

RESEARCH AND STATISTICS BRANCH

WORKING PAPER 10/2008

**Globalization, the Changed Global Dynamics of the
Clothing and Textile Value Chains and the Impact on
Sub-Saharan Africa**

Mike Morris

**PRISM, School of Economics, University of Cape Town and School of
Development Studies, University of KwaZulu-Natal**

mike.morris@uct.ac.za

Justin Barnes

**PRISM, School of Economics, University of Cape Town, and Benchmarking and
Manufacturing Analysts**

Justin@bmanalysts.com



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Vienna, 2008

Acknowledgements

This working paper has been prepared under the guidance of Olga Memedovic, UNIDO project manager, in the context of the UNIDO Project “*Global Value Chains and Production Networks: Prospects for Upgrading by Developing Countries*”. Special thanks are due to Jeanne Esselaar and Krista Tuomi for data collection and organisation, as well as to Penelope Plowden and Georgina Wilde for their style and editing contribution. Iguaraya Saavedra provided administrative support.

The designations employed, descriptions and classifications of countries, and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. The responsibility for opinions expressed rests solely with the authors, and publication does not constitute an endorsement by UNIDO of the opinions expressed. Although great care has been taken to maintain the accuracy of information herein, neither UNIDO nor its Member States assume any responsibility for consequences which may arise from the use of the material. This document may be freely quoted or reprinted but acknowledgement is requested. This document has been produced without formal United Nations editing. The views expressed in this document do not necessarily reflect the views of the Secretariat of the United Nations Industrial Development Organization. Terms such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment. Any indication of, or reference to, a country, institution or other legal entity does not constitute an endorsement. This document represents work in process and is intended to generate comment and discussion.

Contents

1. Introduction	1
2. Globalization of the Textiles and Clothing Value Chains	1
3. What has Remained in Industrialized Countries?	9
4. Production, Added Value, Employment and Capacity	14
5. Global Trade	21
6. The end of the MFA and the ATC	28
7. AGOA and Sub-Saharan Africa	37
8. Conclusion	42

1. Introduction

This paper outlines the dynamics of global clothing and textile value chains. In addition, it focuses on how the economies of Sub-Saharan Africa have been drawn into these globalized value chains, enabling the development of clothing industries in a number of less developed, poor countries. It begins by setting out the dynamics of the changing nature of the global clothing and textile value chain in order to contextualise the global trading patterns. The next section deals with what is left in the industrialized countries and what aspects of the chain have shifted to developing countries. This is followed by a detailed discussion of global trade, employment and investment, which provides the context for analysis of the demise of the Multi Fibre Agreement (MFA) and the impact of China on global clothing and textile value chains post-MFA. The final section discusses the importance of the African Growth and Opportunity Act (AGOA) for the development of Sub-Saharan Africa industrialization. The chapter ends with a number of policy conclusions.

2. Globalization of the textiles and clothing value chains

A key defining aspect of globalization in this new era is the production of manufactured components which are sold as inputs for other components and end up as final products; all linked and coordinated globally (Dicken, 1998). As a result, in both the developed and developing worlds, firms tend to sell less and less into the perfectly competitive markets of economic theory, and more and more into global value chains (GVCs) which are regulated by predominantly external global firms (Kaplinsky, 2005). The global clothing and textiles sectors, par excellence, demonstrate these characteristics as “networks of production, distribution and marketing of particular products or groups of products” (Gibbon, 2003b: 1811). The clothing-textiles value chain has historically played an important role in the process of industrialization and is generally regarded as being a potential first step for developing countries embarking on an industrialization path. In the clothing value chain barriers to entry are low, capital requirements are not onerous, production is labour-intensive, knowledge intensity varies, tradability of goods is high and, finally, clothing and textiles have been the source of rapid export-led industrialization in a number of countries (Gereffi and Memedovic, 2003).

This clothing-textiles value chain has become increasingly globalized. In 2007, global clothing and textiles exports were valued at US\$628.4 billion, making them one of the world’s most traded manufactured products. Even more significantly, exports increased at a compounded

annual rate of 6.1 per cent between 1990 and 2007 (WTO, 2008). The textile and clothing value chain is particularly suited to global production networks as most products can be exported at each stage of the chain, making the sector highly trade-intensive and sensitive to a country's trade regime. Furthermore, a large portion of clothing production, in particular, is labour-intensive and requires low skill levels and is thus suited to developing economies. In contrast, textiles production is much more capital-intensive and developing countries have encountered difficulties in creating backward linkages in the textiles supply chain.

Natural and synthetic fibres are produced from raw materials such as cotton, wool and chemicals. These fibres are spun into yarn, which is used to produce woven or knitted greige fabric. The fabrics are then finished, dyed and printed as required, and used to produce made-up textiles of clothing, home furnishings and industrial or technical textiles. Animal fibres, synthetic filament and non-woven textiles are also used to produce carpets. Although the clothing industry is clearly a significant consumer of textiles products, other sectors such as mining, motor vehicles and construction are important buyers of textile products such as cord, rope and geo-textiles (Roberts and Thoburn, 2002). Figure 1 outlines some of the major products of the textiles and clothing industries while Figure 2 shows the entirety of the clothing and textiles value chain. Generally, more complex, higher value-added tasks remain in developed countries with higher-paid skilled labour, while less skilled tasks have moved to low-cost locations, mainly in the developing world. Nonetheless, firms from high-wage developing economies are finding it increasingly difficult to retain a competitive edge in a progressively global market place. These firms have constantly to confront the competitive challenge from firms in low-wage, industrializing economies that are able to produce more cheaply.

A buyer-driven value chain

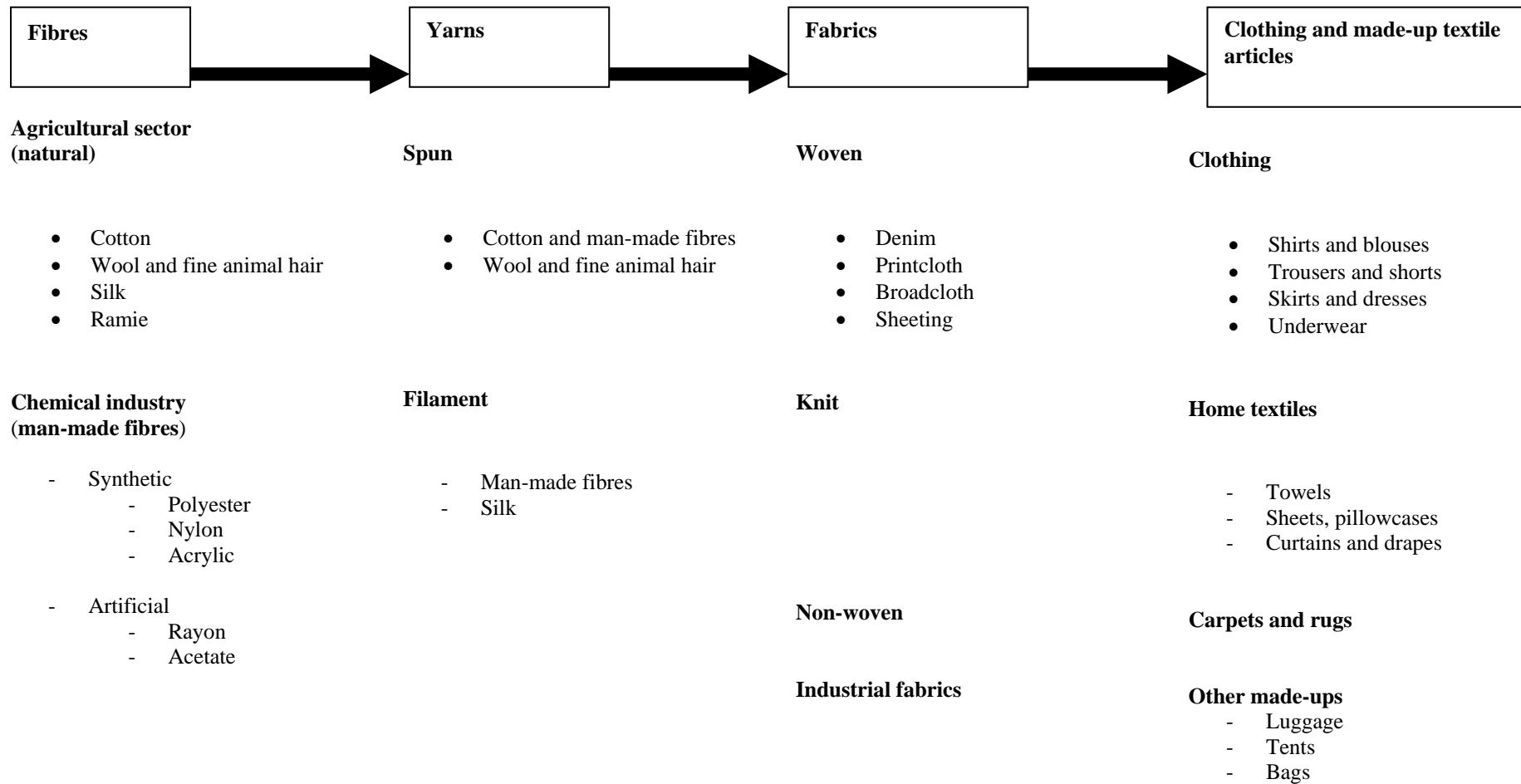
The textile and clothing value chain is buyer-driven, dominated by large retailers, branded manufacturers and marketers which control global production networks and stipulate supply specifications. Buyer-driven value chains are common in labour-intensive, consumer goods industries such as garments, footwear, toys, handicrafts and consumer electronics. A common element of global value chains is that economic actors at particular stages are able to exercise power over other agents in the chain (Roberts and Thoburn, 2002). For example, in buyer-driven value chains retailers can have significant power over manufacturers in terms of price, quality, lead times and raw material inputs. The textile and clothing value chain is dominated by large retailers, which do not own their own factories but organize and control production on a worldwide basis. Information flows directly from retailers to clothing manufacturers, but also in

many cases to textile plants, where decisions are made on patterns, colours and material. The commercial buyers in these global clothing value chains are extremely demanding. Without exception, clothing and textiles researchers have been noting how they are insisting on lower prices, better quality, shorter lead times, smaller minimum quantities and supplier acceptance of as much risk as possible (Flanagan, 2003; Kaplinsky, 2005).

The power wielded by these retailers is attributed to two main factors. Firstly, consumer preferences have changed. Consumers no longer want standardized products but instead are demanding increased variety of product choice, leading to shorter product seasons, more rapid product cycle turnover and smaller minimum orders (Salinger et al, 1999). Furthermore, they are becoming more demanding in terms of price, spending a smaller proportion of income on clothing but shopping more frequently and buying a larger number of clothing items (Nordas, 2004). The demands of consumers coupled with globalization have led to retailers sourcing production from the lowest cost locations around the world. In this manner they are transferring pressures to reduce costs, improve quality and variety to manufacturers, mainly in developing economies. These manufacturers either have to absorb the costs and lower their margins, or improve productivity.

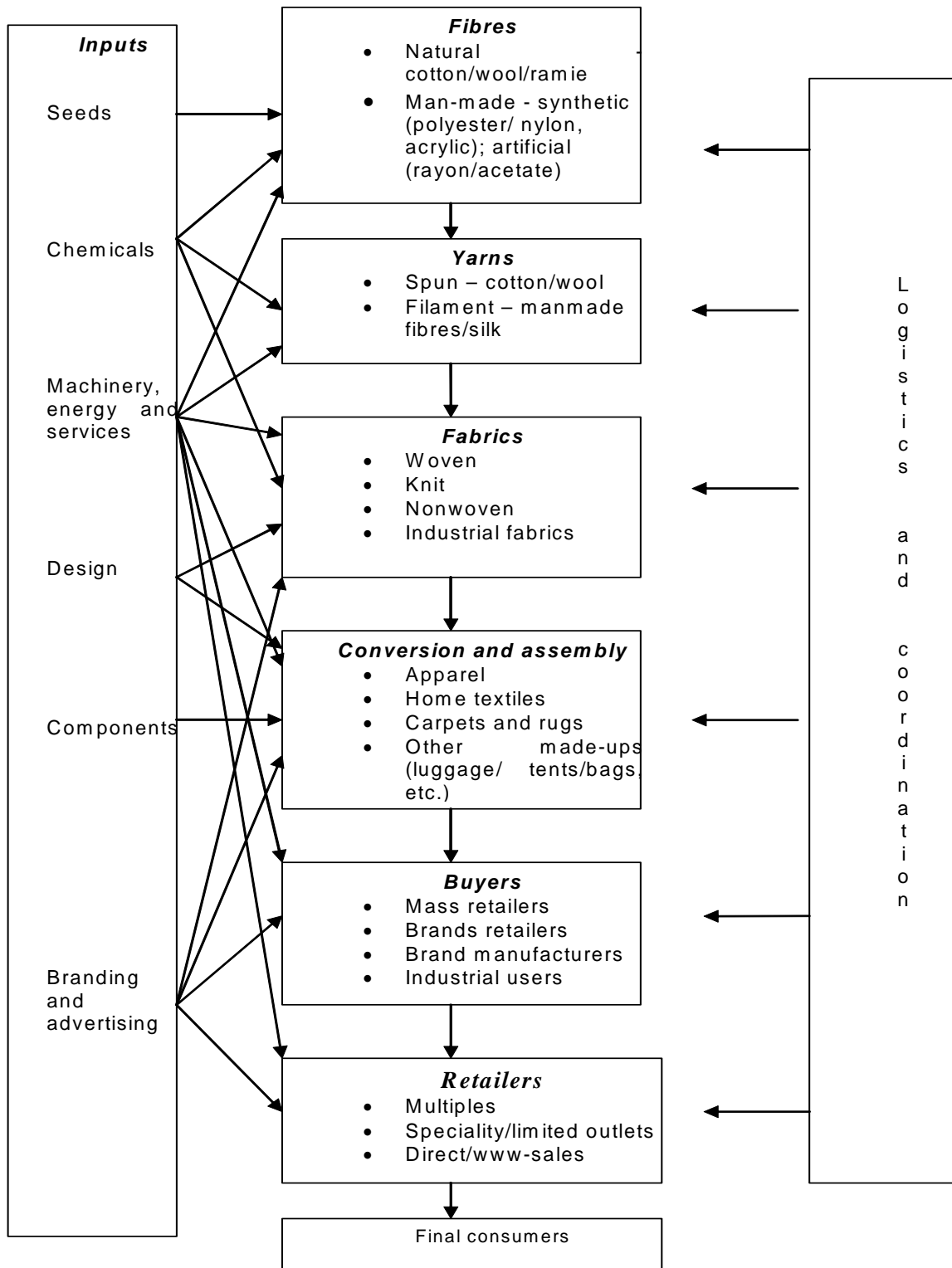
Secondly, mergers and acquisitions have led to a greater concentration of retailers in developed economies. The growth in the buying power of retailers and the emergence of large discount chains and speciality clothing stores which have replaced independent stores have given retailers the ability increasingly to manage the global supply network. In 2007, the top five retailers in the United States of America accounted for 56 per cent of sales among the top 20 retailers (Weathers, 2003). Walmart is the single largest retailer, representing 32 per cent of total United States demand in the retail sector in 2007 (National Retail Foundation, 2008). The UK clothing retail sector is similarly concentrated. According to London Economics (2008), the top five retailers accounted for 35 per cent of total clothing sales in 2007. Experts predict that by 2010 the top ten retailers in the world will control 25-30 per cent of the world textile and clothing trade. This concentration of buying power gives retailers considerable control over the activities of other agents within the commodity chain.

