

Competitive Analysis of Chinese and Indian Textile Products

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Abstract

The trade of textile products between China and India in the context of economic globalisation has attracted much attention in recent years. Both countries are located in the Asian region and have similar display comparative advantages in textile products, at the same time, the target exporters of textile products of the two countries are mostly developed countries, such as the United States, the United Kingdom, Japan and so on, which in turn makes the two countries become strong competitors in the globalised market. In recent years, the textile products of China and India have spread all over the world, and the distinctive features of the textile products of the two countries constitute the similarities and differences in the trade of textile products between China and India. First of all, China and India textile products in the textile market both occupy a large proportion of the textile products of the two countries export trade volume are increasing year by year, this is the first feature of the two countries textile products, but also their similarities. Secondly, the import and export of textile products are similar, mainly focusing on textile raw materials and finished textile products such as textile clothing. In addition, the textile industry in China and India are not the same product structure, resource conditions and other factors, which leads to the advantages and disadvantages of the two countries' textile products are different. These characteristics provide the possibility to analyse the competitiveness of textile products. The reform of the textile industry in China and India started almost at the same time. The textile development in both countries started almost at the same time in 1991, when India gave up its planned economy and the licensing system which from this point of view was seriously affecting the vitality of the Indian economy. The reform of the textile industry in China and India started almost at the same time. The textile foreign trade of both countries grew rapidly after the Cold War, for example, in 1992, the first phase of industrial reforms in both countries, the trade in textile products was still not proportional to the size of the market and the size of the population of the two countries, but in 2012, the value of exports of textile products of both countries has reached a staggering amount. Due to the impact of the global financial crisis in 2009, the pace of optimisation and upgrading of the textile industry has slowed down, and with the economic restructuring between the two countries, as well as the development of multilateral trade, the export value of textile products from both India and China has nearly grown by more than 10% annually. This paper firstly uses the theory of comparative advantage to form a preliminary concept of textile products of the two countries, and then through the establishment of a competitive model of textile products of the two countries to show the competitive advantage.

Keywords

Comparative Advantage; Competitiveness; Complementarity; Trade; Textile Products.

1. Introduction

China and India as the world's two major developing countries with strong development momentum, in the textile industry for the global textile products import and export of the impact of the pivotal, and China and India have some of the many similarities of the textile industry in the two countries, for example, are populous countries and are located in the Asian region, are because of the huge population to obtain the cost of textile dividend, attracting a lot of foreign investment to promote foreign trade in textiles, thereby Both countries have many similarities, such as being populous countries and in the Asian region. But at the same time there are a lot of differences between the two countries, which makes China and India's respective textile products are competitive. As the textile industry structure of the two countries continues to upgrade, the textile trade exchanges between the two countries are also increasing, and in February 2021, India said it intends to open the door to approving investment in China due to the slowdown in economic growth, India will approve China's investment plans, at the same time it can be foreseen that the future of the two countries will be more trade exchanges between China and India. Analyzing the competitiveness of the products of China and India can enable us to have a clearer perception of the strengths and weaknesses of their respective textile products [1].

China and India as the world's two big textile trade countries, both partners and competitors. With the globalization of trade, the rapid development of science and technology as well as the transformation of trade patterns, the change in the concept of competition, as well as tariffs and non-tariff barriers and many other factors, textile trade in China and India is no longer the traditional way of operation. This paper will analyse the advantages and disadvantages existing in the textile industry of the two countries and filter the factors through the model, observe the competitive advantages possessed by each of China and India, compare the competitiveness of the two countries, observe and predict the possible future direction of the textile industry of the two countries, and, finally, put forward some suggestions for strengthening the competitiveness of the textile industry of the two countries through the analysis. Regarding the trade of textile products between China and India, there are many studies based on the "Belt and Road", mainly through the econometric analysis model, Porter's Five Forces model, as well as the exponential function and model to find out the main factors affecting the trade between China and India and to explain them through the statistical analysis of the relevant data. At the same time, there is also a part of the study is based on the economic development of China and India, Cambodia, Vietnam three countries to carry out relevant trade analysis. For China and India textile products trade overall related analysis is currently less, mainly focusing on the relevant policies formulated by the state and the development trend of the textile industry, about the competitive comprehensive analysis of the current overall China-India trade related analysis proportion is low.

