

China's Textile Industry International Competitive Advantage and Policy Suggestion

YUAN, Tao & XU, Fu

Department of International Economy and Trade, Nankai University, Tianjin, China

The textile industry has long been a pillar of China's economy thanks to its advantage in factor endowment and market scale. The trade volume of the textile sector has increased by 27.11 times during the past 25 years (from the Reform and Opening). In 2005, textile exports took up 15.4% of China's total exports and 24.4% of the world's total exports in textiles. The production and exports of Chinese textile products are the largest in the world.¹

Nonetheless, China's textile industry is facing various difficulties, such as excessive resource reliance, low technology and value added, indisposition in trade structure and highly concentrated export markets. More and more trade sanctions against China's textile products are particularly noteworthy as they cast tight restrictions on China's competitive advantage in this industry. This paper aims at an in-depth investigation of competitive advantage of China's textile industry and brings corresponding suggestions.

I. International Competitive advantage Of China's Textile Industry

In view of the relation of factor and international competitive advantage, the development of the textile industry is still determined by labor costs and technology. In comparison, the garment industry is labor intensive while the textile industry, particularly in the chemical fiber sector, capital and technology are becoming more and more important. China's textile industry shows apparent scale economy and cost effects in material supply, labor costs, product qualities, compatibility between up and down stream, which contribute to its vigorous export competitive advantage. But as developed countries are persistently investing new technologies into their textile industries, the advantage of cheap labor in developing countries tends to be weakened by continuously improving productivity in developed countries. The textile industry in developed countries thus can maintain higher profit while at the same time reduce production. In this section, competitive advantage of China's textile industry will be analyzed, and comparisons to its counterparts in both developed and developing economies will be made.

1. Foundation of competitive advantage of China's textile industry

The competitive advantage of present day China's textile industry depends in large part on its solid industrial foundation and cheap cost. In comparison with its overseas counterparts, China's textile industry shows competitive advantage in the following aspects, which are expected to exist in the near future.

(1) Advantage in factor endowment

YUAN, Tao: associate professor of Nankai University; XU, Fu: professor of Nankai University.

¹ The data are collected from *China Textile Industry Development Report 2005-2006*, Page 368

The abundant supply of primary factors such as labor and related materials is essential to China's textile industry.

Among them, the most important advantage is human capital. There are two main features in Chinese labor resource, the first is its low price as well as the superior quality. The average education of Chinese workers is 10 years, which is the medium level of developing countries and around 4 years' lag compared with those in developed economies, yet wages of the Chinese workers is well below those of other countries. In 2005, the wage in China's textile industry is only about 1/18 of that in England, and 1/21 of that in U.S..² China has gained many economic benefits in the textile industry without a loss of the comparative advantage in labor supply, and such an advantage is a driving force for the textile industry's further development. The second feature is its sustainability. Expansion of urbanization and improving higher education in China will provide more and more superior but low price human resources for the textile industry, so the rising human capital stock will guarantee the supply of workers and technological support for future development of China's textile industry.

The second superiority lies in material supply. China has always been the world's largest producer of cotton, cloth, yarn and natural fiber due to the special status of her agriculture and superiority in resources. Meanwhile, an abundance in natural fiber and a fast growing chemical fiber sector brings advantaged superiority for China's textile industry, which is manifested in over 10,000,000 tons of fiber output and 1/4 of the world's fiber processing output. China is also the world's No.1 cotton producer and consumer, whose cotton production accounts for 25% of the world total. China's yarn production grew from 3,021,000 tons in 1980 to 14,400,000 tons in 2005, more than quadrupled within 25 years. With respect to cloth production, China gained the world's first place since 1985, and productions of other materials are also well above other countries.³

(2) Superiority in market scale

Although the domestic market absorbs over 70% of aggregate textile output, consumption per capita in China is far below the world's average. China is the largest and fastest growing developing country; whose vigorous economic development and improving living standards bring expanding demand both in quantity and quality for textile products. This indicates a tremendous potential domestic market, so there are excellent development opportunities and a competitive environment for the textile industry of China. Such an advantage does not exist in other developed or developing countries. On the other hand, entrance to WTO will expose China's textile industry to various protections in the short run, yet it does not hamper China's irreversible integration into the world market. Moreover, abolition of textile quotas in 2005 undoubtedly is helpful for China's textile industry to win greater foreign market access, and helpful to construct a precious opportunity for scale expansion and industry upgrade.

2. Comparison between competitive advantage of textile industry of China and developed countries

² The data are collected from the *stockstar* website: <http://resources.stockstar.com/info2006>

³ The concerned data are collected from *Infobank* : <http://www.chinainfobank.com/irisbin/Search.dll?Super?11a0>, and *China Statistical Yearbook 2006*, Page490-491.

