

Potentially Powerful:

An assessment of the implications of CAFTA-DR for the textile and apparel sector

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Abstract

The US-Central America-Dominican Republic Free Trade Agreement (CAFTA-DR) could not have come at a better time for apparel manufacturers in Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic. Once darlings of the industry, these countries played second fiddle to Mexico through the 1990s, and then watched as apparel exports fell into a period of stagnation in the new millennium. Now quantitative modeling predicts that the textile and apparel sector will be CAFTA-DR's biggest winner – both in terms of output and employment. Unlike past US trade concessions to the region, however, fulfilling the potential of this latest initiative will require significant new investment and a fundamental realignment of the hemispheric fiber-textile-apparel value chain. At the dawn of a quota-free era in global apparel manufacturing, public and private actors in the CAFTA-DR region must understand the task ahead of them and be prepared to make the most of the new agreement.

This report attempts to make sense of the changes that CAFTA-DR will bring to the textile and apparel sector. It also explores ways in which CAFTA-DR will interact with other recent regulatory changes, such as the phase-out of the Multi-Fiber Arrangement. Ultimately, this report assesses the current state of the apparel industry in the CAFTA-DR countries and describes a number of strategies that will return the region to competitiveness. This report assumes that readers are well versed in the history of apparel manufacturing in Latin America and the Caribbean. For reference, however, Appendix A contains a discussion of the ways in which four decades of regulatory change have affected the industry and the region.

This report begins with an analysis of the CAFTA-DR text as it pertains to the textile and apparel sector. Section 1 pays special attention to the importance of regional fabric, which will receive expanded duty-free access under the new free trade agreement (FTA). Section 2 discusses other CAFTA-DR provisions that are important to the textile and apparel sector, such as tariff preference levels and exceptions to the agreement's yarn forward rules of origin. Section 3 explores the evolving needs of US lead firms and underscores the need for Central America and the Dominican Republic to adopt large-scale, integrated, quick-turn fashion production. Section 4 assesses various estimates of the impact of CAFTA-DR on the apparel industry, combining quantitative approaches with data from major American branded manufacturers and retailers. This section also

provides a snapshot of the region's export performance in the quota-free period from January to May 2005. Finally, section 5 concludes with five key recommendations for policymakers.

This report argues that CAFTA-DR has the potential to sustain the current levels of apparel production in Central America and the Dominican Republic, but only if apparel manufacturers capitalize on the new opportunities to develop backward linkages. CAFTA-DR is significant largely because it removes previous regulatory disincentives to develop regional fabric and yarn capacity. The lack of regional fabric was a critical bottleneck that diminished the region's competitiveness, and this node will be key to the region's future success.

In order to compete in a post-quota world, however, the CAFTA-DR countries must also adjust to dual paradigm shifts in American retailing and branded manufacturing. These changes require contract apparel manufacturers to aggregate a larger portion of the value chain and to deliver swifter, more reliable production. The rise of lean retailing in the US and the reorganization of the lead firm as a branding center both offer positive outcomes for development. At present, infrastructure problems, declining demand, and a credit shortage limit the region's ability to take full advantage of these new opportunities. Yet as an analysis of the region's exports reveals, it is crucial that CAFTA-DR countries overcome these obstacles if they wish to resist Asian competition in the apparel categories that form the backbone of the hemispheric industry.

Introduction

The US-Central America-Dominican Republic Free Trade Agreement (CAFTA-DR) came out of negotiations begun in October 2002 with an eye toward jump-starting the FTAA negotiations. Initially the negotiations involved only the US and Central America, but the Dominican Republic was included in the final draft of the agreement, which was signed 28 May 2004. The perceived importance of the deal is significant. An April 2005 survey of 37 major American apparel retailers and manufacturers conducted by the American Apparel and Footwear Association found that 51% would increase production in Central America if CAFTA-DR was ratified in the next six months, while 56% said that they would decrease production in the region if the agreement was not passed during that time (AAFA: 2005).

