

# *Analysis of the Factors Affecting the Position of Processing Trade in the Global Value Chain*

**Zuxuan Wang**

*Harbin University of Commerce, Weifang, Shandong, China*

*1037527048@qq.com*

**Keywords:** Processing Trade, High-quality Development, Global Value Chain

**Abstract:** At the end of 2021, the Ministry of Commerce of China will hold a special press conference to issue the "14th Five-Year Plan" on the high-quality development of foreign trade. The Sixth Plenary Session of the Nineteenth Central Committee of the Communist Party of China comprehensively summed up the experience of the party's struggle. As an important part of China's foreign trade, processing trade is bound to provide a broad perspective for Chinese to enhance the status of processing trade in the global value chain and promote the high-quality development of trade. The purpose of this paper is to find out the factors that affect the status of processing trade in the global value chain, such as technology, brand influence, foreign investment and ability to fight risks, by analyzing some data and combining relevant theories, so as to put forward corresponding policy suggestions to improve the processing trade. Trade status, thereby promoting the high-quality development of trade.

## **1. Introduction**

After reforming and opening up and joining the WTO, China has become a major trading country by virtue of its low-cost endowment advantage to participate in the international division of labor. However, due to the late start of China's manufacturing industry, its own technology, experience and high-tech talents are limited, so it has always been at the lower end of the global value chain. In recent years, China has made great progress in research of mid-to-high-end technology manufacturing, talent training and introduction. In addition, with the emergence of the new crown epidemic affecting the global economy and the implementation of re-industrialization strategies in developed countries and other major changes in the world economy, China's manufacturing industry has been able to adjust the division of labor in the global value chain, and the country are more and more attention the planning for high-quality foreign trade development. Processing trade is an important industry that urgently needs to be transformed, upgraded and improved in quality in China's new journey of unprecedented changes in a century. To achieve this goal, one of them is to move closer to the links with high added value, thereby enhancing the status of China's processing trade in the global value chain.

## 2. Current Situation of China's Processing Trade

Due to the weak base of industry in the early stage of Chinese participation in the international division of labor, it took advantage of low cost to join low value-added links in the value chain such as processing and assembly. However, with the passage of time, the international and domestic economic environment and situation has undergone major changes, the country has begun to actively promote the development of high-end manufacturing industries such as new energy and electronic information, and promote the export of final products to high value-added and transformation of technical knowledge-intensive. The position of global value chain in general continues to rise. As shown in Table 1.

*Table 1: China's export of high-tech products in the past of five years*

Year	Export	(ten thousand yuan) Cumulative Growth±%
2017	45150.0	13.3
2018	49373.9	9.3
2019	50426.7	2.1
2020	53692.4	6.5
2021	63266.0	17.9

data source: General Administration of Customs of China

Although the global economy and trade has been affected repeatedly by the epidemic in recent years, the vaccines have brought the epidemic under control in many countries. However, judging from the relevant data of the WTO's value-added trade, the added value of China's foreign trade still needs to be improved. Furthermore, the current total import and export volume of processing trade in China is growing slowly, and the proportion is shrinking. Since the outbreak of the COVID-19, processing trade enterprises, especially export-oriented enterprises, have the weak ability to fight risks and suffered serious damage.

According to the "Plan" on the high-quality development of foreign trade in the 14th Five-Year Plan issued, the traditional theory of international division of labor and the theory of global value chains, as well as the development status of processing trade, this article will research the factors that affect the status of processing trade in the global value chain.

## 3. Influencing Factors

### 3.1. Technology

The technical factor is an important factor affecting the position of China processing trade in the global value chain. Many companies lack the ability to innovate in product R&D and design, which makes the products exported by Chinese lack international competitiveness and naturally cannot obtain higher profits in the value chain. In addition, in recent years, China has been committed to changing from manufacturing power to creative power, and actively promoting the transformation and upgrading of the processing trade industry, including chip manufacturing. Judging from the list of scientific and technological shortcomings listed by the Ministry of Science and Technology, many fields such as chips and precision manufacturing in China need to be improved, so the demand for high-end technical talents will naturally increase. If the supply of high-skilled talents in the whole society is insufficient, it will also affect the speed of technological change and the status of China's processing trade in the global value chain. In 2019, the state proposed that the proportion

of skilled workers in China should reach more than 25% of the total number of employed people, and the proportion of highly-skilled workers should reach more than 30%. And Japan has reached more than 40% in 2017, which means that the supply of laborers and high-end human capital in China is lacking. To a certain extent, this has slowed down the speed of upgrading the processing trade's technological content and added value, and the products lack international competitiveness, which further affects the status of China's processing trade in the global value chain.