China's Textile Industry: International Competitive Advantage and Policy Suggestion

In comparison with developed countries' textile industry, present competitive advantage of China's textile industry largely stems from comparative advantage in labor supply and natural resource endowment. Textile products are China's most competitive and staple exports, thanks to cheaper labor cost and comparatively integrated industrial chain. Advantage of developed countries' textile industry lies in abundant capital, R&D, brand and matured marketing channels. Textile products from China therefore largely take up low or medium quality market while those produced in Europe or U.S. occupy the world's top market. As China is both a major producer and a major consumer of textile products, her great potential in production and consumption opens an immense market of medium and top apparel and textile, rudimental textile material and textile machinery from developed countries, which in turn enhance interdependence between textile industries of both sides.

(1) Revealed Comparative Advantage (RCA) of both sides

$$RCA_{ij} = (Export_{ij} / \sum_i Export_{ij}) / (\sum_j Export_{ij} / \sum_i \sum_j Export_{ij}), \quad \text{where } i \text{ denotes specific commodity, and } j \text{ denotes the investigated country. } i=1, \dots, I; j=1, \dots, J. Export_{ij} \text{ stands for the } i \text{th commodity exported by the } j \text{th country.}$$

This index is always employed to measure industrial comparative advantage for a certain country. Data in Table 1 shows that, China possesses powerful advantage in textile trade compared to the world's major developed countries in terms of RCA. Although it declined between 1990 and 2004, RCA of China's textile industry is still well above those of developed economies such as U.S., Japan, EU, and Canada. It is therefore safe to say that the advantage of China's textile industry is still apparent and is likely to be maintained for a certain period.

Table 1: Comparison of RCAs between textile industry of China and major developed economies

Country	1990	1995	1999	2000	2001	2002	2003	2004
China	3.838	3.186	2.584	2.701	2.660	2.653	2.687	2.648
U.S.	0.423	0.429	0.528	0.583	0.605	0.646	0.658	0.688
Canada	0.178	0.244	0.329	0.332	0.350	0.363	0.363	0.361
Japan	0.697	0.552	0.609	0.611	0.645	0.608	0.597	0.593
Australia	0.147	0.246	1.055	0.227	0.192	0.183	0.189	0.178
EU	1.110	1.016	0.956	0.953	0.917	0.887	0.882	0.902

Source: Calculated based on the data from WTO website: http://www.wto.org/english/res_e/statis_e/statis_e.htm.

(2) Comparison in trade share and trade structure

From Table 2 we can see that, in view of export share to world total volume, China is enjoying a quicker growth than other developed economies in textile exports, as the share of China's textile increased from 4.6% in 1980 to 17.2% in 2004 and China's share of apparel increased from 4% to 24%. In the developed economies, the corresponding figures are much smaller. For example, U.S.'s export share in textiles and apparel products in 2004 were 6.2% and 4.3% respectively, and for Japan, the corresponding figures were 3.7% and 2%.

From the perspective of textile trade patterns, China's ratio of apparel export to textile product export is higher by far than those in developed countries. Table 3 shows us that, the ratio

for China is above those in developed economies, and on the other hand, the growth rate of this ratio in China is well above those in developed countries. These two facts indicate that China has more advantages in producing and exporting labor intensive apparel rather than capital and technology intensive textile products. On the whole, China's textile industry still shows certain competitive advantage compared to most developed economies.

Table 2: Order of textiles and apparel products export (arranged by share in world export volume) (%)

Country / region	Textiles				Country / region	Apparel products			
	1980	1990	2000	2004		1980	1990	2000	2004
European Union (25)	-	-	36.5	36.6	European Union (25)	-	-	27.0	29.0
extra-EU (25) exports	-	-	11.2	12.5	extra-EU (25) exports	-	-	6.9	7.4
China	4.6	6.9	10.4	17.2	China	4.0	8.9	18.3	24.0
Hong Kong, China	1.7	2.1	0.8	0.4	Hong Kong, China	11.5	8.6	5.0	3.2
United States	6.8	4.8	7.1	6.2	Turkey	0.3	3.1	3.3	4.3
Korea, Taipei, Chinese	4.0	5.8	8.2	5.6	Mexico	0.0	0.5	4.4	2.8
Japan	3.2	5.9	7.7	5.2	India	1.7	2.3	3.1	2.8
India	9.3	5.6	4.5	3.7	United States	3.1	2.4	4.4	2.0
Turkey	2.4	2.1	3.9	4.0	Romania	...	0.3	1.2	1.8
Pakistan	0.6	1.4	2.4	3.3	Indonesia	0.2	1.5	2.4	1.7
Indonesia	1.6	2.6	2.9	3.1	Bangladesh	0.0	0.6	2.0	1.7
Thailand	0.1	1.2	2.3	1.6	Thailand	0.7	2.6	1.9	1.6
Canada	0.6	0.9	1.3	1.3	Viet Nam	0.9	1.5
Mexico	0.6	0.7	1.4	1.2	Korea, RP	7.3	7.3	2.5	1.3
Switzerland	0.2	0.7	1.7	1.1	Tunisia	0.8	1.0	1.1	1.3
Total	2.8	2.5	1.0	0.8	Pakistan	0.3	0.9	1.1	1.2
			92.1	91.3	Total			78.6	80.3

