

Analysis on the Competitiveness of Service Trade between China and RCEP Partner Countries

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Abstract: Service trade is an important area of cooperation among RCEP countries. Based on the data of WTO database from 2013 to 2019, this paper uses TC and RCA index to study the overall and sub-sector service trade competitiveness of China and RCEP partner countries. The results show that: on the whole, the overall competitiveness of RCEP countries is weak; China has strong competitive advantages in construction, telecommunications, computer and information, insurance, and other business services, weak advantages in transportation, tourism, and finance, and a competitive disadvantage in intellectual property. Based on the research results, this paper puts forward some countermeasures and suggestions on how to promote the high-level development of service trade.

1. Introduction

On November 15, 2020, the Regional Comprehensive Economic Partnership Agreement (RCEP), which was vigorously promoted by China and includes 15 member countries of ASEAN, China, Japan, Korea, Australia and New Zealand, was formally concluded as the largest free trade area with 30% of the world's GDP and 20% of the world's total trade in services. It has created many conditions for parties to further expand trade in services, including market access commitments, national treatment and so on, covering most of the service sectors. In the period of fierce trade competition between China and the United States, the signing of RCEP is of far-reaching significance, which will greatly promote the economic development and trade exchanges between China and RCEP countries.

The research on the competitiveness of trade in services mainly includes four aspects: First, the analysis of the overall competitiveness of trade in services, Xiaoqi Zhan (2020) used three commonly used indexes to analyze the competitiveness of China's trade in services from 2009 to 2018; Second, the competitiveness analysis of specific sectors of trade in services, Shanwen Xuan (2020), Yunshi Cao (2018), Juan Xu (2020) with the evaluation index or model of China's transport, tourism, education services trade were studied; Third, the factors affecting the competitiveness of trade in services and promotion strategies, Zifu Liu (2018), Zhiwei Li (2018) analyzed the factors affecting the international competitiveness of trade in services and put forward countermeasures and suggestions; Fourth, the comparative study of the competitiveness of trade in

services between China and other countries. Jiaoyan Fei (2018), Chen Liu Huang (2018), Chen Yang (2017), Xiuying Chen (2018) and Yuchen Wu (2017) used IMS, TC, RCA and NRCA to compare and analyze the trade in services between China and Britain, Germany, India and other major countries, APEC member countries, BRICS countries and countries along the Belt and Road Analysis. At present, there are few studies on the competitiveness of trade in services between China and its RCEP partners. Individual studies mainly focus on the status of trade in services before 2015, lacking the latest data analysis and research results. However, in the past five years, great changes have taken place in both the scale and structure of world trade in services. Therefore, based on the WTO data and the United Nations trade data from 2013 to 2019, this paper analyzes the overall and sub-sector competitiveness of service trade between China and other RCEP countries.

2. Current Situation of Service Trade between China and RCEP Partner Countries

In recent years, the service trade between China and RCEP partner countries has developed strongly, accounting for an increasing proportion of the total world service trade, but the overall deficit is still in a state.

From Table 1, it can be seen that in 2019, the import and export volume of RCEP countries' service trade was 1313.762 billion US dollars and 1120.492 billion US dollars respectively, accounting for 22.55% and 18.24% of the total world service trade, up from 21.38% and 16.76% in 2013, but still a deficit on the whole. The import and export volume of China, Japan, South Korea and Singapore is more than 100 billion US dollars, accounting for more than 70% of the total RCEP service trade; Japan, Philippines, Thailand, Vietnam, New Zealand and Singapore have trade surpluses, while China, South Korea and Australia have trade deficits, of which China has the largest deficit, reaching 217.488 billion US dollars, and the deficit is higher than 200 billion US dollars in 2014-2019.

