

Research on the Path of Upgrading of Jiangsu's Foreign Trade Industry

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Abstract: Based on the global value chain perspective, this study carried out a comprehensive analysis of foreign trade industry in Jiangsu province from four dimensions, including contribution rate of foreign trade industry to GDP, value chain division, value chain dependency and value chain links. Research showed that the four types of industry upgrades (processes, products, functions, chains) could be realized by integrating "Internet +" from the perspective of value chain. Therefore, we planned three proposals to promote the upgrading of Jiangsu foreign trade industry: Integrate and promote the value chain, merge the internet technology; extend the value chain, build Internet platform; reconstruct the value chain and optimize the trade process.

Keywords: Global value chain; Jiangsu foreign trade; Internet+; Industrial upgrading

1. Introduction

The G20 Hangzhou Summit focused again on the issue of global economic adjustment. According to the summit, the dynamic mechanism formed by previous technological revolution and global economic rules generally failed, meanwhile, the current global economy is coming into a period of deep adjustment. In the process of global economic integration, China's economy has also suffered a negative impact. The development of China's foreign trade industry is serious, and such impact is especially profound in Jiangsu Province due to its high dependence on foreign trade. According to the data released by Jiangsu Provincial Department of Commerce, Jiangsu achieved a foreign trade export of 40.404 million US dollars in 2018, an increase of 11.2% over the same period of the previous year, accounting for 60.84% of China's total import and export value. As a leading force in the process of China's economic development, the foreign trade industry has ensured the healthy and sustainable development of foreign trade enterprises and has become the direction of enterprises, governments and other efforts at this stage.

Thus, this paper summarized four types of upgrade: process upgrades, product upgrades, function upgrades and chain upgrades based on the value chain perspective. Considering the current characteristics of Jiangsu's foreign trade industry, this paper also put forward some suggestions about the promotion path and develop pattern of foreign trade industry by integrating the internet technology, building up the internet platform and optimizing the trade process.

2. Literature References

2.1. Global value chain

The theory of global value chain stemmed from the value chain theory, the concept of which was proposed first by Michael Porter in 1985, he argued that all business was an aggregation active in the process of designing, producing, selling, sending and assisting its products, and all of these activities could be depicted in a value chain. Gereffi analyzed the globalization process from the perspective of the value chain, believing that trade in goods and services should be seen as a governance system [1]. Many scholars had systematically discussed and analyzed the global value chain of Gereffi from the perspectives of governance, evolution and escalation of global value chain, and finally established the basic concept of global value chain and its basic theoretical framework. It could be divided into three areas: technique, production and marketing [2]. These three links present a U shape called "Smile Curve". Value added in different parts of the value chain is different, for a lower added-value is created near the middle of the smile curve, while a higher value-added is created close to the ends of the smile curve, such as R&D, design, marketing, branding, etc.

2.2. The upgrading of global value chain

The study of the value chain upgrade was mainly focus on its mechanism, type and path. Kaplinsky and Morris classified value chain upgrade into four types, including process upgrade, product upgrade, feature upgrade, and chain upgrade. Chinese scholars had done a lot of research about the analysis of foreign trade industry upgrade based on the perspective of value chain. Jibo Cai analyzed the upgrading mechanism of China's domestic production-oriented foreign trade enterprises in the global value chain, constructed the evaluation system of the upgrading capability of China's domestic production foreign trade enterprises [3]. Through the study of the de-

velopment characteristics and trends of the global value chain, Hongbing Li analyzed the opportunities faced by China in order to build its own global value chain, and put forward several suggestions about how to develop the global value chain [4]. Foreign trade industry was the main channel that effectively docking domestic economy and global value chain, and to a certain extent, determined the domestic industry's links and status in the global value chain, analysis of the upgrading of foreign trade industry must be established in the perspective of the global value chain. Besides, studying the upgrading of foreign trade enterprises in Jiangsu Province from the global value chain theory view was of great importance to promote the upgrading of foreign trade industries and economic transformation in Jiangsu Province.

2.3. Analytical dimensions of global value chain

It is necessary to select appropriate indicators for comprehensive industrial analysis. On the one hand, in the classic SCP paradigm of Bain [5] and Sherler [6], the industrial analysis consisted of market structure, market behavior and market performance. On the other hand, the upgrading of the industry was essentially an industrial upgrade in the global value chain. Many of the analysis of the transformation and upgrading of foreign trade industry were conducted from the dimension of value chain division of labor, multinational value chain and value chain links. For example, Xiang Dai and Erzhen Zhang analyzed the phenomenon of sluggish development of foreign trade in recent years from the view of global value chain division of labor, argued that changes of foreign trade growth rate was not only related to the deepening trend of the division of global value chain, but also related to the way of division and upgrading in the global value chain [7].