Source: WTO website: http://www.wto.org/english/res_e/statis_e/its2005_e/its05_bysector_e.htm.

Table 3: Export structure (ES)¹ of textiles and apparel products in some economies

	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005
World	0.74		1.04	1.03	1.28	1.31	1.32	1.35	1.33	1.36
Mexico	0.02		0.82	2.13	3.36	3.83	3.51	3.50	3.22	3.41
China	0.64	0.68	1.34	1.73	2.24	2.18	2.00	1.94	1.85	1.81
Hong Kong, China	2.79	2.21	1.88	1.54	1.80	1.91	1.80	1.77	1.76	1.97
Indonesia	2.10	1.71	1.33	1.24	1.35	1.40	1.36	1.40	1.40	1.48
Italy	1.10	1.13	1.25	1.12	1.11	1.17	1.21	1.20	1.18	1.01
France	0.67	0.67	0.77	0.76	0.81	0.87	0.92	1.00	1.07	1.23
India	0.51	0.88	1.16	0.94	1.03	1.02	1.00	0.97	0.96	1.06
Germany	0.46		0.56	0.52	0.67	0.71	0.77	0.82	0.83	0.92
Canada	0.69	0.78	0.48	0.76	0.94	0.90	0.91	0.87	0.82	0.76
Australia	0.18	0.09	0.64	0.58	0.56	0.62	0.62	0.70	0.65	0.50
U.S.	0.34	0.31	0.51	0.90	0.79	0.67	0.57	0.51	0.42	0.40
Korea	1.32	1.76	1.30	0.40	0.40	0.39	0.36	0.34	0.31	0.25
Japan	0.10	0.14	0.10	0.07	0.08	0.08	0.08	0.08	0.09	0.08

¹ $ES = \text{export volume of apparel} / \text{export volume of textile products}$

Source: Collected from WTO website: http://www.wto.org/english/res_e/statis_e/its2006_e/its06_bysector_e.htm.

(3) Complementarity in trade structure

The majority of China's export in textiles are medium and low quality products, which are labor intensive, low technological and low value added. This stands for a complementary rather than a rivalry relationship between the textile industry of China and that of developed countries.

First and foremost, no rivalry exists between these two sides in production, as developed countries possess quality and brand advantage by virtue of the best capital market, ample human capital and matured industrial environment, and they provide high value added products with high technology by virtue of superiority in technology, management and logistics. By contrast, the majority of China's textile exports are low quality products. Second, although China exports some high quality textile products, most of them are produced by foreign owned enterprises, so a big portion of China's high quality products exported to developed countries are actually the result of FDI(Foreign Direct Investment) from developed countries to China, and the majority of profits return to these developed countries. Such a situation indicates a highly interdependent relationship between China and many developed countries. Third, in terms of market demand, exports from China fill up the deficiency in developed countries, and satisfies their demand for cheap but comparative high quality products, and therefore enhances consumers' welfare in developed countries.

(4) Gap between China and developed countries in textile industry

It is of great necessity to keep in mind the real situation of China's competitive advantage in the textile industry. In comparison with developed countries, superiority in China's textile industry is based on traditional comparative advantage rather than competitive advantage. Developed countries' textile industry's incessant progress in technology, management and productivity will weaken the advantage of China's competitive advantage of the textile industry.

Firstly, labor resource is not synonymous with the resource of human capital, and the cheap price works against the transformation from labor resource towards human capital, whose foremost feature is self-increase. If industrial profit or wages remain rather low, enterprises and people have not enough money to get retraining and other education, so technological upgrade and long term profit may be inhibited. Second, the present industrial or product structure of China's textile industry is unfavorable to technological advancement and industry upgrade. Long-time existence of such a situation may plunge this industry into the "trap of comparative advantage", for low technology and low added value will hamper the textile industry's continuing development, technical innovation and industry upgrade, and China's textile industry will be in the bottom of global vertical production networks. Thirdly, firm scale of China's textile industry is smaller than those in developed countries. Tiny firm scale kept Chinese textile firms away from the benefits brought by economy of scale and economy of scope, and hampered the transition from comparative advantage to competitive superiority.