Table 1 Status of Service Trade in RCEP Countries in 2019 (Unit: Us \$100 Million)

	Export Volumn	Import Volumn	Total Volumn	Share World of	Balance of imports and exports
China	2831.92	4.61%	5006.8	8.59%	-2174.88
Japan	2050.57	3.34%	2035.85	3.49%	14.72
Korea	1024.31	1.67%	1264.22	2.17%	-239.91
Australia	699.75	1.14%	715.31	1.23%	-15.56
New Zealand	168.7	0.27%	143.17	0.25%	25.53
Brunei	6.18	0.01%	18.12	0.03%	-11.94
Cambodia	62.54	0.10%	32.04	0.05%	30.5
Indonesia	316.03	0.51%	393.87	0.68%	-77.84
Laos	11.09	0.02%	12.81	0.02%	-1.72
Malaysia	408.83	0.67%	435.01	0.75%	-26.18
Myanmar	70.85	0.12%	35.29	0.06%	35.56
Philippines	409.91	0.67%	279.28	0.48%	130.63
Singapore	2048.14	3.33%	1990.5	3.42%	57.64
Thailand	820.1	1.33%	587.65	1.01%	232.45
Viet Nam	276	0.45%	187.7	0.32%	88.3

Data source: WTO database

Since 2013, the proportion of China's service trade in the world has been steadily increasing, with imports, exports and total accounting for 6.97%, 4.23% and 5.58% respectively in 2013, and 8.59%, 4.61% and 6.55% respectively in 2019 (figure 1).

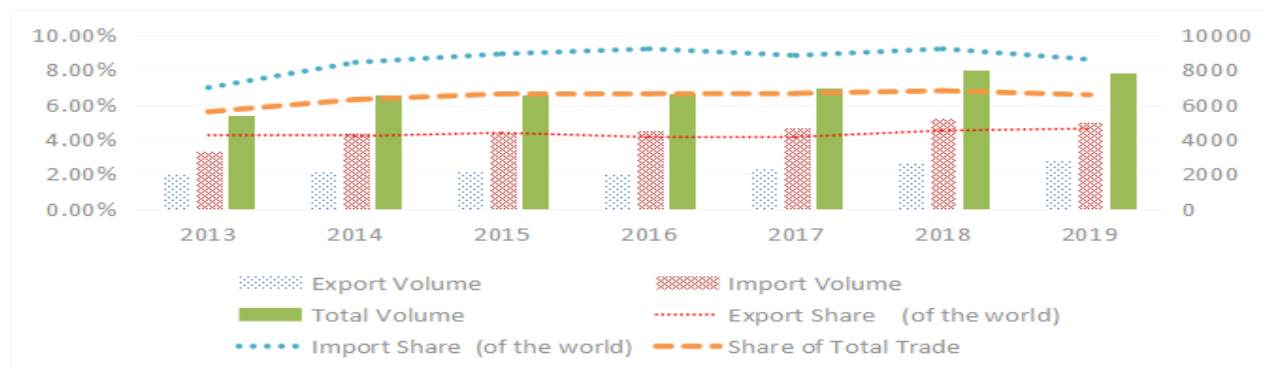


Figure 1 Import and Export Volume and Proportion of China's Service Trade in 2013-2019

Data source: WTO database

RCEP service trade in most countries showed a positive growth trend, whose share in the world is getting higher and higher, but the import and export are unbalance. China's trade deficit is particularly prominent, which forms a big contrast with China's overall foreign trade surplus situation. There are three reasons: China has to import high-end service elements from abroad in order to maintain high-quality exports in manufacturing industry; Second, the development is not mature and the department structure is unreasonable because the service industry starts late ; Third, the promotion and application of science and technology is insufficient, and the technology content of service industry is not high enough.

3. Service Trade Competitiveness of China and RCEP Partner Countries

This paper selects TC and RCA index to analyze the overall and sub-sector competitiveness of RCEP countries.