Figure 1 Major products of fibre, textile and clothing industries



Source: U.S. International Trade Commission, 2004: 1-

Figure 2 The textile and clothing value chain



Source: Kaplinsky 2005.

While global sourcing has been beneficial from a product-pricing perspective, there are disadvantages. The drive to be more cost-competitive has been driving wages down worldwide and has also led to the loss of many textile and clothing jobs, particularly in developed countries, as production moved offshore. Nevertheless, the trend towards offshore production is unlikely to reverse. Since the late 1990s, retailers have been striving towards more cost-effective forms of supply-chain management and reducing their supply base in order to concentrate on core suppliers. They are sharing information more openly and developing more efficient relationships with suppliers, thereby improving replenishment times, new product development, quality and customer service (Weathers, 2003; Gibbon, 2002).

The move to offshore production

Internationally, the clothing and textiles industry both expanded and changed direction during the 1990s. In what has become an increasingly global market place for the production of goods many firms moved the low value-added parts of production (especially in clothing) offshore in an attempt to maintain competitiveness. This move began with Japan in the 1950s and 1960s, followed by the East Asian Tigers (Taiwan, Republic of Korea and Hong Kong) in the 1970s and 1980s, and then South-East Asia in the 1990s, with China emerging as the biggest player. Other emerging, second-level suppliers included India, Malaysia, Philippines, Indonesia and Sri Lanka (Gereffi and Memedovic, 2003).

In the clothing industry, the move towards offshore production took hold in the mid 1970s when branded marketers such as Nike and Reebok began outsourcing production to the low-wage, low-cost East Asian Tigers. These “manufacturers without factories” are involved in the design and/or marketing of products, but carry out no production of their own. Rather, they maintain close control over the global value chain by setting standards, often sourcing raw materials themselves, distributing them globally and then importing the made-up garments.

In 1974, the Multi-Fibre Agreement (MFA) was signed, ratifying countries’ rights to impose quotas on textiles and clothing imports. Although the MFA was intended to be temporary, it was frequently renewed. However, in 1994 the GATT signatories signed the Agreement on Textiles and Clothing (ATC), which committed to phasing out the MFA. The objective of the MFA was to give rich countries time to restructure their textiles and clothing industries before opening up to competition from poorer countries. Although 73 countries were subject to quotas by the EU, the United States or Canada, most of them did not use the full quotas to which they were entitled.

This global regulation system was further complicated by each of the large importing blocs negotiating separate bilateral arrangements with individual countries or regions. The European bloc reached tariff reduction arrangements with, mostly, former colonies through the Lomé Convention. The United States came to a similar arrangement with countries in Central America, the Caribbean and Mexico. Principally the importing blocs set up complex tariff schedules to protect the more capital-intensive parts of the chain, and reduced tariffs generally on labour-intensive stages in the production cycle. The aim was to allow domestic producers to take advantage of outsourced cheap labour for the unskilled labour-intensive part of the production cycle (Kaplinsky, 2005).

The consequences of these trade policy restrictions were diverse. Firstly, preferential trade access through quotas to Europe and the United States meant that production spread to an ever-increasing number of countries. Secondly, when key manufacturers reached the limits of their production quotas they actively searched for under-utilized quota producer countries, in order to organize garment production in these economies. There were three main countries – China, India and Indonesia – which showed the most consistent and widespread near-saturation of quotas for yarn, fabric and garments (Flanagan, 2003). Thus, during the 1990s a rapid process of third-party organizing and supply sourcing functions were spread to key garment producers with established access to established markets. Hong Kong garment producers opened factories in Mauritius and elsewhere, and Korean and Taiwanese producers spread their operations to the Caribbean and to Sub-Saharan Africa. In turn, as they matured in their operations and established their own footholds, Mauritian garment producers began to extend their operations to Madagascar.

Finally, following on from this globalization of production, the Asian producers, especially in Hong Kong and Taiwan, developed the capacity to mobilize and coordinate what is known as full-package manufacture (i.e. all the manufacturing stages) in the global textile and clothing value chain, leading to what Gereffi (1999) termed “triangular production networks”. In other words, production in one country (usually less developed) was organized and coordinated by firms in another (mostly middle income) country, with the products produced sold on to final buyers in a third (usually industrialized) economy.

A change in relationship between retailers and manufacturers

As consumers began demanding better value, retailers also began turning to imports from low-cost locations abroad. This move was partly assisted by advances in technology, such as bar-coding and point-of-sale scanning, that provided retailers with accurate and up-to-date

information on sales which was used for replenishment orders, linking the clothing value chain both vertically and horizontally.¹ Retailers began to take a more pivotal role in design and merchandising, producing their own branded private labels. These trends resulted in a change in the relationship between retailers and clothing manufacturers in developed countries: retailers moved from being the clothing manufacturers' main customers to their main competitors (Gereffi, 2001). This fundamental restructuring of the sector in developed economies resulted in a shift in power from manufacturers to retailers and branded marketers. The ultimate outcome has been a shift from a supplier-driven value chain to a buyer-driven value chain.

Retailers and branded marketers have been coordinating supply chain networks since the 1980s. Essentially, they have been making decisions about where products are made, at what price and how quickly they need to be moved, while at the same time controlling many aspects of the production process itself, for example, design, fabric sourcing, lead times, quality and price. However, retailers and marketers are beginning to manage their supply chains more effectively by reducing their supply base and transferring responsibilities to manufacturers. These companies are increasingly relying on outsourcing agents and manufacturers to take on critical coordination roles in full-package production arrangements. Moreover, by the late 1990s retailers and branded marketers were increasingly adopting more cost-effective forms of supply chain management, and thus beginning to concentrate on core suppliers, develop more effective relationships with them and engage in more direct sourcing (Gibbon, 2002).

As world textile and clothing production moved from developed to developing countries during the 1990s, it became essential for clothing manufacturers in developed economies to find ways to compete with low-cost competitors in emerging economies. As a result, clothing manufacturers also turned to outsourcing production offshore. However, in contrast to the branded marketers and retailers, clothing manufacturers did not outsource to Asia but rather to neighbouring countries, usually with reciprocal trade agreements that allowed goods to be exported and re-imported at relatively low cost. Manufacturers create production networks where intermediate inputs (cut fabric, thread, buttons and trim) are supplied to firms in neighbouring countries. The garments are assembled using relatively low-wage labour and then re-imported. The process is termed "production sharing" in the United States where firms manage production networks primarily in Mexico and the Caribbean Basin; "outward processing trade" in the EU where production networks are located in North Africa and Eastern

¹ This refers to vertical relations between links (e.g. supply chain management) and horizontal relations within links (e.g. cooperation and linkages within companies and between firms) (Kaplinsky and Morris, 2002).

Europe; and “outward processing arrangements” in Japan and the East Asian NIEs where production networks are located in lower-wage regions within Asia. The main objective of outward processing trade is to cut labour costs, which can account for up to 80 per cent of the total production cost of a piece of clothing (Gereffi, 2001; Gereffi, 2002).

3. What has remained in industrialized countries?

The liberalization of clothing and textiles has been controversial because the sectors make a substantial contribution to employment in both developed and developing countries. However, manufacturing in most developed countries has contracted and changed its focus. Currently, the United States, the EU and Japan are the largest consumers of textiles and clothing, yet the majority of clothing and textiles in these countries is imported. The Japan Textile Importers Association estimates that 87 per cent of clothes on sale in Japan are imported. Between 1990 and 2002, the United States’ share of world imports of textiles and clothing rose from 12 per cent to 21 per cent, before dropping back down to 19 per cent in 2007 (WTO, 2008). During 2001 alone, 344,000 jobs in the industry were lost (Flanagan, 2003). Thus, it can be seen that clothing and textiles production in the United States has been declining and that an increasing proportion of demand is satisfied by imports.

Although there is almost no clothing industry left in the United States or Japan, a sizeable one remains in the EU, especially in southern Europe. In 2007, the European industry consisted of approximately 175,850 firms employing 2.474 million people with a turnover of \$289.1 billion (European Commission, 2008). In that year, EU countries imported 57.7 per cent of their garments from each other (WTO, 2008). Although it has fluctuated slightly between 1995 and 2007 the EU share of world imports of clothing has remained between 32 per cent and 37 per cent (WTO, 2008). Despite this, EU production has been declining, with nearly a 6.4 per cent decrease in employment in 2007 alone (European Commission, 2008).

A change of focus

As global contract manufacturing has marginalized the role of domestic clothing manufacturers, the large clothing manufacturers remaining in developed countries have had to change their focus in order to survive. Firms have responded by making marketing and operational changes, e.g. just-in-time (JIT), quick response and team-based manufacturing, and bolstering technological innovation, making quality improvements, and outsourcing (Taplin et al, 2003). The production of basic styles with long production runs, few colours or styling changes has

been moved offshore², leaving developed economies to compete in markets that demand quick response manufacturing, fashion items and speciality garments. This change in focus has made it essential for developed economy firms to invest in technology and staff expertise, as well as in more efficient processes, in order to compensate for higher labour costs (Warburton and Stratton, 2002) and more demanding retail customers. As highlighted by Taplin et al (2003), in such an environment labour needs to be treated as an asset rather than a mere cost. Firms have had to invest in skills development and keep labour turnover low. Developed economies have thus tended to retain higher value-added production elements such as design, marketing, research and development and specialized manufacturing.

As an example, although United States manufacture costs an extra dollar per garment, offshore production has tended to level off at 70-80 per cent of the domestic market, leaving 20-30 per cent of production that needs to take place locally. Firstly, there are many hidden costs involved with offshore production. For example, efficiency levels are not as high in developing countries due to higher staff turnover levels, poorer quality and longer throughput times (although these are improving over time). Furthermore, unexpected logistics problems can increase offshore production costs. Secondly, fashion styles require quick response manufacturing and, because of forecasting inaccuracy, even basic styles can require quick response times as excess inventory can be very costly for retailers. Therefore, even though developed economy manufacturers cannot compete on price, they still retain a legitimate role in the production network (Warburton and Stratton, 2002). Thirdly, some developed countries do have a comparative advantage. The New York clothing industry is synonymous with fashion (Rantisi, 2004), while the EU has a competitive advantage in terms of quality, and Italy is internationally recognized as a leader in fashion and high-quality clothing manufacture (Commission of European Communities (CEC), 2003).

The clothing value chain has been well researched and documented, but the way in which textiles fit into the picture is less clear (Roberts and Thoburn, 2002). The textiles sector is traditionally far more capital-intensive and automated than the clothing industry. The lead times in the textiles industry are generally quite long and its capital-intensive nature results in large minimum quantities and less flexibility (Nordas, 2004). Although some textile plants have seen the opportunity of short production runs and quick turnaround times, the sector is generally perceived as being the bottleneck in the clothing supply chain. Given the commodity-type

² This is, however, changing as manufacturers in developing countries become more skilled and therefore capable of producing more complex styles and taking on more responsibilities.

nature of much of the fabric produced for clothing manufacturers, textiles firms in industrialized economies are increasingly producing household and industrial textiles, which are more technical and R&D intensive, subject to less frequent stylistic changes and higher value-added production. This, coupled with the capital intensity of textiles production, has meant that it has been more difficult to relocate textiles production to developing economies. Most of the relocation that has taken place has been concentrated in the areas of production for the clothing industry and less in the areas of household and industrial textiles. Therefore, while there have still been substantial losses, employment in the textiles sector in developed countries has generally held up better than clothing employment (Nordas, 2004).