In sum, in comparison with developed countries, China shows superiority in her textile industry, yet such superiority, which is based on factor endowment, imposes tight restrictions to development and upgrade of China's textile industry in the world market. As a large developing economy, China has to drive its textile industry towards the modern direction, which means high technology and high added value, so China can upgrade the industry and get more benefits.

3. Comparison between competitive advantage of textile industry of China and other developing countries

China's textile industry also shows both specific superiority and inferiority in contrast to its counterparts of other developing countries. The advantage of China's textile industry is embodied in industrial and market scale, FDI attraction and other fields. In this part we will first cast a brief introduction to competitive advantage of textile industry in some other developing economies.

(1) General status of major developing countries

India is a powerful competitor to China's textile industry. It owns a huge and highly competitive textile industry and has become the world's third largest cotton textile supplier. Indian textile industry's share in total manufacturer output is up to 20%, and it occupies 25% of India's aggregative export. India is also the third largest exporter to the European market and the fourth largest textile supplier to U.S.. India possesses well equipped sectors such as spinning, weaving, printing and dyeing. One report from WTO indicates that textile products from India to U.S. will rise from 4% up to 15% during the "post quota era".⁴ Pakistan is another major cotton supplier, which is the No. 4 in the world and shows powerful strength. Textile industry accounts for 46% of its national aggregative manufacture. Rudimental products, such as yarn and cloth, are Pakistan's primary exporting categories. Its textile products show great competing power and engage 66% of its total trade volume, and occupies the 6th, 7th and 8th status in U.S., EU and Japan's importing market respectively. Exporting advantage in Southeast Asian countries, including Bengal, Indonesia, Thailand and Vietnam, shows mainly on apparel. Bengal is EU's 6th largest apparel supplier, Vietnam takes the 4th place in Japan's apparel importing, and Indonesia takes the 6th place in U.S.'s apparel importing, and market share of Korea and Taiwan (China) rest around 8%.⁵ Besides, due to the advantages of a series of regional trade agreements such as NAFTA, Mexico and some Central American countries have a favorable situation in the North American market. Europe, Turkey, Romania, Bulgaria and Poland also gain advantageous position in European market through a *Custom Union agreement* and other bilateral or multi-lateral trade agreements.

Generally speaking, the above countries are primary rivals vs. China in the global low and medium textile market. Such a pattern is further indicated by RCA indices listed in Table 4, which show that most of the above countries are similar to China in textile RCA indices, or higher than China (Such as India, Pakistan, etc.)

(2) Particular advantage of China

China is well ahead of the above developing countries in textile export in terms of aggregative export, export growth, and world market share. Information provided by Table 2 and Table 3 indicates that apparel export ratio in China's textile industry is higher than those in all the above mentioned developing countries except Mexico. We can therefore conclude that besides low factor cost and market scale, China enjoys particular competitive advantage in industrial agglomeration and FDI attraction.

⁴ Lang Kaichun, *The Textile Industry Confronts "Post Quota Era"*, *Manager*, 2005(3), Page 50

⁵ The data are collected from the *WTO Reference Center In China*: http://www.wtoinfo.net.cn/cgi-bin/worldtrade_statistic.php

Table 4: Comparison of RCA indices in textile products between China and other major developing countries

Country (Region)	1990	1995	1999	2000	2001	2002	2003	2004
China	3.838	3.186	2.584	2.701	2.660	2.653	2.687	2.648
India	4.002	4.845	5.506	5.905	5.215	5.142	5.250	5.123
Pakistan	15.72	18.05	20.69	20.94	20.60	20.31	21.33	21.52
Indonesia	1.595	2.034	2.275	2.236	2.348	2.056	1.996	2.048
Mexico	0.578	0.549	0.713	0.645	0.555	0.578	0.555	0.556
Thailand	1.328	1.169	1.200	1.184	1.222	1.170	1.178	1.267
Hong Kong	3.290	2.706	2.717	2.767	2.689	2.584	2.505	2.531
Korea	3.084	3.353	3.122	3.078	3.059	2.830	2.435	2.007
Taiwan	3.013	3.579	3.434	3.276	3.314	2.964	2.705	2.586

Source: Calculated based on the data from WTO website: http://www.wto.org/english/res_e/statis_e/statis_e.htm.

