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# China's Role in the Global Textile Industry

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# China's role in the global Textile Industry

- Analysis of the evolution of China's position within the global Textile Industry

## 1. Introduction

The Textile Industry is a recognized national precious stone in China. The objective of this paper is to map and understand the evolution of China's role in the global textile industry. The study also seeks to explain the different forces that shape the competition in the textile market, and more importantly, understand the drivers for the Chinese competitive position. Finally, the paper speculates on the short term perspective for the industry and tries to identify existing risks that could negatively impact China.

## 2. Birth and first stages of the Textile Industry

It is very difficult to identify exactly when the Textile Industry began. Archaeological studies suggest that the first textile, different from fur or skins sewn together, was felt (non-woven cloth produced by condensing and pressing woollen fibres). The locations where textile was first used are believed to be: Egypt, India, Turkey and China.<sup>1</sup>



Ladies making silk,  
illustrates silk fabric manufacture in China.

Since ancient years, China was a key player in the textile market. The earliest evidence of textile production in China is cocoon of *bombyx mori*, the domesticated silkworm, found in Xia, Shanxi, dated between 5000 and 3000 BC. First textile fragments were found in Yuyao, Zhejiang, dated to approximately 4000 BC. Scraps of silk were found in Huzhou, Zhejiang, dating back to 2700 BC.<sup>2</sup>



Antique Chinese textile  
(Qing Dynasty: 1644 – 1912BC)

<sup>1</sup> History of Textile - <http://www.textileasart.com/weaving.htm>

<sup>2</sup> History of clothing and textiles - [http://en.wikipedia.org/wiki/History\\_of\\_textiles](http://en.wikipedia.org/wiki/History_of_textiles)

During the Shang Dynasty (1766 BC and 1122 BC), Chinese produced and wore vivid silk tunics and ankle-length skirts. In the Han Dynasty (220–265 CE), China started trading textile with remote buyers. The trade emerged along the Silk Road and achieved its peak between the 5<sup>th</sup> and 12<sup>th</sup> centuries CE, reaching lands as distant as Rome and Iran. <sup>2</sup>

The Chinese textile production and trading strongly influenced the development of the textile industry in Medieval Europe. Through Modern times, England, Italy, France, Spain, Germany and Scandinavia developed sophisticated clothing markets.

Until the nineteenth century, China was the world's largest and most advanced economy. In the textile industry it was not different. China was a large, advanced textile producer.

In the industrial revolution, textile production was mechanised leading to mass production and assembly line organization. Sewing machines emerged in the 19<sup>th</sup> century reshaping clothing production. During this period, Europe, especially England, achieved great efficiency gains and Chinese competitiveness lagged behind.

In the end of last century, the textile industry was shaped by the effects of globalization. Lower transportation costs, reduced commercial barriers and better information flows facilitated the relocation of manufacturing activities in many sectors. The textile industry is highly labour intensive, thus it benefited greatly from lower labour costs. As a consequence, many textile manufacturing facilities were relocated, for example, to Southeast Asia and Latin America.

However, initially China hardly participated in this process due to its then restricted access to foreign markets.

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### 3. Recent moves in the global textile scenario: China dominance

In the last decades, the scenario changed. Not only the textile industry, but all the Chinese industrial sector (especially for exports) has expanded drastically. Since 1990, Chinese exports expanded at a growth rate more than twice the global growth rate.<sup>3</sup> (see table)

Exports 1970 - 2002 (US\$ Billions)						
	1970	1980	1990	1995	2000	2003
World	298	1922	3378	5079	6387	7453
China	2	18	62	149	249	438
China + HK	5	38	144	322	451	662
Japan	19	130	288	443	479	472
US	43	226	394	585	781	724

Source: IMF, International Financial Statistics

The exports growth not only contributed to accelerate the existing Chinese economy, but it also changed the export's profile and China's role in the global economy. Usually, the export's profile in low income economies is focused on raw materials and food derivatives. However, the recent exports expansion showed that China is already a key manufactured producer and a relevant technology player. (see table)

Growth of Exports 1995-2001 - China			
		US\$	2001
1	Raw food	12,777	4.2
2	Proc. agric. products	5,156	-3.0
3	Fuels	8,405	7.6
4	Industrial materials	29,421	5.6
5	Manufactures, mass production	85,857	6.9
6	High-tech & capital goods	122,080	15.0
	Total	263,696	9.5

Source: United Nations Comtrade

China has become a dominant exporter, attracting manufacturing facilities from many different sectors and geographies. Textile producers located not only in developed countries but also low income countries relocated facilities to China.