A means for economic development

The labour-intensive nature of clothing (and to a far lesser extent textiles) production provides low-wage countries with a comparative advantage. Furthermore, it is generally perceived that the clothing industry is more suited to developing countries because it offers entry-level jobs for semi-skilled labour and relatively modern technology can be adopted at a comparatively low investment cost. Therefore, clothing is suited as a first rung on the industrialization ladder in poor countries, and many developing countries have used clothing (and textiles) exports as a way of accelerating growth (Roberts and Thoburn, 2002). However, it has been difficult for developing countries to create backward linkages in the sector. Furthermore, because textiles and garments can be imported and exported at each stage of the value chain, the import content of the clothing industry is typically high. Parts, components and semi-finished goods often cross the border several times before the final product reaches the consumer, which means that tariff rates have a multiplying effect on costs, making the industry very sensitive to tariffs. Nevertheless, this allows great scope for specialization and intra-industry trade. Therefore, some of the largest textile and clothing exporters in the world, for example, China and Japan, are also the largest importers (Roberts and Thoburn, 2002).

Textiles and clothing manufacture has been a means for economic development for many Asian economies in particular. The Republic of Korea and Japan, for example, became developed in a 30-year period largely because of the initial establishment of textiles and clothing industries (Weathers, 2003). East Asian apparel manufacture initially developed from the mere assembly of imported inputs in export-processing zones that were established to take advantage of low labour costs. This was, in part, achieved with the help of capital and technical assistance provided by the EU and the United States. However, the key to the success of East Asia was its ability to move from mere assembly to higher value-added exporting through export incentives,

and then to original equipment manufacture (OEM) and finally brand-name manufacturing.³ These steps accelerated growth and enhanced industrial upgrading. According to Gereffi (2002), the most successful countries are those which are experts in OEM supply, or those which are developing full-package capabilities.

As the East Asian countries of Hong Kong, Taiwan and Republic of Korea began to develop, wages and various other factor costs increased and as a result production relocated again. Firms began moving labour-intensive activities to South-East and South Asian countries as well as Latin America and, to a lesser extent, Africa. As North Asian firms began moving production offshore they continued to control and coordinate sourcing networks. Of critical importance is that they focused on the more profitable design and marketing segments of production in order to sustain a competitive edge (Gereffi, 2002). The advantages these countries gained from having a clothing industry were therefore not entirely lost, although the benefits shifted in both form and content. For example, domestic brand manufacture is currently a major growth market in Asia because the garments are fashionable, affordable, provide good value for money and are of high quality.

Based on the Asian experience, the theoretical argument is that labour-intensive industries move to areas that have the lowest wage rates. However, wages are not the sole determinant of where production is located – government policies and exchange rates are also critical. Most important are quotas and trade agreements. Quotas determined when the outward shift of production occurred, while preferential access to overseas markets through trade agreements determined where firms went (Gereffi, 2002). Relocation to Asian countries, such as Bangladesh, Indonesia and Sri Lanka, resulted from low labour costs, investment in Latin America occurred because of countries' proximity to the United States market and easy quota access and location in Africa because of low quota saturation levels and preferential trade agreements (US International Trade Commission, 2004).

³ Assembly – garment sewing plants are provided with imported inputs to assemble. OEM – buyers provide designs to suppliers making garments to specifications which are marketed under the buyer's brand name. OBM – garment manufacturers use their production expertise to design and then market their own brand products.

Box 1 Vietnam in the global garments and textile value chain; impact on firms and workers

Vietnam emerged during the 1990s as a significant supplier of garments to the EU, Japan and the United States, largely as a result of its growing insertion into global value chains. Vietnamese textile and garment (T&G) firms supply a wide range of global buyers. The nature of their relationship with the buyers varies according to the type of firm. Some retail buyers source directly from Vietnamese firms using local representatives but more commonly buyers place orders with large regional garment manufacturers who then deal with the Vietnamese suppliers, i.e. “triangular manufacturing”.

Due to the predominance of triangular manufacturing most firms, including some SOEs, are often unaware of the final destination of their goods, which makes it harder to acquire market intelligence and respond rapidly to buyers’ changing demands and new fashions. Vinatex, the state holding company for T&G, has tried to address this by introducing buyers to SOEs while some have established links with the buyers themselves. Direct links with buyers have helped producers to improve quality and given them access to greater know-how.

Most SOEs and joint venture companies have been able to move up the value chain from basic cut-make-trim (CMT) to free on board (FOB, where the company provides the fabric and charges for the final garment) production. Their ability to do so is conditioned by the quality and price of domestically produced fabrics and their ability to source fabrics from abroad on a regular, reliable and cost-efficient basis. But the great majority of private garment producers still work under CMT arrangements, mainly for reasons of cost. The key value-added functions of design, advertising and marketing remain the preserve of the retail buyers.

The quality of local textiles is especially important for integrated SOEs that spin yarn, weave fabric and stitch garments for export, particularly as European buyers are perceived to be switching their business to firms able to export FOB. Meanwhile, state guidelines have stressed the need to increase the domestic content of garment exports. Complaints about the quality of local fabric are still common among garment exporters. Although Vietnam’s T&G industry has rapidly inserted itself into GVCs, ties into the value chains are quite distinct. Large SOEs have tended to attract the higher value chains while smaller private firms tend to be restricted to smaller regional traders and less valuable markets. SOEs also appear better positioned to upgrade into fabric sourcing and thus access higher rents.

This differentiated integration into GVCs has inevitably had varying effects, both on firms and workers. Garment exports have been developed largely with imported fabrics but growing pressure from Chinese competition, demands for shorter lead times and the government’s aim to increase local content in garment exports will mean the textile sector must upgrade to meet the needs of the export garment sector. SOEs have invested in textile spinning, weaving and dyeing but this has been done with state-subsidized credit, which is unavailable to the private sector. But the standard of Vietnamese fabrics is rising and the share of local content in garments is likely to increase, so that there will be a growing move to FOB production. Large SOEs have been able to insert themselves into the value chains of leading buyers. However, although the number of private garment firms is increasing they are unable to access the higher quality value chains. They supply smaller regional traders, have poorer working conditions, pay lower wages and use more marginalized workers.

There has been substantial contraction in both the formal sector and household textile employment. In the formal sector, this is the result of the restructuring of SOEs; the textile workforce contracted by almost a third in the 1990s. But productivity has increased and so have wages. The fall in textile employment has been more than matched by a rise in garment employment, especially in private clothing firms, many of which rely heavily on migrant women workers. Wages in the garment industry have also risen, but principally in the state sector.

While garment workers have gained through employment it is those who work in SOEs who have especially benefited. The gains at the level of the SOEs lies in their ability to upgrade thanks to state-subsidized credit, their ability to undertake orders for leading global buyers and their access to the know-how that such buyers impart to their suppliers.

Source: “Vietnam in the global garment and textile value chains: impacts on firms and Workers”. Paper prepared for UNIDO by Khalid Nadvi and John Thorburn, 2005.

4. Production, added value, employment and capacity

The EU textiles and clothing industry has an estimated turnover of \$289.1 billion and contributes approximately 4 per cent to total manufacturing added value. Textiles and clothing production in the EU is concentrated in five countries, France, Germany, Italy, Spain and the UK, which account for approximately three quarters of total production. Italy is by far the largest producer of textiles and clothing, generating almost one third (28.4 per cent) of total value added, followed by Germany with 14.5 per cent, France and the UK with around 11 per cent each, and Spain with 10 per cent. The southern countries of Italy, Greece, Portugal and to a lesser extent France and Spain contribute relatively more to clothing production while the northern countries of Austria, Belgium, Germany, the Netherlands, Sweden and the UK have diversified towards niche markets and specialize in high value-added textile production. A full 92 per cent of Belgium's value-added clothing and textiles is concentrated in textile production along with 80 per cent of employment. Austria and the Netherlands are similarly concentrated in textile production, while textiles account for 70 per cent of Germany's activities. The UK and France have approximately a 60:40 split between textiles and clothing. In Portugal, Greece and Spain the clothing sector accounts for more than 50 per cent of the clothing and textiles workforce (Commission of European Communities, 2003).

The United States has suffered greater losses in clothing and textiles production and employment than the EU. Between 1990 and 2006, U.S. clothing imports rose by \$59.0 billion, or an average annual growth rate of 14.2 per cent. Textile imports, by contrast, increased by \$7.3 billion, or an average annual growth rate of 7.6 per cent (Martin, 2007). In 2007, US textile output fell for a tenth year to its lowest level in over 35 years, with a 9.2 per cent decrease in employment. Clothing output fell by 40 per cent and clothing employment by 8.3 per cent (Textiles Intelligence, 2008). At the end of 2006, domestic production accounted for only 9 per cent of the United States clothing market, with imports making up the remainder (American Apparel and Footwear Association (AAFA), 2007).

Table 1 gives an estimate of the value added for each stage of the textiles and clothing value chain. The retail sector has the greatest share of value added at 57 per cent, followed by clothing, fabric, yarn and fibre. Looking at Figure 3, 62 per cent of clothing and textiles production is accounted for by the textiles industry with the remaining 38 per cent attributed to clothing production. With regards to end-users, 46 per cent of clothing and textiles production is used by the clothing industry, 32 per cent by the interior and household industry and 22 per cent

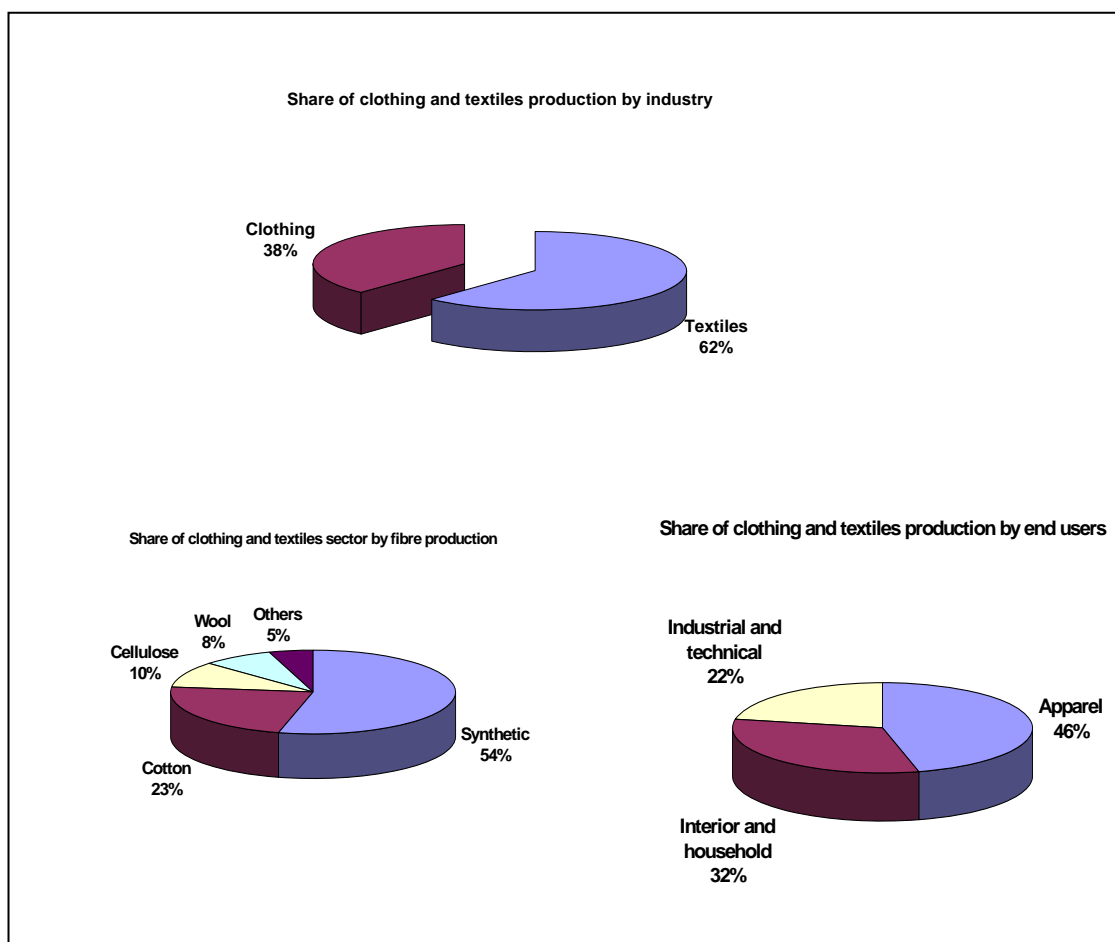
is used for industrial and technical purposes. At 54 per cent, synthetics contribute the greatest proportion of fibre production, followed by cotton, cellulose, wool and other.

Table 1 Percentage of value added in the textile clothing retail value chain, 2004 (*Per cent*)

Retail	57
Clothing	23
Fabric	12
Yarn	5
Fibre	4

Source: Comesa, 2004: p. 30.

Figure 3 Share of clothing and textiles production in the value chain, 2003



Source: Commission of European Communities, 2003: pp. 8-10.