As it were, CAFTA-DR passed the U.S. House of Representatives on 27 July 2005 by a vote of 217-215 after heavy lobbying by US President George W. Bush. The close vote was somewhat surprising, given that the US has recently made much more generous trade concessions to other countries, like Jordan and the AGOA bloc in Sub-Saharan Africa. Yet CAFTA provoked bitter opposition from the powerful US sugar lobby, as well as several important US textile groups. The US drew last minute concessions to sway dissenting Republicans, including a Nicaraguan commitment to increase its usage of US fabric by as much as 200% (Andrews: 2005). Bush signed CAFTA-DR on 2 August 2005, and once it has been ratified by all parties the agreement will go into effect retroactively from 1 January 2004. This means that all qualifying shipments from that date to the enactment of the agreement will be eligible for a duty refund.

According to several large American apparel manufacturers, CAFTA-DR has the potential to make the region competitive again. A careful examination of the text of the agreement reveals that the key word is potential. Unlike NAFTA, CAFTA-DR does not dramatically reduce duties on the region's originating apparel exports, most of which already receive duty-free access to the US. In this sense, CAFTA-DR is guaranteed to do little more than permanently lock-in the predictable regulatory environment of the 2000 Caribbean Basin Trade Partnership Act (CBTPA), which was set to expire in 2008, and which could have been unilaterally altered or withdrawn by the US at any time. With the exception of new protections for foreign investors, therefore, a firm that was assembling garments from US fabric receives no significant new benefits from CAFTA-DR. CAFTA-DR does offer a few new concessions for niche products, but the bulk of the agreement will only be meaningful if apparel manufacturers develop backward linkages to textiles. It is vital that the potential of this agreement be understood, therefore, and understood as a call to action.

A boon for textiles and apparel

Though CAFTA-DR draws meaningful concessions from Central America and the Dominican Republic in the areas of agriculture and intellectual property, the agreement is a virtually unmitigated boon for the textiles and apparel sector. Central America and the Dominican Republic are too poor to buy significant quantities of US apparel, which will now enter duty-free. Moreover, the large quantities of American textiles that these countries do import already enter duty-free (USITC: 2004b). As such, CAFTA-DR is about leveling the playing field for Central American and Dominican textiles. CAFTA-DR is the largest importer of US fabric in the world, accounting for \$2.61 billion, or 22.5% of US textile product exports in 2004, the majority of which (\$1.96 billion) was fabric (OTEXA). Under the current regulatory framework, apparel assembled in the Caribbean Basin from this fabric qualifies for duty-free access to US markets. As a result of these significant imports of US fabric, about three-quarters of Central American and Dominican Republic apparel exports already entered the US duty-free in 2003, and as a whole these exports faced an average *ad valorem* tax of 5.2% (USITC: 2004b).

The playing field is not level under the current regulatory scheme because Central American and Dominican textiles are afforded only very limited duty-free access to the US market. In that this situation contrasts markedly with the duty-free treatment given to US textiles in the region's export processing zones, it is a significant disincentive to establish textile capacity in the region. Balking at the high cost of US fabric, this regulatory framework has encouraged some regional manufacturers to forego preferential US market access and turn instead to Asian fabric. Indeed, some countries in the region, like Nicaragua and Guatemala, exhibited very low Caribbean Basin Trade Partnership Act (CBTPA) usage rates due to their preference for non-originating inputs. Central American apparel manufacturers of East Asian ownership, in particular, were able to capitalize on transpacific connections to use Taiwanese, Korean, and Chinese fabric. This preference reflected the unfortunate Catch-22 situation created by the pre-CAFTA regulatory scheme: either accept long lead times and lose duty-free treatment to secure cheap fabric, or else pay dearly for originating materials.

With the exception of the new requirements that certain elastic fabrics and pocket linings must now originate, CAFTA-DR essentially preserves the CBTPA system of duty incentives to use yarn forward US fabric. It is, after all, difficult to offer more than duty-free access. As such, a basic assumption inherent in American support for CAFTA-DR is that Caribbean Basin apparel manufacturers need to become more competitive just to sustain the current levels of US fabric imports. Asian apparel producers tend to use a significantly lower percentage of US fabric than do their CBI counterparts, which is why American textile manufacturers tend to prefer the expansion of exports from the latter rather than the former. Part of the basic reasoning behind CAFTA-DR, therefore, was that concessions would have to be made – even concessions that might decrease the incentives to use US fabric – in order to maintain the health of the Caribbean Basin apparel industry. The Bush Administration’s promises of safeguards against Chinese textile imports provided another important incentive for the US textile industry to support CAFTA-DR. The result is a bonanza for Central American and Dominican textiles, which have finally secured the market access that they need to be competitive.

