

Information about the development of automobile industry in Vietnam

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Abstract: In the block of foreign-invested enterprises, Toyota Vietnam also has new highlights in automobile manufacturing in Vietnam and supports the system of component suppliers operating according to global Toyota standards. In the launching ceremony of the 500,000th vehicle manufactured in Vietnam on June 7, 2019, after 24 years of receiving the investment license, Toyota Vietnam said that it has officially re-assembled the Fortuner model, after switched to importing complete units from 2017. This is also a move to show support for the government's policy of supporting production in Vietnam. With the car ownership rate of Vietnamese people, it is only 21 cars / 1,000 people, far lower than 780 cars/1,000 people in the US, or 204 cars / 1,000 people in Thailand, an opportunity for businesses. Automobile industry in Vietnam to conquer consumers is still very open. The development of the automotive industry is inseparable from Vietnam's supporting industries as well as global automobile groups such as Toyota, Honda, Hyundai, Mercedes, BMW, GM, etc. as well as public groups or such as Samsung, LG, etc. Where they invest or do anything, there is an ecosystem of suppliers and strong links attached and it is difficult for external suppliers to join the business ecosystem. their karma. Vietnam must master design as the core technology, and commercial products, because if they do not master these important stages, they are simply assembling companies. Vietnamese businesses, especially those with financial resources, should invest in developing technology and industry of the country, not only for the future of Vietnam but also for the future of these enterprises, when Technology and industry are the answer to the sustainable development of the country and businesses.

Keywords: automobile, automobile industry, supporting technology

1. Introduction

Vietnam's automobile industry will grow steadily in the future. Because Vietnam's economy has a good growth momentum. A number of automobile manufacturing and assembly enterprises in Vietnam have begun to participate in the market. And... some businesses intend to produce electric cars. ” Also according to Mr. Do HuuHao, Vietnam now has about 3 million cars equivalent to only over 20 cars / 1 thousand people, a very small percentage. For the market of 90 million people, there are great market opportunities for the automotive industry to develop. Although in the immediate future, Vietnam is still a small market with a negligible number of vehicles and low technology, but hopefully in the coming years it will make a great leap on the basis of new development. Pham Thu Trang, representative of the Tax Policy Department-Ministry of Finance, said that Vietnam's automobile industry has grown rapidly in recent years. The average growth rate of domestically manufactured vehicles assembled in the period 2015-2018 reached 10%. (In 2015, the production and assembly of cars in the country reached over 200,000 units per year, the growth rate was 51% compared to 2014. In 2016, the output continued to increase sharply, reaching over 283.3 thousand vehicles/ year, an increase of 38% compared to 2015. In 2017, production and assembly output reached 258.7 thousand units, down 9% compared to 2016; in 2018 reached 250,000 units, down about 3% compared to 2016. 2017).According to the United Nations Industrial Development Organization (UNIDO): Technology is the application of science to industry by using systematic and systematic research and treatment results. According to the Economic and Social Commission for Asia and the Pacific (ESCAP): Technology is a knowledge-based process and technology for processing materials and information. However, as a whole, technology is a combination of methods, tools, and means based on the use of scientific knowledge in production and life to produce products and services. Service to meet the material and spiritual needs of man.

Technology transfer is an activity aimed at bringing advanced technology and modern technology into production through the application of scientific research results to production or the application of a completed technology from this enterprise. to other businesses. Technology transfer is the purchase and sale of technology and is the process of training the user to use the technology. Characteristics of technology transfer include: Technology transfer activities involve two parties and the decisive factor is the new technology; Technology transfer activities not only include the transfer of material and technical means, but it is more important that training and training is provided for the skillful laborers to grasp and use technology; Technology is a component of the material foundation, creating conditions for the existence and development of enterprises. Especially the technology directly influences and determines the ability to produce. Products increasingly diverse

to meet the needs of the development of society. Without the development of technology, especially those with high gray matter content, it is impossible to diversify the production and supply the market with many products that have a decisive influence on the production and life of modern society. Technology is a factor that directly affects the competitiveness of enterprises. This impact is first expressed in the following: Technology and technological advances have made the product quality is maintained and improved, production costs are relatively saved to reduce costs, products New features have better use can be put into the design put into production, consumption. Moreover today the technology has become the direct object of production. Technology has a powerful impact on creating an image of the business. Companies that are constantly innovating on new technologies can create the trust of customers. Technology is the factor affecting the efficiency of production and business of each enterprise. This can be achieved by adopting new technology or by advancing traditional technologies that allow economical use of resources for production using inexpensive materials rather than using expensive technologies, rare materials, or using more stable and reliable means and means.