Developed countries' production is falling

The breakdown of global mill fibre consumption by region (Table 2) illustrates the decline or stagnation in production in developed economies, and the growth in production in developing

countries, as well as the massive production capacities within these regions. For example, mill fibre consumption in North America declined from 18,500 million pounds in 1997 to less than 16,000 million pounds in 2001. Mill fibre consumption in Western Europe remained fairly constant at around 11,800 million pounds over the period, while consumption in Asia increased from 60,600 million pounds to 73,000 million pounds. Furthermore, China's consumption of 34,700 million pounds in 2001 was more than double that of the second largest consumer, North America, and India's consumption of mill fibre is equivalent to that of Western Europe. The table also highlights the minute contribution of the African continent, with mill fibre consumption of only 3,000 million pounds. Globally, total mill fibre consumption rose by nearly 11 per cent from 109,886 million pounds in 1997 to 121,623 million pounds in 2001.

The shift in production from developed to developing countries has been associated with a decline in both the number of firms and employment in developed economies. Although there have been substantial employment losses in both textiles and clothing, employment in the textiles industry has held up better than clothing, while restructuring has been less destructive in the EU than in the United States. In the clothing industry, most of the job losses have been concentrated in small to medium-sized firms, while larger firms have engaged in their own form of outsourcing to neighbouring countries to survive (Heron, 2002).

Table 2 Global mill fibre consumption, by region (£ million), 1997-2001

<i>Region or country</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>
Asia	60,672	62,990	66,862	70,727	73,082
China	24,947	26,515	29,010	31,800	34,692
India	9,586	10,111	10,901	11,304	11,208
North America	18,504	18,416	18,381	18,513	15,983
Latin America	5,874	5,839	6,378	6,748	6,507
Western Europe	11,880	12,000	11,850	12,040	11,850
Eastern Europe	3,954	3,793	3,725	3,814	3,750
Africa	2,895	2,920	2,904	2,911	3,000
Middle East	5,606	6,117	6,581	6,801	6,800
Oceania	501	563	592	613	650
Total	109,886	112,638	117,274	122,168	121,623

Source: US International Trade Commission, 2004: pp. 1-20.

Table 3 shows that all ATC countries experienced employment losses in the clothing industry between 1995 and 2004. The United States was the hardest hit with 595,000 clothing jobs lost – more than five times the losses of the UK, which amounted to 109,000 over the same period. United States clothing employment totalled 1.4 million in 1970 (Heron, 2002: p. 755), but by 1995 it had already dropped to 814,000, falling by a further 73 per cent to only 219,000 in 2004. In the UK, employment decreased by 29 per cent, from 154,000 in 1995 to 45,000 in 2004. Other countries that experienced substantial job losses in the same period include Italy (82,000 jobs), France (60,000 jobs), and Germany (50,000 jobs), while Spain and Portugal each lost less than 20,000 jobs.

Table 3 Employment in textiles and clothing, ATC countries (thousands)

	<i>1995</i>	<i>2000</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
Textiles					
United States	688	678	535	-	436
France	134	123	113	106	94
Germany	175	154	139	129	120
Italy	301	269	255	249	231
Portugal	99	98	97	85	84
Spain	97	110	109	104	90
United Kingdom	181	144	121	101	96
Clothing					
United States	814	442	295	-	219
France	137	100	89	80	77
Germany	105	77	61	55	55
Greece	66	50	45	-	-
Italy	288	240	224	220	206
Portugal	143	129	139	128	127
Spain	107	123	104	100	90
United Kingdom	154	113	68	53	45

Source: Nordas, 2004 ; UNIDO, 2008

Because of the capital-intensive nature of the textiles industry and therefore the higher barriers to entry, as well as firms' ability to specialize in higher value-added textile production, such as industrial and technical textiles, employment losses in developed economies' textile industries has been less severe than for clothing. Nevertheless, there have been job losses, with the United States again experiencing the greatest fall. United States textiles employment declined from 688,000 in 1995 to 436,000 in 2004. The UK also experienced substantial losses (85,000) over the period, followed by Italy (70,000), Germany (55,000), and France (40, 000).. Portugal and Spain experienced relatively smaller declines in employment (15,000 and 7,000 respectively).

Employment in non-ATC countries' clothing industries grows

Non-ATC countries' textiles and clothing employment (Table 4) paints a very different picture to that of the developed economies.⁴ While textiles employment also declined in most countries, clothing employment grew. In China, textiles employment increased from 6.7 million in 1995 to 7.3 million in 1997 but then fell by 35 per cent to 4.8 million in 2000. (More recent data is not available, but is estimated to have increased slightly since then). Nevertheless, China's textiles employment of 4.8 million is still nearly four times greater than the 1,291 people employed in India (the second-largest textiles employer), and is eleven times larger than the number employed in the United States (436,000).

⁴ These figures are questionable with clothing employment clearly understated for economies such as India. More reliable data is unavailable.

Table 4 Employment in textiles and clothing (thousands)⁵

	1995	2000	2002	2003	2004
<u>Textiles</u>					
Czech Republic	91	79	72	58*	57
Poland	164	92	81	80	86
Romania	186	94	91	102	91
Morocco	70	42	42	40	39
Mexico	109	129	-	-	-
China	6,730	4,829	-		
India	1,579	1,315	1,205	1,236	1,291
Indonesia	-	665	570	553	-
Philippines	56	-	-	40	-
Turkey	189	226	584		
<u>Clothing</u>					
Czech Republic	57	53	43	38	33
Poland	274	179	146	137	143
Romania	189	261	302	325	317
Morocco	102	160	165	167	159
Mexico	476	760	-	-	-
China	1,750	2,156	-		
India	264	329	335	379	449
Indonesia	-	479	469	445	-
Philippines	143	-	-	142	-
Turkey	115	147	501		

Source: Nordas, 2004 ; UNIDO, 2008

In contrast, clothing employment has grown in most of these countries with only the Czech Republic and Poland experiencing consistent employment losses. Chinese clothing employment increased from 1.8 million in 1995 to more than 2 million in 2000. Although more recent figures are not available, Mexico had the second-largest number of jobs in clothing with employment rising from 476,000 in 1995 to 760,000 in 2000. Turkey's employment increased

⁵ Textiles employment here includes knitting, thus increasing total employment figures substantially.

by approximately 3 per cent between 2000 and 2002 to 501,000, while Romania's employment rose to 317,000 in 2004. Despite India's globally recognized position in clothing production, only 449,000 people were employed in its clothing industry in 2004. Once again, China's employment figures vastly exceed those in both developed and developing countries.

Textile production brings investment

On the whole, countries that specialize in textile production perform better with regard to investment than countries that specialize in clothing production. Approximately 70 per cent of total clothing and textiles investment is attributed to the textiles industry and only 30 per cent to clothing (CEC, 2003). The substantial adjustment process that has taken place in developed economies as they have moved towards higher value-added production to compete with cheaper developing countries has necessitated the adoption of new technologies and therefore investment. However, the overall decline in the number of firms coupled with the move of production to developing countries has meant that investment in developing countries has been far greater than in developed countries. For instance, the value of cumulative spindle and rotor shipments to the US between 1996 and 2007 was only 1.7 per cent the value of shipments to China. The value of shipments to western Europe during the same time period was 4.7 per cent that of China (International Textile Manufacturers Federation (ITMF), 2008).

The number of installed spindles and rotors highlights Asia's dominance in terms of available global capacity and the increasing importance of Chinese investment in textile and clothing machinery (US International Trade Commission, 2004). In 2005, Asia and Oceania accounted for 78 per cent of installed short-staple spindles, 45 per cent of installed long-staple spindles and 35 per cent of installed open-end rotors (ITMF, 2008). Cumulative purchases of spindles and rotors between 1996 and 2005 showed similar trends. Asia and Oceania accounted for 85 per cent of short-staple spindles, 52 per cent of all long-staple spindles and approximately 56 per cent of all rotors purchased. In 2005 alone, China alone invested in 7.2 million short-staple spindles, followed by India with 1.4 million (ITMF, 2008). Data on capacity and investment in weaving equipment reinforces the evidence of Asia's growing dominance. Asia and Oceania account for 58 per cent of shuttle looms, 84 per cent of shuttleless looms, 89 per cent of filament weaving looms and 38 per cent of wool weaving looms. Cumulative shipments to this area between 1996 and 2005 were 78 per cent (for shuttleless) and 98 per cent (for shuttle) of the world total. China again led world purchases of, accounting for 61 per cent of the shuttleless loom market in 2005 (Textile Asia, 2008). In contrast, Sub-Saharan Africa's share of world capacity is insignificant, holding around 0.2 per cent of the world's spindles and rotors, and 0.2 per cent of the world's weaving equipment (ITMF, 2008).

5. Global Trade

The top 10 clothing exporters in 2007 (Table 5) were China, Hong Kong, Italy, Germany, Turkey, France, India, Belgium, Mexico and the United States. China was by far the largest exporter, increasing its exports by a remarkable 1,092 per cent from US\$9.7 billion in 1990 to US\$115.2 billion in 2007. In 1990, China had only 9 per cent of the world market but by 2007, its share had increased to 33 per cent. If Hong Kong with 8 per cent of the world total is included, China effectively accounted for nearly half of world clothing exports. Although Italy's clothing exports rose by 97 per cent between 1990 and 2007, its share of world exports declined from 11 per cent in 1990 to only 7 per cent in 2007, when its exports of US\$22.8 billion were less than one third of China's. Apart from China, Turkey, Mexico, India and Belgium also increased their share of world exports. Turkey's share rose from 3 per cent in 1990 (US\$3.3 billion) to 4 per cent in 2007 (US\$14 billion). Mexico's exports rose by 777 per cent from US\$0.6 billion in 1990 to US\$5.1 billion in 2007, in the process increasing its share of the world total from 1 per cent to 2 per cent. India's clothing exports grew by 282 per cent, from US\$2.5 billion to US\$9.7 billion, between 1990 and 2007, and its share of the world total rose from 2 per cent to 3 per cent. Although the United States increased its clothing exports by 68 per cent to US\$4.3 billion, its share of the world total fell from 2 per cent to 1 per cent.

United States is the largest importer of clothing

Developed countries dominate clothing imports, with the United States taking the largest share. Between 1990 and 2007, United States imports grew by 214 per cent, keeping its share of world imports at a steady 24 per cent. Germany is the second largest importer, followed by Japan, the UK, France and Hong Kong. In 2007, United States imports were worth US\$84.9 billion. This was three times the amount imported by Germany (US\$29.7 billion), Japan (US\$24 billion) and the UK (US\$24 billion), and more than four times the value of French and Hong Kong imports (US\$20.9 billion and US\$19.1 billion respectively). In 2007, the US\$183.2 billion imported by the top five clothing importers represented 52 per cent of the world's total clothing imports, while the top 10 accounted for approximately 70 per cent. Other countries included in the top 10 importers are Italy (US\$5.7 billion), Spain (US\$13 billion), Belgium (US\$8.6 billion) and the Netherlands (US\$8.1 billion).

China is also the world's largest exporter of textiles products, with 24 per cent of the global total. Its exports increased by 675 per cent from US\$7.2 billion in 1990 to US\$56 billion in 2007, while its share of the world market more than tripled. Italy is the second-largest exporter, with goods valued at US\$16.4 billion in 2007 representing 7 per cent of world exports.

Germany's exports of US\$15.5 billion accounted for approximately 6 per cent, followed by Hong Kong, with US\$13.4 billion and the United States with US\$12.4 billion, 6 per cent and 5 per cent of the world total respectively. Republic of Korea, Taiwan, India, Belgium and France are also among the top 10 exporters. Interestingly, India and the United States saw substantial growth in their textile exports, of 333 per cent and 146 per cent respectively.

Table 5 World trade in clothing by top 10 countries (US\$ million)

<i>Country</i>	<i>Exports</i>							<i>% world total</i>		
	<i>1980</i>	<i>1990</i>	<i>1995</i>	<i>2000</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>1990-2007 % change</i>	<i>1990</i>	<i>2007</i>
China	1,625	9,669	24,049	36,071	74,163	95,388	115,238	1,092	9	33
Hong Kong	4,976	15,406	21,297	24,214	27,292	28,391	28,765	87	14	8
Italy	4,584	11,839	14,424	13,384	18,655	20,035	22,771	92	11	7
Germany	2,882	7,882	7,530	7,320	12,394	13,910	16,020	103	7	5
Turkey	131	3,331	6,119	6,533	11,833	12,052	14,001	320	3	4
France	2,294	4,671	5,659	5,414	8,500	9,250	10,647	128	4	3
India	673	2,530	4,110	6,179	8,595	9,465	9,655	282	2	3
Belgium	-	-	-	3,941	6,715	7,236	8,338		0	2
Mexico	2	587	2,731	8,631	7,306	6,323	5,150	777	1	2
United States	1,263	2,565	6,651	8,629	4,998	4,876	4,297	68	2	1
World	40,590	108,129	158,353	197,498	276,822	309,593	345,301	219	100	100
<i>Imports</i>										
United States	6,943	26,977	41,367	67,115	80,071	82,972	84,853	214	24	24
Germany	8,326	20,411	24,550	20,183	25,155	27,242	29,676	45	18	8
Japan	1,537	8,737	18,758	19,709	22,541	23,870	23,999	175	8	7
UK	2,858	6,961	8,002	12,995	20,227	21,639	23,791	242	6	7
France	2,637	8,381	10,639	11,412	18,000	18,976	20,875	149	7	6
Hong Kong	695	6,913	12,654	16,008	18,437	18,852	19,149	177	6	5
Italy	797	2,580	4,703	6,139	12,198	14,117	15,676	508	2	4
Spain	152	1,649	2,492	3,847	9,471	11,102	12,980	687	1	4
Belgium	-	-	-	4,828	7,706	7,663	8,614		0	2
Netherlands	2,875	4,768	5,132	5,371	6,905	7,753	8,122	70	4	2
World	42,271	112,236	162,871	207,093	295,868	318,536	351,952	214	100	100

Source: WTO.

