),  $-2.27E + 08$  for 13 (Textile Industry),  $-1.92E + 08$  for 14 (Garment Industry),  $-4.03E + 08$  for 15 (Leather Industry, Leather Goods and Footwear),  $-8.84E + 08$  for 16 (Wood Industry), and  $-2.45E + 09$  for 22 (Rubber Industry, Rubber and Plastic Goods). Whereas 12 (Tobacco Processing Industry), 18 (Industrial Printing and Reproduction of Recording Media), 20 (Industrial Chemicals and Goods from Chemicals), and 29 (Industrial Vehicles, Trailers and Semi Trailers) have a positive coefficient of  $1.04 E + 10$  for 12 (Tobacco Processing Industry),  $2.48E + 09$  for 18 (Recording Media Printing and Reproduction Industry),  $1.84E + 09$  for 20 (Chemical Industry and Chemical Material), and  $2.88E + 09$  for 29 (Motorized Vehicle Industry, Trailers and Semi Trailers)

## 5 DISCUSSION

### 5.1 Impact Industries on Industrial Performance

In accordance with the estimation results in the previous sub-chapter, it is known that the number of industries has a positive impact and has a significant effect on the performance of the manufacturing industry with a significance value of 0.0248, which means that the greater the number of industries in East Java Province economy of East Java Province. The large contribution of the manufacturing sector to the economy has caused the economic cycle to be inseparable from the dynamics of the manufacturing sector. The boom and bust cycle in the

economy is often associated with the number of companies entering and leaving an industry. In addition to the economy, the dynamics of the company also affect the decline in output and employment opportunities in the manufacturing sector (Yati Kurniati dan Yanfitri, 2010). Total of industries entering and leaving also has an effect on macroeconomic fluctuations for several reasons. First, the dynamics may be due to the structure of the economy facing a shock or policy change. Second, the number of companies that enter and exit is useful to see the implications of positive (boom) or negative (bust) shocks. Some studies provide empirical evidence of the effect of business cycles on the dynamics of the manufacturing industry. McQueen and Thorley (1993) state that manufacturing industry production capacity in the US will decline and slow down during the recession. Most studies analyze the relationship between the characteristics of manufacturing companies with economic cycles that focus on developed countries. No studies have conducted analyzes to show patterns in the manufacturing sector in a number of business cycles, especially in developing countries. Explicitly, this study aims to (i) find out the effect of boom / bust cycles on company entry / exit rates, (ii) find out the characteristics of companies that enter the industry during the boom / bust period, and (iii) measure the effect of changes in company characteristics on opportunities for companies to enter the industry during the boom / bust period.

### 5.2 Impact of Labor in Industrial Performance

In accordance with the estimation results in the previous sub-chapter, it has been known that the number of workers has a positive impact and has a significant effect on the performance of the manufacturing industry with a significance value of 0,000 which means that the more labor force in the East Java Province industry further increasing the economic growth of East Java Province. The employment situation in East Java has improved relatively compared to the same period the previous year. The number of workforce in East Java Province as of August 2012 was 19.90 million people, an increase compared to employment data in August 2011 (19.76 million). This increase has caused a decline in the ratio of unemployed people to the number of workforce commonly referred to as the Open Unemployment Rate (TPT). During the reporting period, TPT recorded a decline from 4.16% to 4.12%. Sectorally, the largest employment absorption distribution in East Java in the quarter under review was still dominated by the three leading sectors, namely agriculture with a proportion of 39.30% followed by the trade sector with a proportion of 20.17%, followed by industrial sectors absorbing 14, 91% of the total workforce in East Java. The dominance of the agricultural sector characterizes rural areas, which are the largest areas in East Java. However, the decline in the agricultural land sector due to the conversion of land for settlements and industry is believed to have an impact on the decline of labor in this sector and shift to other sectors.

### 5.3 Impact of Labor Cost on Industrial Performance

In accordance with the estimation results in the previous sub-chapter, it is known that Labor Cost has a negative impact and has no significant effect on the performance of the manufacturing industry with a significance value of 0.3643, which means that more Labor Costs are incurred by industries in East Java Province this will further reduce the performance of the industrial sector in East Java Province. This is in accordance with the wage theory proposed by Nicholson (1999). Nicholson

(1999) explains that in the labor market theory and the labor cost effect, explaining that if a company establishes higher labor costs, it will cause excess in the labor market because the increase in labor cost levels causes an increase in production costs in the real sector, then the real sector will reduce usage labor. That means Labor Cost has a negative effect on industry performance.