Figure 1. The automobile assembly line in Vietnam

By the end of 2018, the whole country had 358 automobile-related manufacturing enterprises; in which, there are 50 automobile assembling enterprises; 45 enterprises producing chassis, body, trunk; 214 enterprises producing components and auto parts ... There are many large companies that produce and assemble in the country (Toyota, Hyundai, Kia, Mazda, Honda, GM, Chevrolet, Ford, Mitsubishi, Nissan, Suzuki, Isuzu, Mercedes-Benz, Hino) meets about 70% of the demand for cars under 9 seats in the country. A number of domestic firms are deeply involved in the global automotive production chain. The auto industry has contributed to the state budget billions of dollars per year and created jobs for hundreds of thousands of direct employees. During the past time in the National Assembly, the Government approved and issued preferential mechanisms and policies for the automobile manufacturing and LR industry in the law on investment and tax (import and export, corporate income and consumption). especially, credit, land rent ... to support and create the most favorable conditions for the development of domestic automobile manufacturing and assembly industry. Earlier, speaking at the opening ceremony of Vietnam AutoExpo 2019, Deputy Minister of Industry and Trade Do ThangHai also said that the Government of Vietnam advocates the development of Vietnam's automobile industry to become an important industry of the country. meet maximum domestic market demand for trucks, passenger cars and specialized vehicles Strive to become a supplier of components, spare parts and some high-value parts in the production chain. World automobile manufacturing contributes to economic

growth and promotes the development of other industries. This is the overall goal of the development of Vietnam's motorcycle industry until 2020 with a vision to 2030.

2. Necessity of technology transfer in the automotive industry

It is forecast that by 2030, Vietnam will have from 466,000 to 863,000 new cars entering the market; By 2020 the number of motorcycles will also reach about 36 million units. On the other hand, the increasingly improved infrastructure is also a favorable factor to help businesses of automobiles, motorcycles and supporting industries develop. With the above forecast and factors, it can be said that the industry, the market of cars, motorcycles and supporting industries in Vietnam still have a lot of potential for businesses to invest in production and business. The important role of technology transfer stems from the meaning of technology for industrial enterprises. In our country, current scientific and technological advances make up about 30-40% in industry. Technology transfer is the main method and measures for technological renewal in a quick and effective manner. Technology transfer in the industry of enterprises that inherit the scientific achievements of other enterprises, saving the cost of research and development of technology and avoid the risk of research and development activities. Small and medium enterprises have many limitations in their own investment in technology research and development so that they cannot carry out many research and technological development activities. Through technology transfer, businesses can save time, soon create a great technological potential, equipped with advanced technology to improve production. At present, the production, assembly and import of means of transport such as motorcycles, motorbikes, locomotives, rail cars, electric trains and cable cars are not regulated as conditional business lines. The User security is ensured through periodic registry work. For automobiles, when putting them into use, they must also register periodically to ensure safety for users. At the same time, there should be strict regulations on the use duration of cargo trucks and passenger cars. Technology plays an influential role both as a direct influence and as an indirect influence. The technology allows for the expansion and upgrading of technical infrastructure as well as social infrastructure. The technology allows businesses to access, process information quickly, check information is easy. Technology makes new business areas in the industry come into being. It is thanks to patents in the electronic field that the industry is constantly developing the technology creates equality in access to information, strongly promotes the formation of a socio-economic environment equal opportunity for all business enterprises. Technology plays a very important role for business enterprises.