### **3.2. Brand Factor**

Brand is a high value-added link in the global value chain, which has an important impact on the position of China's processing trade in the global value chain. Brand power may prevent Chinese from capturing higher brand premiums. In the 2021 Brand Finance, although there are 84 Chinese brands on the list, there are very few brands engaged in processing trade enterprises. It can be seen that China as a large country of processing trade, still lacks an international influence in the manufacturing field. Take Xiaomi as an example. As a representative Chinese company with strong competitiveness, it was once the top three smartphone brands in the world by sales. In the second quarter of 2021, Xiaomi's global sales surpassed Apple's for the first time, but Apple monopolized 75% of the global smartphone market's profits. From the financial report in the third and fourth quarters, Xiaomi's revenue is less than Apple's, and the net profit attributable to the owner of the parent company is also far behind Apple in the same field. That is to say, Chinese brands should focus on improving their own technologies, enhancing the own research capabilities of core components such as chips, and continuously improving the degree of brand internationalization and influence.

### **3.3. Ability to Fight Risks**

In the context of globalization, processing trade has become the main form of international trade. With the repeated COVID-19, the overseas environment has deteriorated, and the foundation for the recovery of the world economy is not strong. However, processing trade enterprises are greatly affected by the international environment, and their ability to withstand risks is weak, and they are prone to problems due to external shocks such as COVID-19 and the cost increase if accompanying. Furthermore, due to the epidemic, the orders of many enterprises have been cancelled or delayed. Transportation and other costs caused by the epidemic has increased, which also affects the transactions of processing trade enterprises. Therefore, according to the data released by China Customs, in 2019 when the new crown epidemic broke out in China, the import and export volume of processing trade decreased by 5.4% compared with last year. In 2021, with the control of the epidemic in China and other countries and the improvement of the international economic situation, it increased compared with the previous two years.

### **3.4. Foreign Direct Investment**

Foreign direct investment has always been considered an important way for developing countries to improve their status of processing trade by technology spillovers. Through the technology spillover effect, foreign-invested enterprises bring high technology and marketing management experience to China's processing trade-related industries or enterprises, upgrade the exported commodities, and better drive Chinese enterprises in the upper, middle and lower reaches of the value chain to integrate into the global value chain, to further enhance trade strength and enhance

the status of processing trade in the global value chain. In 2020, the value of China's technology import contracts is about 2,200 billion dollars. The introduction of foreign capital brings scarce resources of domestic and some high-end production factors, which promotes technological progress and ultimately enhances China's processing trade status.

But in fact, many foreign-funded enterprises will not transfer their high-end industries with core technologies. The focus of their transfer is mostly labor-intensive industries and low value-added industries such as assembly and processing in the value chain, which affects the level and value of export products and further affect the status of Chinese processing trade. In addition, the entry of foreign capital is bound to compete with local enterprises for market share, raw materials and talents. Therefore, some domestic enterprises disperse the energy of independent innovation, which affects the progress of technological development and thus has an impact on the improvement of Chinese processing trade status.

## **4. Countermeasures**

### **4.1. Improving the Capability of Innovation and The Quality of Foreign Investment**

In the process of transition to technology and brand management, it's important for the country which want to improve their position in the global value chain to own high-tech talents and ability of independent innovation. That is to say, the exported products must occupy the upper reaches of the value chain. Therefore, increase the proportion of R&D and manpower investment in high-precision industries, improve the core technology capabilities of independent research and development, and strive to master key core technologies. It should also pay attention to the training and treatment of scientific research personnel, actively introduce foreign high-tech talents, and encourage domestic talents to study advanced technologies abroad and then apply them to the R&D and manufacturing of domestic products. Additionally, some data shows that the higher the education level and the more years of education of the employees in the industry, the higher the technical level of the industry, and the higher the domestic value-added rate. Therefore, enterprises can strengthen cooperation with research institutes and universities, and strengthen the training of professionals engaged in processing trade, such as formulating joint training plans, establishing practical bases, to increase the amount and quality of talent supply.

Chinese enterprises should also enhance their ability to absorb and innovate foreign advanced R&D design technology and management experience. Through preferential policies such as reducing the tax and subsidies, foreign investors are guided to invest in mid-to-high-end manufacturing technology industries and processing trade enterprises in the central and western regions. Foreign enterprises can drive China to integrate into the global value chain and improve the position. On the basis of the original, the field of foreign investment will be further expanded, and the direction of foreign investment will be adjusted to optimize the industrial structure of Chinese processing trade. The government actively promotes targeted investment promotion, introduces the industry that is closely related to local industries, promotes the transfer of foreign key core technologies, utilizes advanced technologies and enterprises from developed countries, which enhances the independent innovation capabilities and competitiveness of enterprises. Furthermore, the state should strengthen the screening of foreign-invested enterprises, and relevant departments should formulate corresponding indicators to avoid high pollution and high energy consumption. Processing trade industries in backward areas use high-quality foreign capital to develop labor-intensive industries with high technology content, and promote the upgrading of local industries as well as the goal of transforming the industry in developed areas to a higher technical

level and high value-added links, thereby improving the status of China's processing trade in the global value chain.

