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Research on the Development Prospect of "China-Asean" Service Trade- Analysis based on the manufacturing level of service industry

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Abstract: For many years, China's foreign trade in service industry has shown a large trade deficit, limited international development level, and insufficient competitiveness in the international market. Relevant studies show that the lack of development potential of the service industry foreign trade may be caused by the low level of industrial integration in China, the lack of high-tech participation rate and the low comparative advantages. At the same time, many ASEAN countries are also caught in a similar service industry development dilemma. Therefore, China and ASEAN countries should actively deepen cooperation in the areas of complementarity and inadequacy to promote win-win development, and jointly optimize the level of technology and the quality of the service industry, we will comprehensively improve the international competitiveness of the “China-ASEAN” service foreign trade.

Keywords: Service trade; Manufacturing of service industries; "China-Asean"

1. Preface

With the deepening of economic globalization and the development of information technology, the service industry has developed unprecedentedly, and the developed degree of the service industry has become an important index to measure the level of national development. Currently, the output of the tertiary industry in our country has exceeded the sum of the primary and secondary industries, which shows that the service industry in our country has developed rapidly and achieved remarkable results. However, compared with the developed countries, the service industry of China is faced with serious problems of low efficiency, lack of competitiveness, and so on, and its transformation and upgrading have become a trend.

In terms of foreign trade in the service sector, the Regional Comprehensive Economic Partnership (RCEP), initiated by ten ASEAN countries, was formally signed in 2020 with the continuous efforts of various parties. Many of the treaties have played a significant role in promoting the opening-up of the service sector. Under this trend, an in-depth study of China-Asean service industry cooperation and upgrading has far-reaching significance. This paper calculates the manufacturing level of China's service industry from the input side and the output side respectively. Combined with the comparison of the manufacturing level of ASEAN's multi-country service industry and the volume of foreign trade in the service industry, this paper further explores the necessity of strengthening industrial integration and complementary cooperation in China-Asean service trade.

2. The current situation analysis of Chinese service industry

2.1 Under the perspective of "domestic and international double circulation", China's service trade potential and insufficiency

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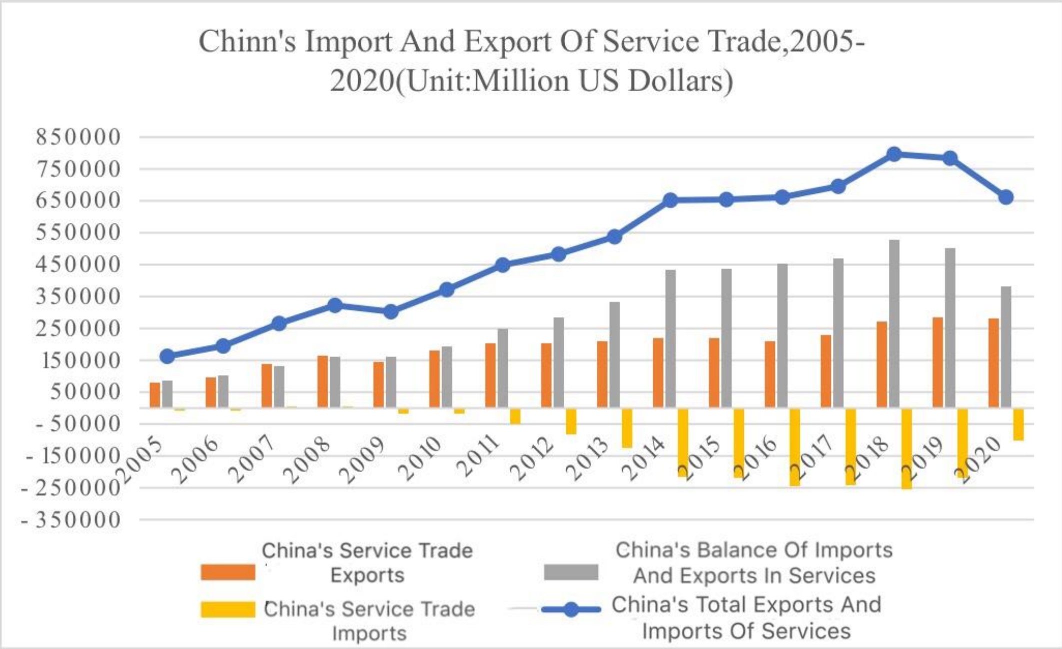

Figure 1 Value added and growth rate of China's service industry, 2002-2021

As a new economic growth point, service trade has become the focus of the international competitive market. For many years, the total scale of China's service trade import and export has ranked second in the world. As can be seen from Figure 1, from 2005 to 2018, China's total import and export of service trade continued to increase and even reached the US $796.6 billion in 2018. Under the influence of the epidemic, China's service foreign trade is still developing against the trend, especially the total volume of online shopping, logistics services, information transmission, and software information technology services has strong upward momentum. In terms of opening, China has also been increasing the number of pilot free trade zones in the service sector to enhance its competitiveness in service trade.