In order to understand the causes of the recent expansion and to try to speculate on the future of the textile industry, it is relevant to understand what factors contributed to attract such high production volumes to China.

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<sup>3</sup> 'Why is China so Competitive? Measuring and Explaining China's Competitiveness' – Adams, Gangnes, Shachmurove. 2006

What led to this massive exports expansion? Is China more competitive than other countries? According to Adams, Gangnes and Shachmurove<sup>4</sup>, competitiveness “is the ability, under present conditions, of a country’s producers to command world markets”.

Analysing the evolution of world exports, it is possible to assess the comparative position between the global players. Exports from China are growing at a much faster pace than the global average growth (see table). This shows that China is drastically raising its share in the world exports. Consequently, one or more player is losing space for China. Thus, it is possible to conclude that China is more competitive than these countries.

**Dynamic RCAs 1970-2002**  
(annual % change in country exports/annual % change in world exports)

	1970-1980	1980-1990	1990-1995	1995-2000	2000-2003
China	1.11	2.19	2.14	2.24	3.66
China + HK	2.22	2.36	1.96	1.46	2.49
Japan	1.03	1.40	1.06	0.34	-0.10
US	0.89	0.99	0.97	1.26	-0.49

Source: IMF, International Financial Statistics

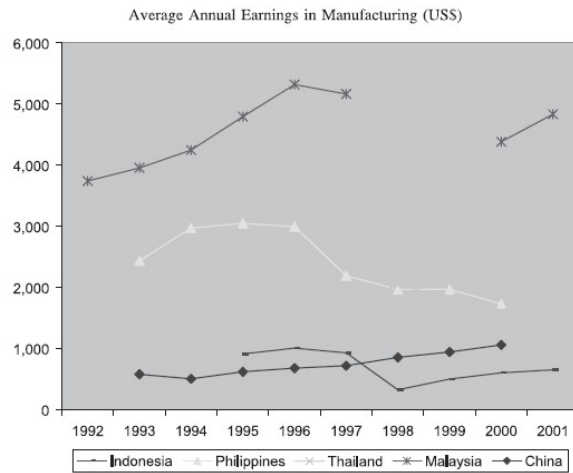
But what can explain China’s competitiveness? Countries’ competitiveness depends on macro and micro factors. At a micro level, countries’ competitiveness is shaped by the costs associated to deliver a certain service or product. The production costs depend on local wages, capital costs, scale of production and employed technology. From a macro perspective, countries’ competitiveness is reflected on current exchange rate, tariffs, transportation costs and trade restrictions. Analysing macro and micro factors, the authors claim that the Chinese competitiveness can be explained by the following determinants:

- Labour costs: Considering that the Textile Industry is labour intensive, labour costs can have a major impact of a country’s competitiveness in this market.

In recent decades, many Chinese moved from rural areas to the city, looking for better life perspectives and better jobs. Most of these rural workers are not educated or technically trained. Consequently, the people moving to cities search low-skill job opportunities, for example, in the textile industry. Therefore, given China’s immense population and still strong ruralisation, the country is probably the one that disposes from the largest excess human capacity. This situation leads to significantly low wages, even when compared with other East Asian countries (see graph).

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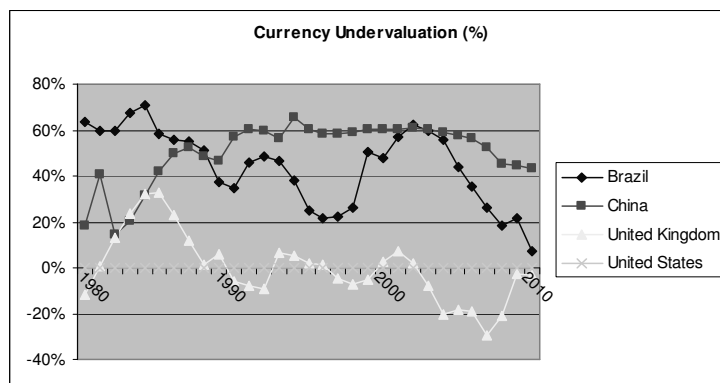
<sup>4</sup> Op.Cit



Source: ILO and Chinese Statistical Yearbooks.