Table 6 World trade in textiles by top 10 countries (US\$ million)

<i>Exports</i>										
Country	1980	1990	1995	2000	2005	2006	2007	% change 1990-2007	% of World Total 1990	% of World Total 2007
China	2,540	7,219	13,918	16,135	41,050	48,683	55,968	675	7	24
Italy	4,158	9,492	12,877	12,040	14,834	15,392	16,387	73	9	7
Germany	6,296	14,033	14,385	10,851	13,578	14,456	15,458	10	13	6
Hong Kong	1,771	8,213	13,815	13,442	13,830	13,910	13,417	63	8	6
United States	3,757	5,039	7,372	10,961	12,379	12,665	12,386	146	5	5
Republic of Korea	2,209	6,076	12,313	12,711	10,391	10,110	10,373	71	6	4
Taiwan	1,771	6,128	11,882	11,896	9,706	9,763	9,720	59	6	4
India	1,306	2,180	4,358	5,998	8,285	8,837	9,446	333	2	4
Belgium	-	-	-	6,311	7,463	7,663	8,614		0	4
France	3,432	6,058	7,474	6,664	6,995	7,024	7,497	24	6	3
World	54,990	104,354	152,319	154,366	202,657	217,992	238,126	128	100	100
<i>Imports</i>										
United States	2,543	6,730	10,441	16,008	22,538	23,498	24,089	258	6	11
China	1,100	5,292	10,914	12,832	15,503	16,358	16,645	215	5	7
Hong Kong	2,967	10,182	16,859	13,717	13,793	13,975	13,559	33	9	6
Germany	6,871	11,868	12,477	10,007	11,865	12,596	13,490	14	11	6
Italy	2,618	6,133	6,461	6,210	7,426	8,238	9,024	47	6	4
France	4,119	7,595	7,526	6,751	7,645	7,871	8,592	13	7	4
UK	3,560	7,018	7,262	6,889	7,231	7,600	8,260	18	7	4
Japan	1,663	4,106	5,985	4,939	5,812	6,179	6,302	53	4	3
Mexico	133	992	1,768	5,824	6,043	5,951	5,661	471	1	3
Spain	354	2,050	2,647	3,359	4,422	4,690	5,053	146	2	2
World	56,975	107,839	156,515	163,121	197,386	208,709	223,525	107	100	100

Source: WTO.

Top 10 textile importers take over half of global total

There is less concentration of textiles imports among the top 10 countries than there is of clothing, highlighting the greater differentiation of markets. The top five importers of textiles (United States, China, Hong Kong, Germany and Italy) import 34 per cent of the world total, while the top 10 (including the UK, France, Mexico, Japan and Spain) import just under half (49.5 per cent). The United States is the leader in textile imports, which increased from US\$6.7 billion in 1990 to US\$24.1 billion in 2007, up 258 per cent. China's imports rose by 215 per cent over the period, from US\$5.3 billion to US\$16.6 billion, while Hong Kong's imports increased by only 33 per cent from US\$10.8 billion to US\$13.6 billion. Germany, France and the UK all experienced minor increases, of 14 per cent, 13 per cent and 18 per cent respectively, revealing the gradual erosion of their clothing industries and their move towards importing made-up garments. The United States, China and Mexico were the only countries in the top 10 that increased their world share. The United States' share rose from 6 per cent to 11 per cent between 1990 and 2007, China's share grew from 5 per cent to 7 per cent while Mexico's imports increased by 471 per cent, which took its share of the world market from 1 per cent to 3 per cent.

Detailed textile and clothing trade data for the United States and the EU reveal that the United States' top five clothing export destinations are Canada, Mexico, the Dominican Republic, Honduras and Japan. Apart from Canada however, US exports to all of these destinations been declining as have clothing exports to all other top 10 destinations except the UK. Exports to Mexico, the second largest United States export destination and accounting for nearly 22 per cent of its total clothing exports, fell by 62 per cent between 1999 and 2006. Exports to the Honduras contracted by the greatest amount (66 per cent) over the period, those to Dominican Republic dropped by 65 per cent and to Japan by 41 per cent. The exports to the Central American countries are likely to represent production sharing with the United States and illustrate the decline in domestic US production. As noted, exports to Canada have risen, from US\$673 million in 1999 to US\$1,098 million in 2006 – an increase of 63 per cent (AAFA, 2007).

While US clothing exports have been contracting, imports have been rising. China accounts for the greatest share (30 per cent), with imports increasing by 324 percent since 1999 to reach US\$18.5 billion in 2006. Imports from Mexico have actually fallen by 30 per cent from US\$7.5 billion in 1999 to US\$5.3 billion in 2006, while imports from Honduras remained steady at around US\$2.2 billion. Vietnam experienced the largest increase, over 793 per cent, between 1999 and 2006. This growth has, however, occurred off a very small base of only US\$36 million to reach a total of US\$3.2 billion in 2006. Imports from Indonesia and India also rose in

the period, growing from US\$1.7 billion in 1999 to \$3.7 billion (118 per cent increase) and from US\$1.5 billion to US\$3.2 billion (109 per cent), respectively (AAFA, 2007).

The top five exporting countries account for just under half of total clothing imports into the United States, while the top 10 countries account for 65 per cent. Overall, US exports fell by 45 per cent while imports increased by 41 per cent between 1999 and 2006, further highlighting the decline in domestic production of clothing (Office of Textiles and Apparel, Otexta, 2008).

US textile exports have seen some growth

US textile production has shown a slightly more positive trajectory, probably because of the more capital-intensive nature of textiles and the move towards higher value-added technical and industrial textiles. Although textile imports have continued to rise, textile exports have seen some positive growth. The export of textiles and fabrics to Canada contracted by 14 per cent between 1999 and 2007, but in response to bilateral trade agreements, US exports to the other top five countries, Mexico, Honduras, Dominican Republic and El Salvador, showed healthy growth over the period. Exports of yarn and fabrics to Mexico grew by 24 per cent, to Honduras by 489 per cent, to the Dominican Republic by 248 per cent and to El Salvador by 736 per cent. This illustrates the movement to outward processing zones for developed economies. Mexico accounted for 32 per cent of total US exports of yarn and fabrics in 2006, followed by Canada (16 per cent), Honduras (10 per cent), Dominican Republic (6 per cent) and El Salvador (4 per cent) (AAFA, 2007).

The import of textiles and fabrics by the United States rose by only 7.4 per cent between 1999 and 2007. Imports of textiles and fabrics from Canada decreased, by 15 per cent from US\$1.4 billion to US\$1.2 billion as did imports from Republic of Korea, by 11 per cent to US\$697 million. Imports from China rose by 445 per cent to US\$9.6 billion in 2007 and imports from Mexico rose by 2 per cent to reach \$1.1 billion. Imports from Italy also increased (24 per cent) from US\$646 million to US\$796 million. Moreover, significant growth was evident in imports from India and Pakistan, which both increased by 125 per cent (Otexta, 2008).

China is the EU's largest clothing provider

EU clothing and textiles trade figures show that the top five clothing export destinations are the United States, Turkey, Tunisia, Morocco, and Switzerland. EU clothing exports to the United States have been steady since 1999, remaining in the \$2.3billion region (Otexta, 2008).

China features most prominently with regards to the import of clothing and accessories into the EU. Imports from China totalled \$32 billion in 2007, an increase of more than 208 per cent

since 1999. This is more than three times the value of imports from Turkey, which increased by 85 per cent to reach \$12 billion, followed by Bangladesh (\$6 billion), India (\$5.7 billion) and Tunisia (\$3.6 billion). Other important clothing suppliers include Morocco and Hong Kong which respectively exported \$3.5 billion and \$2.3 billion to the EU in 2007 (Eurostat, 2008).

The main export destinations of EU textiles are the United States, Turkey, Tunisia, Morocco and Switzerland. Between 1999 and 2007, EU exports of textiles to the US increased by 19 per cent from \$2.7 billion to \$3.2 billion. Exports of made-up articles, wholly or chiefly of textile materials decreased by 1 per cent to \$454 million, and man-made woven fabrics by 11 per cent to 257 million. Silk, another traditional large export decreased by 28 per cent to \$73 million in 2007. Exports of textiles to Turkey have increased by 90 per cent since 1999, totalling \$1.8 billion in 2007, and are concentrated in the areas of man-made fibres and staple filament. Exports to Tunisia have risen by 35 per cent since 1999 to reach a figure of \$1.9 billion in 2007. The large majority of this consisted of cotton exports, which accounted for \$707 million in 2007. Although China is not in the top 5, EU textile exports to China are growing rapidly. They increased by 318 per cent since 1999, amounting to \$961 million in 2007. Some sectors have been particularly fast growing, such as twine and cordage, which grew by 667 per cent. In 2007 exports to Hong Kong totalled \$1.2 billion (73 per cent increase since 1999), with steady growth evident in sectors such as wool and animal hair (50 per cent), in which Hong Kong forms the primary market for the EU (Eurostat, 2008).

Textile imports into the EU are dominated by China, Turkey and India. Other important sources include Pakistan and Switzerland. Some categories of Chinese imports have grown particularly rapidly, such as 'fabrics from man-made textile materials' (257 per cent growth between 1999 and 2007, reaching \$983 million) and special woven fabrics (470 per cent growth, reaching \$467 million). Fast growing areas in Turkish imports also include 'fabrics from man-made textile materials' (117 per cent growth between 1999 and 2007, reaching \$765 million) and other woven textile fabrics (104 per cent growth, reaching \$100 million) (Eurostat, 2008).

As Chinese imports have accelerated, some import categories from India have fallen, especially woven cotton fabrics (11 per cent decrease between 1999 and 2007) and 'fabrics from man-made textile materials' (12 per cent decline). Floor coverings have risen however, by 87 per cent to reach \$643 million in 2007 (Eurostat, 2008).

6. The End of the MFA and the ATC

On 31 December 2004, the MFA came to an end and with it came the termination of all quotas on textiles and clothing trade between member states of the WTO. However, there are a number of tools available to governments to protect their textiles and clothing industries now that quotas have been removed.

- a. Import duties: the United States imposes relatively high import duties on clothing, averaging 11.4 per cent in 2008 (WTO, 2008). In contrast the average rate for all products was only 1.4 per cent, and tariff revenue from clothing accounted for 34.7 per cent of all tariff revenue in 2006, despite the fact that clothes only accounted for 4 per cent of all imports (AAFA, 2007). The EU imposes similar duties, averaging 11.5 per cent. However, it is unlikely that the United States or the EU will increase import duties. If anything, they are likely to decline. Both the United States and the EU have put forward proposals to the WTO for substantial reductions in import duties overall, and both volunteered textiles and clothing for especially fast reductions.
- b. WTO-sanctioned temporary measures: countries facing a surge of imports have the right to adopt emergency measures e.g. anti-dumping duties.
- c. Non-WTO sanctioned measures: a country that believes its economy will be harmed by imports is still able to impose temporary duties, subsidise its exports or even ban imports. However, it does so knowing that other countries will retaliate.

Initially, quotas on insignificant low-volume clothing and textiles imports were integrated or liberalized under the ATC. The last quotas to be removed were the significant ones where the bulk of textiles and clothing trade is undertaken. There is great uncertainty surrounding this removal of quotas and its subsequent effect on textile and clothing producing countries. Some experts predict a “big bang” effect, while others believe that a few countries will gradually increase their exports into the main importing countries of the United States, the EU and Japan. Moreover, buyers are expected to consolidate their purchases to a few politically and financially stable countries that adhere to acceptable labour practices.

Although 73 countries were subject to quotas by the EU, United States and Canada most were not able to fill them. While the elimination of unfulfilled quotas will have no impact, quota-constrained countries have been freed from these restraints. Flanagan (2003) illustrates that

there are three main countries, China, India and Indonesia, which showed the most consistent and widespread near-saturation of quotas for yarn, fabric and garments. Bangladesh also used most of its quotas for the United States (it had no quota restrictions in the EU), but was constrained mainly in garments rather than fabric or yarn.

The quota-free environment from 1 January 2005 has provided a platform for China and several other Asian countries, for example, India, Indonesia and Bangladesh, to dominate in world textiles and clothing markets. Textile safeguards have slowed this process however. Moreover, it must be recognized that the phasing out of quotas has removed a large amount of cost out of the industry as a whole. Quotas act as an export tax, adding an estimated 20 per cent on to the retail price of most garments (Weathers, 2003; Comesa, 2004). Moreover, quota hopping led to inefficient allocation of textile and clothing production globally. The loss of quotas benefits consumers as inefficiencies are reduced and prices deflate, further exacerbating the deflationary trend in clothing prices (Nordas, 2003; Comesa, 2004). The annual cost of quotas to United States consumers was estimated at US\$70 billion, while barriers to textile and clothing trade are estimated to have cut world income by as much as US\$137 billion. Moreover, the estimated cost of quotas to developing countries was US\$40 billion in lost export revenue and 27 million jobs foregone (de Janquieres, 2004).