As pointed out by modern theory of industrial organization, agglomeration is an inherent law in industrial development as well as an effective measure for resource allocation and factor utilization. For the time being, economy of scale effect in China's textile industry from economy of scope, which is further brought by industrial agglomeration, is becoming increasingly prominent. China's success in scale expansion, optimization of resource allocation, production specialization and productivity enhancement gained by industrial agglomeration is the key to her competitive strength in the textile industry. These effects are most notable in China's east offshore industry zones, especially in Yangtze River, Tai Lake rim and the Zhujiang delta.

Another particular advantage in China's textile industry is her FDI attraction. One driving force for China's GDP growth in the previous 20 years was fixed capital investment, among which FDI accounted for over 10%, and China has been the biggest host country among developing economies all around the world for many years. Thanks to investment environment and regional advantage particular to other developing countries, China has gained great competitive advantage in foreign capital utilization, industry scale expansion through "learning effects", technology & management promotion and industry structure upgrade.

(3) Gap between China and other developing countries in textile industry

China falls behind other developing countries mostly in the following aspects. The first flaw is China's export partners are pooled in some particular developed countries, as China's biggest four exporting markets are Hong Kong, Japan, EU and U.S., which take up more than 50% of Chinese aggregative textile exports. Such a heavy market concentration is easy to incur rigorous surveillance or trade disputes from target markets. Secondly, policy support to China's textile industry needs to be strengthened. For instance, India is implementing particular policies on rudimental textile material production, which is not currently available to Chinese firms yet. Chinese government and firms need to carry out persistent effort and cooperation.

II. International Trade Barriers to Chinese Textile Industry

Textiles and apparel products suffer the heaviest trade barriers in China's exports, which badly inhibits its exertion of competitive advantage. Deficiencies in China's textile industry are

certainly responsible for such heavy barriers, yet trade protectionism is also liable. On account of economic or political interests, many textile importing countries are willing and able to cast restriction against China's textile products to meet their targets at small costs.

1. Current trade barriers against China's textile industry

(1) Retrospect to recent trade barrier to China's textile products

On April 8th, 2004, the Nigerian government decided to forbid import of 41 products, the majority of which were textiles and apparel products. On June 3rd, 2004, Columbian customs imposed price restriction on importing socks except in those from the Andes Group countries. Turkey decided to launch safeguards against part of the textiles and apparel products from China on December 23rd, 2004 and began to impose quotas on 42 categories of Chinese textiles and apparel products on February 1st, 2005. On March 2nd, 2005, *Brazilian Textile and Apparel Industry Association (ABIT)* pled to the Brazilian government for special protection against Chinese textile products; *European Apparel and Textile Organization (EURATEX)* petitioned *EU Commission* for special protection against 12 categories of Chinese textile products on March 9; Russian Customs declared comprehensive scrutiny on textile products from China. In succession, *Textile fund of Argentina* solicited its government to prevent Chinese textile products from rushing into Argentina and Brazil on March 15th; on the same day, EU preliminarily adjudicated China's dumping activity in European chemical fiber cloth market. On April 4th, *Committee for the Implementation of Textile Agreements (CITA)* of U.S. announced three safeguards against Chinese textile products; EU Commission decided to cast "special safeguard" survey on 9 Chinese textile products; U.S. announced restrictions to 3 products, which included cotton pants, on May 13th; While on April 28th, EU declared "emergent special protection" against T-shirts and flex yarn from China; American government subsequently claimed "special protection" against China's man tatting shirts, chemical fiber pants, chemical knitting shirt and combed cotton yarn on May 18th.⁶

(2) Features of the trade barriers to China's textile products

Firstly, trade barriers to China's textile products are large in quantity and variety, and wide in scope. From April, 2004 to May, 2005, 19 trade disputes were launched against China's textiles and apparel products, the forms of which ranged from export prohibition, custom price fixing, safeguard, tariff to quota, special protection and surveillance, etc., while the category coverage almost included China's whole textile industry. Secondly, an apparent rising trend is shown in the frequency of Chinese textile trade disputes. The important disputes of China's textile industry during 2004 were 3, which scrambled to quite an astonishing level of 16 in the first 5 months in 2005. Thirdly, dispute initiators involve not only developed countries such as U.S., but also quite a number of developing countries, such as Mexico, Argentina and Brazil.

2. Bottlenecks of China's textile industry

(1) Heavily based on factor endowment advantage

⁶ Excerpted from *Memorabilia For Global Trade Barriers to China's Textile Industry*, <http://info.cloth.hc360.com/html/001/006/003/18980.htm>

China's Textile Industry: International Competitive Advantage and Policy Suggestion

The majority of China's exports in textiles and apparel products concentrate in low or medium quality ones, which shows in world markets China's great price advantage due to cheap labor but less competitive advantage in quality and variety.