- Exchange rate: The nominal exchange rate is highly relevant in all global trading transactions. Countries with undervalued currencies enable foreign buyers to use their relatively overvalued currency to buy “cheap” in the local market.

In 1994, the Chinese government devalued the currency from 5.8 to 8.3 RMB Yuan per US dollar. The movement strongly contributed to the global competitiveness of the items produced in China.<sup>5</sup> In 2005, the Chinese government announced that it would move to a floating exchange rate policy. Initially, the Chinese suffered a moderate appreciation. However, the government has been using part of its reserves to buy US dollars. This movement generates an undervaluing pressure over the Chinese currency. For this reason, the Yuan remains undervalued (see graph), which contributes to the competitiveness of textile producers in China.



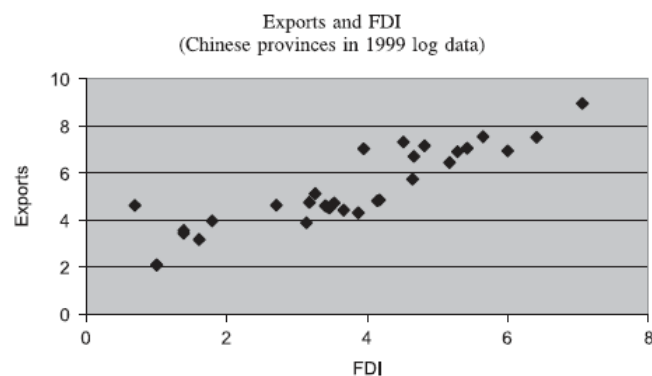
Source: World Bank data

<sup>5</sup> Op.Cit.

- Foreign Direct Investment (FDI): In order to be competitive in the global market, it is essential to be able to make products that meet world market specifications, in terms of quality, design and technology. In the recent decades, China was very successful not only producing low complexity/low value added product, but after 1990 China also managed to expand the production of value added, technological products. It is a key advantage that China presents when compared to other Southeast Asian countries.

The improvement on the Chinese production standards and technology was pushed by the increasing inflow of Foreign Direct Investment. Foreign companies that installed in China during the last decades employed foreign investment on machines, plants and technology. In addition, these companies also brought and shared foreign expertise with local workers. Especially in the cases when these companies were established through joint ventures, the knowledge sharing process was even more intense.

It is easy to observe the effects of FDI on the competitiveness in the global markets. The Chinese provinces that most received higher volumes of FDI also present a stronger performance in the exports (see graph)



The factors above help to explain the current determinants of Chinese competitiveness. However, one could question why the steep rise in exports happened only in the past decades, once most listed factors (exchange rate and labour costs) were already in place a long time ago. The timing of the rise in production and exports might be explained by the following:

- Chinese Economic Reform: Prior to the start of Chinese Economic Reform in 1978, China had limited access to foreign markets. Before the reform, foreign companies could not operate in the Chinese economy, which was dominated by state-owned

enterprises. Only after 1979 the private sector and foreign investments were promoted.<sup>6</sup>

- International Trading Barriers: Until 2005, the textile trading (and, consequently, also the production) potential in China was also regulated by the Agreement on Textile and Clothing (ATC). The agreement is described in the item 4 of this study.

- FDI lag: As described above, foreign investments and foreign intellectual sharing were important to raise Chinese production standards, and consequently increase the country's competitiveness. However, this process takes time and the effects do not cause immediate economic impact.

#### **4. International trading barriers for Chinese textile products**

The competitiveness of China resulted in a shift in the textile production. Especially producers located in developed countries struggle to compete in the global textile industry and gradually are put out of business. Long before China opened its market, other developing countries presented similar competitiveness and threatened producers in developed markets. These producers and governments of developed countries feared losing the market for the textile volumes produced domestically.

