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# Structural Adjustment in Textiles and Clothing in the Post-ATC Trading Environment

Denis Audet

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ENVIRONMENT

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By Denis Audet

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## ABSTRACT

### **Structural Adjustment in Textiles and Clothing in the Post-ATC Trading Environment**

This study focuses on the adjustment challenges facing the textile and clothing industries across the globe. The analytical work was initially suggested during informal consultations between the OECD Trade Committee and Civil Society Organisations. It took two years of extensive discussions in the Working Party of the Trade Committee to deepen understanding of the issues and finalise the study.

Thousands of jobs have disappeared in the textile and clothing sectors, and a considerable restructuring is anticipated with the demise of quantitative restrictions by the end of 2004 as agreed under the WTO Agreement on Textiles and Clothing. The end 2004 event is best viewed as part of a longer process of adjustment, which has taken place over both the medium term (the phase-out of quantitative restrictions has lasted a decade) and the long term (the textiles and clothing industry has long migrated with the industrial evolution of countries). The planning for the post-2004 market, combined with technological developments and evolutionary changes in national policies, has already encouraged a major reordering of patterns in trade and investment. Firms in all countries and segments of the industry will continue to face challenges of adjustment.

The end 2004 event is also causing concern that a few of the larger developing countries may capture a disproportionate share of the economic benefits arising from the quota phase-out. The concerned countries are looking for the on-going multilateral trade negotiations in the context of the Doha Development Agenda to secure improved market access conditions which will help them minimise their adjustment hardships.

The study reviews the most recent market developments throughout the entire supply chain, from natural fibres to retail distribution. It examines the policy challenges in the fields of trade, labour adjustment, technology and innovation, and other regulatory dimensions which are important determinants of a country's drive towards global integration. The study covers the adjustment in both developed and developing countries and underscores the vulnerability of suppliers located in small developing and least developed countries that have specialised in the final assembly of clothing products using imported textiles.

The study argues that countries aspiring to maintain an export-led strategy in textiles and clothing need to shift their industrial cluster of expertise from manufacturing to the higher value-added segments of the supply chain. National suppliers would thus need to place greater emphasis on education and training of services-related skills, such as design, material sourcing, quality control, logistics and retail distribution; and to encourage the establishment of joint structures where domestic suppliers can share market knowledge and offer more integrated solutions to prospective buyers.

The study also argues that a key objective of governments is to strengthen the capacity of the private sector to deal effectively with rapid change and growing competition in order to capture the trade opportunities that are being created through improved market access. This involves: supporting the emergence of qualified pools of expertise and the adaptability of the workforce; improving the regulatory environment on essential business services; stimulating collaborative innovation processes in the fields of dissemination and technological transfers; and negotiating improved market access for textile and clothing products, especially seeking to eliminate remaining obstacles to the establishment of retail distribution systems and distorting production measures.

*Keywords:* structural adjustment, textiles, clothing, Agreement on Textiles and Clothing (ATC), Multi-Fibre Arrangement (MFA), trade policies, labour adjustment, technology and innovation, customs facilitation.

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## PART I: SYNTHESIS

### I. Introduction

1. The scheduled elimination of quantitative restrictions under the WTO Agreement on Textiles and Clothing (ATC) at the end of 2004 is challenging the global sourcing channels that were formed over decades of trade restrictions and entails considerable adjustment for all stakeholders, especially those clothing assemblers in remote low-wage countries.<sup>1</sup> Given the economic importance of these industries for both developed and developing countries, this review examines the process of adjustment in the textile and clothing industries in the post-ATC period with a view to assist governments in establishing a coherent policy and regulatory framework to facilitate the adjustment of the private sector.
2. The import quotas initially imposed under the Multi-Fibre Arrangement (MFA) have contributed to the international fragmentation of the supply chain by accelerating the diversification of supply. This process worked to the disadvantage of the more efficient and quota-constrained suppliers, many of which sub-contracted clothing assembly into low-wage third countries. Hence the Arrangement benefited the least competitive suppliers most of which located in small developing countries and least developed countries. Aware of their post-ATC vulnerability, the least competitive countries are now aiming to improve their access to the developed countries' markets to minimise the expected hardships. These countries are particularly anxious about losing export markets to Chinese exports and are lobbying for expanded product eligibility under the General System of Preferences (GSP) and other preferential programmes, complemented by more liberal rules of origin to qualify for preferential access.
3. During decades of MFA-related quotas, the textile industry did not migrate to developing countries' locations as fast as the clothing industry. In the post-ATC period, there will be no major obstacles to prevent the emergence of high quality textile capacity in developing countries and stronger clusters of expertise. Moreover, there will be neither quantitative trade restrictions nor MFA-related guaranteed market access to mask the competitive weaknesses of exporting countries. These weaknesses must be addressed if countries were to maintain an export-led development strategy in textiles and clothing.
4. This review argues that the role that textile and clothing production now plays in the industrialisation process of developing countries is far more differentiated than it was a generation ago. While low-wages can still give developing countries a competitive edge in world markets, quick turnaround times are now playing a far more crucial role in determining international competitiveness in the fashion-oriented and ever more time-sensitive textile and clothing markets. The comparative advantage of developing countries in the assembly process, *i.e.* the sewing process, based on low wages, does not necessarily carry over into a comparative advantage in the management of the entire supply chain when all services-related dimensions are taken into consideration. Countries that aspire to maintain an export-led strategy in textiles and clothing need to shift their industrial cluster of expertise from manufacturing to the higher value-added segments of the supply chain. This can be done by upgrading their domestic skills in design, material sourcing, quality control, logistics and retail distribution.
5. For developed countries, the post-ATC environment will have varying effects on different segments of the supply chain. Their textile and clothing suppliers will be exposed to strengthened competitive pressure. They are also the host countries of the world's fashion and design hubs. The retail groups in developed countries will have greater liberty in sourcing products on a global basis and can

accelerate the expansion of their distribution networks on a worldwide basis. Moreover, world exports of textile and clothing machinery originate predominantly from developed countries. On net, the interests of developed countries in textile and clothing are multifaceted, and their long-term interests are better served by an open and liberal multilateral trading environment.