On the first hand, Chinese textile products are similar in structure, lack of variety and low in technology, which make Chinese textile products easy to be imitated. China's textiles and apparel products are highly substitutable to products from other developing countries, thus are weak in competitive advantage and vulnerable to trade barriers. On the second hand, increasingly intensified rivalry in world's low-tech and low value-added textile market tends to force exporters to compromise, while importers hope to obtain political or economic benefits, so some developed countries tend to impose discriminating policies on certain products for political or economic reason within the framework of international trade rules.

(2) Cutthroat competition among Chinese domestic firms

The "small profits but quick turnover" tradition in Chinese enterprises along with government's long term export subsidy for foreign exchange accumulation forces many export firms in China to cut price in order to reach their export target, and therefore incur anti-dumping measures. Some firms even sell products at zero profit prices in order to gain export subsidy or drawbacks. Mess in pricing activities is most likely to incur trade restrictions from U.S. and other countries. Additionally, China is still on the way of economic transition, and policy transparency needs to be strengthened.

(3) High export concentration

China's four most weighty textile export markets are Hong Kong (China), Japan, EU and U.S., which absorb 70% of China's total textile product export. China's textile export to Africa, Latin America, the Middle East and more than 100 other countries is increasing, yet the aggregative share accounts only for 12%, which is even smaller than that of Japan. High geographic concentration of exports is rather likely to induce trade protectionism in target countries/regions and enhance the likelihood of trade disputes, which are harmful to long run development of China's textile industry.

Table 5: Major export markets of China's textiles and apparel products: 1995-2005
In 1,000 million U.S. dollars and export share (%)

Year	Japan	Hong Kong (China)	U.S.	EU	Korea
1995	88.61 (23.3)	118.52(31.72)	31.72 (8.4)	30.5 (8.0)	15.99 (4.2)
1996	96.07 (25.9)	119.94(32.31)	32.31 (8.7)	36.9 (9.9)	16.19 (4.4)
1997	92.84 (20.4)	167.79(36.8)	35.72 (7.8)	49.5 (10.9)	18.58 (4.1)
1998	88.16 (20.6)	139.36(32.5)	46.99 (11.0)	65.0 (15.2)	13.36 (3.1)
1999	102.9 (23.9)	113.61(26.4)	49.32 (11.5)	64.8 (15.0)	16.52 (3.8)
2000	132.78 (25.0)	114.44(21.6)	60.20 (11.3)	80.6 (15.2)	22.60 (4.3)
2001	137.21 (25.3)	106.75(19.7)	61.26 (11.3)	85.5 (15.7)	26.53 (4.9)
2002	131.17(20.8)	128.37(20.4)	70.67 (11.2)	64.1 (10.2)	33.93 (5.4)
2003	152.22 (18.9)	153.87(19.1)	96.69 (12.0)	89.5 (11.1)	38.36 (4.8)
2004	171.53(18.0)	173.79(18.3)	117.86(12.4)	121.46(12.8)	41.86(4.4)
2005	175.21(15.2)	148.26(12.9)	186.38(16.2)	183.23(15.9)	40.96(3.6)

Source: *Almanac of China's Textile Industry 1996*, Page 220; *Almanac of China's Textile Industry 1997-1999* Page371-372; *China Textile Industry Development Report 2000-2005*,Page356-372; China Chamber of Commerce for Import &Export of Textiles website: <http://www.ccct.org.cn/information/index.jsp>.

3. Protectionism in developed countries

(1) Pressures from domestic industries of import countries

China has become one of the world's largest exporters and trade surplus earners in textiles and apparel products by virtue of her rapid progress in textile industry, which is marked by expanding scale and increasing output. Developed countries thereby tend to seek excuses for import restriction against China's textiles and apparel products on account of their political elections or protection to domestic industries. Trade protection is therefore necessarily employed as their long term strategy. China, as the world's largest textile exporter, consequentially bears the brunt of their trade restriction.

Moreover, China is the world's largest socialistic country and operates under different political system and ideologies from other developed countries, and this is likely to be another reason for discrimination. On the other hand, China's stay in WTO has not been long enough for either her government or firms to win sufficient experience in protecting domestic industries under international trade rule framework. This is a more bait for trade disputes.