In order to avoid or limit the negative impact that developed economies could suffer, in 1974 it was introduced the Multi Fibre Arrangement (MFA); also known as Agreement on Textile and Clothing (ATC). This policy intervention was created to protect domestic industries in major developed countries, which alleged that producers in developing countries were applying dumping.<sup>7</sup>

MFA imposed quotas on the year amount of textile that developing countries could export to developed markets from 1974 through 2004. It was set to expire on 1<sup>st</sup> January 2005. In the meantime, producers in developed countries had time to improve its efficiency and recover its competitiveness. However, they never managed to match the required competitiveness to remain in the market.<sup>8</sup>

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<sup>6</sup> CEIBS: Chinese Economy course material

<sup>7</sup> Future of Textile after 2004\_ITCB-MI35 - ITCB

<sup>8</sup> Multi Fibre Arrangement - [http://en.wikipedia.org/wiki/Bra\\_wars](http://en.wikipedia.org/wiki/Bra_wars)

China, as a developing country, also had to export according to the limits pre-defined in the MFA. For this reason, after the economy reform in 1979, China could enjoy only to some extent the benefits its competitiveness in the textile market.

## **5. End of quota system impositions**

By the end of MFA valid period, international organizations realized that the agreement was actually making space for inefficient producers in developed economies, and it was causing severe losses in the developing world.

In September 2002, the International Monetary Fund (IMF) and the World Bank realized that the MFA caused developing countries an export revenue loss that amounts to \$40 billion per year, of which \$22.3 billion is on account of quotas.<sup>9</sup>

As consequence, at the General Agreement on Tariffs and Trade (GATT) Uruguay Round, it was agreed that the textile international trade would be taken to the World Trade Organization (WTO), and the quota system would be phased out by 1<sup>st</sup> January 2005.

At the beginning of 2005, once MFA had expired, the textile exports from China to Western countries grew 100% (500% for some items) generating strong discomfort for developed countries. As a response, EU left more that 75 million Chinese garments piled up in European ports. In addition, US and EU filed China at the WTO and managed to limit China's export growth to 7.5% per year instead. In June 2005, EU managed to agree on new quota imports from China on selected items until 2008.<sup>10</sup> Fortunately, in 2007, EU lifted textile quotas on China.<sup>11</sup>

Finally, with the end of trading barriers, China could fully enjoy the benefits of its high competitiveness in textile sector. In the following years, China kept receiving high investments, new companies and greater demand for textile produced in the country.

Nowadays, not only developed country countries suffer pressure from a highly competitive China, but even low labour cost countries feel pressured by Chinese competition. In Brazil,

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<sup>9</sup> Op.Cit.

<sup>10</sup> EU and China reach textile deal - <http://news.bbc.co.uk/1/hi/business/4214490.stm>; EU and China reach textile deal - <http://news.bbc.co.uk/1/hi/business/4214490.stm>; Q&A: Chinese clothes exports to EU - <http://news.bbc.co.uk/1/hi/business/4194474.stm>;

<sup>11</sup> EU lifts Chinese textile quotas \_ EurActiv.pdf - <http://www.euractiv.com/en/trade/eu-lifts-chinese-textile-quotas/article-167516>

local textile producers mention that in the past they competed head to head only to other Brazilian players. Nowadays, Brazilian producers complain about the Chinese competition even inside the domestic market. And regarding international markets, China is a tough competition and it is adversely affecting Brazil textile exports.<sup>12</sup>

## **6. Future perspective for the textile manufacturing in China**

China's position in the textile industry is extremely strong and undoubtedly leads the global production. A study presented by the end of 2009 claims that, even under the negative effects of the global financial crisis, China is still the most competitive location in the world for the textile industry (China's competitiveness index for this industry was evaluated at 102.8 in 2009).<sup>13</sup>

During the financial crisis, while the overall decrease in Chinese exports amounted around 15%, the textile industry felt only partially the downturn effects. Textile export amounts decreased by a relatively low 7% in 2009 and it took very little time of to show significant signs of recovery. In the first 10 months of 2010, China exported more than US\$ 62 billion dollars in textile, a rise of 29% comparatively to the same period in 2009. In this same period, exports of clothes also grew, totalling more than US\$ 100, presenting an increase of nearly 20% compared to 2009.