1. Regional Fabric: Past Limitations and Present Opportunities

From the perspective of the textile and apparel sector in Central America and the Dominican Republic, CAFTA-DR's most significant feature is yarn forward duty-free access for all regional textiles. This means that duty-free access will be granted to textiles that were formed in one of the signatory countries, from yarns that were also formed in one of the signatory countries. This is a major change from CBTPA, which allowed only a limited quantity of knit fabrics to qualify for duty-free treatment. These regional knit fabric allowances were divided between a very limiting t-shirt quota and a more generous quota for all other kinds of approved knit apparel (see Appendix B for a summary of recent regulatory changes and Appendix A for a more detailed discussion). Though the Trade Act of 2002 significantly expanded both of these quotas, production of regional fabric t-shirts continued to be seriously constrained by quotas. The development of a Central American textile sector was further limited by CBTPA requirements that regional fabrics be formed from US yarn in order to originate.

CAFTA-DR also lifts previous restrictions on dyeing and finishing fabric in Central America and the Dominican Republic. CBTPA had been vague on the subject of dyeing and finishing US-formed textiles in the Caribbean Basin, and the US Customs Service considered these fabrics to be of US origin. Under the Trade Act of 2002, however, the US ended this practice by stating that textiles had to be formed, dyed and finished in the US in order to be considered US textiles. Under CAFTA-DR, Central American and Dominican firms will once again be able to build a grey stock of US fabric to dye, print, and finish in the region without losing duty-free access. This provision is expected to be widely used, and will facilitate greater speed to market.

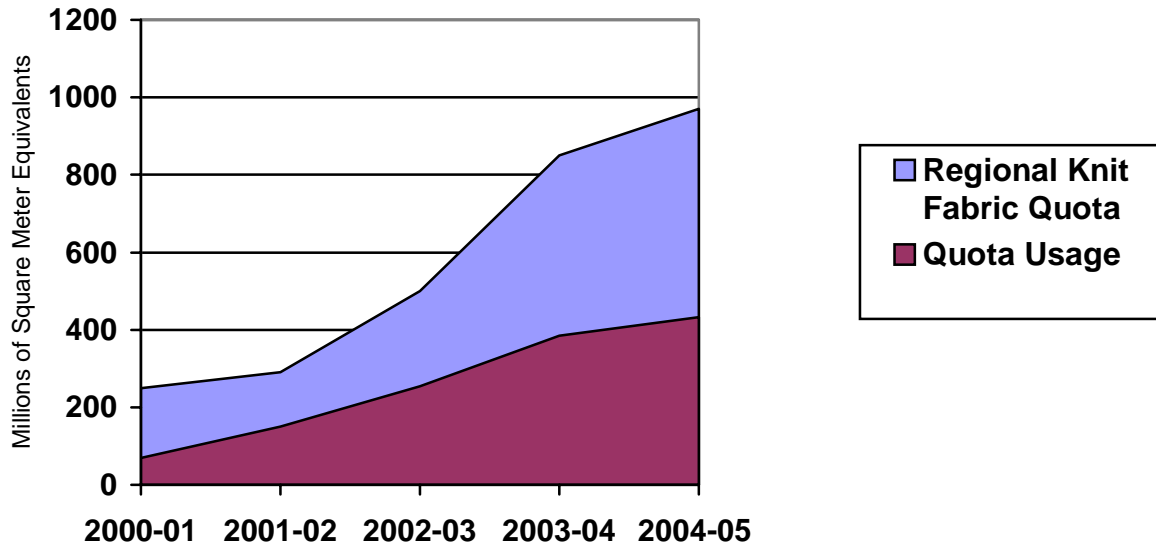
Given the diverse implications of CAFTA-DR's improved access for regional textiles, it is logical to explore this provision in segments. This section begins with a discussion of regional fabric, linking CBTPA-era progress to necessary future developments. This section then covers fiber, yarn, and the importance of grey stocks.