6. Although the prime responsibility for adjustment falls on the firms themselves, governments have a supporting role to play in establishing a coherent policy and regulatory framework. The objective of this framework should be to strengthen the capacity of the private sector to deal with rapid change and growing competition, and to capture the trade opportunities that are being created through improved market access. This process involves dismantling trade-distorting production measures, improving the regulatory environment on essential business services, supporting the emergence of qualified pools of expertise and the adaptability of the workforce, negotiating improved market access for textile and clothing products, and eliminating the obstacles to the establishment of retail distribution systems in developing countries.

7. Liberal trade and investment policies play a key role in this adjustment process through their dynamic impact in restraining price pressure on imported inputs and in facilitating the emergence of competitive firms that are able to compete on domestic and international markets. However, the liberalisation often encounters serious structural impediments and imposes temporary hardships on certain segments of the economy. Governments can ease the transition by facilitating the redeployment of affected resources to other productive activities without reverting to costly trade protection and subsidisation measures.

## II. A Typology of the Textile and Clothing Supply Chain

8. The textile and clothing industries have fundamental distinctive characteristics and involve a large and diversified range of activities that use varying mix of labour and capital. For the sake of simplicity, the entire supply chain is presented as four production segments. The structural adjustment pressures or the drivers of change for each of the respective production segments are discussed in section III below.

9. "*Natural Fibres*", the preparation of natural fibres involves various agricultural activities that are influenced by factor endowments, *i.e.* the quality of land and regional climate, and agricultural policies in respective countries. Diverse natural fibres are used in the production of textiles, *i.e.* cotton, flax, jute, silk, sisal and wool. Two of them involve animal husbandry, *i.e.* silkworms and sheep herding.

10. "*Textiles*", the preparation of textile products, either from natural or man-made fibres, involves manufacturing activities where technological innovations have greatly increased the speed of textile operations and have resulted in huge productivity gains. The non-clothing applications of textiles or the so-called "technical textiles" are now more important than clothing applications and account for the fastest growing segment of total textile production within developed countries.

11. "*Clothing*", the preparation of clothing articles also involves manufacturing activities. The clothing sector is also referred to as "apparel" or "garment" sector to describe the same economic sector. The pre-assembly stage involves designing, grading and marking of patterns and cutting of textiles into individual components, and has been revolutionised with the application of computer-aided design (CAD) and computer-assisted methods (CAM) systems. By contrast, the assembly stage remains highly labour-intensive and involves delicate handling and sewing operations that do not lend themselves to automated progress. Aside from productivity gains attributable to better needles and more secure fabric-holding techniques, the sewing techniques remain basically similar to those that were used a century ago. This industry is almost unique in its low ratio of capital equipment to labour inputs. However, technological progress in telecommunications and transportation networks has made it easier for clothing manufacturers

to divide the supply chain on an international basis and to perform the assembly stage in low-wage countries.

12. “Retailing”, the retailing activities have changed significantly with the blurring of the traditional boundaries between retailers, brand name marketers and manufacturers. Retailers are increasingly involved in global sourcing as lead buyers through a wide variety of organisational channels, such as vertical integration, sub-contracting and licensing arrangements. The retail stage has also become increasingly concentrated into large and lean retail organisations that are able to exert considerable influence throughout the supply chain.

### **III. Adjustment Challenges by Production Segment**

#### **A. Adjustment in Natural Fibres**

13. In the post-ATC period, the worldwide demand for natural fibres will reflect two consumption trends heading in opposite directions. In the clothing applications of textiles, the demand for natural fibres is growing. But in the non-clothing applications of textiles, it is the demand for man-made fibres that is growing. Hence the demand for natural fibres is unlikely to exceed the average growth rate achieved in recent years in the consumption of textiles for clothing applications which has hovered around 2% per year.

14. In the post-ATC period, the main drivers of adjustment for natural fibres will be related to the migration of textile capacity to some developing countries and the results of ongoing agricultural negotiations and dispute settlement procedures in the World Trade Organisation.

#### *Migrating Demand for Natural Fibres*

15. Natural fibre suppliers will have to accompany the migration of textile capacity to the most competitive developing countries, particularly China and India. These two countries are already well endowed in natural fibre production. One implication is that a certain share of world demand for natural fibres traditionally heading to developed countries will be redirected to developing countries. Therefore, some production shares of natural fibres in developed countries will have to compete on quality, delivery and price on world markets. It is also expected that access conditions to developing countries will become more prominent in the trade policy agenda.

16. Tariff protection for natural fibres is generally much lower than the average protection afforded to finished textiles and clothing products. Moreover, various duty-remission programmes are enforced in textile-producing countries to improve the cost competitiveness of the domestic processing industries. Where high tariff protection is granted to natural fibres to protect domestic agricultural producers, the brunt of the protection cost is ultimately born by the domestic processing industries. In developing countries where labour-intensive agricultural production prevails, the reduction of tariffs on fibres may be difficult to justify for policy makers unless there are clear offsetting labour gains in the processing industries. For least developed countries, like Bangladesh, the prospects of losing employment in clothing manufacturing due to intensified competition on export markets may create anxiety for policy makers and reduce the likelihood of downward tariff adjustment in fibres and/or textiles for fear of exacerbating the employment situation.

#### *WTO Agricultural Negotiations and Dispute Settlement*

17. Another challenge for natural fibres relates to the outcome of the ongoing WTO multilateral trade negotiations in agriculture. Under the WTO's Agreement on Agriculture, WTO members have undertaken reduction commitments in respect of market access, domestic support and export subsidy. The ongoing

negotiations are expected to produce improved commitments in each of these three areas. Concurrently, the main natural fibre used in clothing applications of textiles is cotton and domestic support to cotton production is the subject of a formal trade dispute under the WTO dispute settlement procedure. The outcome of this dispute could have an important impact on the cost competitiveness of fibre producers worldwide. The prospects of a WTO package that may include a meaningful reduction in domestic support and export subsidy could force high-cost producers to rationalise their production by adopting more efficient production methods or by shifting production to other crops. As attested by the protracted WTO negotiations in agriculture, domestic groups are resisting the adjustment towards less protected and distorted markets that would otherwise benefit the processing industries and support economic diversification into higher value-added production segments.

