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Does WTO Accession Matter for the Chinese Textile and Clothing Industry?*

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Abstract:

Based on field surveys conducted in Guangdong, Zhejiang and Beijing in 2000 and 2001, this paper argues that accession to the WTO by China will create a new competitive arena for different categories of textile and clothing firms located in that country, partly dependent on the size and ownership of the firm. From the perspectives of reducing import tariffs, eliminating export quotas and the regulations on trade disputes, WTO accession does matter for the majority of Chinese firms in this “win-lose” game. From the perspective of compliance with international standards, this paper argues that accession to the WTO does not really matter for some Chinese firms as they may not survive the intense competition until 2005, when the effects of the Agreement on Textiles and Clothing materialises.

Keywords: WTO accession, China, textile and clothing industry, international trade, international standards

JEL classifications: F1, L6, O1, O2
1. Introduction

After the Chinese delegate signed the World Trade Organization (WTO) accord in 2001, China formally agreed to the accession treaties after 15 years of on-and-off negotiations. Setting aside general discussions, such as those contained in Kong (2000) and Woo (2001), most of the literature about WTO accession by China has focused on three themes. The first is the impact of WTO accession on the vitality of state-owned enterprises (SOEs) in China, e.g. Blumental (1999), Liu and Woo (2001), etc. The second is the implications of WTO accession for foreign direct investment (FDI) and international trade between China and other developed countries, e.g. Wang (1999), Ianchovichina and Martin (2001), etc. The third comprises sector-specific studies about WTO accession, e.g. agriculture (Yamamoto, 2000), automobiles (Harwitt, 2001), pharmaceuticals (Yeung, 2002A), banking and finance (Langlois, 2001), and the telecommunications sector (DeWoskin, 2001), etc. Most of the literature about the implications of WTO accession on the Chinese textile and clothing industry is either in Chinese or far from comprehensive, e.g. Chen (2000), Tang (2000), Yang and Zhong (1998), Yang (1999), Zhong and Yang (2000), etc. Shi (2000, 2001) has conducted a thorough investigation of the industry but it is in Chinese. Furthermore, the above (econometric) studies are largely based on two assumptions: the expanding market for Chinese firms after the elimination of quotas, and uniform performance in the industry (i.e. not taking the differences between firms’ size and ownership types into consideration). These convenient assumptions are neither logically sound nor able to address satisfactorily the following issue: “Does WTO accession matter?”

To fill this gap in the literature, this paper investigates the extent to which China’s accession to the WTO will change the competitive landscape of both foreign-financed and locally-funded Chinese textile and clothing firms. The discussion focuses on the effects of the WTO accession treaties and the sector-specific international standards on the competitiveness of the Chinese firms. Apart from taking the size and ownership types of the firms into consideration, this paper does not assume that WTO accession has a positive impact on the competitiveness of the Chinese industry. Being the largest producer and exporter
of textiles and clothing in the world since 1995, China’s WTO accession has tremendous implications for the development of the industry globally.

To examine these issues, informal interviews with government officials and semi-structured interviews with the owners and managers of 15 textile and clothing firms located in Guangdong, Zhejiang and Beijing were conducted by the authors in April-May of 2000 and August of 2001. The interviews and firm visits were conducted with the help of various institutes in China, especially the Management Commission of the Hangzhou Economic and Technology Development Zone in Zhejiang province, and, in Guangdong province, the Bureau for Foreign Economic Relations and Trade in Guangzhou and the Guangdong Provincial Research Centre for Economic Development. Every Sinologist knows that securing the appropriate personal connections is probably the most important precondition for conducting visits to firms in China. This explains why most of the firms investigated are located in Guangdong (6 cases) or Zhejiang (7 cases) provinces. Unsurprisingly, most of the firms located in Guangdong are financed by Hong Kong-based entrepreneurs, whilst most of the firms visited in Zhejiang are financed by Taiwanese or Japanese (partly due to the relative proximity of Taiwan and Japan to this province, and to their historical ties with Zhejiang).

Each interview and firm visit was lasted for at least an hour and the questions focused on factors, especially with regard to the WTO accession treaties, that might affect the competitiveness of textile and clothing firms in China. For instance, to what extent will the elimination of trade barriers, including the reduction of import tariffs and export quotas, affect the competitiveness of the Chinese textile and clothing industry? The field survey co-ordinators (including several government officials) accompanied the researchers during the interviews and firm visits, but they never intervened in the interviews. The interviewees were willing to share their opinions on issues related to the WTO accession with us, including, on several occasions, criticisms against the government for being secretive and about the lack of preparation for the WTO accession, in front of the government officials (see the main text). One of the advantages of using semi-structured interviews is that the interviewees were allowed to discuss issues not directly related to the WTO accession, but vital for the competitiveness of the
industry, e.g. the proliferation of international standards (see the main text). This proved to be essential for us in assessing the central research question in this paper: Does WTO accession matter?

The sample firms ranged across various investment formats: wholly foreign-owned ventures (7 cases), equity joint ventures (4 cases), processing and assembling (2 cases) and locally-funded (2 cases). With the exception of three smaller sized firms (two processing and assembly clothing firms in Guangdong and another locally-funded clothing firm in Zhejiang), all of the others were large-scale firms with registered capital of at least several million U.S. dollars and employing several hundreds to thousands of workers. The samples incorporate mainly the subsidiaries of transnational corporations (TNCs), major subcontractors for designer brand clothing or major department stores in the U.S. and Europe, e.g. Kellwood, Macy’s, J. C. Penney, K-mark, etc. The sample size is relatively small but representative of the industry, especially of the foreign-financed textile and clothing firms in China.

The global and Chinese textile and clothing industries will be discussed briefly in the next section, before we investigate the possible impact of China’s WTO accession in section 3. The analysis will focus on three perspectives: export quotas and import tariffs, anti-dumping and other trade disputes, and international standards. The policy implications of this paper will be highlighted in section 4.