CBTPA and Regional Fabric

Despite the restrictions of CBTPA, Central America and the Dominican Republic successfully used the agreement to capture a new production nodes. The most significant shift was the development of cutting capacity in the Caribbean Basin. Under the previous Super 807/9802 regime, garments needed to be cut in the US from US-formed fabric in order to qualify for duty-free treatment. The implementation of CBTPA removed the duty penalty on Cut, Make, and Trim production, which led it to be touted as "NAFTA parity." The subsequent shift in cutting is adequately captured in steadily declining CBI imports of cut garment parts and increasing imports of uncut fabric in recent years. CBTPA was not limited to cutting, however, and the new regulatory framework rapidly fostered the development of regional textile capacity as well.

As figures 1.1 and 1.2 demonstrate, Caribbean Basin exports of regional knit t-shirts have continually filled rapidly expanding CBTPA quotas. Furthermore, these figures show that exports of other regional knit apparel have expanded more than six fold

Fig 1.1 CAFTA-DR Exports of Apparel Made from Regional Knit Fabrics (Excluding T-shirts)

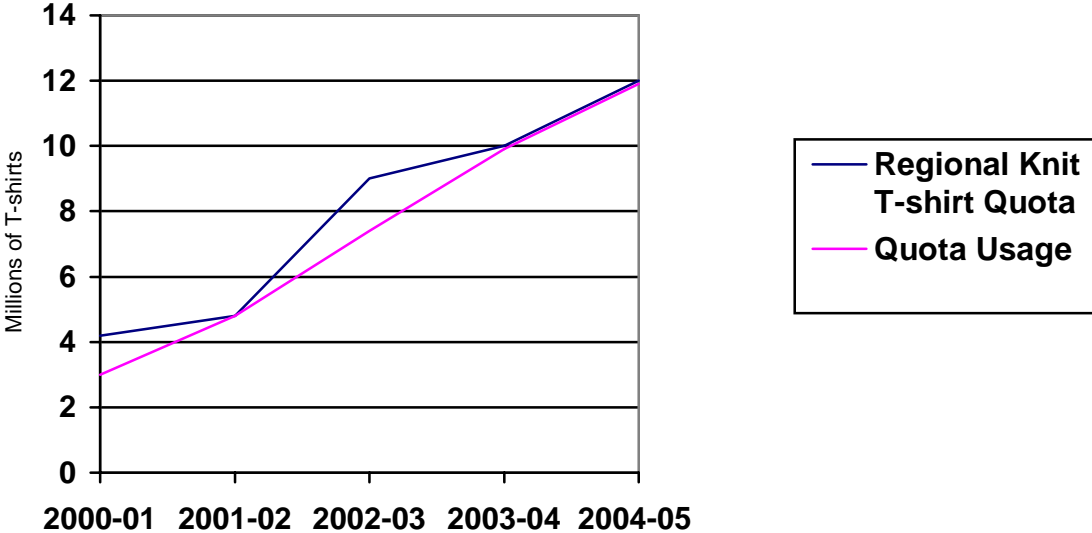


Source: data from OTEXA

over the five years of CBTPA, maintaining a roughly 50% fill rate as quotas expanded. It is striking to note that CAFTA-DR exports of regional knit apparel grew from 69.6 million Square Meter Equivalents (SME) and 3.0 million dozen t-shirts in 2000-01 to 432.4 million SME and 11.9 million dozen t-shirts in the *first nine months* of the 2004-05 period alone (the CBTPA quota year runs October-September). It is also positively staggering that in 2004-05 CAFTA-DR countries filled the CBI t-shirt quota and matched their 2003-04 quota fill rate for other knit apparel before July, given that quotas for these categories expanded 20% and 14%, respectively, year over year. In SME terms, garments assembled from regional fabric accounted for approximately 13% of US textile and apparel imports from the CAFTA-DR countries in 2004 (all data from OTEXA).