(2) Protection transition in developed countries

Labor cost in the countries who take textile trade restriction such as U.S. and EU are much higher than ordinary developing countries. Hence, they had to turn to the quota clause in *Multi-Fiber Agreement* to protect weak textile industry, but in the "post quota era", quotas are eliminated by the newly adopted *WTO Agreement on Textiles and Clothing* which is in place of *Multi-Fiber Agreement*. Developed countries have to seek new means to protect their textile industry. The most effective and most frequently employed tools under the framework of WTO are trade remedy measures such as anti-dumping, anti-subsidy and safeguard measures, among which safeguard measures are increasingly adopted in recent years. Major importers are granted to exert special safeguard clauses for textile products and anti-dumping measures to restrict China's textile export before 2008. Meanwhile, various special favored arrangements and RTAs (Regional Trade Agreements) between developed countries and other developing countries may also cast discrimination against Chinese firms as U.S. and EU are shifting textile industry overseas where firms can get benefits from the special favored arrangements and RTAs.

Moreover, technical trade barriers and other non-tariff protection measures, including environmental standards, technical standards, rules in package & label and labor wage, etc., are additionally available to developed countries for their protection towards the textile industry. For instance, many developed countries enact standards on environmental protection (such as technical standards for dye, standards for textile fiber and fiber processing environment, security standards for textile products and standards on producing circumstances), wage standard, labor rights and so on. These complex standards are likely to be employed by developed countries to restrict import from other countries.

(3) Utilization of special articles and clauses in *the Protocol on the Accession of the People's Republic of China*

Despite the fact that quotas are canceled from Jan 1st, 2005, China is still facing restrictions from some special articles and clauses, two of which are commonly adopted. One is the special

safeguard measure to Chinese textile products. Till December 31st, 2008 China's import partners are granted authority to turn back to quantitative restriction against Chinese textile products, to which quotas have been originally canceled, on condition of "the existence or threat of market disruption" and "the role of products of Chinese origin in that disruption".⁷ Countries like U.S., EU, Korea, Japan, Canada and India have made legislation in succession according to this clause. The other clause is the special safeguard measure. Importers are granted authority to take restrictions against Chinese products if the latter induce "market disruption" till 2013.⁸

Besides the above mentioned causations, it is noteworthy that there are contradictions and conflicts not only between exporters and their importers but also among exporters. China's rapid growth in export has incurred resentment from other textile exporters. Some commercial associations in these countries have already solicited European countries and U.S. for prolonged quotas against textile products from China. Simultaneously, some developed countries are seeking excuses for trade protection against China under the veil of protecting interests of the least developed economies.

To sum up, rapid growth in China's textile industry tends to incur various trade restrictions after quota are canceled on Jan 1st, 2005. It is expected that further development in this industry will lead to more disputes about Chinese textiles and apparel products.

III. Policy Suggestion

Quotas on textiles and clothing products came to an end on January 1st, 2005, according to *Agreement on Textiles and Clothing (ATC)*, and global textile trade should turn to a free trade administration system. An enlarged global market is thereby accessible to China's textile products, yet rivalry in this sector is increasingly intensified. Hence, how to comprehend the international competition pattern correctly during the "post quota era", program optimal developing path through realized and latent comparative & competitive advantage, explore strategies to foster future production and export, so as to reach continuing development in this pillar industry, is a critical issue to China. We argue that keys for China's future development of textile industry lie in effective implementation of three strategies.

1. Turn from simple scale expansion to expansion of high value-added products and promote kernel competitive advantage

Optimization of industry structure, enhancement in human capital and technology are preconditions to continuing development, competitive advantage, technological innovation as well as to industrial upgrade in China's textile industry. For the time being, products with materials supplied by clients and with low added value are the majority of China's textile products. It is therefore imperative for China's textile industry to abandon traditional pursuit in quantity and scale, and to place greater emphasis on enhancing added value and upgrading core competitive advantage. On the firm level, firms in the textile industry ought to strengthen input on R&D, persistently improve technology and release new products into international market as well as impose new technology to present categories. To this aim, it is suggestible to start with

⁷ Stated in the *Report of the Working Party on the Accession of China*, Page241-242.

⁸ According to Article 16, on *transitional product-specific safeguard mechanism*, of the *Protocol on the Accession of the People's Republic of China to the WTO*, Page16-18.

strengthened R&D in sectors like fiber, garment cloth and apparel products, to enhance the level of their technology, design and added value, so as to bring up our own competitive products and continuously strengthen competitive advantage in global market, and to overcome technical barriers with high quality products.

