

MANUFACTURING INDUSTRY STRATEGY IN INCREASING THE ACCELERATION OF ECONOMIC GROWTH IN INDONESIA

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MANUFACTURING INDUSTRY STRATEGY IN INCREASING THE ACCELERATION OF ECONOMIC GROWTH IN INDONESIA

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Abstract. The purpose of this research is to identify the manufacturing industry's strategy for accelerating economic growth in Indonesia. The descriptive qualitative technique was used in this study. The data source used is secondary data obtained through a literature review or literature research. Industry in the manufacturing sector has provided 20.27% of ASEAN's national scale economy. This can be seen in the development of manufacturing sector activities in Indonesia, which allows them to transition from commodity-based to manufacture-based. The manufacturing industry strategy is Article 6.1.1.1 in order to accelerate Indonesia's economic development by implementing the industrial strategy 4.0, which is one of the plans for the establishment of the Indonesia Digital Industry Center.

Keywords: Industry, Economy, Manufacturing, Growth

INTRODUCTION

The industrial sector is very important for economic development because it has the ability to drive economic growth. The industrial sector also contributes to growth by being a productive component. The expansion of the industrial sector is not only marked by an increase in production volume, but also by an increase in the number of goods produced (Syara, 2019). The expansion of the manufacturing industry will spur the development of the agricultural sector which will provide raw materials for the industry.

Likewise, the service sector will grow, due to the existence of banking and marketing organizations that can drive growth in the manufacturing industry sector. As a result, job prospects will develop, and people's income will increase.

Indonesia is a developing country and the economic development activities carried out are aimed at reducing existing economic problems. Economic development will continue to develop if it is carried out in accordance with the right path so that it fits its goals and objectives. This is done through industrialization. The Manufacturing Industry almost always gets top priority in the development plans of developing countries. This industrial sector is used as a leader, which means that by carrying out industrial development it will increase other sectors in the services and agriculture sectors.

In Indonesia, the manufacturing industry sector is a sector that is experiencing very rapid development. This development was carried out during the New Order era with the existence of Law no. 1 of 1967 concerning Foreign Investment (PMA) which the government carried out with liberalization with the aim of attracting foreign capital to improve a weak economy. In Indonesia, industrial processes began to be carried out from 1950 to 1965 but were constrained by political matters which made this economic process not run smoothly. (E. P Lestari, 2017)

Manufacturing is one of the industries that was heavily affected by the Industrial Revolution 4.0. Not only in the manufacturing process, but also throughout the industrial value chain, resulting in the development of new digital business models to achieve high efficiency and higher product quality. The Industrial Revolution 4.0, on the other hand, raises concerns about the replacement of human workers by robots and the weakening of local companies. This fear is in line with research conducted by the International Labor Organization/ILO (2016), which predicts that automation will replace 56 percent of jobs in Indonesia, the Philippines, Thailand, Vietnam and Cambodia. (Nugroho & Wahyuni, 2019)

Important challenges faced by the Indonesian manufacturing industry sector include the possibility of disparities in the level of efficiency and productivity of each sub-sector of the Indonesian manufacturing industry. This problem can arise due to imbalances in market structure, namely the dominance of a large and dominant market share for certain types of business in each sub-sector of the manufacturing industry sector. In addition, empirical findings show that the level of technology utilization and productivity in the manufacturing industry sector in Indonesia is still relatively low when compared to capital and labor productivity. (Etty Puji Lestari & WSU, 2017).

Table 1. Manufacturing Industry GDP Growth Rate in Indonesia

Year	industrial GDP manufacture
2018	4,27

2019	3,8
2020	-2.93
2021	3.39

Source: Central Bureau of Statistics of Indonesia

If seen from the data on the GDP growth rate of the manufacturing industry in Indonesia through data from the Central Statistics Agency that in 2017 it was at 4.29, in 2018 4.27, in 2019 3.8, in 2020 -2.93, and in 2021 3.39. We can see that there has been a decline in the development of the Indonesian manufacturing industry in 2019 and 2020 Then in 2021 the Indonesian manufacturing industry increasing again and what makes the increase in the development of the manufacturing industry in 2021.