#### **4.2. Creating a Favorable Business Environment**

The construction of free trade zones and bonded port areas should be vigorously promoted to increase China's dependence on the domestic market. The government and relevant departments should strengthen the construction of supporting facilities such as housing, transportation, sports and leisure, improve the level of local health care and education, and lay a solid foundation for undertaking the transfer of the processing trade industry and the upgrading of the current industry. The government should also play an active supporting role in scientific research, entrepreneurship, and create a good business environment so that processing trade enterprises can better settle in the local area. In addition, the government should pay attention to environmental governance, increase subsidies for the green development of local processing trade enterprises or provide relevant policy support, so that enterprises can maintain the vitality of technology research and design, and effectively improve the quality and added value of export products. Optimize the business environment, reduce high-energy-consuming and high-polluting manufacturing enterprises in the central and western regions, and protect the ecological environment. Build industrial parks, conduct precise investment and promotion, and attract industries closely related to existing local industries and industries that can form upstream and downstream supply and demand relationships to settle in the park.

#### **4.3. Enhancing Brand Influence**

To enhance the brand influence of Chinese manufacturing industry, the existing enterprises engaged in processing trade should be promoted to accelerate the transformation of intellectualization, so as to continuously extend their industrial chain and value chain. As Chinese manufacturing industry has made progress in infrastructure and industrial support, it has become more attractive to high-end elements, which will lay the foundation for the improvement of the status of processing trade in the global value chain. According to the actual situation, all provinces and cities actively promote the accelerated transformation of local processing trade enterprises, such as establishing a comprehensive pilot zone for cross-border e-commerce, and supporting advanced manufacturing enterprises to build their own brands. Through technological transformation and upgrading, enterprises integrate research and development into production, increase the added value of products, promote the export of self-owned brand products, enhance the international influence of the brand, and enable processing trade enterprises to obtain brand premiums. Local governments and relevant departments should strive to build the industrial parks of processing trade with international influence with the strong support of the state and governments. In addition, the provincial and municipal governments along the "Belt and Road" should also seize the opportunity of the new round of transformation, build the industrial parks of processing trade with specialization, encourage enterprises to explore in the field of manufacturing research and development. It makes the enterprises actively integrate into the Belt and Road business circle, and strengthens the brand awareness of domestic enterprises, further enhance the status of China's processing trade in the global value chain.

#### **5. Conclusion**

In recent years, the proportion of high value-added products exported by Chinese processing trade enterprises has increased in the world, trying to change their low-end position of a long time in the global value chain. However, it is undeniable that in order to achieve high-quality development of processing trade and enhance the status of processing trade, China still faces problems such as weak brand management and the capabilities of independent innovation, the quality of imported foreign direct investment needs to be improved, and the supply of high-tech talents is insufficient. In addition, most countries or regions in the world have resumed normal life and production order since 2021, but there are still many countries where the epidemic cannot be well controlled, which also affects the export of Chinese processing trade products. Moreover, the inherent "two ends are outside" feature of processing trade makes it take on greater external risks. Faced with these complex situations, this article attempts to explore the factors that affect the rise of processing trade in the global value chain. It is hoped that in the new journey to achieve the second centenary goal, China will enhance its position in the global value chain, further enhance its trade strength, and achieve high-quality development of processing trade and thus foreign trade.

## References

- [1] Munasib Abdul and Roy Devesh and Tian Xi. *Differential impact of the Great Recession on foreign and domestic firms in China: Did processing trade play a role in export performance?. The Journal of International Trade & Economic Development*, 2021, 30(4) : 484-511.
- [2] Bawoo Kim. *What has China learned from processing trade?. Journal of Economic Structures*, 2017, 6(1)
- [3] Qiannan Zhang and Yiyin Huang and Miraj Ahmed Bhuiyan. *The impact of Two-way FDI on the upgrading of global value chain of China's manufacturing industry. E3S Web of Conferences*, 2021, 251: 01077-.
- [4] Joseph Junior Aduba and Behrooz Asgari. *Productivity and technological progress of the Japanese manufacturing industries, 2000–2014: estimation with data envelopment analysis and log-linear learning model. Asia-Pacific Journal of Regional Science*, 2020, 4(2) : 343-387.
- [5] Utz-Peter Reich. *Accounting for international trade in value added: a comment on the OECD–WTO project. Economic Systems Research*, 2018, 30(4) : 462-477.
- [6] Mouzas Stefanos and Bauer Florian. *Rethinking business performance in global value chains. Journal of Business Research*, 2022, 144: 679-689.
- [7] Bakhsh Satar and Yin He and Shabir Mohsin. *Foreign investment and CO2 emissions: do technological innovation and institutional quality matter? Evidence from system GMM approach. Environmental Science and Pollution Research*, 2021, 28(15) : 19424-19438.
- [8] *Environmental Research; Studies from Qassim University Reveal New Findings on Environmental Research (Foreign investment and air pollution: Do good governance and technological innovation matter?). Global Warming Focus*, 2020,
- [9] Henryk Gurgul and Lukasz Lach. *On using dynamic IO models with layers of techniques to measure value added in global value chains. Structural Change and Economic Dynamics*, 2018, 47: 155-170.
- [10] Jakubik Adam and Stolzenburg Victor. *The 'China Shock' revisited: insights from value added trade flows. Journal of Economic Geography*, 2021, 21(1): 67-95.