China gains the most from the end of quotas

Although there is great uncertainty surrounding the removal of quotas, it is clear that China is the greatest beneficiary as few countries are able to compete against it on price. China's exports of clothing have already increased to approximately a quarter of the world total since it joined the WTO in 2001 (de Janquieres, 2004). Asian prices are declining, while exports are growing (Kaplinsky, 2005). China has the ability to produce a growing range of items and has improved its capacity to overcome barriers of international quality standards. The availability of cheap, high-quality fabric, both domestically and in neighbouring Asian countries, is also a strong advantage (Robins et al, 2004).

The US International Trade Commission's 2004 comprehensive overview of emerging global competitiveness trends in the textile and clothing industry concluded that China has a major competitive advantage derived from a combination of low wages and high productivity, and the production of high-quality and low-cost inputs. China is regarded "among the best in making most garments and made-up textile articles at any quality or price level" (p. xiii). Hence it is "expected to become the 'supplier of choice' for most United States importers (the large apparel

companies and retailers) because of its ability to make almost any type of textile and apparel product at any quality level at a competitive price” (p. xi).

As quotas were eliminated and tariffs continue to be reduced, China’s share of world clothing has further increased. At the end of January 2005, the Chinese government released trade figures indicating that Chinese imports of textiles and clothing into the United States had jumped about 75 per cent, rising from US\$702 million in January 2004 to more than \$1.2 billion. In terms of product volume, imports of major clothing products from China leapt 546 per cent. In January 2004, for example, China exported 941,000 cotton knit shirts under quota, whereas in January 2005 it shipped 18.2 million, a rise of 1,836 per cent. Similarly, imports of cotton knit trousers were up 1,332 per cent year on year. Given that China ships a large part of its goods through Hong Kong, which would not be reflected in these figures, the real impact may well have been understated (New York Times, 10 March 2005).

This immediate impact set the stage for a rapid increase in Chinese market share over the next few years. Total Chinese clothing and textile exports to the US increased by 44 per cent in the 2005 to 2007 period, with the largest increases being in the categories of yarn, with 85 per cent or more artificial staple fibres (6232 per cent increase) and dresses (1171 per cent increase). One of the largest single categories is flat goods and handbags, which grew by 24 per cent to reach \$2.6 billion in 2007 (Otexa, 2008). China’s share of the US textiles and clothing market, which was about 10 per cent in 1999, now stands at 33.5 per cent (Otexa, 2008)..

The short-term impact of Chinese clothing exports on the EU of a quota-free 2005 can be seen in Table 7. In the immediate quota free period, volumes jumped and prices dropped.

Table 7. EU clothing imports from China

	<i>1st quarter 2005/1st quarter 2004</i>		<i>China market share in EU-25 imports</i>	
	<i>Volumes %</i>	<i>Price %</i>	<i>1 Q 2004 %</i>	<i>1 Q 2005 %</i>
T-shirts	164	-26	7	17
Pullovers	534	-47	6	38
Men’s trousers	413	-16	6	35
Blouses	186	-24	6	22

Women's coats	184	-18	6	10
Bras	139	-15	30	49
Socks & pantyhose	63	-22	30	54
Linen & ramie yarns	51	1	27	45
Linen fabrics	257	1	10	45

Source: Nathan and Associates, 2005.

The response of the United States and the EU was to negotiate safeguard agreements with China limiting the pace of China's penetration into their domestic markets and introducing predictability and certainty back into global clothing and textiles trade. The EU agreement introduced a phased quota system limiting annual growth in Chinese textile and apparel imports to the EU to between 8.5 per cent and 12.5 per cent in the 2005-2007 period. Despite this, Chinese exports of clothing and textiles to the EU grew by 30 per cent in the 2005-2007 period, with a particularly large increase in woven fabric (470 per cent) (Eurostat, 2008). The US-China textiles pact limited US imports of Chinese textile and apparel products in 34 categories for three years from 1 January 2006 to 31 December 2008. Between them, these 34 categories accounted for 46 per cent of China's textile and apparel exports to the US (Barrie, 2005).

Whilst safeguards have at best only managed to put the brakes on China's import growth, they have also encouraged importers to prematurely identify alternative foreign sources of clothing, the effect of which will endure beyond the restrictions. A fundamental impact of the safeguards was a major import diversion shift as retailers, instead of turning to domestic suppliers, sought new alternative low cost foreign supply sources. Once started import diversion also stabilized, and is likely to be a permanent phenomenon. Vietnam, for example, has gradually strengthened its foothold in the US apparel import market since safeguards were initiated, with shipments in 2007 surging 34.44% in value terms from 2006 (Otexa 2008).

What effect have Chinese exports had on the rest of the developing world's access to the major markets? As Kaplinsky (2005) points out, the divisive impact of this period of globalization on the developing world has profoundly changed. The previous period of developing countries' export growth, which so benefited the rise of the NIEs, was primarily at the expense of domestic producers in the high-income economies, which were squeezed out of their domestic markets. Consequently, these developing countries could simultaneously increase their exports to the

United States and Europe. In short, it was a positive-sum game for them. But as the domestic industry in the major consuming blocs has now been eroded, then the growth of exports from one or a few developing countries is likely be at the cost of other exporters in the developing world: in short, a zero-sum game.

Smaller exporters lose out

Table 8 shows how garment imports to the United States and the EU altered between the first quarter of 2004 and the first quarter of 2005 (Flanagan, 2005).

Table 8. Percentage change in volume exports to United States and EU, first quarter 2004-first quarter 2005

<i>Country</i>	<i>% change</i>
Poland	-72.1
Russia	-63.1
Hungary	-54.4
Lithuania	-49.1
Hong Kong	-44.1
Myanmar	-42.5
Slovakia	-36.1
Republic of Korea	-33.8
Ukraine	-30.7
Macau SAR	-29.2
Czech Republic	-27.7
Morocco	-26.4
Taiwan	-26.4
Macedonia, FYR	-23.6
Israel	-17.6
UAE	-10.2
Tunisia	-9.5
Turkey	-9.1
Mexico	-8.6
Vietnam	-8.5
Bulgaria	-7.2
Syria	-5.7
Colombia	-4.4
Mauritius	-3.0
Lesotho	-2.7
Malaysia	-2.7
Singapore	-2.6
Croatia	-0.9
Costa Rica	-0.5
Phillipines	0.4
North Korea	0.5
Indonesia	0.9
Bangladesh	1.0
Romania	1.3
Egypt	6.8
Peru	6.9
Thailand	7.4
Honduras	7.5
Dominican Republic	7.7
Pakistan	9.8
Madagascar	10.1
El Salvador	10.2

Guatemala	10.8
Sri Lanka	11.5
Cambodia	12.8
India	24.2
Jordan	35.4
Nicaragua	35.7
Serbia	47.6
Haiti	48.3
China	109.1

Source: Flanagan, 2005

The zero-sum nature of the effect of the removal of quotas is apparent. Hong Kong has to be removed from the list as exports from there were almost certainly from China or Vietnam. In a short period therefore, just under 30 per cent of exporters lost substantial market share (over 20 per cent), while only 12 per cent managed substantial gains. The worst affected countries were Russia and parts of Eastern Europe which, according to Flanagan (2005) based their exports “on quota rather than manufacturing or design strength”. Asia presented an interesting picture. Large, developed-country exporters in Asia, e.g. Taiwan and Republic of Korea, also experienced a major drop in volumes. But South-East Asian countries either showed export increases or maintained stability. Exports from Cambodia, Bangladesh and Sri Lanka were up, while those from Thailand, Indonesia, the Philippines and Pakistan either showed healthy increases or remained relatively stable. Vietnam’s performance was clearly affected by other regulatory constraints, most of which are no longer relevant due to its subsequent admittance into the WTO. The major surprise was India, with a less-than-spectacular 24 per cent increase in exports.

Low wage rates are often cited as the reason for China’s success. However, while wages in China are very competitive, they are nowhere globally the lowest (Table 9).

Table 9. Clothing manufacturing labour costs in 2008– in US\$ per hour, including social charges

	Country/region	Labour cost (US\$/hour)
Five cheapest labour cost countries internationally	Bangladesh	0.22
	Cambodia	0.33
	Pakistan	0.37
	Vietnam	0.38
	Sri Lanka	0.43
China	China inland	0.55-0.80
	China coastal 2	0.86-0.94
	China coastal 1	1.08

Other selected countries	Egypt	0.83
	Jordan	1.01
	Tunisia	1.68
	South Africa	1.75
	Turkey	2.44
	Brazil	2.57
	Romania	4.03

Source: Jassin O'Rourke Group, LLC, at www.btg.com.bd

There appear to be a number of other reasons for China's success in textiles and clothing: a dexterous, dedicated, coordinated, non-militant; a stable but undervalued currency; diligent investment in new manufacturing technologies; quality and cost of fabric; lead times and services offered to apparel importers or brands; import tariff rates, and the cost of freight also playing an important role. China's dominance was further enhanced by active participation by government in the development process. A combination of low interest, non-repayable loans and cash export incentives, coupled with an undervalued currency gave China a comparative advantage which WTO-compliant countries could not match.

The lynchpin of China's success lies ultimately with its industrial policies. China prioritized unemployment and job creation and structured a development plan aimed solely at achieving this purpose. The plan had four legs: i) identifying labour intensive and mutually beneficial industries (clothing, footwear, luggage and toys) with complementary skills (stitching) and markets; ii) if the industry was export oriented, industries were developed adjacent to a port; iii) skills and people were concentrated to encourage specialization, reinforced through specialised education systems; iv) a critical mass of clothing firms was achieved off the back of which a viable textiles industry was developed and thereafter, in similar fashion, a clothing machine equipment manufacturing industry.

The availability and cost of quotas had a major impact on the sourcing decisions of buyers in developed countries. With the elimination of quotas, other factors will grow in importance and clothing and textiles firms' ability to meet these critical success factors will be the key to their future success (US International Trade Commission, 2004). The United States and the EU are the largest markets for clothing and textiles imports, accounting for more than half of all imports of clothing and more than 20 per cent of world textile imports, but they have very different expectations of their suppliers. Although EU customers require much larger orders and more rigorous quality controls than developing-country firms are exposed to in their domestic markets, United States customers require even larger quantities and demand even more stringent

quality controls. Furthermore, EU buyers' expectations regarding non-production functions undertaken by suppliers are broader (and hence they assist them more) than those of customers in the United States, where modes of doing business are much more exacting and extensive (Gibbon, 2002; Weathers, 2004).

Price no longer the sole determinant

The changing global environment and the buyer-driven characteristic of the international value chain means that although price is the primary determinant, it is no longer the sole determinant of competitiveness (Salinger et al, 1999; Weathers, 2004; Nordas, 2004). Customers have become much more demanding in terms of lead times, quality, reliability and the value of all services provided by the supplier. The ability to be flexible and accurate when responding to customers' needs, as well as having an in-depth understanding of the customer's market and culture has become critically important. Furthermore, developed-country customers have become increasingly concerned with non-production factors such as social compliance and environmental standards. Long-standing relationships with buyers, and communication and transparency with customers have become increasingly important as buyers reduce the number of their suppliers, and quota constraints become less of a problem in respect of where they place their business.

Factors that give countries an advantage

In an assessment of the competitiveness of foreign clothing and textiles suppliers to the US market (US International Trade Commission, 2004), the US International Trade Commission identified seven factors that could potentially provide countries with a competitive advantage.

- a. Business climate and infrastructure: buyers are likely to concentrate on countries that are politically and financially stable, as well as compliant with acceptable labour standards. Infrastructure supporting the buying process (e.g. telecommunications, ease of import and export documentation, test centres) is also critical.
- b. Proximity to markets: reliable delivery and lead times are increasingly important, making it difficult for firms in distant locations to satisfy customer requirements.
- c. Market access: although quotas have been removed, tariffs still remain.
- d. Labour and management: to be competitive a country needs a skilled (or trainable), inexpensive and productive labour force. Low labour costs alone are insufficient. As middle management is tasked with the day-to-day responsibility of maintaining product quality and productivity, upgrading management skills is equally vital.

- e. Raw material inputs: availability of cost-competitive quality fabrics and trim in a country or region is important because it affects production lead times and reliability, as well as the rapid provision of samples before order placement. If fabrics are not available locally, then shipping times and other logistics problems can affect lead times and cost, thus increasing buyer risks.
- f. Level of service provided and reliability of supplier: the buyer-driven nature of the textiles clothing value chain has forced suppliers to be more responsive to buyer demands. As customers begin to reduce the number of suppliers, they are likely to use those which are competitively priced and flexible, offering full-package services.
- g. Domestic demand: the growth in domestic demand in developing countries, particularly in Asia, may result in these countries supplying greater proportions of production to the domestic market.

Need for second-tier suppliers remains

Despite the generally concerning global outlook and the likelihood of buyers sourcing mainly from China, many believe there will always be a need for second-tier suppliers. Although buyers will be consolidating their supply base, diversification among a few main countries is still key as they are likely to spread their risk. Furthermore, Chinese exports of clothing and textiles only account for approximately 29 per cent of total global exports. With a population of 1.3 billion people, China is also the largest potential domestic market in the world (WTO, 2008). Since 1978, its economy has been growing at 10 per cent per annum, doubling its per capita income every seven years. It is becoming one of the most important economies in the world, not just as an export base, but also as a major market itself.

