

# How do Chinese Industry Climb up in the Global Value Chain?

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## ABSTRACT

Under the new trend of the global competition focusing on value and efficiency, the key to maintain the comparative advantage is to gain competitiveness in the higher value chain. In front of the “re-industrialization” wave of the developed countries such as the US, and many challenges such as the loss of the domestic traditional comparative advantage, China should adopt effective measures to climb up the upstream of the global value chain, and promote the full upgrade of the trade structure and industry structure.

**Keywords:** industry upgrade; global value chain; comparative advantage; one belt one road; made by Chinese intellect

## 1. INTRODUCTION

As the world struggles to contain the COVID-19 outbreak, the manufacture industry is the support of the entity economy, the foundation of the country, the tool to the country rejuvenation and the base for a strong country. Currently, the global manufacture industry is facing great revolution and great adjustment. From the global perspective, the re-industrialization in the developed countries rejuvenates the competitive advantage, and the developing countries actively accept the industry transfer, so Chinese manufacture industry faces the challenge of “two-way pressure”. Internally, the domestic input for the research and development increases rapidly, and the industry structure climbs up to the high end of the global value chain. In the new era, the economy transfers from the old energy to the new one, and China is marching forward the strong manufacture industry country from the large manufacture industry country. Under such background, the Nineteen Conference Report highly emphasized the development of the advanced manufacture, and the great promotion of the “2025 Made in China”, which is the significant strategic deployment. As the large developing economy, it is a long way to complete the task to march forward to the middle-to-high end of the global value chain proposed by the Nineteen Conference Report. In future, both the traditional and new industries should focus on improving the technology content, extending the industry value chain, increasing

the added value and cultivating the core competitiveness to enable the competitive industries to climb to the middle-to-high end of the global value chain. As such, for the sustainable development of Chinese economy, how to get rid of the low position in the work division of the global value chain?

## 2. THE INTERNAL DRIVING FORCE FOR CHINESE INDUSTRY TO CLIMB UP IN THE GLOBAL VALUE CHAIN

From the perspective of the main challenges in front of Chinese economy, the purpose to promote many important industries to climb up in the global value chain is to overcome the middle income trap and meet the requirements for building the modern economic structure. Because the internal trend of the economic and social development in our country is that the cost of various elements constantly also increases when the residents' income level, living level and welfare level constantly increase; if the economic system could not digest such increasing costs of the elements, or produce products or service in a more cost effective way, or create the wealth with more added value, Chinese enterprises will gradually lose the international competitiveness when facing the lost cost competitors who newly enter the market, which will in turn bring great barrier for the construction of modern economic structure. As such, only by the technological progress, various innovations,

and improving the industry productivity could overcome the trend of the rise of the element cost, reduce the unit cost of the industry output, enable the industry to have the international competitiveness, and lay down the foundation for the high quality development and construction of modern industry system<sup>[1]</sup>.

The current industry work division in the global value chain is dominated by the developed countries. They allocate relevant industry links with low value added to the developing countries, while the core product technology remains in the developed countries. Moreover, such transnational corporations squeeze the profit and technology development space in the developing countries through brand control, technology monopoly and etc. Although in the industry work division of the global value chain, some technology owned by the developed countries may also flow into the developing countries, which is relatively more advanced for them, such technology are the backward technology which has been eliminated by the developed countries. It is impossible for the developed countries to transfer the most advanced core technologies to the developing countries. Therefore, in the industry work division of the global value chain, for a long time, the developing countries (such as China) are the manufacture workshop for the developed countries. They depend on the upstream industry chain dominated by the developed countries, and are in the low end of the industry chain. With the increase of the foreign direct investment, it is possible for China to improving the position in the work division of the global value chain. The reason why the transnational corporations of the developed countries could dominate the industry work division in the global value chain is their strong capital support, which enables them to directly make the foreign investment layout. With the extending of our “going out” strategy, Chinese enterprises also start the global layout and the foreign direct investment increases rapidly. The foreign direct investment could promote the technological progress in China and improve China’s position in the global value chain<sup>[2]</sup>. The new economy growth theory considers that the technological progress originates from the knowledge production, while the technological progress is the driving force of the long economic development. The economic development path of various countries in the world is the proof of such theory. The foreign direct investment is the effective method for China to rapidly obtain the advanced knowledge and technology in the developed countries. By the reverse technology spillover mechanism, such advanced knowledge and technology could be feedback to China and improve the domestic scientific level and innovation ability, which is helpful for China to participate in the high value added link of the global value chain and improve the position in the international work division.