2. Relevant Concepts and Theories

2.1. Relevant Concepts of Competitiveness

In this paper, competitiveness can be explained as the competitive advantage that similar products have in the same market. For competitiveness, it is impossible to compare the competitive advantages possessed by products of different categories or industries. When doing competitive analysis, the Porter's Five Forces model, the Displayed Comparative Advantage Index model, etc. are usually used to do the corresponding comparative analysis. The theory of comparative advantage can be expressed by the fact that the difference in labor productivity between two countries is not equal in any product, and that each country should focus on producing and exporting products with comparative advantage and importing

products inferior to the comparative product [2]. Advantage, i.e., the theory of comparative advantage means that international trade is based on the relative differences in production technology, and not every country should focus on producing and exporting products with comparative advantages and importing products with relative disadvantages. According to the principles of the theory of comparative advantage in trade, the basis of emerging trade is explained on a more comprehensive basis. In this paper, according to the theory of comparative advantage, China and India should fully utilize the resources available in the theory. With comparative advantage, effective combination of factors of production is essential to achieve effective utilization of factors of production.

2.2. Theory of Comparative Advantage

The theory of comparative advantage can be expressed by the fact that the difference in labour productivity between two countries is not equal for any product and that each country should focus on producing and exporting products with comparative advantages and importing products that are inferior to the comparative products. Advantage, i.e. the theory of comparative advantage, means that international trade is based on relative differences in production technology, and not every country should focus on producing and exporting products with comparative advantages and importing products with relative disadvantages. According to the principles of the theory of comparative advantage in trade, the basis of emerging trade is explained on a more comprehensive basis. In this paper, according to the theory of comparative advantage, China and India should make full use of the resources available in the theory. Having comparative advantage, effective combination of factors of production is essential to achieve effective utilisation of factors of production [3,4].

3. Development and Status of Textile Products in China and India

3.1. Development History of Textile Products in China and India

All along, China and India belong to the big textile countries, before 1995, the textile industry to take the textile product quota system, textile quotas in a broad sense, that is, a management and distribution of limited textile resources, is a balance of the interests of all parties, in the textile quota system, the country and the country will be signed between the textile agreement, which stipulates the categories and the number of textile products to enter the country or region. quantity. Compared to the textile products of various countries, China's textile products have obvious advantages, in order to protect their own products from China's textile products, to maintain the market share of domestic textile enterprises, for decades has been to China to take the textile quota system. For developing countries, especially China and India so that textile products are mainly dependent on exports of countries, to a certain extent, to limit the rate of growth of textile exports. And in 2005, the quota system was completely canceled, China's textile industry ushered in the spring, the textile industry has become one of the most benefited industries after joining the WTO.

3.2. Changes in the Volume of Trade in Textile Products between India and China

As of 2020, China's textile foreign trade stock investment has exceeded \$10 billion, of which, the textile and clothing trade amounted to more than \$300 billion, the import and export countries include Asia, Europe, North America and other developed and developing countries. India's textile foreign trade dependence on the volume of 13.8 per cent year-on-year growth. The rapid growth in the volume of textile trade between the two countries illustrates the great resilience and potential of textile trade between China and India. For the main related textiles, cotton as the main raw material for textile, China's import and export volume compared with the previous two years has declined, other plant textile fibre import and export trade volume

in the past three years is basically flat, knitted fabrics and crochet fabrics with the previous two years compared with the previous two years have also been reduced, while other textile manufactured goods appeared to be a year-on-year upward trend, the 2020 import and export trade volume compared with the previous two years has seen a huge increase in the previous two years is two years ago The volume of import and export trade in 2020 showed a huge increase compared with the previous two years, more than twice as much as the previous two years. From the data, it can be found that China's trade in textile raw materials and low value-added products is flat or declining, while the trade in textile manufactures, i.e., textile products with higher value-added products, is increasing year by year. The situation in India is similar to that of China. Not surprisingly, this is probably due to the fact that consumers nowadays have more and more demands and needs for patterns and styles, and are more sensitive to design. Therefore, the total volume of trade in textile products between China and India is increasing year by year, but the trend of trade volume varies for different types of textiles and related raw materials.