#### **B. Adjustment in the Textile Industry**

18. The main drivers of adjustment in the textile industry in the post-ATC period are related to: (1) the migration of textile capacity to developing countries; (2) the adoption of up-to-date equipment by producers; (3) the fading attractiveness of outward processing programmes (OPP); and (4) the importance of rules of origin to qualify for preferential trade arrangements.

##### *Migration to Developing Countries*

19. With the imminent demise of the ATC, there will be no more trade obstacles to the development of stronger clusters of textile expertise in the most competitive developing countries. The recent import surge of up-to-date textile and clothing equipment in China attests to this migration and foreshadows where more textile and clothing production and export in the future will be coming from.<sup>2</sup> With modern equipment, Chinese textile suppliers are improving their productivity and are increasingly producing export-quality textiles. The main beneficiaries of this textile modernisation are the Chinese clothing suppliers that can procure their textile inputs directly from domestic sources and hence meet shorter turnaround delivery requirements. Access to high quality textiles is considered one of the most important determinants of competitiveness of clothing suppliers. Against this background, the textile industry in developed countries will be facing intensified competition in both their export and domestic markets. This migration of textile capacity will nevertheless be influenced by objective competitive factors and thus will be hampered by the presence of distorting domestic measures and weak domestic infrastructure in several developing and least developed countries.<sup>3</sup>

20. The textile industry is also undergoing a major shift in the direction of the non-clothing applications of textiles, *i.e.* the technical textiles, which account for the fastest growing segment of total textile applications. The technical textiles are often defined as those textile materials and products manufactured primarily for their technical and performance properties rather than aesthetic or decorative characteristics. Technical textiles are used in multiple applications, including furniture, automotive, health and hygiene, transportation, construction and environment. The processes involved in producing technical textiles are human and physical capital-intensive and, for the moment, concentrated in developed countries. With the transfer of technology and expanding development of knowledge sharing through global university networks, many developing countries have access to the knowledge base and are enabling the technical textiles industries to flourish. Whenever major industries shift to or expand production in developing countries, it is only a matter of time for inputs to be produced there as well.

##### *Shrinking Productivity Gap*

21. Significant productivity gains were achieved during the twentieth century from improved spinning and weaving equipment. The textile industry has also become a capital-intensive industry where up-to-date equipment plays a crucial role in defining the competitiveness of firms.<sup>4</sup> The significant productivity gains

have historically been driven by the symbiotic relationship between a competitive textile and clothing industry and a creative textile and clothing machinery (TCM) industry. However, this symbiotic relationship is weakening as new materials are developed mainly in the chemical industry and as new processes are developed in the machinery industry. As a result, the technological competitiveness of textile and clothing firms largely depends on their ability to adopt new products and processes developed outside the textile and clothing industries. Therefore, the major focus of innovation activities within these industries lies on technology transfer. With globalised knowledge networks, the technology transfer is occurring at a rapid pace, and the historical productivity gap that has differentiated developed and developing countries is expected to shrink as modern equipment can be operated efficiently in the most competitive developing countries.

22. The TCM industry in developed countries nevertheless succeeded throughout the 1980s and the 1990s in maintaining its high share of the world's exports by accompanying the international shift in the demand for capital equipment. The four main exporting countries are Germany, Italy, Japan and Switzerland; together they account for almost two-thirds of industrial countries' exports of machinery. This was made possible through various means, including: (1) industrial consolidation among firms; (2) the development of ties between equipment manufacturers in developed and developing countries; (3) concentrating production on the high value-added segments of the equipment market; and (4) keeping close contacts with equipment users wherever they are located.

#### *Preferential Trade Arrangements*

23. Trade policies other than MFA-related quotas have also had a major impact on the development of geographical patterns of trade in textiles and clothing. This review argues that the elimination of import quotas will reduce the attractiveness of outward processing programmes and, conversely, increase the attractiveness of other preferential trade arrangements, such as regional trade arrangements (RTAs) and GSP regimes. The magnitude of economic benefits accruing under these arrangements varies greatly because of their differences in scope and the specificity of the rules of origin that confer preferential access under respective arrangements.

24. The outward processing programmes (OPP) or production sharing programmes involve the temporary export of textiles or pre-cut fabrics from the OPP-initiator country to low-wage countries for final assembly, with the finished articles then being re-imported under preferential provisions. For low-wage countries, the assembly of imported fabrics into clothing is a simple form of industrial activity. OPP eligibility often acts as a booster for their export-oriented strategies by giving them instant access to high quality inputs and foreign distribution networks. For developed countries, outward processing transactions strengthen the competitive position of domestic suppliers by enabling them to transfer the labour-intensive sewing activities in low-wage countries. To make outward processing transactions worthwhile, the cost savings associated with low-wage assembly in offshore centres and tariff reductions must exceed the inherent additional costs of production fragmentation, namely: two-way shipments; longer and larger inventory; and added co-ordination to manage the fragmented supply chain.

25. Under the MFA-related quota regime, the inherent cost inefficiencies of outward processing transactions were partly masked by the trade distorting impact of quota allocations. Moreover, outward processing transactions provided a protected market for textiles made in OPP-initiator countries. In 1995, outward processing trade accounted for 15% of the EU's external trade in textiles and for 24% of total clothing imports by the United States in 1999.<sup>5</sup> Since then, the importance of outward processing trade has considerably diminished in the European Union with the entry into force of several free trade agreements (FTAs) with neighbouring countries that made OPP almost redundant. In a less pronounced way, the importance of outward processing trade for the United States has diminished with the implementation of

NAFTA, but the OPP eligibility was expanded under the Trade Development Act of 2000 and outward processing trade accounted for 10.9% of clothing imports in 2003.

26. Without the trade distorting impact of quota allocations, the inherent vulnerability of business models developed under OPP is exposed. On the one hand, outward processing transactions will remain economically attractive only if the margin of preferential duty exceeds the difference between the OPP-related cost and the logistical cost incurred for competitive suppliers.<sup>6</sup> With distance and time acting as trade barriers, there are no net cost advantages from outward processing transactions involving offshore assembly centres that are either geographically remote from the OPP-initiator country or nearby centres with poor transportation infrastructure.