### 3. THE FACTORS AFFECTING CHINA’S POSITION IN THE WORK DIVISION OF THE GLOBAL VALUE CHAIN

With the progress of Chinese technology, the space for China to imitate and learn the technology of the developed countries will be compressed. In order to keep the sustainable economic development and achieve the industry upgrade, China should make technological innovations and grasp the independent intellectual property<sup>[3]</sup>. Only by this could China improve the position in the work division of global value chain. However, the key problem in front of the current Chinese industry upgrade is the weak industry technology and insufficient innovation ability, which could not provide the technological support for further development of our industrialization. In the industry work division in the global value chain, China is always in the low end. The developed countries transfer the low end links such as the labor intensive industries to the developing countries including China by the technology and capital advantages. Since the opening and reform, China has grasped such opportunity to be the processing factory for the transnational corporations of the developed countries, and accepted many resource intensive industries and labor intensive industries transferred by the developed countries. This creates Chinese economic development miracle and promotes the rapid development of Chinese industrialization. From the distribution of the industry pattern, the resource intensive industries mostly accumulate in the middle and western China, while the eastern coast areas have many original equipment manufacturer (“OEM”) industries which are labor intensive. With the maturity of the industry development and the rise of the labor cost in the eastern areas, some labor intensive industries in eastern China start to transfer to the west, which promotes the economic development in the middle and west and shortens the difference in the development between the east and the west<sup>[4]</sup>. However, such industry transfer did not change the low end position of China in the global value chain. In the work division of the global value chain, the transnational corporations are the important participants. It is because of many strong transnational corporations that the developed countries could dominate the work division of the global value chain. At present, Chinese large state owned enterprises such as China Motors Groups have entered the international market, made broad foreign investment and achieved certain achievement in respect of the resource exploitation and project construction, which play certain role in improving China’s position in the work division of the global value chain. However, compared to the developed countries, China has few enterprises which have the capacity to make transnational investment. Their business is limited to a small scope. The development of China’s transnational corporation is behind.

#### **4. HOW DO CHINESE INDUSTRY CLIMB UP IN THE GLOBAL VALUE CHAIN**

Some scholars emphasize that we should transfer to “innovation-driven” from “element-driven”, to competitive advantage from comparative advantage. In other words, we should upgrade to the high end of the value chain with technology, brand and service from the comparative advantage and the low end OEM in the traditional labor intensive industries. In the long run, this is reasonable, and there are also successful cases in the practice. However, in the short run, overall, the strategic adjustment and countermeasures on basis of the reality that China climbs in the global value chain should be based on the current comparative advantage. Specifically speaking, to exactly judge and position the future role of China in the work division system of the global value chain, it is necessary to know the development stage of China, the real comparative advantage as well as the evolution trend. In contrast, if we do not base on the reality conditions and the comparative advantage, and blindly pursue the height and the big size, it is difficult to achieve the upgrade of comparative advantage in real sense. In contrary, it is possible to lose the original advantage and the opportunity to further participate in the work division in the global value chain, especially the new development opportunity brought by the deep evolution of work division in the global value chain.

Specifically speaking, in order to build the new comparative advantage and climb up the global value chain, China may adopt the following measures. First, China could gradually build the regional value chain dominated by China itself by the “one belt one road” strategy. Chinese manufacture industry, especially the equipment manufacture industry and the high speed railway industry, will be faster and faster in the pace of “going out”. In future, China should achieve the transfer from the product output to the product, technology, capital and service output through the means such as investment in different places, mergers and acquisitions, international industry technology alliance, participating in the global innovation network, etc. to achieve the full upgrade of Chinese industry chain. In the meantime, according to the comparative advantage of the labor cost and natural resource endowments of various countries, in many years in future, it is expected that our labor intensive industries and capital intensive industries may in turn transfer to the neighbor and the countries along the “one belt one road”, improve the industry upgrade and industrialization level of the countries along the route, and complete the restructure of the regional value chain dominated by China. Second, China should cultivate a group of local transnational corporations with certain competitiveness worldwide. At present, China does not have the transnational corporations in the real sense. The main business of many domestic large enterprises remains in the domestic market. As such, China need to

make the middle-to-long term development strategy to promote the internationalization of Chinese enterprises, absorb and use the global high level production elements to the greatest extent, extend the domestic value chain, and encourage the domestic enterprises to transfer to the countries with low level industries. Third, China should dig the domestic market demand and promote the global high level elements to accumulate in China. The domestic demand enlargement policy will further stimulate the growth potential of domestic market. The gradually improved labor quality and the relatively complete supportive capacity create the development condition for the introduction of the foreign investment with high value added and high technology content. Fourth, China should strengthen the independent research and development innovation ability in the equipment manufacture industry. Lastly, China should further optimize the domestic layout of the processing trade, accelerate the industry upgrade and gradient transfer, and accelerate the transfer of the processing trade industry to the middle and west.

#### **5. CONCLUSION**

Since 1980s, there has been great change in the form of international work division. The typical sign is that the product value chain is decomposed. The advantages among countries are more shown in the advantage in certain specific production stage and link in the industry value chain. This leads that the countries divide the work on basis of the different production link or procedure in the same industry or product. The academia called such new form of the international work division as the work division on the global value chain. Its essence is the “element division”. In other words, the countries integrate into the international work division system dominated by the transnational corporations by their own country’s element advantage, and achieve the production internationalization. In certain sense, the great practice of China’s opening is the process to integrate into the global value chain, and achieve the economic development and industry upgrade. The achievements China has made attract worldwide attention. However, for a long time, the traditional extensive development road of “low end embed” in the global value chain work division system also produces the problems such as the unbalance, inconsistency, unsustainable development, etc. Especially after the global financial crises in 2008, the above problems became more and more obvious. It is necessary for China to improve the position in the work division in the global value chain. The transfer of China to the upstream of the industry value chain plays a huge role in promoting the “re-balance” of the world economy. If the global value chain still reconstructs to the direction of unfairness and maintains the current international work division layout, the world economy will lose balance and the trend of the world economy rejuvenation will be killed. In order to achieve the industry upgrade in the condition of the work division in the global value

chain, China should fully realize the influence of the work division in the global value chain on the industry, adopt the positive measures to fully use of the favorable conditions, and avoid the unfavorable conditions to promote the industry upgrade. Now, China need and also has the capacity to effectively link the domestic value chain and the global value chain, and obtain the initiative and create new comparative advantage in the new round of international competition.

## **AUTHORS' CONTRIBUTIONS**

Haiyan ZHOU performed the policy analyses and wrote the manuscript.

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