2. The textile and clothing industry

2.1 The global textile and clothing industry

The international textile and clothing trade is dominated by a small number of economies, i.e. China, Hong Kong, South Korea, Mexico, India, Italy, the United States, Germany, etc. (Table 1). The top ten exporting countries accounted for 53-67% of the global export value of textile and clothing products in the 1990s. With the exception of the U.S., the diminishing share of the export value of developed countries (DCs) is offset by the increasing market share of the less developed countries (LDCs) in Asia, especially China, Hong Kong, Taiwan and South Korea. The global market share of Chinese textile and clothing
products increased from 4.6% in 1980 to 14% (US$52.21 billion) in 2000. In terms of revealed comparative advantage indices, the clothing industry (0.433) had a much stronger comparative advantage than the textile industry (0.114) in China in 2000. This is partly due to the massive relocation of export-oriented clothing firms from Hong Kong to southern China since the 1980s to reap the much lower factor costs. For instance, wages in southern China are about 15-20% of those in Hong Kong, even taking the differences in labour productivity into consideration. Subsequently, Hong Kong’s share of the value of global exports decreased from 11.5% in 1980 to 5% in 2000. Since 1995, China has been the largest exporting country for textile and apparel products in the world (WTO, 2001D).

[insert Table 1 about here]

The top ten importing countries accounted for a majority (77%) of the global import value of textile and clothing products in the 1990s (Table 1). The share of the global import value by three DCs, the U.S., the United Kingdom and Japan, increased significantly from about 14-27% in 1980 to 16-47% in 2000. In 2000, European Union countries accounted for a massive 41%, while North America accounted for another 34% of world apparel import values. The U.S. is the largest market, accounting for almost 10% (US$15.71 billion) of the global import value of textile products and about one-third (US$66.39 billion) of that of apparel in 2000. China was also a major importing country of textile products during the 1990s, e.g. reached US$12.83 billion in 2000 (WTO, 2001D). This is reconciled by the fact that most foreign-financed firms in China prefer to import fibre or fabric to control the quality of their products.

Given the tremendous politico-economic implications for the continuous “industrial hollowing out” of the West, it is not surprising that textiles and clothing is probably one of the hardest-fought issues in international trade disputes. To regulate the unilateral imposition of market restrictions, 54 major exporting and importing countries signed the Multifibre Arrangement (MFA, formally the Arrangement Regarding International Trade in Textiles) in January 1974, under the auspices of the General Agreement on Tariffs and Trade (GATT). The major treaties of the MFA are, as follows (WTO, 2001A):
• “Market disruption”: importing countries can unilaterally impose export quotas for two years against exporting countries, when bilateral negotiations fail to settle disputes.
• The quotas allocated to exporting countries have been increased by 6% per annum.
• “Reasonable departures”: importing countries can depart from the MFA rules temporarily under the special circumstances of “market disruption.”

Despite being a major departure from the GATT’s principle of non-discrimination, textile and clothing quotas were negotiated bilaterally between importing and exporting countries under the MFA. A number of LDCs lobbied for a reduction in the trade barriers erected by the DCs and for the conclusion of the MFA during the GATT negotiations. This resulted in the Agreement on Textiles and Clothing (ATC). Since the conclusion of the Uruguay Round of GATT negotiations on 1 January 1995, the ATC is a transitional instrument and applies to all WTO member countries (including non-MFA signatories). The major treaties of the ATC are, as follows (WTO, 2001B, 2001C):

• The progressive enlargement of existing export quotas by increasing the annual growth rate at each stage, until they are eliminated on 1 January 2005.\(^5\)
• A special safeguard mechanism to deal with new cases of serious damage or threat to domestic manufacturers during the transition period.\(^6\)
• The establishment of a Textiles Monitoring Body (TMB) to supervise the implementation of the ATC, including rules on circumvention of quotas via transhipment, re-routing, false declaration of origin, falsification of official documents, etc.\(^7\)

Despite the regulations of international treaties, China and several LDCs are becoming major players in the global textile and clothing industry. It is important to have a brief overview of the Chinese industry, before assessing the possible impact of WTO accession.

2.2 The Chinese textile and clothing industry
Despite being the largest textiles exporting country in the world since 1995, further development of the Chinese industry is constrained by its unique ownership and industrial structure, largely the legacy of the planned economy. In terms of industrial structure, valuable financial resources are being drained through the existence of tens of thousands of small and medium-sized enterprises (SMEs) proliferating all over the country. A number of them are supporting a significant proportion of the fiscal budgets of financially independent local governments. This partly explains why the number of firms exploded from 37,900 in 1980 to 102,500 in 15 years, and why the number of employees have doubled to 12.43 million (Table 2). However, the majority of firms are simply too small. For instance, in 1995, the average number of employees was 121/firm, the gross annual industrial output was only 8.19 million yuan/firm and the annual profit tax was 259,700 yuan/firm. They neither benefit from economies of scale nor are competitive in the international market. This is especially the case in the cotton and wool spinning sectors, where only 10% of the cotton spindles are on a par with international standards. The cotton weaving machines are even more obsolete: only 15% are the automatic doffer type, and 94% of 824,000 machines are the outdated shuttle-loom type. In terms of export value, foreign-financed firms in the form of sanzi qiye (it incorporates equity joint ventures, contractual joint ventures and wholly foreign-owned ventures) alone accounted for 34% of the total export value of the Chinese textile and clothing industry in 1999. The export of textile products is mainly focused on fabrics for clothing, while higher value-added textile products for decorative purposes and industrial use is almost non-existent (Chen, 2000, p. 130; Shi, 2001, pp. 89,155).

[insert Table 2 about here]

In terms of ownership, the SOEs in general are performing badly. In 1996, about 55% of the 3,061 state-owned firms were loss-making (the losses incurred by 1,667 firms were 11.17 billion yuan and the state-owned textiles industry was in the red to the tune of 8.35 billion yuan). In 1999, there were about 41% of 4,247 state-owned textile firms still suffering from losses (the state-owned textiles industry was still losing 0.37 billion yuan) (NBS, 2000). The output share of state-owned textile firms declined dramatically to less than 25%. Moreover, the central
government pays subsidies of 60 billion yuan to the state-owned textiles industry every year in low-cost loans, financial subsidies, workers welfare payments, bad debt re-financing, and so forth. (Shi, 2001, pp. 78,120-1).

To improve industrial competitiveness, the central government established the National Textile and Clothing Industry Bureau and the China Textile and Clothing Association. In 1998, the government implemented a “restructuring, downsizing and efficiency” policy: to phase out 10 million obsolete cotton spinning machines, reduce employment in the textiles industry and return the state-owned textiles industry to profitability within three years. Subsequently, the number of firms decreased from 102,500 in 1995 to 24,500 in 2001, and the number of employees decreased from 12.43 million to 5.07 million simultaneously (Table 2). In 2001, the annual gross value of industrial output increased to 44.13 million yuan/firm (profits tax of 1.66 million yuan/firm in 1999).

