Analysis of China’s Service Trade Competitiveness under the “Belt and Road” Initiative

Rong Wang
Changchun Guanghua College
Changchun, China
374650147@qq.com

Abstract—The purpose of the research work is to promote the competitiveness of China’s service trade. This paper selects the import and export data of China’s service trade from 2013 to 2017, and analyzes the changes in China’s service trade competitiveness through the international market share index, comparable net export index and display comparative advantage index. Through the analysis of these three indexes, it is found that although China’s service trade competition is still weak, China’s service trade competitiveness is gradually increasing. Based on the current competitiveness of China’s service trade, it finally expounds on the measures to improve the competitiveness of service trade under the “Belt and Road” initiative.

Keywords—“One Belt; One Road”; Service trade; competitiveness; international market share; comparable net export index; Display comparative advantage index

I. INTRODUCTION

After the "One Belt, One Road" initiative proposed by China in 2013, the implementation of the "Belt and Road Initiative" initiative began. From this point on, the service trade between China and the countries along the “Belt and Road” has grown at a relatively fast pace, which has become the highlight of the “Belt and Road” international cooperation. In 2016, China's import and export of services along the “Belt and Road” countries and regions reached $122.2 billion, a year-on-year increase of more than double digits, accounting for 15.2% of China's total service trade in the same year, a significant increase from the previous year.

According to the 2018 China Service Trade Development Report, although the current global economic growth has slowed down, global service trade has developed rapidly and has become a new engine for stimulating world trade growth. From 2009 to 2016, global service exports grew at an average annual rate of 4.55%. In 2017, global service exports reached 5.25 trillion US dollars, an increase of 7.6% over the previous year. The "Report" believes that the global economic recovery is accelerating, and a new round of industrial changes, especially the vigorous development of the digital economy, will promote the continued growth of global service trade. Emerging economies are expected to become the main engine for the growth of service trade, and digital technology will promote the emerging service trade is accelerating and the delivery model is constantly innovating. The global service outsourcing market will continue to develop rapidly.

In 2017, China’s total annual service trade reached $695.68 billion, a year-on-year increase of 5.1%. The trade scale maintained second place in the world for four consecutive years. China's service trade has already ranked second in the world, but is China's service trade competitiveness also increasing? By selecting data from 2013 to 2017, we analyze the changes in China's service trade competitiveness by measuring the international market share index, comparable net export index and explicit comparative advantage index of China's service trade.

II. ANALYSIS OF CHINA’S SERVICE TRADE COMPETITIVENESS UNDER THE "BELT AND ROAD" INITIATIVE

A. International market share index

The international market share index refers to the ratio of the total export value of a country's specific products or industries to the total exports of similar products or industries in the world. It can reflect the international competitiveness or competitive position of a country's products or industries.

In 2013, China's service trade exports amounted to $207.06 million, and world service trade exports amounted to $48.83 billion. According to the international market share index formula, the international market share of China's service trade in 2013 was 4.3%. In the same way, we can see that the international market share of China's service trade in 2014 was 4.2%. In 2015, the international market share of China's service trade was 4.4%. In 2016, the international market share of China's service trade was 4.2%. The international market share of trade is 4.3%, as shown in Table I below.

| Project                        | 2013     | 2014     | 2015     | 2016     | 2017     |
|-------------------------------|----------|----------|----------|----------|----------|
| China's total exports of services trade | 2070060  | 2191410  | 2186340  | 2095290  | 2280900  |
| Total exports of world trade in services | 48381300 | 51977400 | 49370200 | 49629700 | 53511900 |
| China's service trade international market share | 4.3%     | 4.2%     | 4.4%     | 4.2%     | 4.3%     |

Source: National Research Network World Trade Organization (WTO) data

Copyright © 2019 The Authors. Published by Atlantis Press SARL.
This is an open access article distributed under the CC BY-NC 4.0 license (http://creativecommons.org/licenses/by-nc/4.0/)
By analyzing the international market share of China's service trade, we find that the international market share of China's service trade in 2014 is lower than the international market share of China's service trade in 2013. In 2015, the international market share of China's service trade was higher than that of China's service trade international in 2014. Market share, the international market share of China's service trade in 2016 is lower than the international market share of China's service trade in 2015. The international market share of China's service trade in 2017 is higher than the international market share of China's service trade in 2016, which shows China's service.

Trade competitiveness has sometimes increased, sometimes weakened, and China’s service trade competitiveness is not strong enough.