3.3. Analysis of the Status of Textile Products in China and India

In China's textile raw material products production, cotton, cotton yarn, synthetic fibre and sheep blended woven fabrics are the main export products. As can be seen from the above table, the export quantity of China's cotton in 2019 is 521,427,800 tonnes, which is nearly twice as much as the export quantity of China's cotton in 2015. China's cotton yarn export quantity maintained a relatively stable export quantity amidst fluctuations during 2015-2019. The export quantity of synthetic fibre and cotton blended woven fabrics was 2,154,878,700 tonnes in 2015 while it was 1,682,775,400 tonnes in 2019, a decrease of 472,103,300 tonnes, with the export quantity decreasing year by year during the five-year period. The export quantity of cotton yarn from China accounts for a large proportion of textile exports.

Table 1. China's textile export volume, 2015-2019

Year	2015	2016	2017	2018	2019
Quantity of cotton yarn exported (tons)	343935.48	355657.00	393512.00	402072.00	374976.61
Quantity of cotton exported (tons)	28915.68	7757.00	17083.00	47349.00	52142.78
Quantity of synthetic fiber and cotton blended woven fabrics exported (10,000 meters)	215487.87	195459.00	173908.00	168955.00	168277.54

In addition, the share of exports and imports of textile and apparel products between China and India is not insignificant in the foreign trade of the two countries. China and India have similar comparative advantages in the production and trade of different textile and apparel products, and as of now, although China's exports and imports of textile products outstrip India's, India's textile products also show a strong potential for growth. In textile production, apart from one's own resources and technology, other external influences such as competitors, qualitative differences, industrial policies, and China's industrial development cycle should also be emphasized.

4. Competitive Analysis of Chinese and Indian Textile Products

4.1. Comparative Advantage Analysis of Chinese and Indian Textile Products

Textile industry for decades as a labour-intensive industry, the main factors affecting its development and cost of labour costs, production efficiency, factors of production, infrastructure, textile raw material resources, the international environment, national policy

factors and consumer demand conditions, etc., which at the same time is also an important factor whether China and India can occupy a dominant position in the textile industry, to obtain comparative advantage. In the cancellation of the textile industry quota, India's textile products in some developed countries such as the United States and other countries in the market share of a more obvious rise, China's huge trade surplus with the United States, resulting in China's textile import and export trade in these countries on the restrictions, and India is the United States to unite the other countries to suppress China's biggest beneficiaries, therefore, in the international factors, India has more advantages than China, but it is worth noting that the international environment is volatile. The international environment is unpredictable, India has a short period of time this advantage is likely to gradually disappear with the international form.

4.2. Labour Cost

China and India, as the world's most populous developing countries, have abundant labour resources, and for the textile industry, inexpensive labour can effectively reduce production costs. From the table, it can be found that among the labour manpower cost of textile products in many countries and regions, the labour wage in China's inland textile industry is US\$1.10/person . Hour, equivalent to 7.5% of the U.S. labour wages, Japan's 4.2%, South Korea's 19.0%, Thailand's 83.3%, Turkey's 38.2%, which means that, compared with the vast majority of developed countries, China's textile industry has a lower level of labour wages, and has a more obvious labour cost advantage. But India's textile industry, the labour wage level is 60.9% of China's, which explains the Indian textile industry labour cost advantage than China's textile industry labour cost advantage is more significant.

Table 2. Comparison of labor costs in the textile industry in major countries and regions of the world

Unit: USD/person . Hour

nations	US	Japanese	South Korea	China	India	Thailand	Istanbul
Labour cost	14.51	26.50	5.80	1.10	0.67	1.32	2.88

For labour costs, China's demographic dividend is gradually disappearing, while India's total population is still in a rapid growth stage, as China a few decades ago, and cheap labour is always a major winning formula for the textile industry. It is not difficult to find, although China's textile industry, foreign investment and foreign investment is still growing, but the rate of establishment of foreign processing factories has slowed down, China is no longer the first choice of developed countries to create factories, replaced by Laos, Vietnam, India and other countries where the price of labour is still very low, while at the same time, the rate of foreign investment is still to maintain the medium and high speed, which also shows that the international market for textile Demand for textile products in the international market is still not a small gap. Therefore, in the cost of labour, India and some other developing countries have a more obvious comparative advantage than China [5].