3.1 Overall Services Trade Competitiveness

3.1.1 TC Index

Trade Competitiveness Index (TC) is a commonly used index to analyze international competitiveness, which mainly measures the value of import and export, The formula: $TC = (X_{ij} - M_{ij}) / (X_{ij} + M_{ij})$. The calculation results are shown in Figure 2:

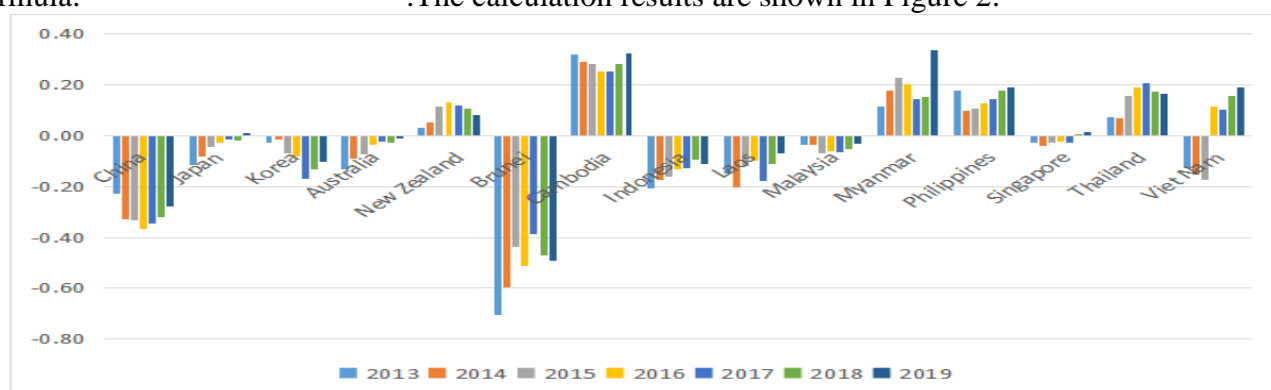


Fig.2 Total Service Trade TC Index of RCEP Countries in 2013-2019

Data source: WTO database

TC index calculation shows that most RCEP countries do not have obvious trade competitive advantage, only Cambodia, Myanmar, Thailand, Philippines and New Zealand with small volume of service trade are weak advantages, and other countries including China, Japan, South Korea and Singapore are weak disadvantages. The competitiveness of most RCEP member countries fluctuated,

especially in 2019, with the exception of Myanmar, Vietnam and other countries, the competitiveness of most countries declined, but the overall trend is good, showing a gradual development from a weak disadvantage to a weak advantage.

3.1.2 RCA Index

Revealed Comparative Advantage (RCA) is a commonly used index to express competitiveness by the ratio of a country's export share of a certain industry to the world's export share of that industry, The formula: $RCA_{ik} = (X_{ik} / X_k) / (X_{iw} / X_w)$. The results are shown in Figure3:

