Research on the Help of “China Intellectual Made” in Promoting the Position of “One Road One Belt” Countries in the Global Value Chain

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Abstract—The economic globalization produced the new international division system of the global value chain. Under the broad background of the economic globalization, the global value chain has undoubtedly become the key chain in the cycling and interaction of the world economy. The countries who obtain the core line of the industry value chain may not only gain the optimized economic profit, but also has the dominating power and bargaining power in the future development of the value chain. For a long time, the developed countries have had the dominating power and bargaining power in the world economy development, and attempted to maintain such competition advantage, while the fast developing countries have been in the bottom of the global value chain. This is especially obvious among countries alongside the “one belt one road”. China needs to gradually establish the mutual benefitting and win-win global value chain centering itself with a blueprint and plan, according to the different features of the factor endowments structures of the countries alongside the “one belt one road”.

Keywords—economic globalization; manufacture industry; “one belt one road” proposal; global value chain

I. INTRODUCTION

Since the reform and opening, China has grasped the opportunity of the deepening development of the economic globalization, and achieved the great industry development and economic take-off while rapidly and fully integrated into the global value chain dominated by the transnational companies in the developed countries, by use of the low cost competitive advantage formed by low end elements, and depending on the international demand market, especially the demand market of the developed countries. At present, the global economy has entered the stage of deep adjustment. There is significant change in the global economy structure. China’s economy also entered the key stage of transforming and upgrading, which greatly challenged the traditional development model of entering from the low end and participating passively into the global value chain dominated by the developed countries. This is shown not only in the “low end targeting” risk facing China when entering the global value chain, but also the ceiling effect of the open-type economy development restricted by the important external environment. Such external environment elements include the depression of the global economy; especially that the demand of the developed economies is insufficient, the element cost increasingly rises, as well as that the “anti-globalization” wave of the developed economies emerges. As such, China should actively build the mutual benefitting and win-win global value chain instead of passive participation; achieve the transforming and upgrading of the development, and make effort to lead the economic globalization into the new era. The implementation of “one belt one road” strategy obviously becomes the important step to build the China-centered global value chain. In November 2011, the Third Session of the Eighteenth Meeting of the Communist Party determined to fully deepen the reform and proposed to “adapt to the new situation of the economic globalization, promote the combination of opening, introduction and going out, advance orderly and freely flow of international and domestic elements, efficient resource allocation and the deep market integration, accelerate the cultivation of new advantage in international economic cooperation, and promote the reforming by opening to build the new open economic structure”. Therefore, Chinese government issued the Hope and Action to Promote the Mutual Building of Silk Road Economic Belt and 21st Century Sea Silk Road, the Guidance on the Promotion of International Production Ability and Equipment Manufacture Cooperation, the Advice on the Building of the New Opening Economic System, the Advice on Accelerating the Implementation of Free Trade Zone Strategy, etc. Afterwards, China actively promotes the multi-lateral, regional and bilateral economic diplomacy in the trade and investment area to achieve the mutual benefitting and win-win in the global value chain framework.

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II. Establish China’s Regional and Global Value Chain and Proceed to the Industry Chain During the Re-Shaping of Global Value Chain

The reform of the global value chain in the “industry 4.0” era represented by the new information technology revolution (in turn of material-net and big data), has started under the leadership of the US “industry internet” and German “industry 4.0”. During the fourth scientific and technological revolution assisted by the “industry 4.0”, there was a large wave of traditional industry upgrade driven by the intellectual made. The reform of the global value chain will undoubtedly produce deep impact on the international division. Under the traditional international division model, when the “product division” transforms to the “element division”, there will be a so-called “smile curve”. Through the whole product chain from design, research and development to manufacture, assemble, marketing and after sales service, the developing countries are in the bottom of the “smile curve” because they lack the core technology and advanced design, thus undertake the manufacture and assembling. However, in the era of the global value chain, the large transnational companies in the developed countries begin to organize the manufacture and assembling globally. The factor endowments differences among countries will gradually transfer to the manufacture and assembling area from the original international trade. When the “industry 4.0” continuously promotes the scientific and technological innovation and changes the traditional manufacture method, the developed countries will conduct the high value added production domestically. For example, the US now accelerates such process through the “re-industrialization” strategy. This will result in the shrinking of the space for the developing countries to conduct the manufacture and assembling. The small profit of the original equipment manufacturer will reduce, which will enhance the low end targeting effect of the developing countries in the global value chain.

The theoretic logic of the global value chain division is still the competitive advantage. After decades’ development since the reform and opening, there is significant change in the factor endowments in China. The quality is improved, and the human resources, innovation ability and the industry supporting ability are enhanced, which provides the conditions for the rise in the global value chain. However, from the perspective of the regional structure of the competitive advantage, the developed countries still occupy top of the global industry chain. Nevertheless, for the developed countries, the previous industrial revolution and technological innovation have come to an end, and the new one is still in the cradle. Therefore, on one hand, the developed countries lack the driving force to transfer the middle and high end production ability to the developing countries due to the economic depression in the life cycle; on the other hand, the developed countries are worried about the competition after the product upgrade and adopt the anti-globalization measures, such as the trade protectionism. Therefore, there are great difficulties for the transformation and upgrade in the participation in the global value chain established by the multi-national companies of the developed countries. From the perspective of the competitive advantage in the “one belt one road” area, there is relatively huge difference in the levels, which could complete the advantage of China. In contrast, China lacks element cost advantage, but has obvious advantage in the capital, the common industry technology, and even the middle and high end technology in certain industry area. Therefore, we may learn the experience from the developed countries in building the global value chain through outsourcing and foreign direct investment. By cooperation with the countries alongside the “one belt one road”, China may also transfer the labor-intensive manufacture industry and value added link to foreign countries through trade and foreign direct investment; and increase the input in technological research and development as well as the internet marketing to transfer the affluent capital and production ability, and meanwhile introduce the world energy and resource. The integration of trade and investment could be realized by export which is driven by foreign direct investment.