27. On the other hand, there will be instances where offshore centres will be able to offer lower prices to buyers of clothing products assembled from third country textiles. It means that the textile industry in OPP-initiator countries will lose their protected OPP textile export markets and will also have to adjust to intensified foreign competition in their domestic markets. Simultaneously, OPP recipients that have gradually developed their expertise are conscious of their vulnerability and are requesting improved trade opportunities from developed countries to assist them in competing with the most competitive suppliers. Most requests concern the negotiations of FTAs with developed countries and/or improved GSP access. In any of those options, the improved access will mean more competitive pressure on the domestic textile industry of developed countries.

#### *Trade Opportunities under Regional Trade Arrangements (RTAs)*

28. In the post-ATC period, comprehensive RTAs can provide a useful policy framework to underpin the development of a regionally-integrated textile and clothing supply chain and to facilitate economic diversification strategies for its members, but they don't necessarily imply competitiveness. This review argues that a comprehensive RTA is a necessary but insufficient condition to promote trade flows and qualitative transformation in textile and clothing production. Although production and trade opportunities are created under comprehensive RTAs, certain domestic factors play instrumental roles for reaping the trade opportunities. Among these factors are: the ability to attract the right kind of lead retailers, brand name marketers and manufacturers; a pre-existing cluster of expertise; a striving and vibrant entrepreneurial environment; and geographical proximity to minimise the transit time of shipments during transportation.<sup>7</sup>

29. Prior to the North American Free Trade Agreement (NAFTA), access to the US markets for Mexican suppliers was primarily driven by outward processing transactions in which Mexican suppliers merely assembled imported components from the United States. With NAFTA, the trade rules have changed and all activities of the supply chain, not only sewing, can be performed in Mexico (and in Canada). In the context of NAFTA, Mexico has been able to promote the consolidation of its regional clusters of textile and clothing expertise and to move along the supply chain from the simple assembly of imported components, thereby bringing backward and forward linkages to the domestic economy. In a similar way, the customs union between Turkey and the European Union has paved the way for improved opportunities for further integrating the Turkish textile and clothing markets into the larger European markets. However, despite their integration process into larger regional markets, both Mexico and Turkey are not shielded from the need to adjust to external competitive pressures as products originating from other countries, *i.e.* China, are increasingly competitive in both the European Union and NAFTA markets.

#### *Stringent Rules of Origin for Textiles and Clothing*

30. Rules of origin (ROOs) are a necessary part of preferential trade arrangements, such as GSP, to ensure that the trade preference is granted to products that effectively originate from the beneficiary

countries. Similarly, they are a necessary part of FTAs to preserve the preferential treatment of trade for member countries – to avoid the problem of trade deflection where imports enter into the region through the member country whose import tariff is the lowest. This review shows that there are considerable disparities in the rules of origin applied under various preferential arrangements and in the utilisation rates of respective arrangements.<sup>8</sup>

31. Specific and more stringent rules of origin are often applied on sensitive products, such as textile and clothing, which make it more difficult for suppliers to achieve the regional content. This creates an incentive for manufacturers to source inputs from regional suppliers and may act as a trade barrier on its own. By limiting the sourcing of inputs from regional partners, ROOs may encourage a vertical integration of the production chain which may not reflect the least cost opportunities to compete effectively in a globalised environment. A further problem with specific rules of origin is that the determination of regional content for yarns, fabrics and final products requiring multiple components can become so burdensome and costly for suppliers that they prefer not to use the preferential arrangements.

32. Several countries have recently improved their GSP regimes by broadening the scope of eligible textile and clothing products and/or offering comprehensive duty-free and quota-free treatment for products originating from the least developed countries (LDCs).<sup>9</sup> This review argues that while rules of origin are necessary elements to ensure that the preferential trade actually benefits its targeted countries, overly restrictive rules may not provide meaningful access and could lead to an under-utilisation of preferential access schemes. By contrast, liberal rules of origin may not benefit the targeted group of countries as much as originally intended and the associated preferential access can invert the structure of tariffs with consequential negative problems for national manufacturers. Moreover, liberal rules of origin do not necessarily confer competitiveness. Inherent competitive factors explain which beneficiary countries of preferential arrangements are more likely to gain the most. The distance between remote trading partners entails long transit periods for shipments and the size of the cluster of expertise in beneficiary countries seems to matter. Finally, the identity of foreign investors also appears to influence the patterns of input procurement.

33. The recent Canadian modifications to its GSP regime offer interesting lessons. In 2003, Canada granted duty-free and quota-free entry to all textile and clothing imports originating from LDCs that meet the 25% content requirement originating from any LDCs, GSP beneficiaries, or Canada. Four main issues are worth noting in the present context: (1) the liberal rules of origin with the right to cumulation from any LDC or GSP beneficiaries have allowed LDCs to drastically boost their clothing exports to Canada within a very short period of time; (2) the improved access has enabled many LDCs to expand their exports but the distribution of gains was nevertheless concentrated in two beneficiary countries: Bangladesh and Cambodia; (3) large trade gains also accrued to the largest developing countries, such as China and India, by shipping textiles to LDCs which were subsequently assembled into clothing products and later exported to Canada; and (4) the duty-free treatment for clothing products has inverted the structure of tariffs with consequential negative problems for Canadian manufacturers who claimed unfair competition. Instead of backtracking on its liberal commitments, Canada announced a series of new tariff cuts in early 2004 to address the problems caused by inverted tariff protection and, simultaneously, launched a programme designed to improve production efficiency for Canadian suppliers. One important lesson to draw from the Canadian experience is that the implementation of liberal rules of origin requires a comprehensive approach to ensure that the domestic processing industry also benefits from the trade liberalisation programmes.