Due to the existing ownership and industrial structure of the Chinese textile and clothing industry, it is clear that not every firm in China will gain after the WTO accession.

3. Competitiveness of the Chinese textile and clothing industry: Does WTO accession matter

According to the WTO accord signed in 2001, the major areas of liberalisation related to the textile and clothing industry are, as follows (White House, 2000; MOFTEC, 2001):

- **Export quotas and anti-dumping:**
  - The deal incorporates the ATC, signed in 1995, under which the MFA restrictions (export quotas) will be phased out by 1 January 2005.9
  - The special safeguard mechanism to prevent a surge of imports will remain in effect until 31 December 2008 (rather than 2004 as laid down by the ATC). The product-specific safeguard which determines the market disruption caused by a specific product will remain in force for 12 years after Chinese accession.
• The importing countries will treat China as a “non-market economy” in future anti-dumping and countervailing cases for 15 years after Chinese accession.\textsuperscript{10}

- **Import tariffs, import quotas and licences:**
  - Tariffs will be reduced from the current average of 25.4\% to an average of 11.7\% by 1 January 2005.
  - Import quotas and other quantitative restrictions will increase from the current trade level of 15\% per annum and be phased out no later than 2005.

- **Trading and distribution rights:**
  - Comprehensive trading and distribution rights in China, including the provision of goods made in China, will be granted to foreign-financed firms progressively over three years.

- **SOEs:**
  - China will ensure that the sales and purchases of SOEs and state-invested enterprises (SIEs) are based solely on commercial considerations rather than on “government procurement.”
  - The SOEs and SIEs are regulated under the *WTO Agreement on Subsidies and Countervailing Measures*, e.g. no export subsidies, no soft loans, etc.

It is obvious that the WTO accession treaties will affect the Chinese textile and clothing industry in two major areas: (1) the reduction of import tariffs and the elimination of export quotas, and (2) the possibility of trade disputes between China and her major trading partners. This paper will address these two aspects of WTO-related issues in turn, before discussing the proliferation of international standards and how it affects the competitiveness of the Chinese industry.

### 3.1 Import tariffs and export quotas

It is generally argued that textile and clothing firms in China will benefit from the reduction of import tariffs and the eventual elimination of export quotas, e.g. Zhang (2000, pp. 134-7), Bach \textit{et al.} (2000). They can import their raw materials and machines at much lower tariffs, which will reduce their production costs and improves their competitiveness. They will also be able to export their finished products without worrying about the availability of export quotas after 2005. This is equivalent to a sudden increase in the size of overseas markets.
Zhong and Yang (2000, p. 187) estimate that China will gain US$13.1 billion in 2005 (about 30% of the increase being in exports of textiles and 142% in those of clothing). Some entrepreneurs expect that the export value of the Chinese textiles industry will reach US$68 billion by 2005 (Field survey, 2001).

This rosy “win-win” scenario may be based on sound logical grounds. Nonetheless, its optimistic conclusion is based on an unrealistic assumption: that the global market for Chinese firms will increase after the elimination of export quotas in 2005, e.g. Yang et al. (1997). In reality, the elimination of export quotas may not actually lead to an increase in market size for Chinese firms, since the present official export figures exclude an unknown value of illegal shipments. It is a “public secret” that a number of (foreign-financed) firms in China are exploiting the loopholes on country of origin (via transhipments and re-routing). Therefore, it is argued that the elimination of exports quotas by importing countries in 2005 may or may not increase the market size for Chinese firms. In fact, the elimination of export quotas will benefit those firms who are exploiting the loopholes on country of origin. First, they will no longer have to use various means to deliver their products to the U.S./EU. Second, they are likely to secure more orders from U.S./EU markets since they are already very competitive there, as their present production costs are inflated by the high transaction costs of dealing with the documentation on country of origin and the very high transhipments costs. Third, they have established networks of customers. As long as their prices remain competitive, foreign buyers are likely to keep their existing sub-contractors rather than venture out to do business with other suppliers with unknown qualifications, both in terms of quality control and reliability of product delivery (Field survey, 2001).

Contrary to general perceptions, foreign firms who invested in southern China before the WTO accession do not necessarily enjoy the “first mover” advantage, mainly due to the elimination of export quotas. The ability to use Hong Kong export quotas has been one of the greatest competitive advantages of foreign-financed firms located in southern China since the 1980s, where the majority of them are operating under outward-processing arrangements. The labour-intensive manufacturing processes are conducted in Guangdong, while the
semi-finished products are then exported to Hong Kong for final value-added work before being legitimately exported to overseas markets (with labels of “Made in Hong Kong”). Foreign investors can enjoy both the lower production costs in Guangdong and the less restrictive Hong Kong export quotas assigned by the U.S. government. After the elimination of export quotas in 2005, the competitive advantages that foreign-financed firms derive from dividing their manufacturing processes between Guangdong and Hong Kong will diminish rapidly, if not be eliminated. To remain competitive internationally, the large-scale foreign-financed firms in Guangdong have been moving up the value-added chain during the last few years in anticipation of Chinese accession to the WTO (Field survey, 2000, 2001; Yeung, 2002B).¹¹

With their limited design capability and limited capital to invest in advanced equipment, however, SMEs are less likely to be able to up-grade to higher value-added manufacturing processes which demand stringent quality controls. A number of foreign-financed SMEs are expected to close down before 2005. First, they are producing low value-added and out-of-fashion fabrics or apparel. Second, their “real” production costs are higher than those of TNCs due to the lower level of automated manufacturing. For example, a Taiwanese-financed textile firm pays 6.8 yuan to produce one kilogram of yarn, compared to 6.5 yuan/kg for TNCs. Third, their production costs are higher than those of locally-funded firms (which do not subscribe mandatory labour and medical insurance) (Field survey, 2000, 2001).