(1) Improve industrial competitive advantage through human resource exploitation strategy and innovation in science and technology

Capability in technical innovation is the soul for enterprises' development and core to competitive advantage, while technological innovation practitioners are enterprises. For large firms and firm groups, it is necessary to establish R&D center to construct a market-oriented innovation system in which technology and production cyclically promote each other. To fortify core competitive advantage, strengthened efforts in autonomous technological exploitation and fostering the leading products with their own intellectual property are called for. From the perspective of global economic development, 60%-70% of benefit growth in developed countries relies on progress in science and technology, yet in China, this ratio is only around 30%. It is therefore urgent for China to reconstruct and upgrade the traditional textile industry with high technology. Thus a consummate technological innovation system is required for technology absorbance and renovation. Equally important is to emphasize human resource development and administration. It is imperative to launch strategies for human resource exploitation and establish an administrative mechanism for human resource training.

(2) Meet international standards and make export products safer

There are about 90 national standards relative to textile product security in China, most of which adopt ISO(International Organization for Standardization) standards, yet lag behind the world's latest technologies. Moreover, many of these standards are just recommendatory without legal constraint. Government and industrial associations ought to make international standards more popular⁹ and make them become legal standards which every firm must obey. Simultaneously, heavier R&D input should be implemented in textile production on firm level, which is not only necessary for meeting consumers' demand, but also a precondition for textile industry's breakthrough against "green trade barriers"¹⁰ in developed countries. Additionally, countermeasures against "green trade barriers" are imperative to China. To this aim, China should establish corresponding training and consultative agents.

(3) Enhance brand competitive advantage

For the time being, Chinese enterprises get overseas market by means of price cutting, trade of processing with customer's materials, etc. But if Chinese enterprises aim at the markets in Europe and U.S., they should shift to a new strategy to enhance technology and added-value as soon as possible, for which the only way is to develop autonomous brands. China falls far behind in textile brand rivalry against developed countries in that developed countries hold the final textile market networks and benefit from their brand competitive advantage, which is different than benefit from cheap labor in developing countries' textile industry. From the

⁹ Such as the ISO 9000 standard for quality administration, the ISO 14000 standard for environment administration, the SA 8000 standard for social obligations, and various certifications like ISO 9000、ISO14000、SA8000, etc.

¹⁰ Green trade barriers refer to environmental laws and regulations that affect global trade.

perspective of China's export composition, 50% of textile export belongs to the trade of processing with customer's materials, few of which use Chinese brands. Massive trade of processing with customer's materials forces the price of China's textile products down. Meanwhile, the majority of the income from textile export is actually the profit of foreign textile enterprises in that the foreign textile enterprises have FDI in China. To construct autonomous brands and enhance their competitive advantage especially the international brand competitive advantage are the inevitable way for development of China's textile industry in the "post quota era".

2. Diversification of China's export markets and internationalization strategy of China's firms

China's textile export markets are concentrated in Hong Kong, Japan, EU and U.S. High concentration in export markets makes China's textile products rely heavily on several major markets, and thus vulnerable to suddenly kindled trade disputes. Textile firms of China ought to hold opportunities to exploit newly emerging markets in Africa, Latin America and East Europe. China's textile industry should keep on its market diversification strategy, and exploit new export markets as well as strengthen traditional markets in the "post quota era", in order to maintain smooth export development.

The internationalization strategy means that textile firms in China can purchase or construct producing or sales textile corporations in their export markets, in order to jump the trade barriers to Chinese textile products and reduce the frequency of trade disputes between China and textile import countries. "Internationalization" is not only a developing strategy during the opening process, but also firms' important competing instrument in international competition.

3. Government's effective regulation and establishment of industrial early-warning system

Cancellation of quotas in the "post quota era" reduces export cost and inspires exporters' enthusiasm, which leads to three "sharp increases" in China's textile industry, namely, sharp increases in production, export and employment. These increases may impair China's holistic export if the government fails to keep exporting order and therefore incur trade disputes with major importing countries. While official interferences were widely employed among the Chinese Planning Era to control exports, market method, which includes exchange rate, drawbacks and exporting tariffs, should mainly be adopted by the government in the current market economy to regulate market order and textile export.

In addition, the government and industry associations ought to analyze *Agreement on Textiles and Clothing (ATC)* to find good means for China's textile exports, improve policy cooperation with other countries, investigate trade policies of textile importing countries, introduce flexible measures to stimulate exports, and settle trade disputes through negotiation within WTO framework with other WTO members. Chinese government and industrial associations should make active efforts to establish a government-guided industrial early-warning system which involves government, industrial associations and firms. Government and industrial associations should also construct industrial information centers and databases. In order to overcome technical trade barriers, government and enterprises should provide textile

China's Textile Industry: International Competitive Advantage and Policy Suggestion

enterprises with assistance, especially in information collection toward technology statutes, technique standards and assessing procedures.