4.3. Raw Material Resources for Textile Products

In the supply of textile raw materials, India has huge resources comparable to China, such as cotton, China is the world's number one producer of cotton, while India also has the world's largest cotton plantation base, the two countries are not comparable to the production of cotton, China's cotton production in 2017-2019 in fluctuations to maintain a stable. 2019 India's cotton production of 6.3 million tonnes, China's cotton production of 5.889 million tonnes, India's cotton production exceeds China's for the first time. In terms of cotton raw material, India's exports are highly competitive [6].

Table 3. China's textile export volume, 2015-2019

Year	China			India		
	2017	2018	2019	2017	2018	2019
Cotton(10,000 tons)	555.2	567.6	588.9	522.1	550.6	630.0
Chemical fibers (10,000 tons)	4722.6	5011.1	5688.7	723.1	758.6	842.9
Yarn(10,000 tons)	4050.0	2976.2	2892.1	542.1	559.3	594.0
Silk (10,000 sheets)	1165.2	1643.3	1886.5	546.2	766.2	877.5

China's yarn production saw a huge slide in 2018, with output plummeting from 40.550 million tonnes to 29.762 million tonnes, and India's yarn production increased gently, but China's yarn production is still ahead of India's, with India's yarn production at 13.4% of China's in 2017, 18.8% of China's in 2018, and 20.5% of China's in 2019.

Silk is an important raw material for silk textiles, and China's silk production is at the forefront of the world. India's silk production is low and it needs to import a large amount of silk from China every year to meet domestic demand. In silk textile products, China's silk is very competitive. Compared with China, India's export competitiveness from the beginning is relatively small, and with China's continuous export of culture in recent years, China's silk production all the way up. India has not improved much in comparison.

4.4. Modeling Analysis of Indicative Comparative Advantage Index of Textile Products between China and India

The RCA index, proposed by Balassa and later modified to include imports, is used to measure a country's export and import advantage over another country. The RCA index is defined as the share of exports and imports of a particular category or industry in the total exports and imports of a country, and the share of exports and imports of such goods in the total exports and imports of such products in the world market. The formula is:

$$RCA_{ij} = (X_{ij} / X_{tj}) \div (X_{tj} / X_{tW})$$

In this paper X_{ij} for China or India's total exports of major textile products, X_{tj} for China or India within the scope of the country's total exports of all textile products, X_{tj} for the global scope of the total exports of textile products, X_{tj} for the global scope of the total exports of all products. When the RCA_{ij} index is greater than 1 means that China or India in a certain type of textile products have a certain export competitive advantage, that is, at this time the country in the textile products in a dominant position. On the contrary, if the RCA_{ij} index value is less than 1, it means that China or India does not have a competitive advantage in a certain category of textile products, that is, the country is in a disadvantageous position in such textile products. the larger the RCA, the more obvious the comparative advantage of the country's products of the same type, and the smaller the RCA, the more obvious the comparative disadvantage of the country's products of the same type.

According to the above described display of comparative advantage index model of textile products of India and China to analyze the study of different textile products that each country has a comparative advantage. In the National Customs Bureau, textile products are mainly located in Chapters 52 to 63, and several textile products with more obvious comparative advantages are analyzed by calculating the RCA index.

Table 4. China's total textile exports in the global market, 2015-2019 (\$ million)

Year	2015	2016	2017	2018	2019
China's total textile and apparel exports	144466	129788	128319	127040	120676
China's total textile exports	21208	19348	18981	19926	23568
China's total exports of textile products	5822803	5841534	6804225	7667566	7482530

Table 5. Total Exports of Indian Textiles in Global Markets, 2015-2019 (US\$ Million)

Year	2015	2016	2017	2018	2019
India's total textile and clothing exports	30592	32286	36770	35442	48665
India's total textile exports	37390	35353	40833	41172	41893
India's total exports of textile products	249272	235688	272220	274480	279289

Table 6. Total global merchandise exports on global markets, 2015-2019 (\$ billion)

Year	2015	2016	2017	2018	2019
Total global textile and clothing exports	3980.6	4233.8	4669.5	4877.1	4935.1
Total global exports of textile products	1884.2	2020.1	2254.3	2680.1	3061.2
Total global merchandise exports	16887.1	17996.3	18866.9	18896.5	189325.8