However, China's service trade deficit gradually emerged after the 2008 financial crisis, and even reached $253.7 billion in 2019. The deepening dependence on service trade imports means the inadequacy of China's service industry global competitiveness, moreover, the increase in trade deficit is bound to bring certain hindrances to our service industry optimization. Besides, the low opening degree of service trade is also one of the main contradictions, coupled with the various international trade barriers to China's emerging service trade, China's service trade export is subject to many restrictions. In addition, over the years, China's service trade has faced many problems, such as low technological content, unbalanced regional development, and weak openness. However, in the process of responding to the challenge of the global epidemic, Chinese service enterprises were able to withstand the pressure, quickly recover and move forward against the trend. Under the guidance of our party's "international and domestic double cycle", many enterprises are also showing the decision-making power to find a breakthrough in the weak aspect, which brings confidence for the development prospects of our service trade.

2.2 Discussion on the limitation of service industry development based on the level of manufacturing of service industry

At present, the connotation of service manufacturing mainly exists in two perspectives, namely input end and output end. First, the manufacturing of the service industry at the input end refers to the introduction of the production methods and products of the manufacturing industry into the service industry, so that the service industry can have a certain industrial division of labor and scale output, and finally achieve a certain scale effect, which is a relatively preliminary industrial integration. The manufacturing of the service industry at the output side refers to putting the unique core technology of the service industry into manufacturing production, that is, embedding the added

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value of intangible products into tangible products, to achieve the goal of producing high-quality manufacturing products from the service industry. Manufacturing ferritization at the output end can better represent the customized output process of the service industry, which is a relatively advanced industrial integration. To sum up, the meaning of the manufacturing of service industry can be defined as the industrial integration activities that are led by the service industry and extend to the manufacturing industry using its core advantages.

Based on the Leontief matrix in the OECD-ICIO Table of Inputs and Outputs (2021 edition), this paper calculates China's direct consumption coefficient from 2005 to 2018 from the output side, and thus obtains the overall manufacturing level of the service industry at the input and output sides. At the same time, according to the statistical research of OECD, the manufacturing industry is divided into four categories: low-end manufacturing industry, middle and low-end manufacturing industry, middle and low-end manufacturing industry, and high-end manufacturing industry. After re-integration, the classification of the manufacturing industry can be obtained as shown in Table 1. On this basis, the corresponding four types of manufacturing levels of service industry are calculated, and Table 2 and Table 3 are obtained.

Table 1 Manufacturing classification and OECD-ICIO (2021) code

Type of manufacturing	Industry content	Industry code
Low-end manufacturing	Food, drink, and tobacco Textiles, textile products, leather, footwear Softwood wood and softwood products Paper products and printing	D10T12 D13T14 D16 D17T18
Medium and low-end manufacturing	Coke and refined petroleum products Other non-metallic mineral products Base metals Metal products Repair and installation of machinery and equipment	D19 D23 D24 D25 D31T33
Medium and high-end manufacturing	Chemistry and chemical products Rubber, plastic products Electrical equipment Machinery and equipment Cars, trailers, and semi-trailers Other transport equipment	D20 D22 D27 D28 D29 D30
High-end manufacturing	Pharmaceutical, medicinal chemical and plant products Computer, electronic, optical equipment	D21 D26

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Table 2 Manufacturing level of service industry at the output end

Year	Total level of end-to-end manufacturing of output (%)	Low-end manufacturing level (%)	Low-end manufacturing level (%)	Medium and high-end manufacturing level (%)	High-end manufacturing level (%)
2005	46.804	14.499	10.111	15.312	6.881
2006	48.347	14.275	9.923	15.887	8.262
2007	48.891	14.295	10.483	15.405	8.708
2008	46.562	13.399	10.553	15.454	7.156
2009	48.213	14.222	11.016	15.246	7.729
2010	47.415	14.665	11.390	14.732	6.629
2011	45.131	13.408	11.682	13.397	6.644
2012	45.269	14.063	11.008	12.898	7.301
2013	43.829	14.730	8.572	13.514	7.014
2014	43.324	14.972	8.062	13.640	6.650
2015	42.636	14.614	7.649	13.711	6.661
2016	41.646	15.723	8.331	11.255	6.338
2017	40.203	15.681	8.477	10.205	5.840
2018	39.334	15.515	8.681	9.329	5.808