For locally-funded firms who focus on the Chinese market, the reduction of import tariffs and the opening up of distribution channels in China are equivalent to an increase in competition from foreign-financed firms and imported products. They have cost advantages in low value-added fibre and apparel, but not in high value-added products. The Chinese fibre industry is already experiencing intense competition, and a number of SMEs have closed during the last two years. Those who are still operating are just able to survive through established customer networks (Ibid.). Since the foreign-financed firms in China are no longer constrained by their production contracts and other Customs documentation, they can sell their products locally and at competitive prices (they can either source
their raw materials locally or imported them at lower tariffs). The subsidiaries of TNCs can also expand their retail chains in China and import their brand name apparel without paying high tariffs. It is therefore expected that the crowding out process of cost-inefficient firms with obsolete equipment producing low quality, out-of-fashion products will be accelerated. This will shorten the transitional period of industrial restructuring, thus improving the long-term competitiveness of the Chinese industry. This “win-lose” scenario is not revealed by conventional econometric studies, such as those of Yang et al. (1997) and Zhong and Yang (2000, pp. 188-90), which report large gains to Chinese industry from WTO membership, or those of Ianchovichina and Martin (2001, p. 21), which estimate that China will account for up to 47% of global clothing exports by 2005.

3.2 Anti-dumping and other trade disputes

The role of the Chinese central government in the resolution of disputes with the country’s trading partners is vital for the competitiveness of textile and clothing firms in China during the 15 years transitional period after the WTO accession, during which the U.S./EU can still use its current anti-dumping methodology. Moreover, the U.S./EU’s special safeguard and product-specific safeguard mechanisms will not be phased out until 2008 and 2014, respectively. In other words, WTO accession will eliminate the uncertainty surrounding the annual renewal of Permanent Normal Trade Relations (PNTR) by the U.S., but it will not reduce the possibility of trade disputes between China and other countries for at least another 15 years.

The fact that China ranked first in the world on anti-dumping suits filed by her trading partners in 2002 (about 540 suits covering 4,000 products, involving 33 countries and worth US$16 billion) highlights the potential scale of future trade disputes (CD, 10 December 2002). The Chinese industry was not well informed, as the government did not distribute documents related to WTO treaties before their delegates signed the agreement in November 2001. Once the Chinese firms refuse to co-operate with the anti-dumping investigations, the U.S./EU’s regulatory authorities have no choice but to accept the pricing information provided by the accusers (Western firms). If China is admitted into the WTO with the status of a “transitional economy,” the regulatory authorities should compare
local production costs (or the representative price of the product exported to a third country) when determining whether a firm is guilty of dumping. In reality, however, the information on production costs provided by the accusers can be misleading, since the current anti-dumping methodology treats China as a “non-market economy.” This means that the U.S./EU regulatory authorities can use third country reference prices to determine the existence of state subsidies or the dumping. When the export price of the accused firm is lower than the reference market prices in the third country, foreign competitors would then raise the accusation that the “dumping” is causing material injury to the industry that is producing a “like product” in the importing country. Anti-dumping duties are then imposed on the product to maintain a “level-playing field” for Western firms should the exporting firm refuse to increase its price to the “non-dumping” level (Field survey, 2001; WTO, 2002).

When anti-dumping duties are imposed on Chinese firms by importing countries, the firms can first try to resolve the trade disputes by appealing to the Chinese government. If the Fair Trade Bureau for Import and Export finds enough evidence to support the appeal, it will then represent the Chinese central government in negotiating directly with the authorities of the importing countries. If the negotiations fail to achieve satisfactory results, the Chinese government can complain to the WTO and ask that the issue be settled by its Dispute Settlement Body (DSB) (Potter, 2001, p. 601).¹⁴

Since the Chinese government may not be well prepared for the WTO accession, the Chinese industry faces an uphill battle in any future trade disputes. China had not established any specific department to deal with potential trade disputes until November 2001, and the Ministry of Foreign Trade and Economic Cooperation’s (MOFTEC) legal team remains understaffed (SCMP, 2 November 2001; CD, 8 October 2002).¹⁵ The lack of co-ordination within, and between, different bureaux to administer foreign trade policy efficiently, further undermines the investigation of counter-anti-dumping cases (Potter, 2001, pp. 600-1). For instance, there are no other Customs officers to follow up the case when the officer in charge is on annual or sick leave. Worse still, it is not uncommon for two or more bureaux in the local government to have their senior officers on
annual leave simultaneously (especially during the Chinese Lunar New Year). In arbitration cases, managers only meet with a “wall of silence,” receiving advice such as “I don’t deal with this; come back in two weeks when Mr. X is back!” (Field survey, 2001). The competitors of Chinese-based firms are fully supported by their countries’ regulatory authorities, whilst some of the corresponding officers in the Chinese government may have inherited the “legacy” of the planned economy.

In general, most of the large-scale foreign-financed (especially Taiwanese- and Hong Kong-financed) textile and clothing firms have years of experience in dealing with anti-dumping suits launched by the U.S. or the EU. They know how to navigate through the minefield of anti-dumping allegations. They also have the capital to recruit lawyers to prepare for counter-anti-dumping cases (Ibid.). Individual companies can apply for “market economy” treatment from the importing country’s regulatory authorities. But the transaction cost of doing so is very high, as it demands on-site inspection by the regulatory authorities. Thus, only 16 Chinese firms (in all sectors) have been granted “market economy” treatment by the European Commission (CD, 11 October 2002).

In a stark contrast, locally-funded and foreign-financed SMEs may have little or no experience of dealing with anti-dumping charges. This resulted in their reluctance to counter the anti-dumping charges by releasing sensitive cost and pricing information to the relevant authorities (HKET, 7 June 2002). A survey revealed that more than half of the Chinese firms involved in anti-dumping charges had been reluctant to participate in foreign anti-dumping procedures. Subsequently, the Chinese firms were the losers in over 80% of the cases (HKEJ, 18 December 2001, p. 21).

No matter how successful the counter-anti-dumping measures are, the bottom line is that some SMEs simply do not have the resources to counter anti-dumping charges. In fact, the cash flow of SMEs is so tight that they simply cannot wait for the outcome of the arbitration on trade disputes. Rather than opening up overseas markets, WTO accession may actually accelerate the crowding out process of SMEs in China.
3.3 International standards do matter

Apart from issues directly related to the WTO accession treaties, the proliferation of international standards in the global textile and clothing industry is vital for the competitiveness of Chinese industry. International standards, such as the ISO9000, ISO14000, SA8000 and WRAP, are an immediate challenge for the industry in China, with or without WTO accession.