Regional knit garments have tended to be manufactured largely in Honduras, and to a lesser extent, in El Salvador as well (see Appendix E). Together these countries accounted for 83% of regional knit t-shirt exports and 77% of other regional knit apparel exports in the October 2004-June 2005 period (all figures from OTEXA). This dominance has been funded by both national and foreign capital, the balance of which varied by country. Stand-alone textile manufacturing companies are common in Honduras and El Salvador, but all CAFTA-DR countries have some textile capacity. Frequently textiles are closely tied to apparel, and many CAFTA-DR apparel manufacturers offer integrated textile manufacturing services as well. This model tends to involve wholly-owned knitting operations, often on-site, which supply a significant minority of the fabric used by the company's CMT operations. The vast majority of regional knit apparel products are believed to be made from cotton due to the fact that no significant manmade fiber capacity was found in the region.

Fig 1.2 CAFTA-DR Exports of Regional Knit T-shirts



Source: data from OTEXA

Despite the remarkable proliferation of regional fabric in recent years, CBTPA limitations have seriously hindered the development of a significant regional textile industry. The exclusion of US fabric dyed or finished in the region contributed to this problem, as did restrictive regional fabric quotas on t-shirts. CBTPA quotas were allocated to the 14 CBTPA members as a whole, and were to be filled on a first come, first serve basis. These quotas operated on a calendar year basis, causing a race to use regional fabric during the first months of each quota year. Due to the lobbying of US and Mexican interests, the regional fabric t-shirt quota was particularly tight and liable to be filled quickly. As a result, manufacturers would use one fabric source for the first six months of the year, and another for the remainder. The following case study illustrates the difficulties of using regional fabric in this unpredictable environment, which forced manufacturers into stop/start production.

Case Study 1: The Limits of CBTPA

Company A is a large, full-package apparel manufacturer in the Dominican Republic. Founded in 1986 as a sewing operation, Company A’s employees control 85% of the firm, while the remainder is held by local investors. In July 2005, the company had 11,000 employees and 18 plants, most of which were located in its own duty-free industrial park. All of Company A’s output is exported to the US, and it works for a number of large US manufacturers and retailers, including Levi Strauss, VF Corporation, Sara Lee, and Wal-Mart. Company A is one of the largest apparel firms in the Dominican Republic, and it marshaled its resources to take full advantage

of CBTPA. The company had initially constructed a wholly-owned knitting mill in Alabama, but shifted its knitting capacity to the Dominican Republic when CBTPA was enacted.

According to its president, Company A began to manufacture textiles because US knit fabric was becoming increasingly scarce. Using US yarn, the company has a knitting capacity of 120,000 kg of knit fabric per week, which is sufficient to meet approximately 25% of its total fabric requirement. In April 2005 Company A was producing 300,000 woven garments and 90,000 pairs of knit underwear per week. The company was also producing 220,000 units of cut and sew knits per week, and this category accounted for the majority of Company A's regional fabric usage. By June 2005, however, the company's cut and sew volume had fallen to 60,000-70,000 units per week because the CBTPA quota for t-shirts had been exhausted. At this time, the company was only producing 45,000-50,000 kg of fabric per month, which was to be used in other knit garments. In June 2005 Company A predicted that the remainder of the quota year would be very difficult for a number of reasons, which included domestic problems. The fabric bottleneck, however, is significant among these problems because it is directly attributable to the existing regulatory framework.

In the May to September period of the past two years, Company A has been forced to either use scarce, expensive US fabric, or forfeit duty-free access to use its own knit fabric. During these periods after the t-shirt quota has been exhausted, the company had historically chosen US fabric, which also restricts its ability to deliver high speed to market by dyeing in the Dominican Republic. Yet by so doing, the company finds it difficult to compete for low-end clients like Wal-Mart, which are happy to take advantage of inexpensive Indian and Chinese knit fabric by shifting production to Asia.

After all, apparel manufacturers in a relatively high-wage country like the Dominican Republic survive by delivering quick turn production with preferential market access; when forced to use US fabric, however, speed is less of a factor and materials costs may outweigh duty savings. Ultimately, American clients, Caribbean Basin apparel manufacturers, and US yarn manufacturers (who must supply the yarn for regional fabrics under CBTPA) are the victims of CBTPA limitations, which protect only a dwindling US knit fabric industry.