Automobile industry is a very important industry for the development of society. In the automotive industry master plan, it is determined that the automotive industry will become a very important industry in 2020. This is because the automotive industry provides the basis for improving people's living standards and creating jobs for workers. Vietnam's automobile assembly and assembly industry consists of two groups: FDI and domestic enterprises. Twelve of the 17 licensed FDI companies in Vietnam are operating with a total investment capital of \$1 billion, capable of producing 150,000 vehicles per year, mainly passenger cars and multi-purpose vehicles. At present, there are 47 domestic companies investing in the field of automobile assembly and assembly with the total investment of tens of trillion dong, mainly producing bus, passenger and light trucks, specialized vehicles. However, the biggest impact on the domestic car market is the 4-9 passenger cars, the prices of these vehicles as well as the tax rates associated with it are always hot topics in the market. The domestic automobile market has increased sharply in the past five years, sometimes failing to meet demand. For example, at this time, many businesses had to do three shifts a day and raise their full capacity but not enough to supply cars to the market. By the end of September 2007, the number of vehicles sold by FDI enterprises reached 32,000 units. Many of them had orders from hundreds of thousands of cars until the end of 2007 and some months of 2008. Vietnam is now a member of the World Trade Organization (WTO). Therefore, Vietnam's position has been increasingly enhanced, attracting investment, demand for fast-growing economy, and new policies. Imports and exports have made strong moves in the automobile manufacturing and trading industry. According to the Vietnam Automobile Manufacturers Association (VAMA) in May 2007, The car sales were 5,580 units, an increase of 59% over the same period in 2006, a 19% increase compared to April, of which five-seat cars doubled and multi-purpose vehicles increased by 25%. Forecasts to 2010 will increase to 3065040 units. Poor infrastructure: By the end of 2000, the road system in Vietnam had 210,447 km, of which 169,005 km was rural roads and only 3,211 km of urban roads. Most narrow streets, bad quality. The area of traffic in urban areas (parking lots, parking lots) is small, only 0.7% while in modern cities it is 5-7%. The demand for automobiles in Vietnam is relatively small: Only about 60,000 cars a year, while ASEAN is 2.1 million cars a year, China is 5.2 million cars a year, Japan 5.9 million cars a year ... Up to now, the number of cars in Vietnam has only 8 vehicles per 1000 people, while in China there are 24 cars per 1000 people, Thailand is 152 cars per 1000 people, Korea has 228 cars per 1000 people and 682 cars / 1000 people in the US. Germany has a population of almost 83 million inhabitants in Viet Nam, with an area of approximately 330,000 km². But the volume of cars in Vietnam is about 670,000 units and 18 million motorcycles, while in Germany there are 52

million cars and about 7 million motorcycles (the area used by a car by 8 cars mounted machine). Some comments suggest that the demand for automobiles in the Vietnamese market is an artificial supply. Because of the high price of cars compared with the ability of consumers, the volume of cars produced is bought with public funds, with the state budget (buy to do public car). Of course this object is still a customer and they are classified in the "market of the organization" rather than the "individual consumer market." And the purchasing power of this object is enormous in any country. Every development is focused, overheated care. But in Vietnam, too much attention has been paid to the customer, making the market distorted and overwhelmed by administrative decisions. This is also the main reason for the high price of cars because when customers buy cars with public funds, "no money", and the car market suddenly turned to gloomy after decision 25/20 Vietnam's automobile industry, 06 / QD-TTg of the Prime Minister on thrift practice with the content "From 01/06/2006 will suspend the purchase of vehicles with budget. The industry supporting this industry is currently underdeveloped: At present, nearly 40 FDI manufacturers and 30 domestic manufacturers supply automotive parts. According to PhanDacTuat, director of the Institute for Strategic Industrial Policy Research: There are too few supporters in Vietnam. According to the calculations, a car has 20,000 to 30,000 parts and to produce one car needs thousands of component suppliers, and to avoid a simple assembly, a car business needs at least 20 different suppliers. However, up to now, no automobile assembly and assembly company in Vietnam has had 20 domestic suppliers. The small component market is small because no one dares to invest in the industry. This is because of its complexity: high capital investment because it is a precision engineering industry and absolute safety, high quality and high technology, while backward technology in Vietnam, want to develop catch It is necessary to invest in technology transfer from abroad so it is relatively risky to invest in this sector. Another reason is the high cost of imported components, which is estimated to be 1.7-3 times higher than that of other countries. This has two effects: high price of components, scarce components on the market. When the supply of spare parts is limited by small quantity, poor quality and high price, the automobile industry cannot develop and the Vietnamese automobile market is still only market. With the purpose of attracting investment and building an automobile industry to keep up with other countries in the region, so nearly 15 years, since its inception in 1992, Vietnam's automobile industry Nam is considered a key industry and is always the most preferential industry among industries. This very special preference is reflected in the tax policies of the Ministry of Finance, with preferential tax policies on the localization rate, import tax for assembly components and corporate income tax. As a result of the preferential policy for Vietnam's automobile industry, the price of domestically produced cars is 2 to 3 times higher than in many countries. Explaining the cause of this situation, the Ministry of Finance has frankly stated in its policy report on the automotive industry since 2004: "The cause of this situation is the umbrella assembly business. I rely on the protection of the State should offer high prices to earn high interest". Meanwhile, some auto assemblers think that the reason is that Vietnam's automobile market has a capacity of only 1/10 of the markets of regional countries (such as Thailand), so they cannot discount. The obvious fact is that automobile manufacturers and assemblers have failed to comply with their investment license commitments to increase the localization rate to 30 to 40% within 10 years. With this "broken promise", up to the present time, the localization rate of automobile enterprises in Vietnam is only from 2 to 12% and the localization is only limited to companies simple steps in the manufacturing and assembly process (using low value domestic components such as tires, tires, batteries, wires, chairs ...). The problem here is why did investors fail to deliver on their commitments? And is the strategic orientation for the development of the domestic automobile industry and accompanying it the aforementioned preferential tariff policy to realize the goal of localization of the automobile industry wrong? In our opinion, the Vietnamese automobile industry over the past 10 years has been standing still because the development strategy of this industry only focuses on measures to pay import taxes on components and taxes on imported CBU cars as a pressure. Investors implement localization of component products. This is "utopian" because automakers, even at their own, only produce depth of 36-45% of the details of a car, the rest is provided by the component manufacturers. With the small market that Vietnam wants to coordinate the localization rate only through the tax incentive policy mentioned above, no investor wants to invest in producing real components. A mistake made by policy-makers in the automobile industry in the past is that they do not understand the complexity of the auto industry. The investment capital in the automotive industry is very high because it is precision engineering, safety, quality and high technology. For example, the belt in cars costs only 3-6 USD, but if damaged, the whole engine engine (car) will be damaged, and many other examples ... so car manufacturers Brand names only buy components that they believe in quality so as not to affect their brand. In the past time, we have seen many investors (phones, cars ...) pay huge costs (possibly up to several hundred million or billions of dollars) when they have to recall. and cancel) the product for a faulty part only. A phone worth thousands of dollars must be recalled when the battery fails, many famous car manufacturers have also recalled their products. The reason for the lack of development of Vietnam's automobile industry and the higher price of domestic cars compared to regional cars is the poor manufacturing of auxiliary components. It is necessary to develop supporting industries for the