One of the performance indicators of economic development needed for macroeconomic evaluation and planning is an increase in Gross Regional Domestic Product (GRDP) both at current and constant prices. Looking at the GDP figures can provide an overview of the implementation of development that has taken place. (Sholihah et al., 2017)

THEORETICAL STUDY

1. Manufacturing Industry

Based on Law No. 3 of 2014 concerning Industry, specifically article 1 paragraph 2, industry is all forms of economic activity that process raw materials and/or utilize industrial resources to produce goods that have added value or higher benefits, including industrial services. Based on Webster's New World Dictionary, the term industry refers to "manufacturing productive enterprises collectively, especially as distinguished from agriculture". Still according to the same source, industry also means "any large-scale business activity", for example the food industry, the textile industry, the internet industry, and so on. Meanwhile, according to the Central Statistics Agency (BPS), industry is a business or activity of processing raw materials or semi-finished goods into finished goods that have added value for profit. Industry is also often interpreted as a group of companies that have similar products. Based on the business sector, the industry is grouped into the processing industry and industrial services. (Nikensari, 2012)

industry. The manufacturing industry transforms raw materials into finished goods that have a sale value and can be consumed or used by consumers. Raw materials from the manufacturing industry are finished goods produced by the primary industry. The manufacturing industry often does not take raw materials directly from natural resources, so the manufacturing industry is also called a non-extractive industry. The manufacturing industry produces products on a very large scale (mass production).

Technological developments greatly affect the manufacturing industry. Production of finished goods, which used to be done on a household scale in rural areas, is now being produced on a larger scale in factories. With the help of machine or robotic technology, the production process can be accelerated.

The main characteristic of the manufacturing industry is that it has a majority market share in the country. The main consumers of domestic production come from within the country. The manufacturing industry in Indonesia is more focused on the domestic market share, although some of the industry has exported products abroad. The manufacturing industry is also the most resilient industry, especially in times of crisis. The manufacturing industry in Indonesia, especially the consumer product industry, is always used by the public. Even in difficult economic conditions, this product is more stable. (Sukamulja, 2021)

2. Economic growth

Economic growth is one of the important indicators in analyzing economic development that occurs in a country. In short, economic growth shows the extent to which economic activity generates additional income for the community in a certain period. Meanwhile, according to Kuznets, economic growth is an increase in the long-term capacity of the country concerned to provide various economic goods to its population. Therefore, it is not surprising that at the beginning of a country's economic development, development planning is generally oriented towards growth issues. (Arifin, nd)

In its development until now there are various theories of economic growth. This theory itself appears a lot to explain the growth cycle as well as the factors that directly influence an increase in the national economy by experts. Among the many theories that have sprung up, here are some of them:

3. Solow-Swan Growth Theory

This theory of economic growth was developed by Robert Solow (Massachusetts Institute of Technology) and Trevor Swan (The Australian National University). According to this theory, economic growth depends on the increase in the supply of factors of production and the level of technological progress. This view is based on classical analysis, that the economy will continue to experience full employment and the capacity of capital equipment will remain fully utilized at all times.

Furthermore, the capital-output ratio (COR) can change and is dynamic. To create a certain amount of output, different capital can be used with the help of different labor according to what is needed. If more capital is used, less labor is needed, conversely, less capital is used, more labor is used. With this flexibility, an economy has unlimited freedom in determining the combination of capital and labor that will be used to produce a certain level of output.

The Solow-Swan growth theory uses the production function approach that was developed by Charles Cobb and Paul Douglas, known as the Cobb Douglas production function. As with the Harrod-Domar model, the Solow-Swan model focuses on how population, capital accumulation, technological progress and output interact in the process of economic growth. (Hidayat, 2017)

4. Historical Theory

This theory was developed by many economists, such as Karl Buicher, Werner Sombart, and Frederick List, who have different views but focus on people's economic activities. According to Karl, the relationship between producers and consumers affects the country's economic growth, which itself occurs in communities, cities, and the whole world. Werner Sombart, on the other hand,

classifying the role of society in economic growth from the closed economic stage, industrial growth, to the capitalist stage. (Christianti, 2022)

RESEARCH METHODS

Qualitative descriptive method is a type of research method that will be used in this study. The data sources used come from secondary data through literature review or so-called literature study which is collected through websites, journals, bulletins, which are viewed in digital form and according to the theme to be examined. (Purboseno et al., 2022) The data collected is secondary data, obtained from literature, journals, newspapers, and the Central Statistics Agency (BPS). The data needed includes the GDP growth rate of the Manufacturing Industry in the 2017-2021 period.

RESULTS AND DISCUSSION

The existence of increasing and sustainable economic growth is the most important requirement in implementing the method so that Indonesia becomes a developed country. One of the things that must be done so that this goal can be realized is to seek support from several sectors, one of which is in the manufacturing sector. This has the same direction to continue to develop the manufacturing industry in providing support for economic growth and improving the ongoing transactions. The government also continues to provide a consistent way to provide support in the manufacturing sector from the existence of several established policies.

In developing economic growth in Indonesia, we need a manufacturing industry. At present, the manufacturing industry has contributed 20.27% through a national-scale economy in ASEAN. This can be seen through the development of manufacturing industry activities in Indonesia so that they are able to replace commodity-based and change to manufacture-based. Then, it can be seen that the industry

This manufacturing sector has considerable potential to increase employment, provide an increase in the value of raw materials, as well as an increase in foreign exchange sources.