34. With the imminent demise of the ATC, the small developing countries and LDCs are increasingly vocal about their post-ATC vulnerability and are formulating demands to access developed country's markets on an improved preferential basis as a means to compete more effectively with the prime contenders, *i.e.* China and India. Recognising that there are virtually no productions of high quality textiles



in LDCs for the time being, any preferential access arrangements in favour of LDCs must take into account that they have to use competitive textiles originating from third countries to compete on export markets. In these circumstances, it seems inevitable that in providing preferential access to LDCs, there will be some collateral benefits for the suppliers of high quality textiles. In the post-ATC period, rules of origin provisions will be at the forefront of the trade policy agenda as demands from vulnerable offshore centres will become more insistent. The challenge for policy makers in developed countries is to draft rules of origin for their preferential arrangements that will mainly benefit LDCs and small developing countries which are most vulnerable to competition from the large and integrated suppliers in China and India. It also means that any improvement in the rules of origin under preferential trade arrangements will increase the competitive pressure on the domestic textile industry of developed countries.

### *C. Adjustment in the Clothing Industry*

35. The main drivers of adjustment in the clothing industry in the post-ATC period are related to: (1) the importance of time factors as determinants of international competitiveness; and (2) the adjustment in trade protection and WTO safeguard measures.

#### *Time Factors as Determinants of International Competitiveness*

36. This review argues that the role that textile and clothing production now plays in the industrialisation process of developing countries is far more differentiated than it was a generation ago. While low wages can still give developing countries a competitive edge in world markets, time factors are now playing a far more crucial role in determining international competitiveness. With the imminent demise of quantitative restrictions, several low-wage countries that had excelled as offshore assembly centres because they had quota allocations are exposed to the inherent vulnerability of production fragmentation. Time factors act as important trade barriers for intermediary inputs involved in an internationally fragmented production process. There are trade-offs between low-wage cost and time factors, whereas time proximity to large consumer markets provides a competitive edge for succeeding in the highly competitive, time-sensitive and fashion-oriented clothing market.

37. Moreover, the emergence of more competitive and integrated suppliers in China is exerting considerable pressure on the vulnerable offshore centres to adjust domestic capacity towards more advanced processes and to diversify their economic activities. The comparative advantage of developing countries in the assembly process, *i.e.* the sewing process, based on low wages, does not necessarily translate into a comparative advantage in the management of the entire supply chain when all services-related dimensions are taken into consideration. Efficiency in managing the entire supply chain is required, including in design, fabric procurement, logistical skills in transportation, quality control, property rights protection, export financing and clearing of trade formalities.

38. To move along the supply chain beyond the mere assembly stage of imported inputs into more advanced activities, exporting countries need to shift their industrial cluster of expertise from manufacturing to services-related functions, such as design, material sourcing, quality control, logistics and retail distribution. To pursue these avenues, national suppliers need to place greater emphasis on education and training of services-related skills; and to encourage the establishment of joint structures where domestic suppliers can share market knowledge and offer more integrated solutions to prospective buyers.

39. This review also stresses the importance of efficient port infrastructure, reliable and competitive modes of transport and efficient customs procedures for maintaining a competitive edge in the highly competitive textile and clothing markets. The reliability of transportation infrastructure and efficiency in customs procedures complements each other in minimising transit periods for shipments involved in international trade and can make geographically remote locations more internationally competitive. Even if

long transit periods can be overcome to some extent by preferential market access arrangements, long transit periods can essentially eliminate from international competition the offshore centres that are either geographically remote from the buyer's markets or nearby centres with poor transportation infrastructure.

#### *Adjustment in Trade Protection*

40. As noted earlier, access to high quality textiles is considered one of the most important determinants for the competitiveness for clothing suppliers. Therefore, high tariff protection on textile inputs undermines the efforts of clothing suppliers to shift their production mix that require imported high quality textiles. Policy makers are often confronted with a policy dilemma in deciding which segments of the supply chain should be exposed to a greater dose of import competition to favour the processing sectors and ultimately the consumers. On the one hand, the textile suppliers will argue that they need the protection to reach the critical mass in order to compete on more equal terms with foreign textile suppliers. On the other hand, the clothing suppliers will argue that duty-free access for their inputs is needed to compete with imported clothing products. Various duty-remission programmes can help to reduce the impact of otherwise high tariff protection on textile inputs, particularly when there are no domestic productions of specific textile components. Each country thus needs to assess its competitive strengths and weaknesses throughout the supply chain, and to calibrate its tariff protection in such a way that tariff protection granted to fibres and textiles does not prevent the emergence of competitive suppliers in the high value-added segments of the supply chain.

#### *India's Potential*

41. In India, the textile and clothing industries are based on a system of decentralised production, referred to as "reservation of garment manufacture for small-scale industry (SSI)" that provides a series of economic advantages to small-scale labour-intensive firms and high tariff protection is afforded throughout the supply chain, from natural and man-made fibres, to textiles and clothing products. Policy analysts have argued that the SSI framework has discouraged entrepreneurs from investing in optimal production scale plants and has created strong vested interests that are opposed to reforms. They have also argued that India faces formidable domestic hurdles in order to meet international quality standards and thus is ill prepared to reap the opportunities created by the elimination of quantitative restrictions. Mindful of these, the Indian government has recently reduced import duties and is seeking to rationalise the imposition of the value-added tax across the textile and clothing supply chain. India has valuable assets to succeed in the post-ATC period with the domestic availability of several natural fibres, clusters of expertise in man-made fibres, low wages in manufacturing sectors, an increasingly affluent and educated middle-class and a large domestic market. To unleash the great potential of India, domestic reforms are needed to remove the domestic obstacles to growth and to inject a strong dose of import competition to encourage the modernisation of its production capacity. The case of India emphasises the need for all vulnerable countries to assess and to address their domestic competitive weaknesses if they want to pursue an export-led strategy in textiles and clothing.