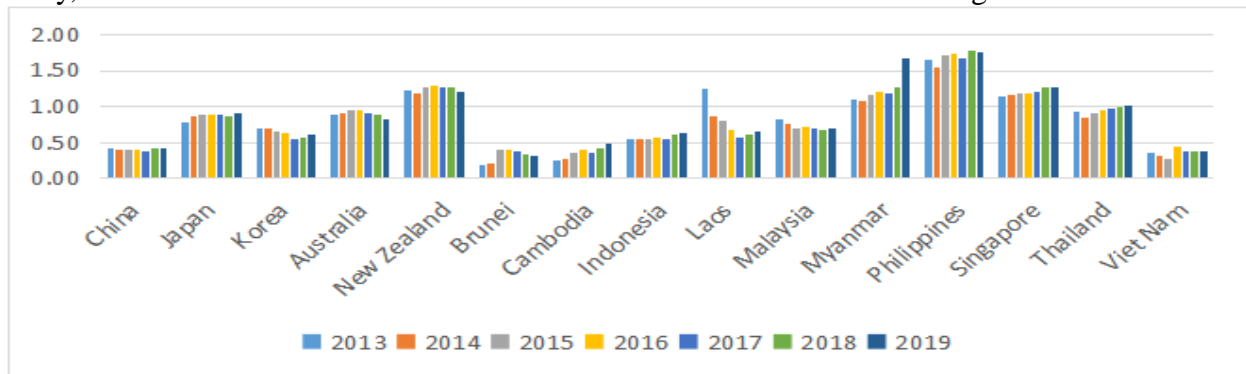


Fig.3 RCA Index of Overall Service Trade of RCEP Countries in 2013-2019

Data source: WTO database

It can be seen from Figure 3 that the overall service trade competitiveness of RCEP countries calculated by RCA index has no obvious comparative advantage, among which, the comparative advantage of Philippines is stronger, Japan, Australia, Singapore and New Zealand have medium comparative advantages, while the comparative advantages of China and Korea are weaker; From the perspective of change trend, the competitiveness of Singapore, Myanmar, Thailand, Indonesia and other countries has been steadily and rapidly improved, Malaysia has declined significantly, while China and Japan have been relatively stable, and the RCA index has maintained an average level of about 0.4 and 0.84, but in recent years, the overall performance is still rising.

The above calculation results show that Myanmar, Philippines, Thailand and New Zealand have comparative advantages, while China, Japan, South Korea and Australia have weak competitiveness. These countries need to adjust their trade strategies under the future RCEP framework, continue to optimize the content and form of trade in services, change the current situation of weak competition, and maximize the benefits of trade in services. In addition, the changes of service trade competitiveness of RCEP countries calculated by TC and RCA index are positive upward trend, which also reflects the growth trend of trade in RCEP countries and the better development of service trade in one aspect.

3.2 Competitiveness of Trade in Services by Sector

This paper uses TC and RCA indices to calculate and analyze the competitiveness of service trade in transport, tourism and construction sectors of RCEP countries in 2018. The calculated results using the TC index are shown in Table 2:

Table 2 TC Index Of Service Trade of RCEP Countries in 2018

	Transport	Travel	Construction	Insurance
China	-0.438	-0.750	0.511	-0.414
Japan	-0.140	0.351	0.062	-0.489
Korea	-0.073	-0.352	0.592	-0.054

Australia	-0.420	0.101	***	-0.098
New Zealand	-0.190	0.409	-0.358	-0.719
Brunei	0.146	-0.510	-0.410	-0.846
Cambodia	-0.367	0.670	-0.835	-0.969
Indonesia	-0.552	0.229	0.478	-0.638
Laos	-0.050	-0.115	0.057	-0.846
Malaysia	-0.403	0.234	-0.542	-0.774
Myanmar	-0.605	0.898	-0.838	-1.000
Philippines	-0.329	-0.179	-0.090	-0.889
Singapore	-0.017	-0.125	0.356	0.110
Thailand	-0.422	0.647	0.038	-0.897
Viet Nam	-0.410	0.261	-0.816	-0.826
	Finance	Telecommunications ,computer, etc.	Charges for the use of intellectual property n.i.e	Other business services
China	0.243	0.329	-0.730	0.193
Japan	0.168	-0.550	0.353	-0.235
Korea	0.174	0.439	-0.317	-0.205
Australia	0.269	0.017	-0.580	-0.102
New Zealand	0.242	-0.171	-0.346	-0.213
Brunei	-1.000	-0.969	-1.000	-0.967
Cambodia	0.500	-0.440	-0.867	-0.133
Indonesia	-0.258	-0.402	-0.920	-0.071
Laos	0.000	0.231	0.000	-1.000
Malaysia	-0.028	-0.071	-0.765	-0.065
Myanmar	0.400	-0.468	-0.880	-0.987
Philippines	-0.340	0.714	-0.908	0.565
Singapore	0.628	0.007	-0.335	-0.061
Thailand	-0.140	-0.597	-0.795	-0.121
Viet Nam	-0.429	0.348	-0.984	0.093

Data source: WTO database

Note: Trade in construction services sector data for Australia are missing

The results of TC index show that in the three traditional service industries, the competitiveness of transport is generally not strong. China, Australia, Indonesia and other countries have a greater competitive disadvantage. Japan, South Korea, Singapore and other countries have a weak disadvantage. There are great differences in tourism, China, Korea, Singapore and other countries are inferior, Japan, Korea, Singapore, Thailand and other countries have greater competitive advantages; China, South Korea, Indonesia, Singapore and other countries have obvious competitive advantages, while Japan, Malaysia and Vietnam are at an obvious disadvantage. Among the emerging service industries, China has a strong competitive advantage in telecommunications, computer and information and other business services, South Korea in telecommunications, computer and information, and Japan in intellectual property rights.