Chinese prevailing competitiveness in the textile industry is also supported by public investments and industry internal organization in China. There are cities, like Changshu City (Jiangsu province) and Dongguan City (Guangdong), which concentrate a high number of textile enterprises (2300 and 6500 textile companies respectively). Companies in these cities are co-ordinately moving to improve the industry competitiveness. In Changshu, for example, more than 50% of all integrated production textile machines meet international standards. It is an important movement, given China's accession into WTO. In addition, these textile industrial centres help to attract new companies and investors due to the existing appropriated infrastructure and business momentum.

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<sup>12</sup> Brazil's raw materials and the Chinese bikini problem -

[http://news.bbc.co.uk/1/hi/programmes/from\\_our\\_own\\_correspondent/9348299.stm](http://news.bbc.co.uk/1/hi/programmes/from_our_own_correspondent/9348299.stm)

<sup>13</sup> Textile and Apparel Weekly - <http://textination.de/en/tiw/2010/TIW10122010.pdf>

However, the textile industry is changing in China, and it could reshape the country's competitiveness in the sector. As mentioned previously, high amounts of foreign investment and technical expertise were attracted to China in the past decades. Consequently, China stepped forward into the production of more sophisticated, value added products (see item 3). This is a good outcome to China, as it moves to higher margin and less commoditized products.

In recent years, China started to focus on more sophisticated textile products, and the production of some basic products shifted to other countries in Southeast Asia as Cambodia and Vietnam. This trend can also be observed by the rising volume of textile machinery ordered from Japan and Germany to these countries.<sup>14</sup>

However, more sophisticated products also require more qualified workers. And more qualified workers are more capable to organize themselves and negotiate better working conditions. Once this happens, the drastic existing labour cost advantage might start shrinking. It is true that higher margins allow producer to pay better salaries, but on the other hand, the lack of labour bargain power in China contributes greatly to the existing advantageous low production costs.

Workers organization started rising in China. During the downturn, when demand for Chinese products decreased, around 20 million workers were made redundant and had to return to the country side. Many unhappy unemployed protested and given that 20 million people faced the same difficult reality, the government was worried about mass reactions.<sup>15</sup>

Japan lived a similar situation in the 1970s. After years of economic prosperity, unionized workers demanded their share, asking for salaries. The rising wages increased production costs and Japanese competitiveness was negatively impact.<sup>16</sup>

Finally, another risk the Chinese textile industry might suffer is the appreciation of the exchange rate. The massive trading surplus in China puts high pressure on the Yuan. In addition, strongly affected by the financial crisis, developed countries are desperate to reduce their trading deficit and to increase their domestic producers' competitiveness. For

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<sup>14</sup> Quiet Migration: Apparel and Textile Companies Head Out of China - Apparel Magazine; Jun2010

<sup>15</sup> China's migrant workers hit by economic pinch as 20 million lose jobs - <http://business.timesonline.co.uk/tol/business/economics/article5638893.ece>

<sup>16</sup> Rising wages will burst China's bubble - <http://www.ft.com/>

this reasons, government of major economies are putting great pressure on China to force a faster appreciation of the RMB.

## **7. Conclusion**

Unarguably, during all economic history, China has been a key player in the textile industry. Chinese were already able to produce silk textile in ancient history (4000BC). And not only China developed advanced technology to produce textile but it also managed to develop strong trading bonds with distant lands through the Silk Road.

China's remarkable position lasted until the nineteenth century, when the Industrial Revolution took Europe to a distinctive position.

In the last decades, after the economic reform, China recovered its leading position and it became the most competitive country in the textile industry. As a result, textile production in China expanded drastically for both domestic consumption, but mainly for export to the whole world.

The determinants of the Chinese incontestable competitiveness are mainly: low labour costs; massive inflows of foreign investment and technological expertise; and a depreciated exchange rate.

Developed economies limited their competitive disadvantages by imposing protectionists trading policies. However, the Multi Fibre Agreement expired in 2005 and now China is not subjected to export quota limitations.

The advantageous position China holds should be sustainable in the short term. However, the industry has been evolving extremely fast and the determinants of the Chinese competitiveness might be affected. The higher risks for the industry stability are: labour pressure for higher salaries, which could damage the existing strong labour cost advantage; and internal and external pressure to appreciate the exchange rate, which could drastically reduce the competitiveness of Chinese products abroad.

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