#### *WTO Safeguard Measures*

42. In the post-ATC period, there is considerable anxiety about the emergence of more competitive suppliers in China. The potential market disruption in importing countries is also recognised in the WTO Protocol on the accession of China. The Protocol contains a transitional product-specific safeguard mechanism (Article 16) that enables WTO Members to restrict imports originating from China when the latter cause or threaten to cause market disruption to domestic producers of textile and clothing products. This transitional safeguard provision is valid for a period of 12 years after China's accession (or by December 2013). The WTO Report of the Working Party on the Accession of China (paragraph 242) also contains a textile safeguard provision that enables WTO Members to restrict imports from China when the

latter believes that imports of Chinese origin of textile and clothing products are, due to market disruption, threatening to impede the orderly development of trade in these products. The China's textile safeguard provision is valid until the end of December 2008. Otherwise, WTO members have the ability to apply temporary protection to products and sectors that are seriously injured from import competition. The implementation of this general safeguard measure is subject to a number of procedural provisions, including the determination of serious injury, consultations with affected trading partners and, potentially, the payment of offsetting compensation to aggrieved partners. Under the WTO Anti-Dumping Agreement, members also can take action against dumping and could impose extra import duty on the particular product from the particular country in order to remove the dumping margin and hence the injury to the domestic industry in the importing country.

43. Whether or not the WTO transitional safeguard provision, the China's textile safeguard provision, the general safeguard provision or anti-dumping measures will be invoked frequently in the post-ATC period by WTO members remains an open question. The United States has invoked the China's textile safeguard provision in December 2003 and, following consultations with China, it restrained Chinese imports of knit fabrics, dressing gowns and brassieres for a period of 12 months. According to the US International Trade Commission,<sup>10</sup> the WTO transitional safeguard provision brings an element of uncertainty in the export capacity of Chinese suppliers to access foreign markets and this risk of sourcing from only one country will encourage buyers to diversify their sourcing networks from other low-cost country alternatives to China. This import diversification will be influenced by competitive cost factors in other supplying countries which themselves are influenced by market access opportunities offered under regional and preferential trade arrangements.

#### *The Potential in Emerging Economies*

44. The demand for clothing products in developed countries is influenced by underlying changes in demography, disposable income and a growing tendency towards more relaxed and leisure wear, brand name products and fashion wear. But consumers in developed countries are spending a declining share of their disposable income on textile and clothing products. With the maturing of markets in developed countries, the fastest consumption growth opportunities are likely to materialise in the emerging and newly industrialised economies. This underscores the importance of market access to the developing countries in general and the large emerging economies in particular.

45. This review shows that the average applied tariff protection on textiles and clothing remains high compared to average tariffs imposed on manufactured products for the overwhelming majority of developed and developing countries.<sup>11</sup> There are considerable differences in the level of tariffs applied on textiles and clothing and the recurrence of tariff peaks among developed countries. There are also similar imbalances among developing and least developed countries. It is worth noting that the applied tariffs in textiles and clothing in China in 2002 were roughly equivalent to the average applied tariffs by OECD countries and thus were considerably lower than some OECD countries, such as Mexico, which is a large net exporting country of clothing products. All of China's tariffs are bound in the WTO and most bound rates at the end of the implementation period will be much lower than its 2002 applied tariffs. This means that China is effectively reducing its tariff protection over the period. In other developing and least developed countries, high tariff protection remains the norm and given their competitive concerns about China, they are, for the time being, most reluctant to commit to tariff reductions in the context of ongoing multilateral trade negotiations. Therefore, the prospect of improving trade in a south-south direction in textiles and clothing does not look promising. In terms of expanding trade in a north-south direction, the export interests of developed countries may be better served by seeking improved access to the retail distribution systems of developing countries. This is discussed in the following section.

#### **D. *Adjustment in Retail Distribution***

46. The drivers of adjustment in retail distribution in the post-ATC period are related to: (1) the leadership role played by large retail groups and brand name marketers; (2) the importance of the private codes of conduct and market knowledge; and (3) access to retail distribution in emerging economies.

##### *Leadership Role of Large Retail Groups and Brand Name Marketers*

47. Retail distribution is becoming increasingly dominated by large and lean retail organisations in the main consuming countries that are moving toward greater product specialisation, brand name products and market segmentation. The large retail groups and brand name marketers are now exporting their successful distribution models worldwide. With their sheer market size, large retail groups collect market information about the latest trends in styles and tastes and this information-integration function gives them considerable leverage in dealing with suppliers. Nevertheless, there are benefits for offshore suppliers to work in close co-operation with large retail groups and brand name marketers as suppliers learn to: (1) manufacture quality products; (2) apply the buyer's codes of conduct; and (3) deliver products in a timely fashion. The development of business relationships between national clusters of expertise and the large retail groups and brand name marketers is found to play an instrumental role in facilitating the qualitative transformation of the supply chain with backward and forward linkages for the local economy. For exporting countries seeking to develop their export-led strategies, nurturing the contacts between domestic clusters and the large retail groups and brand name marketers is a must.

##### *Codes of Conduct and Market Knowledge*

48. Retail groups and brand name marketers invest handsomely in building distinctive corporate names and in sustaining brand name recognition. By fears of tarnishing their names or losing the market knowledge that underpins their capacity to sell at premium prices, they pay great care in selecting suppliers that will protect their market knowledge and will not let their names become associated with exploitative working conditions. Hence, foreign suppliers that are offering strong guarantees to protect market knowledge and implement the buyer's codes of conduct have a competitive edge over other attractive business proposals that do not provide the same level of guarantees even if they offer lower prices. In this respect, strong enforcement of intellectual property laws and private codes of conduct are considered as assets for countries that aspire to maintain an export-led strategy in the upper market segment of clothing products. It also means that non-cost factors are becoming increasingly important within the supply chain, and buying decisions are not based exclusively on price competitiveness, particularly for brand name and eco-labelled products.

##### *Retail Distribution in Emerging Economies*

49. The large retail groups and brand name marketers in textiles and clothing are expanding their distribution networks and pursuing business opportunities in countries where there are attractive growth prospects. The establishment of retail distribution services in most developed countries is not hindered by restrictions on foreign ownerships or obstacles on the right of establishment. Although the large retail groups and brand name marketers are predominantly headquartered in developed countries and owned by developed countries' interests, some leading manufacturers in Hong Kong (China) have launched their brand names and are entering retail distribution. This strategic move requires services-related expertise in designing, marketing, retailing, financing and the gathering of market intelligence on foreign markets. This also requires foreign direct investment (FDI) flows originating from Hong Kong (China) or other emerging economies that are pursuing similar diversification strategies. Without either restrictions on FDI or limitations on the access to retail distribution in developed countries, it is only a matter of time before

Asian-controlled and -owned retail distribution chains will operate in developed countries and compete head-to-head with established large or small retail distributors.