The results of RCA index calculation of RCEP countries in 2018 are shown in Figure 4:

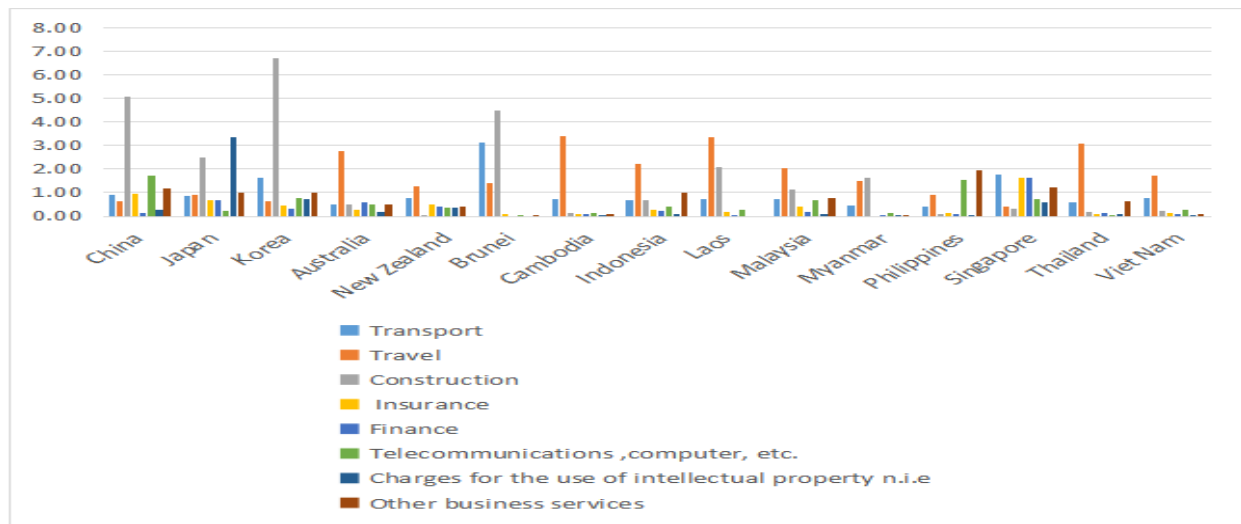


Figure 4 RCA index of service trade of RCEP countries in 2018

Data source: WTO database

The results of RCA index show that in the traditional service industry, the countries with strong competitive advantage in transport industry include Korea, Singapore and other countries, and China is in the middle comparative advantage; In terms of tourism, Australia and Thailand have strong competitive advantages, Japan and Philippines have medium competitive advantages, and China and South Korea have weak competitive advantages; In construction, China, Japan and Korea have obvious competitive advantages, while the competitiveness of other countries is quite different. In the emerging service industry, the overall competitiveness of RCEP is weak, except that China, Korea, Philippines and Singapore have strong comparative advantages in telecommunications, computer and information sub-sectors, other RCEP countries have weak comparative advantages; Japan, Australia and Singapore have strong competitive advantages in finance, all RCEP countries have weak competitiveness in intellectual property services, China, Japan, Korea, Philippines and Singapore have medium comparative advantages in other commercial services, and other countries have weak competitive advantages.

The results show that China has obvious or stronger competitive advantages in construction, telecommunications, computer and information, and other business services, while transportation and tourism have weaker competitive advantages, while finance and intellectual property are inferior. According to the theory of factor endowment, a country should export products with comparative advantages and import products with comparative disadvantages. The determinants of comparative advantage of trade in services include natural resources, labor, capital, technology, government policies and so on. The strong competitiveness of construction service trade lies in the large scale of China's industry, the large amount of government investment, the relatively low cost of raw materials and labor, and the abundant capital accumulation which provides sufficient financial advantages for overseas project contracting and engineering design; The reason for the strong competitive advantage of telecommunications, computer and information is that China has advantages in industrial scale, talent scale, government investment, capital accumulation and related industry construction; The main reason for the weak competitiveness of transportation and tourism is that both transportation and tourism belong to capital-intensive industries, while the infrastructure construction and related industry support in transportation and tourism in China are still insufficient; Finance and intellectual property are knowledge-intensive industries, which are weak in competitiveness due to late start, low market openness, lack of professionals and imperfect government policies. In addition, RCEP countries have better competitive advantages in other commercial services, which is a concrete reflection of the diversification and diversity of the development of international trade in services. Under the circumstance of insufficient motive force and slow growth of traditional service trade sector, other commercial services, as a new service