ISO9000 is mainly concerned with “quality management” (i.e., whether the firm has done everything to ensure that its products conform to the customer’s requirements), while ISO14000 is primarily about the “environmental management system,” i.e. whether the firm has done everything to ensure that a product will have the least harmful impact on the environment during production or disposal (ISO, 2001).\(^{17}\) SA8000 is focused on the “social accountability” of the firm’s activities, including the International Labour Organization’s Conventions on Labour Rights, the Universal Declaration of Human Rights and the United Nations Convention on the Rights of the Child (SAI, 1997, p.4). Similar to SA8000 but focused on apparel, WRAP is the set of “socially responsible global standards for apparel manufacturing,” i.e. to ensure that sewn products are produced under lawful, humane and ethical conditions (WRAP, 2001). Getting ISO9000 and ISO14000 certification is one of the pre-conditions for securing sub-contracting deals from major U.S. clothing chains, as this is normally (though wrongly) regarded as the benchmark for quality and environmental friendliness.\(^{18}\) Increasingly, major U.S./EU buyers also demand SA8000 or WRAP to fend off allegations from non-government organisations (NGOs) that they purchase products manufactured by “sweatshops”.

Generally, the majority of Chinese firms are willing to adopt ISO9000 certification, partly to fulfil their customers’ requirements and partly to improve quality control processes and productivity through detailed and systematic documentation during the production processes.\(^{19}\) For ISO14000 standard, it is more costly for firms to implement the standard as it monitors the use of raw materials and natural resources, and demands tremendous investment in environmentally friendly equipment, monitoring and measurement devices to
ensure that the emission of pollutants is minimal, etc. This explains why a number of firms are reluctant to implement the ISO14000 standard, as the investment can be prohibitively high for some SMEs (Field survey, 2000, 2001).

Regarding the SA8000 or WRAP certification, they are also too costly for a number of clothing firms in China to implement, even if they are willing to adopt the system wholeheartedly, since such certification covers almost everything, including local working conditions, remuneration, workers’ rights, the extent of overtime work, a ban on child labour, etc. (SAI, 1997, pp. 4-8; WRAP, 2001).20 After inspecting the shop floor of the sub-contractor in Zhejiang, the inspectors from Macy’s Department Store (U.S.) requested that the manager install air conditioning in the workspace, a request with which the firm has duly complied. The Director of this clothing sub-contractor privately admitted that “it is impossible to fully comply with all of the requirements laid out by the SA8000 certification. The production costs are simply too high to remain competitive while doing so.” (Field survey, 2001). This is especially the case in overtime work, where the standard imposes a limit of 12 hours of overtime per week on top of a maximum of 48 hours for a regular shift (SAI, 1997, p. 6).21 Due to the seasonal nature of the clothing market, it is very costly for the sub-contractor to employ and train more workers during the period of peak market demand and sack them during the period of low demand. This explains why overtime work is very common in Chinese firms, regardless of their size.

Second, it is probably impossible to fully implement all the standards in SA8000 or WRAP in China. For instance, it is very difficult, if not impossible, for the firm to ensure that there is no child labour in the firm, partly due to the fact that a large number of workers are involved, most of them migrant workers about whose dates of birth the local Public Security Bureau lacks accurate information. The widespread availability of false identity cards in China further hampers the process of verification. Probably the most difficult item of SA8000 to achieve is the demand faced by certified firms to ensure that their suppliers are conforming to the same standards of social accountability (Ibid., p. 7). It is too costly to demand that all suppliers implement SA8000, as there are dozens of major suppliers for a single firm. Large-scale firms may be able to use their market
power as leverage on their major suppliers. SMEs, however, simply do not have the market power to impose any control over their suppliers, other than product requirements.

The extra costs involved in the certification and implementation of ISO, WRAP and SA standards can partially or even totally offset the low nominal labour costs of some Chinese firms. For these firms, accession to the WTO by China is a non-issue, since most of the tangible effects of the reduction of import tariffs and elimination of export quotas will not take effect until 2005. For them, the certification and implementation of international standards is more urgent. Without certification, they can easily lose their lucrative contracts to competitors in Pakistan, Sri Lanka or Vietnam.

4. Conclusions and policy implications

To conclude, accession to the WTO does matter for the majority of Chinese textile and clothing firms from the perspectives of the reduction of import tariffs and opening up of distribution channels in China, the eventual elimination of export quotas by importing countries, the regulations on trade disputes, etc. From the perspective of compliance with international standards, however, accession to the WTO matters less for some Chinese firms, especially SMEs.

Contrary to the conventional argument which says that the elimination of export quotas by importing countries will increase the market size of Chinese firms, the reduction of Chinese import tariffs and export quotas by importing countries are likely to lead to a “win-lose” game for the industry, given the differences in competitiveness between firms of various sizes and ownership types.

First, Chinese firms are competing in the same export markets in North America and Europe as other low-cost competitors. The eventual elimination of export quotas will benefit export-oriented (foreign-financed) firms as their competitive products and pricing are demonstrated by their existing market shares, given the high transaction costs on export documentation (including illegal transhipment and re-routing, etc.). Rather than enjoying “first mover” advantages, the reduction of import tariffs and the elimination of export quotas may actually
deprive foreign-financed firms with investments in southern China of the ability to use Hong Kong quotas as their competitive advantage. The reduction of import tariffs and the opening up of distribution channels in China will subject import-oriented (locally-funded) firms to more intense competition locally and internationally.

Second, WTO accession will not reduce the incidence of trade disputes in the forms of anti-dumping and countervailing suits for at least another 15 years, since importing countries are treating China as a “non-market economy” and can sanction Chinese imports via the special and product-specific safeguard mechanisms. Most large-scale foreign-financed firms in China have the experience and capital to deal with anti-dumping suits filed by foreign competitors. However, this is normally not the case for locally-funded and foreign-financed SMEs. Moreover, the secrecy of the Chinese government surrounding the WTO negotiations, as well as the non-disclosure of treaties, certainly does not assist the industry in preparing for the accession. The red tape and lack of co-ordination between different Chinese bureaux further lower the competitiveness of Chinese firms, especially for those aiming at niche markets with short product cycles.