50. In developing countries, access to retail distribution systems is less predictable and varies among countries. In China, as of December 2004, foreign retailing services will have the right to set up their distribution networks, through wholly-owned foreign enterprises, without geographical and quantitative restrictions, thereby providing considerable retailing opportunities in this large consumer market. Anecdotal sources estimate that the size of the Chinese affluent middle class hovers around 80 to 100 million people, which would be roughly equivalent to the combined population of France and the United Kingdom. In India, another country with significant potential, foreign direct investment in retailing is not allowed and India has so far made no GATS commitments in respect of retail distribution services. Although the commercial presence of some large groups is currently growing in India, these operations are mainly to facilitate the sourcing of Indian products for exports. In the context of the Doha Development Agenda, countries have an opportunity to improve the access for wholly-owned foreign distribution services to developing countries that are still maintaining obstacles to foreign direct investment and/or restricting the right to distribute foreign-made goods.

#### **IV. Policy Challenges**

51. Trade policy measures have had a major impact on production, trade and investment decisions in the past and their influence will be less pronounced in the near future with the elimination of quantitative restrictions which are probably the most restrictive of all trade instruments. As noted throughout this Part, tariff reductions, preferential access under GSP regimes or regional trade arrangements and access to foreign retail distribution systems will remain on the policy agenda of trade policy makers in the post-ATC environment. To facilitate the process of sound structural adjustment in textile and clothing, governments have a support role to play in establishing a coherent policy and regulatory framework that complements the competition-enhancing trade policy framework. This review underscores the complementary role that labour adjustment policies, technology and innovation policies, and other policy and regulatory dimensions, referred to as business facilitation, can play in this process of structural adjustment. The salient points of these policy dimensions are summarised below.

##### **A. Trade-Related Labour Adjustment Policies**

52. This review acknowledges that it is difficult to isolate the causes of worker displacement. Technological change, productivity gains, increased import competition and shifts in production can all contribute to job loss. This difficulty has led many policy analysts to oppose targeted labour market adjustment policies and programmes for special groups of workers, *e.g.* workers who lose their jobs due to increased imports, and instead put into place broad labour adjustment programmes for all displaced workers. This issue is likely to remain prominent in the foreseeable future with the intensification of international relations among countries.

53. Available evidence on the impact of globalisation and international trade on labour adjustment suggests that workers who lose their jobs due to increased imports or shifts in production do not appear to be different than other dislocated workers. Similarly, their adjustment process does not seem to differ significantly. Trade-related dislocations may suggest the need for labour market adjustment policies and programmes, but not necessarily a special response. An analysis of the characteristics of displaced workers from the textile and clothing industries shows that they tend to have a low level of education, low skill levels (thus earn low wages), and are predominantly women and minorities (including minority women). All of these characteristics make it more difficult for workers to adjust to changes in the labour market.

54. In place of the debate over special versus general labour market adjustment policies and programmes, more effort needs to be made to determine which interventions are more effective than others. Most of the developed countries are attempting to improve the co-ordination of their unemployment benefits and employment services.

55. Unemployment insurance programmes in most developed countries are designed to assist all unemployed workers, regardless of industry, worker demographics or cause of displacement. The most significant exception to this general framework is the targeted Trade Adjustment Assistance (TAA) programme in the United States that provides assistance to displaced workers due to import competition and shifts in production. By comparison, more comprehensive and generous labour market adjustment programmes in most other developed countries somehow mitigate the need for special programmes for workers from a specific industry or whose job loss can be traced to a specific cause.

56. There has been increasing reliance on training as part of the toolbox of labour market adjustment programmes. Many workers coming out of traditional low-wage manufacturing industries lack basic language and math skills, thereby preventing them from acquiring the specific skills needed for the new jobs being created. The shift in structure of the labour market in developed countries has also resulted in a gap between the skills that workers needed in their old jobs and those required by their future jobs. Governments are employing various subsidies and tax incentives to encourage training and skill enhancement.

57. The main goal of any labour adjustment programme should be re-employment: either returning to one's previous job or finding a new job as soon as possible and with minimal disruption in earnings. With that objective in mind, countries have used various programmes to train workers and provide job search assistance. The recent introduction in Germany and the United States of "wage insurance" aims at encouraging workers to return to work as soon as possible. Wage insurance is designed for those workers whose new wage is lower than their previous wage. By subsidising some portion of the difference between the new and previous wages, it is hoped that workers will be encouraged to take a new job sooner. It is also hoped that new employers will provide the worker with on-the-job training, which has proven to be more effective and cheaper than government-financed classroom training. These programmes also aim at minimising the economic and social impact of plant closings on communities. At the outset, the overall labour adjustment policy challenge is to devise ways to meet the social goals in a cost-efficient and least trade-distorting manner.

#### ***B. Technology and Innovation Policies***

58. Different countries have different historical backgrounds of industrial development and thus differ with respect of the optimal policy support for specific industries, such as textiles and clothing. This review draws some general lessons from the examination of technology and innovation experiences in many developed countries.

59. There seems to be no fundamental lack of invention and innovation. Hence it does not seem appropriate for governments to launch large-scale basic research projects on textile and clothing technologies outside of horizontal industrial research schemes based on public-private co-funding mechanisms. Although the textile and clothing industries can be considered to be mature, they use technological innovations that are largely generated in other industries, above all in chemicals and machinery. These technology suppliers are well able to sufficiently provide product and process innovations for textiles and clothing without financial support from public research programmes. While governments may stimulate collaborative innovation processes in the fields of dissemination and technological transfers, such approaches should not distort market-oriented innovation programmes.

60. Technology transfer between suppliers and users plays a pivotal role in the performance of textile and clothing suppliers. This review argues that it is appropriate for countries to deploy efforts in technology transfer. Nevertheless, to achieve faster productivity and welfare gains, the process of technology transfer could be strengthened by exploiting more efficiently the enriched opportunities that are offered by modern information and communication technologies for the dissemination of advanced technological knowledge. However, such a policy would require complementary public funding in order to provide financial incentives for innovators to pass proprietary technological knowledge to imitating firms.