#### 5.4 Impact of Input Costs on Industrial Performance

Input costs can be said as investment, capital, and raw materials of a company. From the regression results indicate that the value of the probability of input costs is 0,000 this value is smaller than the value of  $\alpha$  5% or 0.05 means that input costs have a positive effect on the performance of the industrial sector in East Java Province. In this case, it means that if the input costs increase, the performance of the industry will also increase or increase as well. This is because input costs are the capital of the company, as the higher the input maximum, the industry's performance will also increase as well. As explained in the theory of production functions according to Sadino Sukirno (1994) that the level of production of an item or service depends on the amount of capital, labor, natural resources and the level of technology used. Different quantities of production by themselves require a variety of different production factors, besides that a certain level of production can also be used by a combination of different production factors (Sukirno, 2000). Resources or inputs can be grouped into human resources (labor and managerial abilities or entrepreneurship), natural resources, and capital (Samsubar Saleh, 2000). The results of this study are in accordance with the theory in Sukirno's book (2002) in this case input costs are investments of a company, namely an increase in investment will increase aggregate demand and national income. Then the increase in aggregate demand will bring a change in the production capacity of an economy which will then be followed by an increase in the need for labor for the production process, which signifies increasing employment.

#### 5.5 Impact of Value Added on Industrial Performance

The estimation results in the previous sub-chapter, it is known that Added Value has a positive impact and has a significant effect on the performance of the manufacturing industry with a significance value of 0,000, which means that the greater the number of workers in the East Java Province industry, the more industrial growth will be. economy of East Java Province. Value added is the amount of output of a business after being reduced expenses or costs between them. Value added (market price) of large and medium industrial companies in East Java in 2011-2013 the value is always increasing. In 2011 the value added was 170.42 trillion rupiahs and in 2013 it was 264.45 trillion rupiahs. But in 2014 and 2015 the value dropped to 252.37 trillion rupiah and 248.83 trillion rupiah. Growth of large and medium industrial value added during the period 2011-2013 experienced positive growth, except for 2014 contracted by 4.57 percent compared to 2013. Dan contracted back in 2015 at 1.40 percent. Growth the highest occurred in 2013 which reached 39.59 percent. Manufacture of Electrical Equipment and Industrial Chemicals and Materials from Materials Chemistry always grows positively even though the percentage is small, while the Tool Industry Other Transportation and Industrial Products from Coal and Oil Refinery Earth since 2012-2015 has always experienced contractions or growth always negative. Manufacture of Electrical Equipment and Industrial Chemicals and Materials

from Materials Chemistry always grows positively even though the percentage is small, while the Tool Industry Other Transportation and Industrial Products from Coal and Oil Refinery Earth since 2012-2015 has always experienced contractions or growth always negative.

#### 5.6 Implications for Strategy Preparation

The contribution of the manufacturing sector to economic growth currently only reaches 18 percent of the National Gross Domestic Product (GDP). In fact, the government targets manufacturing contributions to the national economy to reach 30 percent. The Ministry of Industry will spur the performance of the metal, machinery, transportation and electronic industries (ILMATE) so that its contribution is significant to the manufacturing sector. In 2016, the ILMATE sector grew 3.87 percent and contributed 4.93 percent to the national total GDP. In order for the manufacturing industry to be able to reduce investment costs (capital costs), several steps must be taken, namely providing easy licensing, as well as issuing appropriate fiscal and non-fiscal incentives. In addition, the manufacturing industry should receive input costs and logistical costs that are able to strengthen competitiveness with priority concerns covering aspects of energy costs, improvement of labor regulations, availability of raw material supplies such as gas, and handling costs and efficient port services and logistics security. In the next 2 years the government must be able to make the domestic market an industrial baseload and attract investment in the non-existent industrial sector, increase installed production capacity and improve investment quality. These targets become KPI of the Ministry of Industry, Ministry of BUMN and BKPM. Meanwhile, the KPI for the Ministry of Commerce and the Ministry of Industry includes product diversification and industrial product export destinations. And, at the end of the working period, the cabinet at least determines the mastery of technology, R & D capabilities and production for environmentally friendly energy industries and strategic industries (mini hydro, biomass, processing of agro products, rare earth, new materials, health, IT applications), as the KPI Menristek and the Ministry of Industry. Furthermore, efforts to increase the productivity and competency of industrial workers become the KPI of the Ministry of Manpower. Industry that is rooted in the country will play a major role in the economy and providing employment, and is able to reduce dependence on imports. For some major industrial sectors the structure must be strengthened, such as processing minerals, agro, automotive and components, and the chemical industry. As a vehicle for its implementation, technopreneurship, an incentive system, the spirit of Indonesianism and pride in domestic products are absolutely grown. If it is necessary to merge several ministries to facilitate coordination, such as the Ministry of Trade, Ministry of Industry, Ministry of Energy and Mineral Resources, BPPT, and BKPM, it becomes a separate ministry. Efforts to restore industry performance while avoiding Indonesia from the 'Middle Income Trap' must begin now, given that time is an expensive item in the midst of the threat of chronic growth and globalization.