Contrary to the conventional wisdom that WTO accession is an important event for the Chinese industry, the accession is not an issue for some Chinese firms. For them, compliance with international standards is the more immediate challenge to their survival. This is because most major overseas buyers are requesting that their sub-contractors comply with international standards on “quality management,” “environmental management” or “social accountability,” in particular ISO9000, ISO14000, SA8000, etc. The recent consolidation in the U.S. retailing industry, exemplified by the bankruptcy of the K-mart Corporation, has further weakened the bargaining power of smaller sub-contractors. Most firms are willing to adopt ISO9000 as, theoretically, it can improve their productivity. However, the certification and adoption of international standards on “environmental management” and “social accountability” are very costly, and some of the treaties are too expensive, if not impossible, to adopt fully, e.g., SA8000 forbids the employment of child labour by the certified firm and by its suppliers.
It may be premature to draw a definite conclusion on the significance of the WTO accession for the Chinese textile and clothing industry, but one outcome is certain. The process of industrial consolidation is likely to be accelerated. Most well-funded (foreign-financed) firms are expecting the WTO accession and can invest to improve their productivity and move up the value-added ladder to meet the competition. Due to the increasing stringency of international standards and the intense competition in low value-added products, a number of SMEs are not expected to survive until 2005, when the effects of the ATC materialise. Even those who survive post-ATC may not be able to withstand the onslaught of anti-dumping from importing countries. Paradoxically, this crowding out process of SMEs may actually improve the long-term competitiveness of the Chinese industry, as most of the crowded out firms are producing excess supplies of low value-added products with obsolete equipment.

To improve the competitiveness of the Chinese industry, the government can assist the industrial consolidation by merging the SOEs. Routine workshops and technical seminars about the latest developments in products, international standards and technical know-how will assist in upgrading the technological and value-added level of the industry. Moreover, the National Textile and Clothing Industry Bureau can invite the ILO and/or other NGOs to inspect the working conditions of Chinese firms by following the strategy of Cambodia (FT, 18 June 2002). Instead of dealing with the cost-consuming certification processes of international standards at the level of the firm, a higher level of transparency through scrutiny is one possibility for improving the competitiveness and reputation of the Chinese industry. Should the Chinese industry get the endorsement of the ILO, the image sensitive TNCs may still place orders from the non-certified Chinese firms. This allows the Chinese industry to further improve its working standards and competitiveness.

To counter the expected surge in anti-dumping suits against Chinese firms, the government should waste little time in assisting the industry to prepare for trade disputes. The government should adopt a proactive approach by issuing guidelines and conducting workshops on the possible challenges that the industry may encounter during the post-accession period, e.g. how to deal with the
expected surge of anti-dumping suits? The reality is that the global competitors of
the Chinese industry will not just sit there and let Chinese exports conquer their
domestic markets.

Trade disputes will be far from over after the WTO accession. The
Chinese industry cannot take the quota elimination outlined in the ATC for
granted, as the history of multilateral trade agreements on textile and clothing
demonstrates (e.g., MFA). First, whether importing countries will indeed
eliminate up to 49% of their quotas overnight on 31 December 2004 is
questionable, as this will have far-reaching consequences for their own textile and
clothing industries. Second, the importing countries may use other pretexts to
invoke safeguard mechanisms to protect their domestic industries for another 10
years legitimately. The Chinese government should stand firm in future
international negotiations whenever the importing country employs safeguard
mechanisms. Apart from trying to settle any disputes through the WTO’s DSB,
the government should use its increasing influential economic power for hard
bargaining, including invoking the “transitional safeguard” measures under the
WTO rules against imported textile products which can cause damage to the
Chinese industry.
Notes:

* The authors are grateful for financial support from the Hong Kong Polytechnic University Research Grant (A/C no. GT301). The helpful assistance of various people (especially Mr. Bilai Zhang and his colleagues at the Hangzhou Economic and Technology Development Zone, the staff at the Guangdong Provincial Research Centre for Economic Development, and a number of other officials in Guangdong, Hangzhou and Beijing who prefer to remain anonymous) in facilitating the field survey is deeply appreciated. We also would like to thank the two anonymous referees for their valuable comments on an earlier version of this paper.

1. For the historical background and politics about the WTO accession, see Yang (2000) and Fewsmith (2001).

2. In this paper, “Chinese firms” is a generic term referring to foreign-financed and locally-funded textile and clothing firms located in China.


4. The revealed comparative advantage index is the value of net exports as a percentage of gross exports plus imports (Balassa and Bauwens, 1988, p. 7). The closer the index is to positive 1.0, the more competitive the industry in the global economy, and vice versa, ceteris paribus.

5. Unlike the MFA, to which importing countries have applied six times for extensions, Article 9 of the ATC stipulates that the integration must be completed by 1 January 2005 (Shi, 2001, p. 54; WTO, 2001C). However, the ATC allows importing countries to “endload”: up to 49% of product quotas (with the largest imported value) will not be eliminated until 31 December 2004 (WTO, 1997).

6. The original aim of the special safeguard mechanism is to protect member countries against damaging surges in imports during the 10-year transition period from the ATC (1995) to the realisation of the GATT rules (2005). It is applicable only to products not yet integrated into GATT and not already under quantitative restraint (WTO, 2001B).

7. According to section 334 of the US Uruguay Round Agreement Act, the country of assembly is normally treated as the country of origin. This is unfavourable to exporting countries which rely on processing trade, such as China (Zhong and Yang, 2000, p. 183).

8. There are about 300 down coat manufacturers in China but 10 of them controlling two-third of the local market (only 70% of 27 million down coats were sold in 2000) (SCMP, 22 October 2001).

9. There are 276 export quotas on different categories of textile and clothing products in China, with the US (104) and the EU (72) accounting for the lion’s share (Shi, 2001:107). China was excluded from the ATC before joining the WTO (Ianchovichina and Martin, 2001, p. 10).

10. The Agreement on Implementation of Article VI of GATT 1994 (The Anti-Dumping Agreement) allows importing countries to take actions against dumping (WTO, 2002).

11. Thompson (2002, p. 883) argues that geographical clustered foreign-financed garment firms are more effective on transferring technology and up-grading the value-added of their products than geographical dispersed firms in China.
12. The bureaucracy associated with production contracts and other import documentation has been documented by Yeung and Mok (2002).