Interviews and surveys conducted for this report confirm that Company A's experience is not uncommon. Yet there have been other problems with regional fabric. When asked why they do not use more regional fabric, Central American and Dominican apparel manufacturers overwhelmingly answered that regional fabric is not available in sufficient quantities. The next most common answer was that regional fabric was too expensive. This was followed by US duties and the slowness of regional textile manufacturers. Apparel manufacturers also answered that regional textile mills were unreliable and that they were not able to provide credit. Low quality was also cited as a problem. It is interesting to note that the least selected answer was that the American client does not wish to use regional fabric. An unwillingness to disrupt a good relationship with one's current fabric supplier was also an unpopular answer.

These responses reveal an inefficient textile industry that was not able to meet the standards of export-oriented apparel manufacturers. Slow, unreliable, low-quality mills are the result of minimal foreign investment in textiles in a region that has little experience manufacturing textiles for export. What foreign capacity has been developed in regional textiles has been largely concentrated in integrated apparel manufacturing, whereby it has only been available to local subsidiaries. These responses clearly demonstrate that manufacturers are interested in using regional textiles, but that there has been a limited availability of the standard of textiles that they require. This helps to explain why the Caribbean Basin never came close to filling its quota for knit apparel other than t-shirts. Granted, t-shirts represent a large portion of the region's total knit apparel exports, so there were not many more significant categories of knit apparel to convert to regional fabric. Yet there were also obvious shortcomings to regional fabric that made it difficult to use in more variable and time-sensitive garments like knit trousers.

CAFTA-DR and Regional Fabric

A yarn-forward rule of origin will eliminate much of the uncertainty surrounding textile production in the CAFTA-DR countries. This is particularly important for large, foreign, stand-alone textile manufacturers, which finally have guaranteed market access and the economies of scale that justify production in the region. Knitting production will likely expand in the absence of a t-shirt quota, and foreign firms may develop capacity to produce more complex knits. Woven fabric manufacturers, however, have the greatest range of new opportunities because wovens had been completely excluded from CBTPA. The permanence of the new FTA is an attractive feature for all textile manufacturers because it shields them from the unpredictable regulatory change that was possible under unilateral programs like CBTPA.

Unsurprisingly, CAFTA-DR has attracted the interest of the US textile sector, which was bitterly divided over the agreement. The industry was split over a desire to develop production in Central America. For those textile companies that produce almost exclusively in the US, Central American and Dominican fabric represents new competition at a time when they are already feeling pressure from Asia. For those companies that are willing to invest in the CAFTA-DR countries, however, the new FTA is a tremendous opportunity. By adopting Central America or the Dominican Republic as a manufacturing base, these textile manufacturers can lower both costs and lead times for apparel producers. Moreover, by developing regional fabric capacity, these firms help to ensure the continued viability of apparel manufacturing in the CAFTA-DR countries, thereby sustaining the largest foreign market for their textiles.

CAFTA-DR has spurred a wave of new investment in textile manufacturing in the Caribbean Basin. Textile mills that have recently opened or are under construction run the gamut from knit to woven fabrics, and from American to Asian and domestic ownership. It is also significant to note that many of these projects are not located in Honduras, with its established mills. In the Dominican Republic, for example, Sara Lee is constructing a textile facility and Gildan just opened a mill. In Nicaragua Nien Hsing is proceeding with plans to turn its textile finishing plant into a knitting operation, Sae-a is organizing an integrated textile and apparel giant, and Gildan is considering building a

mill. Similarly, Guatemala has been chosen as the site for Cone Denim's new mill. To be sure, Honduras is still an attractive destination for textile investment, and has already received commitments for \$300 million in knitting and yarn spinning investments for 2006, according to the Honduran Manufacturers Association (AHM).

Though these investments are significant, they are likely only the beginning of a new paradigm based on the use of a significant portion of regional fabric. The following case study illustrates both the emerging standard of a closely integrated value chain and the increasing aggregation of the value chain in the CAFTA-DR countries. This case is particularly important in an analysis of CAFTA-DR because it demonstrates the transfer of two key nodes – yarn spinning and the formation of woven fabrics – from the US to Central America.