industry, may be the most competitive area in the future and a new engine driving the continuous development of service trade.

4. Main Conclusions and Recommendations

4.1 Conclusion

From the current situation of service trade development, the service trade of RCEP member countries is generally deficit, of which China has the largest deficit, but the development trend of service trade in various countries is good, and the service trade in most countries shows a positive growth trend; RCEP countries' service trade accounts for an increasing proportion of Global trade, and has become the most potential, dynamic and promising important part of international trade.

In terms of the overall competitiveness of service trade, Myanmar, Philippines, Thailand and New Zealand have comparative advantages in service trade, while China, Japan, South Korea and Australia are weak in the competitiveness of regional economic and trade leaders, and China's overall competitiveness of service trade is in the downstream area of RCEP countries, lagging behind most RCEP countries; The competitiveness of RCEP countries has maintained a sustained growth trend on the whole, and the overall competitiveness is getting stronger and stronger.

From the point of view of the competitiveness of service trade in different Sub-sectors, the competitiveness of various sectors is strong and weak, and the problem of unbalanced development is more prominent. China has obvious competitive advantages in construction, and its competitiveness in telecommunications, computers and information and other commercial services is also good, but its competitiveness in traditional transportation and tourism industries as well as emerging financial and intellectual property industries is relatively weak or relatively inferior.

4.2 Recommendation

In order to give full play to the advantages of RCEP platform, comprehensively promote the long-term and high-level development of service trade between China and its member countries, and accelerate the construction of a new pattern of service trade development in China, the following three aspects should be done well:

Firstly, a new open economic system should be built. We will comprehensively promote the multi-level, multi-field and multi-dimensional open development of the service industry, constantly deepen the reform of the service industry system and mechanism innovation, upgrade the management level of trade in services, create a high-level market environment, improve the bilateral cooperation mechanism between China and RCEP countries, and promote the development of China's service industry. We should refine the contents of trade in services in various sectors, take advantage of China's dominant position in telecommunications, computer, information and digital services trade in RCEP countries, actively participate in and lead the formulation of relevant rules and standards for trade in services, give full play to China's leading role in RCEP, make China's plan mainstream, and let China's wisdom shine.

Secondly, the competitiveness of trade in services should be enhanced as the core. To break through the dilemma of large service trade deficit and slow growth, we should make full use of China's comprehensive industrial advantages, rely on China's vast market, and apply big data, 5G, AI and other information technologies to empower service trade. Accelerate the application and promotion of cloud computing, big data and other information technologies in the field of trade in services, and comprehensively popularize 5G services, Beidou navigation services and other national strategic core technologies to RCEP partner countries; We will increase support for knowledge-intensive services such as finance, insurance and intellectual property rights, follow up in policy guarantee, financial support and incentive mechanism, and shape and cultivate more high-end service trade industries with scientific and technological content.

Thirdly, the structure of trade in services should be optimized. On the basis of coordinating the relationship between trade in services, trade in goods and foreign investment, we should give priority to the development of superior industries, consolidate the foundation of superior services such as telecommunications, computer and information, and other commercial services between China and RCEP partners, and extensively explore the construction, intellectual property rights and other commercial services between China and member countries. Efforts should be made to improve the competitive disadvantage of tourism, insurance and other sub-sectors, expand the potential opportunities for trade cooperation in transportation and finance, and realize the simultaneous improvement of the quantity and quality of trade in services, the diversification and scale of the content of trade in services, the optimization of the structure of service trade and the maximization of the benefits of trade in service.

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