13. The US government granted PNTR status to China, which entails levying the same tariffs on Chinese imports as on other major US trading partners’ imports. The bilateral deals between China and the US will be “multi-lateralised” to all WTO members.

14. For a detailed discussion of the procedures, see chapter 11 of Jackson (2000).

15. In November 2001, the MOFTEC established the Fair Trade Bureau for Import and Export to handle subsidy and anti-dumping issues with foreign countries, and to represent China during WTO-administered trade disputes (SCMP, 2 November 2001).

16. For example, to handle an anti-dumping charge against its exports of automotive replacement windscreen to Canada, Fuyao Glass Industry Group in China spent more than three million yuan in legal expenses alone (CD, 2 September 2002).

17. The Oeko-Tex Standard 100, which sets specific noxious limits (e.g. pH values, extractable heavy-metals) on all kinds of yarns, fabrics and textile products, is another of the so-called “green” standards (Oeko-Tex, 2002).

18. ISO9000 and ISO14000 are generic management system standards (they are not product standards) developed under the guidance of the International Organization for Standardization. Both standards concern the production processes of the firm, not the products (ISO, 2001).

19. Since each batch of products is documented or electronically tagged, any faulty products picked up by quality control staff will result in the whole batch being double-checked before leaving the factory. With a lower rate of manufacturing faulty products, these documentation procedures also improve productivity.

20. Obviously, there are ways to fulfil the SA8000 or WRAP audit without actually meeting the standard, e.g. inducing the workers and factory managers to put on a show during auditing, and presenting falsified labour records.

21. Unlike the SA8000, WRAP just stated that the working hours should not exceed the legal limitations of the countries in which apparel is produced (WRAP, 2001).
## Table 1: The Global Top 10 Exporting and Importing Countries of Textile and Clothing Products in 1990-2000

<table>
<thead>
<tr>
<th>EXPORTS of Textiles</th>
<th>(in US$ billions &amp; percentage share of global exports of textiles)</th>
<th>EXPORTS of Clothing</th>
<th>(in US$ billions &amp; percentage share of global exports of clothing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China†</td>
<td>7.22 6.92% 13.92 9.30% 16.14 10.25%</td>
<td>China†</td>
<td>9.67 8.95% 24.05 15.28% 36.07 18.13%</td>
</tr>
<tr>
<td>S. Korea</td>
<td>6.08 5.83% 12.31 8.22% 12.78 8.12%</td>
<td>Italy</td>
<td>11.84 10.96% 14.18 9.01% 13.22 6.64%</td>
</tr>
<tr>
<td>Italy</td>
<td>9.49 9.10% 12.80 8.55% 11.96 7.59%</td>
<td>Hong KongΨ</td>
<td>9.27 8.58% 9.54 6.06% 9.94 4.99%</td>
</tr>
<tr>
<td>Taiwan</td>
<td>6.13 5.88% 11.88 7.94% 11.69 7.42%</td>
<td>Mexico†</td>
<td>0.59 0.54% 2.73 1.74% 8.70 4.37%</td>
</tr>
<tr>
<td>Germany</td>
<td>14.03 13.46% 14.39 9.61% 11.02 7.00%</td>
<td>USA</td>
<td>2.56 2.37% 6.65 4.23% 8.65 4.35%</td>
</tr>
<tr>
<td>USA</td>
<td>5.04 4.83% 7.37 4.92% 10.96 6.96%</td>
<td>Germany</td>
<td>7.88 7.30% 7.50 4.77% 6.84 3.44%</td>
</tr>
<tr>
<td>Japan</td>
<td>5.86 5.62% 7.18 4.79% 7.02 4.46%</td>
<td>Turkey</td>
<td>3.33 3.08% 6.12 3.89% 6.53 3.28%</td>
</tr>
<tr>
<td>France</td>
<td>6.06 5.81% 7.47 4.99% 6.76 4.29%</td>
<td>France</td>
<td>4.67 4.32% 5.62 3.57% 5.43 2.73%</td>
</tr>
<tr>
<td>Belgium</td>
<td>6.37 6.11% 7.88 5.26% 6.40 4.07%</td>
<td>India‡</td>
<td>2.53 2.34% 4.11 2.61% 5.15 2.59%</td>
</tr>
<tr>
<td>India‡</td>
<td>2.18 2.09% 4.36 2.91% 5.09 3.23%</td>
<td>S. Korea</td>
<td>7.88 7.30% 4.96 3.15% 5.03 2.53%</td>
</tr>
<tr>
<td>Top 10:</td>
<td>68.46 65.66% 99.56 66.49% 99.81 63.38%</td>
<td>Top 10:</td>
<td>60.22 55.76% 85.45 54.30% 105.54 53.05%</td>
</tr>
<tr>
<td>World:</td>
<td>104.27 100% 149.73 100% 157.46 100%</td>
<td>World:</td>
<td>108.00 100% 157.37 100% 198.94 100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMPORTS of Textiles</th>
<th>(in US$ billions &amp; percentage share of global imports of textiles)</th>
<th>IMPORTS of Clothing</th>
<th>(in US$ billions &amp; percentage share of global imports of clothing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>6.73 6.25% 10.44 6.50% 15.71 9.37%</td>
<td>USA</td>
<td>26.98 24.07% 41.37 24.80% 66.39 31.59%</td>
</tr>
<tr>
<td>China†</td>
<td>5.29 4.91% 10.91 6.79% 12.83 7.65%</td>
<td>Japan</td>
<td>8.74 7.79% 18.76 11.25% 19.71 9.38%</td>
</tr>
<tr>
<td>Germany</td>
<td>11.87 11.01% 12.49 7.77% 9.32 5.56%</td>
<td>Germany</td>
<td>20.41 18.21% 24.54 14.71% 19.31 9.19%</td>
</tr>
<tr>
<td>UK</td>
<td>7.02 6.51% 7.70 4.79% 6.91 4.12%</td>
<td>UK</td>
<td>6.96 6.21% 8.34 5.00% 12.99 6.18%</td>
</tr>
<tr>
<td>France</td>
<td>7.60 7.05% 7.49 4.66% 6.75 4.03%</td>
<td>France</td>
<td>8.38 7.48% 10.29 6.17% 11.48 5.46%</td>
</tr>
<tr>
<td>Italy</td>
<td>6.13 5.69% 6.39 3.98% 6.12 3.65%</td>
<td>Italy</td>
<td>2.58 2.30% 4.65 2.79% 6.07 2.89%</td>
</tr>
<tr>
<td>Mexico†Φ</td>
<td>0.99 0.92% 1.77 1.10% 6.10 3.64%</td>
<td>Netherlands</td>
<td>4.77 4.25% 5.01 3.00% 4.83 2.30%</td>
</tr>
<tr>
<td>Japan</td>
<td>4.11 3.81% 5.99 3.73% 4.94 2.95%</td>
<td>Belgium</td>
<td>3.59 3.20% 4.38 2.62% 4.81 2.29%</td>
</tr>
<tr>
<td>CanadaΦ</td>
<td>2.33 2.16% 3.20 1.99% 4.13 2.46%</td>
<td>Spain</td>
<td>1.65 1.47% 2.61 1.56% 3.77 1.79%</td>
</tr>
<tr>
<td>Belgium</td>
<td>3.58 3.32% 4.15 2.59% 3.63 2.16%</td>
<td>CanadaΦ</td>
<td>2.39 2.13% 2.69 1.61% 3.69 1.76%</td>
</tr>
<tr>
<td>Top 10:</td>
<td>55.64 51.64% 70.53 43.91% 76.43 45.59%</td>
<td>Top 10:</td>
<td>86.44 77.12% 122.63 73.52% 153.05 72.82%</td>
</tr>
<tr>
<td>World:</td>
<td>107.75 100% 160.62 100% 167.65 100%</td>
<td>World:</td>
<td>112.09 100% 166.81 100% 210.17 100%</td>
</tr>
</tbody>
</table>