The manufacturing industry strategy in increasing the acceleration of Indonesia's economic growth is carried out by implementing the industry 4.0 strategy which is one of the plans for the establishment of the Indonesia Digital Industry Center 4.0 (PIDI 4.0) which is carried out with the concept of smart buildings. The purpose of the building is a shelter or home for research, creation, and development regarding intelligence that will be made by Indonesia in the industrial era 4.0 so that it continues to assist and support industrial activities carried out, especially in the manufacturing sector.

The making roadmap for industry 4.0 was initially only focused on 5 strategic industrial sectors nationally through the GDP (Gross Domestic Product) level, namely in the manufacturing sector as much as 57%, manufacturing industry exports as much as 64% and employment in the industrial sector as much as 59%. This includes several fields, namely: (Utomo & Harjono, 2021)

1. The industry in the food and beverage sector will become a strong and leading industry in ASEAN countries, especially the food and beverage powerhouse.
2. The automotive industry will be the most important industry in meeting the needs of the domestic and foreign market for motorized vehicles, especially for Electrified Vehicle (EV) and internal combustion engines (ICE).
3. Industry in the field of electronics, will be an industry that is able to meet the needs of foreign and domestic markets. Like a bunch of electronics.
4. The chemical industry must be prepared as an industry that knows the desires of domestic and foreign consumers.
5. Industries in the field of textiles and textile products will be used as industries that create clothing products such as sportswear.

With the industrial revolution being carried out, it will be able to provide changes in the way humans live life and survive using technological advances that provide information and have a positive impact on life in the wider community. Through technological developments that continue to develop over time, there are breakthroughs in the field of artificial intelligence, this happens because technology can replace the role of humans in carrying out work automatically.

When an industrial business in the manufacturing sector carries out the industrial revolution 4.0 strategy, of course all activities will be carried out automatically due to the development of increasingly developing technological media. In today's era, only a few industries still use manual media. Because with the development of technology, companies are more effective and efficient in carrying out their business activities. Likewise, people will get the desired goods more easily and at affordable prices.

Through the media, the industrial revolution changed the way products were made, which were originally done by humans, so they used machine power. This is in line with the development of science so that it is able to create sophisticated and useful technology in increasing the acceleration of economic growth in Indonesia because it is able to accelerate the production of goods.

The following are some of the principles that the industrial revolution 4.0 has in the economic field, namely: (Istikomah & Arsanti, nd)

1. The interaction is carried out with the help of machine capabilities with the existence of sensor devices, namely being able to communicate via the internet.
2. There is a transportation that can provide information through a system that has been provided through a virtual copy using sensor data.
3. The existence of assistance provided technically through a system that can be used as a tool to provide an evaluation of the right information and find solutions to a problem that is happening and requires a quick and precise resolution.

4. There is a decision made with the virtual world system that is carried out by its own decision and carries out the task effectively.

With the presence of the industrial revolution 4.0, Indonesia has committed to building a manufacturing industry that is competitive at the global level at the speed of implementing industry 4.0. this can be marked in the launch of the making roadmap and strategy in Indonesia which is entering the digital era that is currently underway. The purpose of the Daei making roadmap is to be able to implement strategies that enter the industrial era 4.0. The implementation of Industry 4.0 itself has a goal to create development for a disparate economy. Making Indonesia 4.0 contains 10 national initiatives that are cross-sectoral in nature in order to accelerate the pace of growth in the manufacturing industry. Indonesia has started a stage in adaptation for industry 4.

It is hoped that the management system in the industry 4.0 platform will become an important input in recommendations for the formulation of national strategies and policies in accelerating the implementation of industry 4.0 into the preparation of infrastructure needed for industrial players, especially for manufacturing industries whose priority is to transform into industry 4.0. because regulations have not been made in the relevant negotiations for the development of industry 4.0 formally as a reference for implementation, at this time many industries are still having trouble finding a reference for implementation in the development of industry 4.0. With support in the form of an industrial development platform 4.

CONCLUSION

At present, the manufacturing industry has contributed 20.27% through a national-scale economy in ASEAN. This can be seen through the development of manufacturing industry activities in Indonesia so that they are able to replace commodity-based and change to manufacture-based. The manufacturing industry strategy in accelerating Indonesia's economic growth is carried out by implementing an industrial strategy 4.0 which is one of the plans for the establishment of the Indonesian Digital Industry Center 4.0 (PIDI 4.0). The Minister of Industry hopes that the big vision can be achieved by implementing Industry 4.0. The vision is to bring Indonesia into the top 10 economies in 2030, to be able to return a net export figure of 10%. Increasing labor productivity up to two times compared to increasing labor costs, and allocating two percent of GDP for technology and innovation activities.

In addition, the development of the Indonesian manufacturing industry must also be supported by the cooperation of various stakeholders, such as the government, entrepreneurs and the general public.

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