B. The comparable net export index

The comparable net export index refers to the ratio of net exports to total foreign trade. The comparable net export index of China's service trade refers to the ratio of the net export value of China's service trade to the total import and export volume of China's service trade. This index reflects the proportion of China's service trade net exports to total imports and exports, which can be used as an indicator to measure the competitiveness of China's service trade. The comparable net export index, also known as the trade competitiveness index, has a value range of ±1. From an export perspective, the closer this index is to +1, the stronger the international competitiveness; the closer the index is to -1, the weaker the international competitiveness.

C. Display comparative advantage index

The Display Comparative Advantage Index can be used to understand the comparative advantage of a certain industry in a country. This index indicates that the comparative advantage of a certain industry trade in a country can use the share of the industry in the country’s exports and the total trade volume of the industry in world trade. The ratio of shares is shown. The China Service Trade Display Comparative Advantage Index can be expressed by the following formula.

\[
\text{China's service trade show comparative advantage index} = \frac{(\text{China's service trade exports} / \text{China's total exports})}{(\text{World service exports/world exports})}
\]

In general, the display comparative advantage index is greater than 1, indicating that the industry is in comparative advantage. The larger the value, the greater the comparative advantage, and the display comparative advantage index is less than 1, indicating that the industry is at a comparative disadvantage. The smaller the value, the greater the disadvantage.

Through this formula, we can calculate the 2013-2017 China Service Trade Display Comparative Advantage Index, as shown in Table III below.

| Project                        | Years | 2013     | 2014     | 2015     | 2016     | 2017     |
|-------------------------------|-------|----------|----------|----------|----------|----------|
| China's trade in services     |       | 20700600 | 21914100 | 21863400 | 20952900 | 22809000 |
| Net export value of China's   |       | 33060800 | 43288300 | 43554100 | 45209700 | 46758900 |
| China's total import of service|       | -12360020 | -21374200 | -21690700 | -24256800 | -23949900 |
| China's service trade comparable net export index | -0.23 | -0.33 | -0.33 | -0.37 | -0.34 |

From Table II, we can find that the net export value of China's service trade in 2013 was -12,360 million US dollars. In 2013, the total import and export volume of China's service trade was $537,614 million. According to the formula, China's service trade comparable net export in 2013. The index is -0.23. In the same way, we can calculate that the comparable net export index of China's service trade in 2014 is -0.33, the comparable net export index of China's service trade in 2015 is -0.33, and the comparable net export index of China's service trade in 2016 is -0.37, China's service in 2017. The trade comparable net export index is -0.34. In the five years from 2013 to 2017, the comparable net export index of China's service trade has been negative, indicating that China's service trade is at a disadvantage and has weak competitiveness.

From Table III, we get the 2013 China Service Trade Display Comparative Advantage Index is 0.421324779, the 2014 China Service Trade Display Comparative Advantage Index is 0.397759504, and the 2015 China Service Trade Display Comparative Advantage Index is 0.381272051, from 2013 to 2015. In the past three years, China's service trade comparative advantage index has been decreasing, indicating that China's service trade competitiveness is declining from 2013 to 2015. The 2016 China Service Trade Display Comparative Advantage Index is 0.384124133. The 2016 China Service Trade Display Comparative Advantage Index is larger than the 2015 China Service Trade Display Comparative Advantage

| Project                        | Years | 2013     | 2014     | 2015     | 2016     | 2017     |
|-------------------------------|-------|----------|----------|----------|----------|----------|
| China's trade in services     |       | 20700600 | 21914100 | 21863400 | 20952900 | 22809000 |
| Net export value of China's   |       | 33060800 | 43288300 | 43554100 | 45209700 | 46758900 |
| China's total import of service|       | -12360020 | -21374200 | -21690700 | -24256800 | -23949900 |
| China's service trade comparable net export index | -0.23 | -0.33 | -0.33 | -0.37 | -0.34 |

From Table II, we can find that the net export value of China's service trade in 2013 was -$12,360 million US dollars. In 2013, the total import and export volume of China's service trade was $537,614 million. According to the formula, China's service trade comparable net export in 2013. The index is -0.23.