Notes: †: Includes significant shipments through processing zones. ‡: 1999 instead of 2000. Φ: Imports are valued f.o.b. Ψ: Domestic exports only. In 2000, the re-export value of clothing products in Hong Kong reached US$14.28 billion. Sources: Compiled from *Textile Asia*, 1997, pp. 53, 59; WTO, 2001D.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of enterprises</strong> (in units of 10,000)</td>
<td>3.79</td>
<td>8.38</td>
<td>10.25</td>
<td>2.45</td>
</tr>
<tr>
<td>of which SOEs:</td>
<td>(10.1%)</td>
<td>(7.1%)</td>
<td>(8.0%)</td>
<td>(14.3%)</td>
</tr>
<tr>
<td>of which loss-making SOEs:</td>
<td>0.33</td>
<td>0.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of employees</strong> (in 10,000 persons)</td>
<td>502</td>
<td>1,243</td>
<td>1,243</td>
<td>507</td>
</tr>
<tr>
<td>(4.8%)</td>
<td>(8.8%)</td>
<td>(8.3%)</td>
<td>(13.2%)</td>
<td></td>
</tr>
<tr>
<td><strong>Gross industrial output value</strong> (in 100 million yuan)</td>
<td>885</td>
<td>3,735</td>
<td>8,397</td>
<td>10,813</td>
</tr>
<tr>
<td>(17.7%)</td>
<td>(16.2%)</td>
<td>(12.6%)</td>
<td>(11.3%)</td>
<td></td>
</tr>
<tr>
<td><strong>Value-added</strong> (in 100 million yuan)</td>
<td>1,494</td>
<td>2,690</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(9.7%)</td>
<td>(9.5%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Profit taxes</strong> (in 100 million yuan)</td>
<td>165.06</td>
<td>229.62</td>
<td>266.24</td>
<td>358.71</td>
</tr>
<tr>
<td>(14.2%)</td>
<td>(7.8%)</td>
<td>(4.3%)</td>
<td>(11.5%)</td>
<td></td>
</tr>
<tr>
<td>of which loss incurred by loss-making SOEs:</td>
<td>78.60</td>
<td>76.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which loss incurred by all SOEs:</td>
<td>33.50</td>
<td>3.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fixed assets investment</strong> (in 100 million yuan)</td>
<td>38.52</td>
<td>129.50</td>
<td>309.99</td>
<td>266.02</td>
</tr>
<tr>
<td>(4.2%)</td>
<td>(2.9%)</td>
<td>(1.5%)</td>
<td>(0.94%)</td>
<td></td>
</tr>
<tr>
<td><strong>Export value</strong> (in US$100 million)</td>
<td>44.1</td>
<td>167.8</td>
<td>379.7</td>
<td>498.4</td>
</tr>
<tr>
<td>(24.1%)</td>
<td>(27.0%)</td>
<td>(25.5%)</td>
<td>(18.7%)</td>
<td></td>
</tr>
<tr>
<td>textiles export value (in US$100 million):</td>
<td>27.6</td>
<td>99.3</td>
<td>139.2</td>
<td>130.1</td>
</tr>
<tr>
<td>of which SOEs</td>
<td>81.0§</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which collectives</td>
<td>5.4§</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which sanzi qiye</td>
<td>43.2§</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clothing export value (in US$100 million):</td>
<td>16.5</td>
<td>68.5</td>
<td>240.5</td>
<td>300.6</td>
</tr>
<tr>
<td>of which SOEs</td>
<td>181.9§</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which collectives</td>
<td>14.6§</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which sanzi qiye</td>
<td>103.4§</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

Figures in brackets are the percentage shares of textiles and clothing in the corresponding values of the national total.

Sanzi qiye incorporates three forms of direct foreign-invested enterprises: equity joint ventures, contractual joint ventures and wholly foreign-owned ventures.

†: 1998 data.

§: 1999 data.

¶: Another source of information suggested that there are more than 70,000 textile and clothing firms in China (SCMP, 7 January 2002).

References:

Abbreviations for newspapers and magazines titles:
FT: Financial Times (http://www.ft.com)
HKET: Hong Kong Economic Times (in Chinese)
SCMP: South China Morning Post (http://www.scmp.com)


Textile Asia. April 1997


World Trade Organization. (WTO) 2001C. *Agreement on Textiles and Clothing (ATC)* (http://www.wto.org/english/docs_e/legal_e/final_e.htm#textiles)


Yeung, G. 2002A. The implications of WTO accession on the pharmaceutical industry in China, Journal of Contemporary China, vol. 11, no. 32, 473-93

Yeung, G. 2002B. WTO accession, the changing competitiveness of foreign-financed firms and regional development in Guangdong of southern China, Regional Studies, vol. 36, no. 6, 627-42