Currently, almost all textiles and clothing trade is with the United States, the EU and Japan, and yet together they represent only about 10 per cent of the world's population. The wealth of their populations, and therefore their ability to buy clothes, is growing at a much slower rate than that of the world's middle-income countries. There are therefore many opportunities in growing middle-income countries where the demand for clothing increases at a much faster rate than economic growth (Flanagan, 2003). In addition, better access to the United States and EU markets after the end of quotas may benefit more than a few selected countries. China does not have the capacity to supply the whole world in the short term. Japan, which currently relies heavily on Chinese imports, has already started to source its imports elsewhere. Although China still accounts for 82 per cent of its clothing imports and 55 per cent of its textile imports, imports from the EU, Indonesia and Vietnam have been growing. The EU accounts for 7 per

cent of Japanese imports in clothing and 11 per cent of imports in textiles. Other significant markets include Vietnam in clothing (accounting for 3 per cent of Japanese imports) and Indonesia in textiles (6 per cent of Japanese imports) (WTO, 2008). Buyers based in the Middle East, Russia and Australia, which currently rely heavily on Chinese imports, may also wish to similarly diversify their orders. While Asia's rise to the top of the world's clothing and textiles industry is therefore unquestioned, the jury is still out as to how much space will be left to other players.

7. AGOA and Sub-Saharan Africa

The Generalised System of Preferences (GSP) programme is GATT-authorized and allows industrialized countries to offer certain non-reciprocal tariff preferences to developing countries. The African Growth and Opportunity Act (AGOA) is a United States programme that builds on the existing GSP programme by expanding duty-free benefits to an additional 1,800 product lines (making 6,000 in all). It originally covered the period from October 2000 to September 2008. On 13 July 2004, the AGOA Acceleration Act of 2004 (AGOA III) was signed into law. AGOA III extends AGOA benefits until 2015. This extension introduced an added measure of predictability and credibility to AGOA and was intended to provide business with greater confidence about investing in Africa. These changes may militate somewhat against the effects of the ATC, providing producers in Africa with a better chance of competing with low-cost producers in the Far East.

There are currently 41 SSA countries that are eligible under AGOA for duty-free exports to the United States. Textiles and clothing are ineligible under both the GSP and AGOA. Although there is a "wearing apparel" provision governed by a separate set of conditions and rules of origin, eligibility for AGOA does not automatically imply eligibility for it. To export clothing duty-free to the United States under AGOA, countries have to have implemented a visa system that ensures compliance with the AGOA rules of origin for clothing. The Africa Investment Incentive Act of 2006 (signed by President Bush on December 20, 2006) amends the textile and apparel portions of AGOA and is referred to as "AGOA IV". AGOA IV provides duty-free and quota-free treatment for eligible apparel articles made in qualifying sub-Saharan African countries through 2015. As of 2008, 26 countries are considered eligible, including South Africa which achieved eligibility on March 7, 2001 (AGOA, 2008).

AGOA's rules of origin stipulate that clothing has to be made from United States fabric, yarn and thread, or from fabric, yarn and thread that is produced in AGOA-beneficiary SSA countries. However, a special rule applies to LDCs (defined as countries that have a GNP per capita of less than \$1,500 in 1998) that allows these countries duty-free access for clothing made from fabric originating anywhere in the world until September 2012. All AGOA-beneficiary SSA countries except South Africa qualify for this rule. (AGOA IV continues to grant lesser-developed beneficiary country status to Botswana and Namibia, qualifying both countries for the Special Rule) (AGOA, 2008). Therefore, while clothing exports to the United States from South Africa require a triple-stage transformation (i.e. yarn to fabric to clothing) in order to qualify for AGOA, all other eligible countries are only subject to a single-stage transformation (i.e. only the garment has to be made locally – imported fabric can be used).

AGOA's effect on the SSA clothing industry

AGOA has had a profound effect on the garment industries in SSA. When it came into effect in 2000, AGOA's aim was to improve the economic conditions on the African continent by giving African-made goods special tariff-free access (under certain conditions) to the US market. It was predicted that there would be a significant increase in non-oil African exports, providing a development boost for industries in countries that desperately need more employment (Mattoo et al, 2002). The effects of AGOA, however, have not been as widespread as they could have been as the AGOA rules of origin are very stringent when compared with those associated with other preferential schemes.

During the 1990s, SSA only increased its global share of clothing output from 0.6 per cent to 0.8 per cent (Economist Intelligence Unit, 2004). In 2001, SSA countries accounted for less than 1 per cent of global exports of clothing and textiles. SSA's main trading partners are the United States and the EU, with US imports from these countries rising by 85.3 per cent between 1999 and 2002, while EU imports dropped by 5.5 per cent (Gibbon, 2002). Clothing and textiles account for 2.5 per cent of total US imports from SSA in 2007 and the vast majority qualified under AGOA (Otexa, 2008). Many smaller, higher-cost, less-developed countries have been provided with valuable opportunities as they have been shielded from open competition (Minor et al, 2002). Preferential trade agreements have allowed SSA to expand its exports. Exports from the region are mainly low-price basic items such as trousers, T-shirts and sweaters that typically have long production runs, low labour content and few styling changes (US International Trade Commission, 2004; Economist Intelligence Unit, 2004). The production and export of clothing and textiles is concentrated in a small number of SSA countries. A disadvantage for SSA is that it is not a particularly low-cost location. Labour costs are relatively

high, productivity is low, lead times are long and non-labour input costs are higher than in Asia. Further disadvantages include poor logistics (notably transport costs and longer lead times), unreliable telecommunication systems and inadequate physical and technical infrastructure.

As Table 10 shows, Lesotho is the largest SSA exporter of clothing to the United States, exporting goods worth US\$387 million in 2007. As a direct result of AGOA, Madagascar's clothing exports to the United States jumped from US\$45.7 million in 1999 to US\$277.1 million in 2007. Because of the impact of AGOA, both Kenya and Swaziland have significantly increased their clothing exports to the United States, and are becoming substantial exporters of clothing. These six countries accounted for US\$1,195 million out of total SSA exports of US\$1,293 million in 2007. In 2007, Mauritius was by far the largest African exporter of clothing to the EU (US\$660 million).

Table 10 Clothing exports from Africa to the US and EU (US\$ million)

	<i>Kenya</i>		<i>Lesotho</i>		<i>Madagascar</i>	
	<i>US</i>	<i>EU</i>	<i>US</i>	<i>EU</i>	<i>US</i>	<i>EU</i>
1990	2.5	2.5	24.5	5.6	0.4	10.8
1991	4.5	6.3	27.0	18.2	0.1	15.1
1992	7.8	17.4	50.8	18.3	0.2	18.5
1993	22.1	10.3	55.1	14.7	1.5	46.3
1994	35.2	7.1	62.4	13.5	2.8	92.6
1995	34.0	6.3	61.7	12.6	6.7	122.0
1996	27.1	3.3	64.9	12.7	11.0	147.7
1997	31.3	2.6	86.5	4.5	15.3	177.1
1998	33.5	2.3	100.2	0.8	22.0	218.0
1999	39.3	2.5	110.7	0.2	45.7	213.9
2000	43.9	1.7	140.1	1.6	109.5	234.6
2001	64.4	1.7	216.7	3.2	178.2	233.3
2002	125.9	1.1	321.0	2.1	89.4	145.6
2003	187.8	1.4	392.4	1.2	195.9	127.9
2004	277.2	3.3	455.9	1.2	323.3	198.2
2005	270.6	3.1	390.7	0.8	277.1	226.1
2006	262.9	1.1	387.0	1.1	238.4	291.2
2007	248.2	1.1	383.5	2.3	289.4	339.6
	<i>Mauritius</i>		<i>South Africa</i>		<i>Swaziland</i>	
	<i>US</i>	<i>EU</i>	<i>US</i>	<i>EU</i>	<i>US</i>	<i>EU</i>
						n.a.
1990	121.2	522.7	0.0	32.3	3.4	n.a.
1991	97.7	536.5	0.7	72.7	5.2	n.a.
1992	113.1	533.9	2.4	73.2	7.1	n.a.
1993	161.2	501.0	12.7	75.5	9.7	n.a.
1994	186.2	518.8	34.7	73.4	15.5	n.a.
1995	190.3	573.3	55.7	66.9	11.7	n.a.
1996	164.7	616.0	60.4	67.1	11.4	0.0
1997	184.4	658.0	70.9	62.3	15.1	0.3
1998	233.3	693.2	78.7	69.4	16.3	0.5
1999	231.6	625.2	96.9	68.3	23.2	0.6
2000	244.7	638.5	140.9	78.6	31.9	1.1
2001	238.3	591.2	173.4	69.0	48.1	0.8
2002	254.4	642.3	180.6	68.7	89.1	0.2
2003	269.0	616.2	231.8	78.0	140.5	0.2
2004	226.4	640.4	141.3	72.4	178.6	1.1
2005	166.6	552.4	67.2	51.8	160.9	0.04
2006	118.8	612.3	46.9	39.5	135.2	0.1
2007	114.6	659.6	23.9	28.7	135.3	0.1

Source: Otxa, Eurostat.

Table 11 AGOA qualifying as share of total clothing exports to US (US\$ million)

Country	2001	%	2004	%	2006	%	2007	%
Lesotho	129.2	60.1	447.6	98.2	384.5	99.3	379.5	98.9
Madagascar	92.1	51.8	314.5	97.3	229.5	96.3	281.4	97.2
Kenya	51.7	80.0	271.5	97.9	257.6	98.0	244.7	98.6
Mauritius	38.9	16.3	147.8	65.3	110.2	92.8	108.7	94.9
Swaziland	8.2	17.1	175.6	98.3	134.5	99.4	134.5	99.5
South Africa	30.4	17.4	114.7	81.2	42.0	89.5	21.5	89.9

Source: US Department of Commerce, Otexa.

It is important to note the distinction between exporting synthetic and cotton textiles and garment products to the United States market through AGOA. Table 12 shows the United States customs duty rates and the then China-United States quota costs. Exports to the United States were protected by two factors – the percentage duty rate (tariff) and the US dollar cost of buying import quotas. With the end of the MFA, the latter disappeared and is no longer an add-on cost to exports from countries such as China. The only defence countries with preferential agreements have is the rate of duty added on to the price by the United States government. For synthetics (sweaters at 32 per cent or men’s suits at 27.3 per cent) this still maintains a substantial rate of protection against cheap exporting competitors.

Table 12 US customs duty rates and China-US quota costs⁶

Item	General 2007 duty %	2003 quota price/dozen
Cotton garments		
Knit men’s shirts	19.7	US\$32.50
Knit T-shirts	16.5	US\$32.50
Woven men’s trousers	10.3	US\$39.00
Woven women’s dresses	8.4	US\$30.50
Synthetic knit/woven garments		
Knit women’s skirts	14.9	US\$35.00
Knit Sweaters	32.0	US\$23.50
Woven men’s suits	27.3	US\$90.00
Woven women’s dresses	16.0	US\$37.00

Sources: General US duty rates: Harmonized tariff schedule; 2003 reference prices for Chinese/US quota www.chinaquota.com

⁶ Our thanks to Peter Gibbon for providing this information.

Textile exports do better than cotton

SSA garment and textile producers will therefore have to be wary of depending on exports of cotton products. Even though AGOA allows for preferential access to such products if the cotton is sourced from Africa, the duty rate providing protection (on average only about 14 per cent with peaks rarely exceeding 20 per cent) may not be substantial enough to protect producers from competitors who are the main beneficiaries of the end of the MFA. The key issue is to be able to develop the cotton-products value chain in order to reap systemic competitive benefits along it. This is especially the case for South African producers who are subject to triple transformation. At present, the bulk of the cotton produced in Sub-Saharan Africa is exported out of the region in an unbeneficiated form.

Zambia and Malawi are cases in point, with almost all of their sizeable cotton production exported. These exports are then converted into fabrics and imported back into SSA as raw materials for clothing manufacturers that are supplying into the United States under AGOA. An important set of conversion stages within the cotton pipeline are therefore being lost to SSA (the manufacture of yarn and fabric). This has to change as of 2015, when AGOA's one-stage conversion provision for SSA countries ends. South Africa is therefore in an ideal position to establish itself as the textiles supply base for Africa, using regional cotton inputs. This would involve establishing a strategic partnership between the South African government, other African governments, the South African cotton-textiles industry and major clothing-producing industries in Africa, including Mauritius, Madagascar, Kenya, Lesotho, Malawi, Ghana and Swaziland.

8. Conclusion

The analysis of the changing dynamics of the clothing and textiles value chains reveals a number of critical issues. The international clothing and textile industries are hyper-competitive. The termination of the MFA, the increasing liberalization of most major consumer markets, the emergence of China as an export behemoth, the increasing discernment of consumers in developed-country markets, the power wielded by buyers in the global clothing and textile value chains, and the importance of global preferential trade access arrangements such as AGOA, clearly illustrate this. However, the future of the clothing and textile industries globally is not set in stone. It is impossible to be sure of the extent to which China will dominate the two sectors. Growing middle-income economies, the need for buyers in the developed countries to spread their purchasing risk and the continued expansion of the global clothing and textiles market all suggest future opportunities for those firms capable of meeting stringent critical competitiveness success factors.