#### 6 CONCLUSION

If the industrial development of East Java Province is used as the backbone of economic development, the analysis of its success must be based on the basis of economic progress. The policies of industrial development that obviously do not have an impact on increasing economic value, it is necessary to review them. In

order for the industrialization in East Java Province to be approved, it needs to be regulated, deregulation, debureaucratization and liberalization related to the growth of the industrial sector need to be continuously developed. To support the ideals of industrialization, East Java Province also needs a reliable industrial information system and a clear direction of the world of education and research. On the other hand, the East Java industrial community also needs to be stimulated to increase efficiency and productivity, as well as sensitivity to market demand. With a short sentence can explain the future industry is 'market industry'. Only industries that are able to adjust to market demand will survive.

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## REFERENCES

- [1]. Djojodipuro, M. 1992. Teori Lokasi. Lembaga Penelitian Fakultas Ekonomi Universitas Indonesia. Jakarta.
- [2]. Dumairy. 1996. perekonomian Indonesia, Jakarta: Erlangga
- [3]. Evalia, N. A. (2015). Strategi pengembangan agroindustry gula semut aren. *Jurnal Manajemen & Agribisnis*, 12(1), 57-56.
- [4]. Hasibuan, Nurimansjah. 1994. Ekonomi Industri: persaingan, monopoli dan Regulasi. Jakarta: Penerbit PT Pusaka LP3ES Indonesia.
- [5]. Zeppel, Heather. 2005. Indigenous Ecotourism Sustainable Development and Management. United Kingdom: CAB International.
- [6]. Jaya, W.K. 2001. Ekonomi Industri. BPFE, Yogyakarta
- [7]. Wulandari, Jeni. 2009. Strategi Pengembangan Kawasan Industri Kecil Berbasis Komoditas Unggulan (Studi Kasus Kawasan Sentra Industri Keripik Kota Bandar Lampung). Ilmu Administrasi. Universitas Indonesia
- [8]. Kuncoro, Mudrajat. 2007. Ekonomika Industri Indonesia; Menuju Negara Industri Baru 2030. Yogyakarta: Penerbit Andi.
- [9]. Landiyanto, Erlangga Agustino. 2005. Kinerja Keuangan dan Strategi Pembangunan Kota di Era Otonomi Daerah: Studi Kasus Kota Surabaya. CURES Working Paper. No.5, Januari 2005.
- [10]. Nicholson, Walter. 2002. Mikroekonomi Intermediate dan Aplikasinya. Edisi ke-8. Jakarta: Erlangga.
- [11]. Partomo, Tiktik Sartika. 2008. Ekonomi Industri. Jakarta: Inti Prima.
- [12]. Undang-Undang Nomor 9 Tahun 1995 Tentang Perindustrian dan Perdagangan.
- [13]. Pindyck, Robert S. and Rubinfeld, Daniel. 1999. Mikro Ekonomi. Jilid 1, Prenhallindo.
- [14]. Sagala, Castarica Imelda dan Ibnu, Muhammad. 2013. Kinerja Usaha Agroindustri Kelanting Di Desa Karang Anyar Kecamatan Gedongtataan Kabupaten Pesawaran. JIIA, Vol. 1, No. 1.
- [15]. I Made Sandy. 1985. Geografi Regional Indonesia. Puri Margasari. Jakarta.
- [16]. Sitorus, Septiani. 2012. Analisis Struktur, Perilaku dan Kinerja Industri Kakao Di Indonesia. Bogor: Institut Pertanian Bogor.
- [17]. Soekartawi, 1994. Teori Ekonomi Produksi ; Dengan Pokok Bahasan analisis Fungsi Cobb-Douglas. Raja Grafindo Persada. Jakarta.
- [18]. Sukirno, 2000, Perindustrian Kecil, cetakan ketiga, Jakarta: Kanisius.
- [19]. Teguh, Muhammad. 2013. Ekonomi Industri. Raja Grafindo Persada, Jakarta.
- [20]. Wadji, Farid. 2012. Analisis Efisiensi Industri Kecil Berdasarkan Analisis Stochastic Frontier. *BENEFIT Jurnal Manajemen dan Bisnis* Volume 16, No. 1.