automobile industry to be able to compete. Cars have from 20,000 to 30,000 parts and it takes thousands of houses to supply parts each assembler needs at least 20 suppliers, while in Vietnam, there are currently only about 40 component suppliers out of 50 assemblers.

3. Policies

Supporting industry of Vietnam cannot develop, besides the reason we mentioned above, there are reasons that some investors give that the capacity of Vietnam's automobile market is too small. Because of its small size, investors do not want to rush into producing auxiliary components for domestic businesses. They could not even dream of competing with China, Thailand, Taiwan ... in exporting car components. Thailand has more than 1,500 ancillary businesses. The localization rate reaches 70% -80%. Taiwan also has more than 2,000 investors producing spare parts. In this regard, at the same workshop, the representative of the Ministry of Finance (General Department of Taxation) also explained that: "According to the general assessment, over-preservation of the current auto industry is often easy causing the domestic car selling price to be too high, creating inertia for businesses. The current tax policy is still highly protective so car prices remain high. The side taxes are not reasonable and there are parts. However, the "vicious circle of the Vietnamese automobile industry", according to the call of an official of a ministry, is that the State calls for development of ancillary industry on the one hand to reduce car prices, but on the other hand others set policies to restrict the use of cars by applying excise taxes. While supporting industries want to develop, the market capacity must be large and the consumption volume must be high. Among current component suppliers, more than 90% are foreign-invested enterprises and most of the components are different from the requirements for components for the domestic market. In 2016, Vietnam consumed more than 300,000 vehicles (including approximately 230,000 domestically assembled cars and over 74,000 imported vehicles), forecast to increase by 10% in 2017. However, both investors and the government is not satisfied with this figure reaching just 45% of its manufacturing capacity. Usually a car is assembled from thousands of components, including some large components such as engines, during the assembly of cars are considered a part of the car, but the actual dynamic Muscle also includes hundreds of different small details. That's why car manufacturers have multiple supply chains and complexes, each with different suppliers.