Taking into account the particularity of foreign trade industry and the availability of related data in Jiangsu Province, we analyzed the current situation of foreign trade industry in Jiangsu Province from the dimension of contribution rate of foreign trade industry to GDP, value chain division, value chain dependency and value chain link. Among them, the contribution rate to GDP was the first judgment index of foreign trade industry dependence degree which was an important index to measure the dependence degree between regional economy and international market; value chain division and value chain link was the common index that helped value chain to analyze industrial upgrading, both of them were helpful to define and analyze the industry's position in value chain and value chain links' quality. The value chain dependence integrated the two dimensions of "enterprise nature" and "trade market", which could effectively define the dependence degree of foreign trade enterprises in Jiangsu Province on foreign enterprises, especially multinational

corporations, and the concentration and dependence on external market.

3. Mechanism Analysis

3.1. Contribution rate of industry to GDP

We got foreign trade industry contribution to GDP statistics in Jiangsu Province from Statistical Bureau of Jiangsu Provincial Bureau of Statistics 2014-2018 Volume and Jiangsu Provincial Department of Commerce December 2014 - June 2018 Import and Export Statistics Monthly, and found that since the second half of 2014, contribution rate of total import and export of foreign trade industry to GDP showed a basically consistent decline trend. As a foreign trade province, the foreign trade industry was an important support for the national economy of Jiangsu Province, however, the total import and export volume in Jiangsu Province had down more than 5 percentage points in five years and showed a sustained decline trend. Foreign trade industry in Jiangsu depended highly on foreign trade while its contribution rate was low. Continued lower completion of foreign trade industry was in stark contrast to the continued growth of Jiangsu's GDP, which was serious.

3.2. Division of value chain

We got foreign trade industry commodity exports statistics from Monthly Import and Export report of Jiangsu Provincial Department of Commerce December, 2014-2018, and found that during the second half of 2014 to the end of 2018, Jiangsu Province, high-tech products and mechanical and electrical products' exports were relatively high, and local enterprises represented a small part in these two exports while took up a large part in textiles, clothing and agricultural products' export volume, reflecting the insufficient development momentum of local enterprises. In the point of development trend, textile exports and exports of agricultural products rose better. In addition, the other four categories of products remained stable, the market turn appears in the first half of 2016. Jiangsu Province's foreign trade industry remained the "low-end embedded" stage in the value chain division of labor, was still the low-end aspects of high-end industries.

3.3. Value chain dependency

We got exports statistics of foreign-funded enterprises in Jiangsu Province and its proportion of total exports from Statistical Yearbook of Jiangsu Province of 2014-2018, and found that the proportion of foreign-funded enterprises accounted for the total exports still occupied a dominant position. In recent years, although the trade situation in Jiangsu Province had improved, the export of state-owned and private enterprises had increased significantly, their proportion of the total share of exports had

increased, however, neither foreign trade enterprises nor manufacturing enterprises had established their own international marketing network. They overly rely on brokers and even second and third-hand brokers, their dependence on the traditional trading model had never decreased. Although the internet today was highly developed, traditional canton fair and various integrated commodities fair remained popular, this phenomenon had properly reflected the problems we mentioned above.

Table 1. Proportion of foreign trade exports

Period	Japan	UN	US	Total
2014	9.03%	18.58%	20.53%	48.13%
2015	8.29%	17.95%	21.50%	47.74%
2016	8.14%	18.63%	22.46%	49.22%
2017	7.51%	18.92%	23.56%	49.99%
2018	7.32%	18.64%	23.02%	48.98%

We also got statistics about proportion of foreign trade exports, from the market dependence point of view, since 2013, the collective import and export share ratio to the United States, Japan and the EU reduced a little, but the absolute amount of collective import and export volume to the United States, Japan and the EU was still large, and the potential negative effects of regional concentration and regional dependence still existed. In summary, foreign trade industry export market in Jiangsu was highly concentrated, its regional dependence was strong. Although the foreign trade industry of Jiangsu owned a worldwide market, its exports to the EU, the United States and Japan accounted for about 50% of the province's total exports. Excessive concentration of export markets would lead to provincial enterprises compete for a small number of markets and consequently the lower prices that would form a vicious competition, and easily suffered from trade friction and trade restrictions. Besides, the international economic situation in trade countries (regions) or changes of their policy to China and fluctuations in the dollar exchange rate were also very easy to have a greater impact on foreign trade industry in Jiangsu.

3.4. Value chain links

The value chain of Jiangsu Province was relatively short, mainly manifest as the specialized chain had not been able to effectively extend to both sides of the value chain when it integrated into the value chain link, the relatively low value-added rate, and the limited leading role and spillover effect to other industries. For the vast majority of the local productive foreign trade enterprises in Jiangsu Province, their production was embedding in global value chain activities in the form of OEM, situated in the low-end chain of the value chain, namely the bottom of the smile curve. The profits of productive foreign trade

enterprises relied entirely on foreign orders and was squeezed by foreign multinational companies. Therefore, in order to achieve the sustained and healthy development, local enterprises must get rid of the control of foreign enterprises, and transform from the manufacturing side to the R&D side, then occupied the key position in global value chain, finally increased the initiative in international trade activities.