Preferential trade access through AGOA has had a major impact on a significant number of SSA countries. These poor, less-developed countries have managed to develop or even create from scratch their clothing industries, and expand their export output to the United States market through locking them into AGOA-dependent clothing and textiles value chains. This has had a significant impact on employment in countries such as Lesotho, which had little industrial base of any consequence and where waged labour was confined to the ever-shrinking export of migrant labour to the South African gold mines. The impact on employment, and hence poverty reduction, in countries such as Lesotho, Madagascar and Kenya has been significant. The extent to which China and the rest of the Asian clothing producers in the post-MFA environment have reduced these countries' clothing exports is however also significant (Kaplinsky and Morris 2008). If this were to stop, or reverse, these industrializing trends, then the developmental consequences will be severe.

The conclusion in relation to South Africa is more complex. The South African clothing and textile industry is bifurcated and not solely dependent on exporting into global value chains. As a middle-income country it is the only SSA country with a large and significant high-income domestic market⁷. Until recently, protected by an import-substituting industrialization regime, this has been the basis for sustaining a substantial domestic clothing industry, employing well over 100,000 workers with substantial multiplier effects. The impact of a post-MFA world, with the increasing dominance of Chinese and Asian producers in the global clothing and textile value chains, on this middle income country's clothing industry has been even more severe than it is on the rest of Sub-Saharan Africa. The Asian competition has not only jeopardized export markets, but also squeezed South African clothing and textile producers out of their own substantial domestic market (Morris and Einhorn 2008). Policy levers must therefore be directed not only towards export market possibilities, but also towards realigning the domestic value chain in order to ensure competitive access to domestic market opportunities. In much the same way as developed economy clothing and textile producers have needed to create manufacturing capabilities that meet incredibly onerous fast fashion, lean retailing and replenishment retailer requirements as a means to survival, so South African clothing and textiles manufacturers need to substantially upgrade their operational capabilities to secure speed and flexibility that differentiates them from primarily Asian competitors.

Policy conclusions that result from the above analysis

It is clear that preferential trade access (such as AGOA) provides a critically important way for “competitively disadvantaged” less-developed countries to lock into global value chains. For developed-country “preferences” provide these countries an edge in competing with their greatest threats in accessing these markets – i.e. developing-country producers in Asia and China in particular (Kaplinsky, 2005). Such preferential trade access is, at the very least, a necessary condition for further industrialization, employment expansion, poverty reduction and development to occur in many countries in SSA. In this respect, a more refined, preferential trade policy regime would need to also take note of the balance between natural and synthetic products so as to take advantage of the substantial tariff opportunities contained in AGOA.

However, such access has its own built-in limitations, for it cannot be sustainable in the long term if it is simply based on tariff discounting. This ultimately has to go hand in hand with countries being able radically to upgrade their operational performance and ratchet up their competitiveness levels relative to the clothing producers in Asia. If these SSA countries cannot learn to compete on the basis of more than tariff-protected prices, through internalizing the production lessons of manufacturing excellence, substantially ratcheting up their operational performance, upgrading their production capabilities, and meeting the critical success factors demanded by global buyers, then they will ultimately drop out of the global clothing and textiles value chains. They cannot expect to remain competitively disadvantaged and successful. This places a major policy onus on governments and international agencies to provide production capability upgrading assistance to firms (such as firm-level innovation, continuous improvement networks, benchmarking programmes) as well as finance to access technological innovation.

Finally, this may well require SSA to pay more attention to the dynamic development of the downstream cotton, yarn and fabric linkages within the clothing and textiles value chain. In the case of SSA, this requires serious analysis of how to create potential clothing and textile synergies throughout the region – i.e. fostering the existing cotton production in SSA, its conversion into yarn, and expanding the cotton-based textile industry, primarily located in South Africa.

⁷ The South African market for clothing and textiles products was estimated at around R55 billion (approximately \$5.5 billion) in 2008, with over 90% of clothing and textiles production destined for domestic as opposed to export consumption (authors’ own calculations).

References

- African Growth and Opportunity Act (AGOA), 2008, www.agoa.gov
- American Apparel and Footwear Association (AAFA), (2007), “*Trends: An Annual Compilation of Statistical Information on the US Apparel and Footwear Industries: 2006 Edition*”, www.aafa.org.
- American Textile Manufacturers Institute (2003), “The China Threat to World Textile and Clothing Trade”, Washington DC, 202-862-05000/f:202-862-0570 (www.ncto.org/textilecrisis/china.pdf) www.atmi.org.
- Barnes, J. (2004), “An aggregate and sub-sectoral analysis of the South African textiles industries’ value chain competitiveness”, *B & M Analysts Research Report*, for the Textiles Federation of South Africa, 18 October 2004.
- Buck, T. (2004) “Brussels seeks to shield textile industry”, *Financial Times*, London, UK, 1 July 2004.
- Business Day (2004),. “Rand eats holes in export garments”, *Business Day*, 1 April 2004.
- Business Report (2004), “Beware Beijing when it’s freed from quotas cage”, *Business Report*, 8 August 2004 (<http://www.busrep.co.za/index>).
- Commission of the European Communities (2003), “The future of the textiles and clothing sector in the enlarged Europe”, *Commission staff working paper*, Brussels, SEC, p. 1,345.
- De Janquieres, G. (2004), “The textile revolution”, *Financial Times*, London, UK, 19 July 2004.
- Dicken, P. (1998), *Global Shift: Transforming the World Economy*, Paul Chapman, London
- Economist Intelligence Unit (2004), “*Africa consumer goods: Clothing Industry is Shrinking*”, London.
- Economist (2004a.), The, “*A fair exchange?*”, Survey: The World Economy, print edition, 30 September.
- Economist, (2004b), “*The looming revolution*”, from The Economist print edition, 11 November.
- European Commission (2008), “*Textile and Clothing Industry Statistics*”, www.ec.europa.eu
- Eurostat (2008), www.eurostat.ec.europa.eu
- Flanagan, M. (2003), “*Clothing Sourcing in the 21st Century, the 10 lessons so far*”, www.Just-Style.com.
- Flanagan M. (2005), “*Has quota abolition really been so bad?*”, www.just-style.com, 4 July 2005.
- Frontline (2004), “*Is Wal-Mart good for America: An interview with Gary Gereffi*”, www.pbs.org/wgbh/pages/frontline/shows/walmart/, 16 November 2004.

- Gereffi, G., (1999), "International trade and industrial upgrading in the clothing commodity chain", *Journal of International Economics*, Vol. 48: pp. 37-70.
- Gereffi, G., (2001), "Global sourcing and the US clothing industry", *Journal of Textile and Clothing, Technology and Management*, Vol. 2 (1): pp. 1-5.
- Gereffi, G., (2002), "Outsourcing and changing patterns of international competition in the clothing commodity chain", Paper presented at the conference on 'Responding to Globalisation: Societies, Groups and Individuals', Hotel Boulderado, Boulder, Colorado, April 4-7 2002.
- Gereffi, G and Memedovic, O., (2003), "The Global Clothing Value Chain: What Prospects for Upgrading by Developing Countries", UNIDO, Vienna.
- Gibbon, P. (2001), "At the Cutting Edge: UK Clothing Retailers and Global Sourcing", Copenhagen, Centre for Development Research, Working Paper Subseries on Globalisation and Economic Restructuring in Africa No. 14. CDR Working Paper 01.4.
- Gibbon, P. (2002), "At the Cutting Edge? Financialisation and UK Clothing Retailers' Global Sourcing Patterns and Practices", *Competition and Change*, Vol. 63, No. 3, pp 289-308.
- Gibbon, P. (2002), "South Africa and the Global Commodity Chain for Clothing: Export Performance and Constraints", Centre for Development Research, Copenhagen.
- Gibbon, P., (2003a), "AGOA, Lesotho's clothing miracle and the politics of sweatshops", *Review of African Political Economy*, No. 96, pp 315-350.
- Gibbon, P. (2003b), "The African Growth and Opportunity Act and the global commodity chain for clothing", *World Development*, Vol. 31 (11), pp 1,809-1,827.
- Heron, T. (2002), "The US-Caribbean clothing connection and the politics of 'NAFTA parity' ", *Third World Quarterly*, Vol. 23 (4), pp. 753-767
- IFM (2007) "Study on the competitiveness, economic situation and location of production in the textiles and clothing, footwear, leather and furniture industries", Institut Français de la Mode paper, European Commission, Enterprise and Industry Directorate-General.
- Inngs, M. (2005), "SA delays reaction as China gets weaving", *Business Report*, 19 January 2005.
- International Textile Manufacturers Federation (ITMF) (2008), "International Textile Machinery Shipment Statistics", Vol. 28/2005 68, Zurich.
- Jassin O'Rourke Group (2008), accessed at www.btj.com.bd.
- Kaplinsky, R (2005), *Globalisation, Poverty and Inequality: Between a rock and a hard place*, Polity Press, 2005.
- Kaplinsky, R., and Morris, M.L. (2001), "A Handbook for Value Chain Research", Institute of Development Studies, University of Sussex, (www.ids.ac.uk/global).
- London Economics (2008), "The Evolution of the High Volume Retail Sector in Europe in the Last Five Years", Report by London Economics.

- Martin, M. (2007), “*US Clothing and Textile Trade with China and the World: Trends Since the End of Quotas*”, Congressional Research Service Report.
- Mattoo, A., Devesh, R. and Subramanian, A. (2003), “The African Growth and Opportunity Act and its rules of origin: Generosity Undermined?”, *World Bank Policy Research Working Paper 2908*, www.worldbank.org, World Economy, Blackwell Publishing Ltd, copyright. pp.829 – 851.
- Minor, P.J., Velia, M. and Huges, J.K. (2002), “*Assessing the potential for South African clothing exports to the United States and how the DTI and the South African clothing industry could best ensure that this is maximised*”, Research Report to the South African Department of Trade and Industry (DTI).
- National Retail Foundation (2008) “*Top 100 Retailers*”, www.stores.org
- Nathan Associates, (2004), “*Diversification into manmade fibre clothing exports: A strategic option for Madagascar to maximise post 2004 preferential tariff margins*”, Washington D.C.
- Naumann, E. (2004), “Sub-Saharan textile industry awaits quota demise”, *TRALAC newsletter*, 2 November www.tralac.org/scripts/content.php?id=3046
- Nordas, H. K. (2004), “*The global textile and clothing industry post the Agreement on Textiles and Clothing*”, Discussion Paper, World Trade Organisation, Geneva, Switzerland
- Office of Textiles and Apparel (Otexa), US International Trade Commission (2008), www.otexa.ita.doc.gov
- Rantisi, N. (2004), “The ascendance of New York fashion”, *International Journal of Urban and Regional Research*, Vol. 28 (1), pp 86-106.
- Roberts, S. and Thoburn, J. (2002), “Globalisation and the South African textiles industry”, *Globalisation and Poverty*, Discussion Paper 9, Paper prepared as part of the project ‘Globalisation, Production and Poverty’ financed by a research grant from the UK Department for International Development. For more information on the project, see www.gapresearch.org/production/globprodpo.html
- Roberts, S. and Thoburn, J. (2003a), “Adjusting to trade liberalisation: The case of firms in the South African textile sector”, *Journal of African Economies*, Vol. 12 (1): pp. 74-103.
- Robbins, G., Todes, A. and Velia, M. (2004), “*Firms at the crossroads: The Newcastle-Madadeni clothing sector and recommendations on policy responses*”. An initiative of the KZN DEDT and Newcastle Municipality, University of KwaZulu-Natal, School of Development Studies, Research Report no. 61,.
- Salinger, B., Bhorat, H., Flaherty, D.P. and Keswell, M. (1999), “Promoting the competitiveness of textiles and clothing manufacture in South Africa”, *African Economic Policy*, Discussion Paper 32, 1999, United States Agency for International Development Bureau for Africa, Office of Sustainable Development, Washington D.C.
- Taplin et al (2003), “Understanding the labour turnover in a labour intensive industry: Evidence from the British clothing industry”, *Journal of Management Studies*, Vol. 40 (4), pp. 1,021-1,046.

- Textile World Asia (2008), “*Financial Statistics*”, www.textileworldasia.com
- Textiles Intelligence (2008), “*World Textile and Apparel Trade and Production Trends, Edition 1, 2008*”, www.researchandmarkets.com
- Tralac, (2004), “*AGOA info – Resource on the African Growth and Opportunity Act*”, Trade Law Centre for Southern Africa (Tralac), www.tralac.org or www.agoa.info/
- US International Trade Commission (2004), “Textiles and Clothing: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market”, Volume I, Investigation No. 332-448, *USITC Publication 3671*, Washington, D.C., Working/technical paper for the United States International Trade Commission.
- Van Eerden, J. and Fundira, T. (2008), “*South African Quotas on Chinese Clothing and Textiles: 18th Month Economic Review*”, Tralac Working Paper No. 8/ 2008.
- Warburton, R. and Stratton, R. (2002), “Questioning the relentless shift to offshore manufacturing”, *Supply Chain Management: An International Journal*, Vol. 7 (2), pp. 101-108.
- Weathers, N. (2003), “*Marketing strategy to enhance the competitiveness of African clothing firms under the African Growth and Opportunity Act*”, Philadelphia University, research sponsored by the Lindback Foundation, copyright May 2003.
- Weathers, N. (2004), “*African clothing: Marketing globally means acting regionally*”, www.just-style.com,
- World Trade Organization (2008), “*Annual Trade Statistics*”, www.WTO.org.