The capital flow and foreign trade on basis of “one belt one road” could not only support the enterprise group development, but also coordinate the up and down stream of the industry chain to build the complete research and development, production and selling system, as well as China’s own regional value chain and the global value chain, and to develop to the middle and high end of the industry chain during the re-shaping of the global value chain. As a matter of fact, the three large waves of the industry transfer after the World War II is determined by the layout of the countries’ comparative advantage and its change. At present, Chinese enterprises have been “going out” and transferred the labor intensive and low value added links to south-east Asia, southern Asia and Africa, etc. China’s focus on the middle and high end part is in consistent with the comparative advantage rule, and at the same time the important step to build the global value chain.

III. “China Made” Helps the Countries Alongside the “One Belt One Road” in Improving the Position in the Global Value Chain

It could not be denied that there are difficulties and challenges for the “one belt one road” countries in the global value chain competition. The economic development of the countries alongside “one belt one road” varies greatly, among which there are the developed economies, the least developing countries with GDP under USD 1000, and most are the developing countries. The marketization degree of such countries is different; the demand for employment is large, and the infrastructure is old. Because the industry foundation is weak and the economic structure is relatively single, such countries act as the assembling party and the original equipment manufacturer in the global industry chain depending on their cheap labor, low land price and the resource and environment advantage. Under the background that the current vertical division of in the international industry chain gradually replaces the traditional horizontal division, some “one belt one road” countries have to face the reality that they are in the low end of the global industry chain and in the downstream of the global value chain, being restricted by the original division, the assembly trade, and insufficient scientific and technological innovation and technology support. Even
one or two countries have been excluded from the global industry division system.

The rapid growth of Chinese economy owes to the great achievements of the industrialization, and “China made” undoubtedly provides strong support. The industry is the foundation of national economy while the manufacture is the lifeline. With the low element cost advantage, high deposit rate, certain technology source opened by the advanced countries and the huge domestic consumption market, China has successfully grasped the development opportunity and caught up with the old industrialized countries. After three decades’ rapid development, China is honored as the “world factory” and the base of the global manufacture. However, after the global financial crises, the developed countries try to maintain their control power in the global value chain by the “re-industrialization” strategy and the formulation of the new investment rules in regional trade. The backflow of the manufacture produces deep impact on the regional layout of the global value chain, and exerts pressure on China as the “world factory”. Facing such situation, in order to maintain the competitive advantage, “intellectual made” is no doubt the path to enhance China’s competitiveness in the global value chain. In accelerating China’s manufacture to develop to the high end of the global value chain, the planning of China made 2025 proposes to transfer from “large manufacture country” to “strong manufacture country” by use of innovation and “intellectual made”. The intellectual products, the application of new information technology in the production management and the spread of the industry material net, enable that China research and development could not only help China made occupying the global value chain, but also help China participating more in the advanced technology research and development and core equipment manufacture to gain greater profit, rather than being restricted to the assembling in the international division. Obviously, China made has obtained value added creation ability in the global value chain division. In the areas of high speed railway, aviation, equipment manufacture, China’s ability to obtain added value is especially prominent and the domestic percentage is higher than the average global level. Under the background of the “new industry revolution” targeting intellect, softness and sophistication, intellectual made has become the key driving force for China’s traditional manufacture to go to the upper stream of the global value chain. Currently, China is building the new mutual benefiting global value chain, which is the best opportunity for the “one belt one road” countries to rapidly integrate into the global value chain and improve their position. When the “one belt one road” countries (whose industrialization vary and complement each other) take part in the new value chain, their industrialization could be accelerated. It is also helpful for them to participate in the “one belt one road” industry chain derived and created by “China intellectual made” and catch up with the developed countries.

IV. CONCLUSION

The “one belt one road” proposal aims to solve China’s signification domestic issues, such as the surplus of the production ability, resources, strategic exploitation and national safety, and seek to solve the regional problems of the alongside countries and areas in the multi-lateral, independent, balanced and sustainable development. As the largest developing country and the world second largest economy, China is committed to promote the international economic governance system to develop fairly, justly and reasonably, and advance various countries to have bilateral and multilateral cooperation to the larger scope, higher and deeper level. It is necessary to manufacture in order to achieve such target. The rapid development of the manufacture is the original driving force for China’s economic development, and the building of “one belt one road” is the development strategy under the economic globalization background. The purpose is to seek the multi-lateral, independent, balanced and sustainable development of the alongside countries, which is helpful for the transfer of the capital intensive branches of China’s manufacture and add of value by reducing cost. Driven by the national region self-trade strategy and the interconnection and interflow, China’s manufacture, especially the equipment manufacture and the high speed railway, “goes out” in a faster and faster way. In future, it is necessary to further transfer from the product export to product, technology, capital and service export and realize the whole upgrade of China’s industry chain through investment in different areas, mergers and acquisition, international industry technology alliance and participation in the global innovation network. In the meantime, on basis of the relative comparative advantage in respect of the labor cost and natural resource endowment, it is expected that in future, China’s labor intensive and capital intensive industry will transfer to the countries alongside the “one belt one road”, which will improve industry upgrade and industrialization level of such countries, and complete the re-building of the global value chain by China.

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REFERENCES

Advances in Social Science, Education and Humanities Research (ASSEHR), volume 181