From the point of view of the overall level, the change in the manufacturing level of the Chinese service industry is relatively stable. The range of the change of output end is corresponding to the situation that after 2009, it shows a gradually decreasing state. Based on the analysis of the degree of manufacturing ferritization, this paper holds that the index is not simply the higher the value, the better. Because the manufacturing level of the service industry often aims at product differentiation and customization, however, as a service product, the profit brought by product differentiation is limited. Second, increasing the manufacturing output at the output end will continuously increase the expenditure of various costs. Combined with the enterprise cost mechanism, the profit advantage of the service industry will also form nonlinear changes along with its manufacturing. Therefore, the trend in the manufacturing level of the Chinese service industry is understandable.

Then, at different levels of manufacturing, the input and output sides show similar trends. In general, the middle and high-end manufacturing sector accounts for the largest share in the service sector; And high-end manufacturing such as computers, electronics, and optical equipment input is minimal; Low-end manufacturing and mid-end manufacturing strength is comparable, accounting for a relatively high proportion. However, if we want to change the advantage endowment of the service industry, it is far from enough just through the middle-end manufacturing, because this direction will soon be subject to the finiteness of the cost constraint and product differentiation, thus affecting the corporate profits. If you really want to push the service industry to the middle and high end of the global value chain and high-end market, the service industry must have its irreplaceable and high technical barriers. How to lead the world in technology content is the difficulty that our service industry needs to break through.

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3. Explore new opportunities based on the service trade difference between China and ASEAN countries

3.1 New opportunities arising from the service sector liberalization clause in RCEP

With the leap-forward development of the world trade in services, the traditional international trade in goods cooperation system has been difficult to adapt to, coordinate, and serve the current international economic and trade exchanges. In the face of the great changes that the traditional rules of international economic and trade cooperation will be deconstructed and upgraded, to realize the in-depth exchange of trade in services, and make the relevant laws and treaties fairer, more transparent, and more efficient, China began to actively lead and promote the construction of a new platform for international Economic and trade cooperation -- Global economic Partnership. The signing of the RCEP agreement will play a major role in promoting the fair and transparent exchange of trade in services. On this basis, the agreement also calls for further integration of trade in goods and services, so that they can support each other and develop together, supported by more open policies. Moreover, RCEP also focuses on the development of Internet-based trade in services, which provides greater business opportunities for emerging businesses such as cross-border e-commerce, Internet finance, and online office. This also means that the economic recovery in the post-pandemic era will largely rely on the development of Internet-based trade in services.

3.2 To compare the differences in service structure between China and ASEAN countries based on the manufacturing level of the service industry

Table 3 Manufacturing Level of Output End Service Industry in China and ten ASEAN Countries from 2005 to 2018 (%)

	China	brunei	myanmar	In Cambodia	Indonesia	The Malay	The Philippines	Singapore	Thailand	Vietnam	Laos
2005	46.8	37.0	24.6	36.7	30.9	18.5	32.0	11.0	38.6	36.1	15.0
2006	48.3	28.6	24.9	22.6	32.7	18.9	32.6	12.2	39.9	35.4	13.4
2007	48.9	35.8	26.4	19.4	33.3	19.9	28.0	18.4	40.4	33.8	13.0
2008	46.6	29.0	26.5	19.5	33.3	18.6	26.8	13.8	39.6	38.2	14.5
2009	48.2	38.6	26.1	15.8	36.0	21.2	28.3	19.0	41.5	40.2	17.7
2010	47.4	33.4	23.4	19.4	36.0	20.4	26.6	14.0	38.7	40.6	15.6
2011	45.1	32.8	24.2	19.7	35.3	21.7	27.0	8.1	33.1	40.1	14.4
2012	45.3	32.3	24.9	20.6	35.5	22.8	27.3	9.3	33.9	41.5	16.3
2013	43.8	33.5	26.2	20.6	35.2	23.8	27.4	11.3	34.5	40.2	12.9
2014	43.3	35.0	26.5	21.1	35.3	24.1	26.7	11.7	35.0	39.8	14.4
2015	42.6	42.0	26.2	20.2	36.8	25.8	27.7	11.8	35.9	39.9	14.8
2016	41.6	42.6	28.3	19.5	37.9	25.3	28.1	12.0	37.2	39.5	16.3
2017	40.2	35.9	27.8	18.9	37.5	24.5	27.8	10.4	36.0	38.7	16.2
2018	39.3	32.0	29.3	18.1	36.3	24.9	28.0	10.9	34.9	37.8	16.2

On the output side, the manufacturing level of the service industry in China is higher than that in the ten ASEAN countries, that is, there are more manufacturing components in the finished products of the service industry in China, which indicates that China has a certain leading advantage in the externalization of products in the emerging service industry. China can make use of this advantage to effectively export the customized and tangible service industry chain to ASEAN. And through leading advantage, increase high-end manufacturing output, to sustainable development of service trade in this field, improve our long-term deficit.