4. Problem Analysis and Suggestions

4.1. Problem analysis

Through the four aspects analyzed above, we could further integrate and extract the three major issues concerning the development of foreign trade industry in Jiangsu Province. Embedded the low-end of the global value chain, lack of industry development momentum. The growth mode of foreign trade was defective, success through quantity expansion and low-cost production factors also existed many problems, manifest as, the product only existed low-end industrial chain. Local export products in Jiangsu were mainly rough, low value-added labor or resource-intensive products, technological innovation of them were insufficient. These enterprises failed to form its own brand, corporate profits were meager, economic efficiency was low, the vast majority of profits was stripped by foreign and multinational companies. They were in a passive position in the international competition. From the perspective of the value chain, the "low-end embedded" characteristics were obvious. High value chain dependence, lack of participation ability for local enterprises. Foreign-funded enterprises accounted for much of the foreign trade industry in Jiangsu while contribute of state-owned enterprises was low. Foreign trade business in Jiangsu had long been dominated by the Foreign-funded enterprises. Excessive proportion of Foreign companies, on the one hand, would squeeze most of the market share in foreign trade, on the other hand, would led to competition among local enterprises, they might affect industry norms and overall development by using price competition and other simple means in order to seize the remaining market share. Seeing from another point of view, export market in Jiangsu foreign trade industry was highly concentrated, its regional dependence was strong. From the perspective of the global value chain, the foreign trade industry of Jiangsu Province was highly dependent on the business of foreign-funded enterprises, especially multinational enterprises, their own participation in global resource allocation, and the ability to expand external market still need to be improved. Risk avoidance and risk diversification under high market concentration was also an important direction for optimization. Value chain was relatively short, value-added rate was relatively low. National economy in Jiangsu Province depended highly on foreign trade while the contribu-

tion rate of foreign trade industry was low. This was mainly due to the short value chain of foreign trade industry in Jiangsu Province, manifest as the single form of processing trade, low industrial chain technology intensity, low pulling effect the whole industry was and inadequate structural flexibility, once the external environment changed, the drawbacks of the industrial adaptation showed up, resulting in reduced industrial performance, even a sudden drop, but the associated negative effects were limited also. From the perspective of the value chain, the value chain of foreign trade industry in Jiangsu Province was relatively short, the specialized chain had not been able to effectively extend to both sides of the value chain when it integrating into the value chain link, the value-added rate was relatively low, and the leading role and spillover effect to other industries was limited.

4.2. Upgrading suggestions

The upgrading of the industry was essentially an upgrade of the role and function of the industry in the global value chain. The four types (processes, products, functions, chains) of the industrial upgrading in the value chain could all be realized by integrating the "Internet +". Pushing forward the transformation and upgrading of Jiangsu foreign trade industry and integrating the Internet had already become a top priority. Based on the current situation of foreign trade industry in Jiangsu Province and the problems faced by foreign trade industry we analyzed above, this study planned the upgrading of foreign trade industry in Jiangsu Province and seek value chain innovation to realize foreign trade industry upgrade.

The path planning described above had built three upgrade path from the global value chain perspective: Integrate value chain, blend Internet technology. The integration of foreign trade industry value chain must firstly solve the problem of low efficiency, low profits, inadequate technological innovation, and the low degree of professional organization. Integration of the value chain would need to integrate business with internet technology to achieve model of "foreign trade + Internet". When using internet technology, we need to blend the technology and results of the internet economy into the whole value chain of Jiangsu foreign trade industry, vigorously develop the "Internet of Things + foreign trade", "Cloud Computing + foreign trade", "Network Package + foreign trade" and other emerging forms of technology and formats, mixing these technologies into the raw materials processing and manufacturing. At the same time, we could use the large data to participate in infrastructure construction and support and human resources management, finally strive to enhance the information and synchronization of enterprises. Extend the value chain, build the Internet platform. The purpose of the value chain extension was to obtain more added value for enterprises, we should strive to develop cross-border electricity busi-

ness. The logistics, information flow and capital flow involved in the process of traditional foreign trade were basically bilateral and linear, while cross-border e-commerce was usually showing a multilateral, network and flat features. Therefore, it was necessary to build an Internet platform, develop small and medium enterprises and upgrade foreign trade enterprises' products, promoting these companies to launch their own brands and products and enhance brand innovation through cross-border electrical integrative packaging. This was conducive to the brand reengineering of enterprises, increase the added value of the product and can contribute to the upgrade of processing and manufacturing enterprises, help their operating core transform from the products manufacturing to the production of its own products and brands. Reconstruct the value chain, optimize the trade process. The optimization of internal process could be realized by integrating the Internet and other emerging technologies into the various parts within the enterprise, while the optimization of external business process should not only build the internet platform, but also optimize other trade links. Combined with the characteristics and current situation of foreign trade industry in Jiangsu Province, it was possible to optimize the value chain process from three points: First, built the credit management mechanism of foreign trade enterprises, including the establishment of enterprise record certification mechanism and information sharing mechanism. Second, simplified the customs clearance process. The third was to optimize cross-border settlement process.

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