61. Many SMEs often face substantial difficulties in the marketing of their products, because they lack a widely recognised reputation for high product quality. Governments could support marketing activities by promoting certification agencies and common brand names. At present, government activities in this area are mainly concentrated on sponsoring fairs and exhibitions.

62. Governments should keep in mind that in the long run innovative capacities basically depend on the availability of suitable human capital. Therefore, a sound education and qualification system seems much more important for sustainable technical progress than public innovation programmes. This applies not only to textiles and clothing, but to any other industry.

### *C. Business Facilitation Agenda*

63. In the post-ATC period, there will be neither quantitative restrictions nor MFA-related guaranteed market access to mask the vulnerable situation of national textile and clothing suppliers whose international competitiveness are hampered by: inefficient domestic regulatory regimes; obsolete infrastructure in essential business services; cumbersome customs procedures; and other distorted market structures. All these dimensions are influenced by the policy and regulatory framework set up by governments. From a trade policy perspective, efficiency in transportation, telecommunications and electricity infrastructure and in customs services is an important determinant of a country's ability to integrate fully in the world economy. Achieving greater synergies among distinct policy and regulatory areas that impact the competitive position of national firms is in essence the purpose of a business facilitation agenda.

#### *Dynamic Macroeconomic Environment*

64. Above all, the role of government relates to the pursuit of sound and stable macroeconomic environment that aims at sustaining non-inflationary economic growth. There is strong evidence to attest that real economic growth and, in turn, net employment creation is stimulated in a low-inflationary environment. The pursuit of sound macroeconomic policies fosters market adjustment to change in the competitive environment and facilitates the redeployment of affected resources to other productive sectors. The pursuit of a business facilitation agenda complements other government actions at the macroeconomic and microeconomic levels, *i.e.* trade, labour adjustment and innovation, and brings benefits that go well beyond the textile and clothing industries.

#### *Minimise Transit Time for Shipments*

65. This review stresses that the reliability of transportation infrastructure and efficiency in customs procedures complements each other in minimising transit periods for shipments involved in international trade and can make geographically remote locations more internationally competitive. Recognising that each country has a different geographical position relative to large consumer regions and different transportation options, countries need to assess their logistical costs involved in export markets with a view to: (1) setting up an efficiency-enhancing environment in port infrastructure; (2) strengthening competition conditions in and between transportation modes; (3) setting up a competition-enhancing environment in

various port services; (4) addressing the terrorist risks in transportation without losing sight of the beneficiary effects of frictionless transportation systems; and (5) better integrating the enforcement of national laws and regulations, *e.g.* customs procedures, taxation, sanitary and environment protection, with other service providers in ports.

#### *Modernise Customs Procedures*

66. Where matters concern the facilitation of international trade, textile and clothing traders are poised to benefit from streamlined border requirements with the dismantling of MFA export permits and related controls in formerly-constrained exporting and importing countries. However, the internationally fragmented supply chain remains vulnerable to cumbersome and outdated customs procedures in countries that are less advanced in the implementation of modern customs systems. This review highlights that the holding up of shipments in customs warehouses due to inefficiencies in customs procedures undermines export-led strategies especially for those countries that rely on imported inputs for a significant share of their production. In dealing with the added emphasis on security and safety measures, governments should not lose sight of the beneficiary effects of smoothly functioning transportation and customs clearance systems.

#### *Reliability of Telecommunications and Electricity Infrastructure*

67. This review underscores that reliable and updated telecommunications and electricity infrastructure confers a competitive edge to textile and clothing suppliers. Trade flows in differentiated products, such as textiles and clothing, are found to be sensitive to international variations in communication costs. Outdated regulatory frameworks in electricity and telecommunications services act as taxes on textile and clothing suppliers and, more importantly, undermine the capacity of national suppliers to focus production on the higher value-added segments of the supply chain that are critically dependent on reliable infrastructure to ensure quick market responses. In the post-ATC period, the international competitiveness of textile and clothing suppliers will be enhanced in countries that maintain a competitive environment, spurring investment in innovative telecommunications equipment, electricity generation and distribution systems.

#### *Nurture SME-Related Entrepreneurship*

68. This review recognises the importance of nurturing SME-related entrepreneurship but warns against the danger of distorting investment incentives in sub-optimal productive capacity when excessive fiscal advantages and labour law exemptions are offered to small-scale operations. Recent work by the OECD in the context of the Bologna Charter on SME Policies has found that education and training are recognised as the single most effective means for achieving the objective of fostering entrepreneurship in societies.



## NOTES

- 1 The WTO ATC superseded the Multi-Fibre Arrangement (MFA) regime of quantitative trade restrictions when it entered into force in January 1995 and provided the multilateral trade framework applicable for trade in textiles and clothing for all WTO members. The ATC provides for the elimination by 31 December 2004 of all forms of quantitative restrictions applied to trade in textile and clothing products, including those that originated from the MFA regime. The ATC phases itself out of existence at the end of 2004.
- 2 For more details about textile and clothing machinery trade by country, see Figure 4.3 in Part IV.
- 3 For more details about infrastructure, see Part V on Business Facilitation.
- 4 For more details about long-term productivity gains, see Figures 4.4a and 4.4b in Part IV.
- 5 WTO, Trade Policy Review of the United States, 2001, Geneva.
- 6 For more details about OPP-related logistical cost by country, see Tables 2.10 and 5.2 in Part II and Part V respectively.
- 7 For more details, see Box 2.2 in Part II.
- 8 For more details about the utilisation rates of preferential arrangements, see Tables 2.12 and 2.13 in Part II.
- 9 For more details about the GSP regimes, see Box 2.1 in Part II.
- 10 US International Trade Commission (2004), Textiles and Apparels: Assessments of the Competitiveness of Certain Foreign Suppliers to the U.S. Market, Investigation No. 332-448, Washington, D.C., February.
- 11 For more tariff information by country, see Tables 2.8 and 2.9 in Part II.