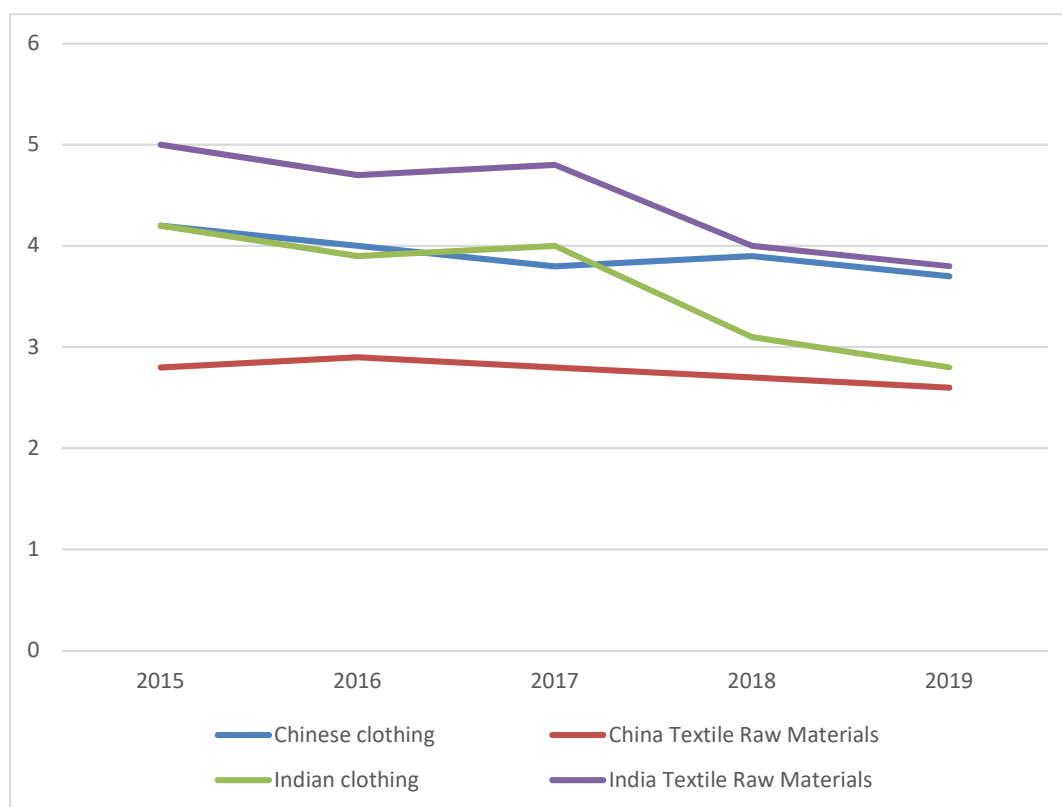


Figure 1. China-India Textile Displayed Comparative Advantage Index 2015-2019

5. Conclusion

According to the results of the Displayed Comparative Advantage Index, it can be seen that China's RCA index in textiles mainly including textile raw materials has been decreasing year by year, which means that the competitiveness of China's textile raw materials has been gradually decreasing in the global market, while India's textile's RCA index is higher than China's, which shows that India has a stronger competitiveness and competitive advantage in

textile raw materials; at the same time, in the textile finished apparel. China's RCA index between 2015-2017 and India is not much different, after 2017, China is far more than India's textile and apparel RCA, India's textile and apparel in the flat after a huge drop, while China's textile and apparel RCA value in the fluctuation of basically flat, which shows that China's textile and apparel is more competitive compared to India, and more stable.

Both countries have their own strengths and weaknesses in the textile industry, and for textile and apparel products, China is more competitive. In the textile raw material products, India is also the same. Generally speaking, China and India's textile industry situation is relatively similar, but because of the two countries in the factor endowment, geographic location, production conditions and other factors are also complementary, the future will be further verified. Especially in textile and clothing, China and India can strengthen cooperation and exchange, so as to absorb each other and integrate to promote the development of the textile industry. China and India should actively use their own advantages and resources, with an open and inclusive heart to strengthen bilateral trade, and promote the continuous upgrading of the textile industry in both countries [8]. China and India as the world's two emerging economies, although the textile industry is in a different stage of development, but if we can make good use of the respective characteristics of the two countries' products, we can form a kind of healthy competition, good for both countries. At the same time, the textile industry should rely on the "Belt and Road" international exchanges and co-operation, and constantly seize the opportunity to develop the advantages of their own products.

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