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3.3 Analyze the current situation of ASEAN's demand and supply for service trade from the perspective of the import and export of service trade

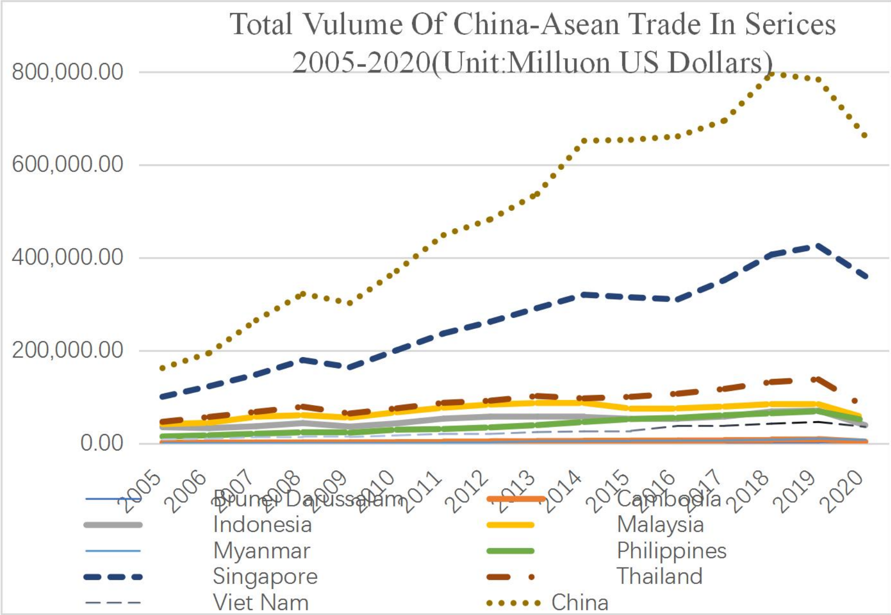

Figure 2 Total imports and exports of China-Asean service trade from 2005 to 2020

Among ASEAN countries, Singapore has a relatively outstanding performance in service trade. Although it is only about half of China's volume, its per capita service trade volume is far higher than China's. There are some differences between China and developed countries like Singapore in the development of service trade. As the financial center of Asia, Singapore has strong reference significance in finance, business services, transportation, and communication. China can make use of the favorable conditions of RCEP signing, strengthen exchanges with Singapore's competitive service industry, and actively learn from its successful experience.

There are also other extreme situations in ASEAN countries. For example, Myanmar, Cambodia, and Brunei have relatively limited development in service trade. In comparison, Thailand, Indonesia, Malaysia, and the Philippines are much more impressive in the service trade. In 2005, the total import and export volume of these countries' service trade can reach hundreds of billions of dollars. After more than ten years of development, several countries have rapidly developed to more than one trillion dollars. Among them, Thailand, with its advantages in tourism and retail trade, quickly ranked second among ASEAN countries in terms of total trade in services. Inevitably, these countries have also been hit hard by the pandemic, among which their advantageous tourism and foreign trade bear the brunt.

In terms of the trade structure of each ASEAN country, several small service trading countries are actively trying to export their own services and provide as much supply as possible. These countries have relatively strong labor endowments and are actively seeking development due to their low labor prices. However, most of their export products are still at the lower end of the value chain. China can bring some of its primary emerging service industry experience and supporting facilities to these countries to complement each other's advantages and develop as a group. In addition, the in-depth cooperation between China and these ASEAN countries will play a positive role in promoting the improvement of their service trade structure. China can use the historical experience to explore more in-depth cooperative relations with ASEAN countries in more fields.

In general, with the signing of RCEP, China-Asean service trade will enter a new stage of cooperation and development. Despite this, China should cooperate in different fields and degrees according to the supply and demand of service trade in different countries. Based on optimizing China's service trade, we should truly complement each other's advantages and achieve win-win cooperation.

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