In the same way, we can calculate that the comparable net export index of China's service trade in 2014 is -0.33, the comparable net export index of China's service trade in 2015 is -0.33, and the comparable net export index of China's service trade in 2016 is -0.37, China's service in 2017. The trade comparable net export index is -0.34. In the five years from 2013 to 2017, the comparable net export index of China's service trade has been negative, indicating that China's service trade is at a disadvantage and has weak competitiveness.
Advantage Index, which indicates that China's service trade competitiveness has increased in 2016 compared to 2015. The 2017 China Service Trade Display Comparative Advantage Index is 0.394881163. The 2017 China Service Trade Display Comparative Advantage Index is larger than the 2016 China Service Trade Display Comparative Advantage Index, indicating that China's service trade competitiveness has increased in 2017 compared to 2016. [3]. From the five-year analysis of the comparative advantage index of China's service trade, we can find that China's service trade competitiveness has gradually increased since 2015, indicating that although China's service trade is still at a disadvantage, China's service trade is gradually changing. In this state, China's service trade is gradually enhancing its competitiveness.

III. MEASURES TO IMPROVE THE COMPETITIVENESS OF CHINA'S SERVICE TRADE UNDER THE “BELT AND ROAD” INITIATIVE

Since 2016, although China's service trade has already ranked second in the world, the international competitiveness of China's service trade is still weak. China should actively seize the opportunity of developing service trade and promote the international competitiveness of China's service trade with the promotion of the “Belt and Road” initiative.

Under the “Belt and Road Initiative” initiative, China can strengthen service outsourcing between countries along with the “Belt and Road” countries. We know that service outsourcing is a business model based on the global division of labor, and this service outsourcing is not limited to traditional service outsourcing. It covers the first, second and third industries and is a transformation and upgrading of service outsourcing. China can consider manufacturing service outsourcing, tourism service outsourcing, agricultural information service outsourcing and financial service outsourcing in Southeast Asia, South Asia, Central Asia and West Asia.

With the construction of the “Belt and Road” initiative, China should further develop western trade in services and introduce some preferential policies to further promote the development of service outsourcing in western China. This will promote the development of trade in western China and narrow the development of trade in services in the eastern and western regions of China. The gap will drive the balanced development of China's service outsourcing, and thus promote the competitiveness of China's service trade. [4]

The “Belt and Road” will promote exchanges between people along the route. China can consider the development of some international boutique tourism routes and tourism products suitable for the people of different countries in the “Belt and Road” and carry out the “One Belt, One Road” special tourism service. This kind of special tourism can be carried out through travel charter routes, tourism service procurement and tourism investment trade, forming a “Belt and Road” service trade, enhancing the development of China's tourism service trade, and thus promoting the competitiveness of China's service trade. [5]

While carrying out trade in traditional services such as tourism and transportation, China should carry out more high value-added service trade. China's Huawei and ZTE companies have certain advantages in the field of information technology. We can allow these enterprises to set up R&D centers and service centers in the countries along the “Belt and Road” to drive the increase in China's professional consulting and information services exports. With the development of information technology, the Internet has connected people from different countries in the “Belt and Road”. China should consider developing mobile payments with certain advantages, strengthen the “One Belt, One Road” cross-border e-commerce cooperation, and create some new forms of service trade. Promote the competitiveness of China's service trade. [6]

Compared with developed service trade cooperation in developed countries, China has a comparative advantage in conducting service trade cooperation with countries along the “Belt and Road”, and can take the initiative in the international division of services, obtain higher international division of labor and service trade benefits, and promote China's service trade competitiveness has increased.

IV. CONCLUSION

Through the analysis of international market share, comparable net export index and display comparative advantage index, we find that although China's service trade is less competitive, since China's "One Belt, One Road" initiative, China's service trade competitiveness is gradually strengthened. Therefore, China should vigorously strengthen service trade with countries along the “Belt and Road” to enhance the competitiveness of China's service trade.

REFERENCES

[1] Zhu Ni, Chen Yu. Dynamic comparison of the complexity of China's service trade export along the “Belt and Road” [J]. National Economic Circulation, 2018 (10). (In Chinese).
[2] Zhu Fulin. China undertakes the “One Belt, One Road” service outsourcing to promote the new opening of the service industry [J]. Globalization, 2018 (10). (In Chinese).
[3] Jiang Rongchun. The Path of Innovation and Transformation of China's Service Outsourcing Industry under the Belt and Road Initiative[J]. People's Forum, 2017(21). (In Chinese).
[4] Wang Shaoyuan, Shi Jinfang. China's Foreign Trade [M]. 4 Edition. Dalian: Dongbei University of Finance and Economics Press, 2016. (In Chinese).
[5] Yin Xiaobo, Yuan Yongyou. International Service Trade [M]. Dalian: Dongbei University of Finance and Economics Press, 2013. (In Chinese).
[6] Dan Ningning. Research on the Competitiveness of Tourism Service Trade [J]. Modern Economic Information, 2019 (09). (In Chinese).