Apply measures to support domestic production in line with the process of international and regional economic integration. To issue technical standards for automobiles and automobile spare parts in order to prevent the circulation of unsafe, unsafe and polluting goods. To strictly handle smuggled goods and commercial fraudulent goods, which are brought into the Vietnamese market. To step up investment in upgrading the road network throughout the country. To encourage enterprises producing and / or assembling automobiles to use engines and spare parts for domestic manufacture. To create conditions for enterprises in marketing and trade promotion activities in order to expand the domestic market. water and out to foreign markets. Encourage cooperation and division of production among domestic enterprises with each other and with foreign invested enterprises to make use of the invested technologies and equipment, reduce new investment costs and avoid Duplicate investment. New investment step by step but focus, focus and fast investment in the basic technology, decide the quality of products, suitable to market demand. Foreign-invested projects in supporting industries, automobile engines, spare parts and components, especially investment projects of large capacity and production of products In order to increase the ratio of domestic production and export, the State shall fully enjoy preferential policies in accordance with the provisions of the Law on Foreign Investment in Vietnam. To encourage the transfer of technologies and investment in advanced technologies in service of the program of automobile and automobile spare parts, especially engine, transmission and transmission. The State shall provide financial support for technology transfer for engine, transmission and transmission projects if the technology is transferred from well-known firms in the world. The State shall provide financial support for investment in research and development activities in the automobile industry. Clearly, this argument is inconclusive. Need to know, the number of cars in Vietnam is only 8 cars / 1,000 people, while in China is 24 cars / 1,000 people, Thailand 152 cars / 1,000 people, South Korea 228 cars / 1,000 people, US 682 vehicle / 1,000 people ... Please provide the following data to help us understand more: Germany and Vietnam are approximately the same area (about 330,000 km²), the population is almost the same (about 83 million people), but the number of cars in Vietnam is about 670,000 and 18 million motorbikes, the area uses 8 motorbikes with 1 car, but they still have parking space, and the traffic is not congested. polluted! Of course, comparisons between a developing country like Germany are lame, but it is important to remember that Vietnam is striving to 2020, that is, only 13 more years, must become a developed country. As mentioned above, the motorbike and automobile industry is a precision engineering industry. Vietnam does not travel with other countries, but cannot "take shortcuts, take first". The only effective way that Vietnam should and must do is to "force them to piggyback" by applying the high technical standards that developed countries are applying. This standard is beneficial for the country and society in Vietnam, consumers do not have to pay anything more. Only then can

they bring to Vietnam the latest technology: reducing emissions, reducing energy consumption, high safety for consumers and minimizing traffic accidents. If anyone says that applying high technical standards, Vietnam can not do it, please tell that Vietnam has not done that foreign automakers have to do it, and if anyone says that using high technology, consumers do not have money to buy is that consumers do not understand anything about automotive technology or they understand and deliberately say otherwise to continue selling, continue to "discharge" outdated, backward technology for Vietnam. In order to encourage the development of automobile and spare parts industry in service of domestic demand and export, the State has a number of supporting policies as follows: No import tax shall be calculated on the basis of CKD, IKD removable components; Calculate the tariffs on imported components and parts and encourage domestic production. Enterprise income tax exemption for test products is granted for one year from the time the products are sold on the market.

4. Conclusion

The destiny of the Vietnamese automobile industry is being strengthened to reach the goal that many years have not achieved. However, despite the glittering aura, the road ahead for this industry still contains many challenges. Developing 30 years later than other countries in the region, Vietnam's automobile industry has faced many difficulties and challenges on the development path. Through many efforts to implement development strategies, the pioneering names in the construction work are VMC (HoaBinh Automobile Company) cooperating in assembling and distributing vehicles for BMW, Mazda and Kia brands with Mekong to assemble Fiat and Ssangyong cars. However, after the arrival of big names such as Toyota, Honda, Daihatsu, Ford and Mercedes, domestic enterprises were weak despite the government's clear and resolute support strategies such as taxation. CBU imports are very high, facilitating the development of supporting industries and input materials. The milestone of joining ASEAN (1995) is a time to show the failures of the Vietnamese automobile manufacturing industry, when the domestic component industry is still not strong enough to replace imported products. Meanwhile, manufacturers gradually withdraw from Vietnam because of the preferential tax rate policy for imported cars in Southeast Asia. 2018 is the year marking a strong transformation of Vietnam's automobile manufacturing industry. In the context of the risk of domestic market flooding imported cars of the region, because the import tax rate is only 0%, the emergence of Decree No. 116 was issued on October 17. In 2017, it was seen as a last-minute push that brought many advantages to domestic production and assembly vehicles, when there were many new barriers for imported cars.

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