Case Study 2: The Textile-Apparel-Retail Triangle

Company A is a major American denim manufacturer. The company owns denim mills in North Carolina, Mexico, and India, and has a commercial venture in Turkey. In July 2005 Company A was producing approximately 150 million linear yards of denim per year and employed approximately 4,000 people. The company reported US\$ 400-500 million in sales in 2004. Company A divides its production between medium and high-end denim, with the latter being manufactured in the US and the former in its international facilities. Most of Company A's denim is used by up-market American brands like Levi Strauss, American Eagle, and Calvin Klein.

Company B is a large Guatemalan full service blue jeans manufacturer. The company exports almost all of its output, and imports 90-95% of its fabric from the US. Company B manufactures blue jeans for major American branded retailers like Tommy Hilfiger, The Gap, Levi Strauss, and Calvin Klein. Production is divided between three plants, all of which are proximate to Guatemala City. The company has formed clusters around these plants by encouraging suppliers of intermediary goods to settle in its industrial parks. Company B produces approximately 600,000-700,000 garments per week, and receives an average of US\$ 11 per garment. The company offers its clients advanced design services, full package manufacturing, and high-fashion finishes, with a focus on quick turn production. Company B employs 18,500 directly, and perhaps several thousand more through dependent suppliers.

Company C is a major American branded apparel retailer that sells a wide variety of apparel products through wholly-owned stores around the world. Company C does not own any apparel factories. Instead, it contracts for production, building long-term relationships with large, full package and full service apparel manufacturers. Apparel manufactured in the Americas accounts for approximately 20% of Company C's total apparel sales, and this figure has decreased slightly over the past five years as its twill bottoms business has shifted to India. The remaining 80% of Company C's apparel sales are chiefly derived from products manufactured in Asia.

Company C continues to source blue jeans, underwear, t-shirts, socks, and some twill pants in the Americas for two reasons. First, the company requires quick turn production for fashion products and to replenish certain commodity products. Second, Company C finds that the landed cost of some apparel products is lowest in the

Americas. Traditionally, Mexico has accounted for 75-80% of the company's production in the Americas, but in 2005 it represented only 60-65%, with a greater emphasis on Guatemala and the Dominican Republic.

Company C is a major client of Company B, which in turn, is a major client of Company A. Company B has pursued an aggressive course of industrial upgrading, and in a decade it has transformed itself from a sewing operation to a full service manufacturer. Full service production means that the firm offers design and product development services and takes charge of every production and logistics node. Currently, Company B's design department works with its counterpart at Company C to translate consumer research and designs into manufacturing processes. Company B then takes charge of sourcing materials and manufacturing the blue jeans.

Recently, Company B began to offer warehousing and on-demand shipping services, and the company now ships specific orders of styles and sizes directly to Company C's stores. In recent years, Company B has nearly ceased to produce basic blue jeans, and instead focuses on high-end fashion blue jeans, a niche that closely aligns with its mid-level manufacturing costs and proximity to the US market. To facilitate this transition, the company has focused on reducing lead times, which currently stand at 4-6 weeks for full package and 3 weeks for Cut, Make, and Trim, including transportation to the US.

Company C has encouraged Company B to move into full service production because cooperation on design reduces both costs and product development times. By continuing to employ world class designers, Company B hopes to eventually reduce product development times from the traditional 10 months to as little as one month. Company B has now acquired product development capabilities that surpass those of Company C in some areas, and it has been a vital component of Company C's efforts to extricate itself from the portion of the value chain that does not pertain to branding and retailing.

Despite its success in attracting intermediary goods manufacturers, such as label and trim companies, fabric continues to be a bottleneck for Company B. Company B sources approximately 40-45% of its fabric from Company A, which amounts to approximately 18 million linear yards per year. Yet this fabric comes from Company A's US mills because CBTPA does not offer duty-free access to garments made from regional woven fabrics. This situation incurs high materials costs relative to Asia, and significant shipping times, which are exasperated by port delays on both ends.

Company A recently announced plans to construct twin denim mills, one south of Shanghai, China, and the other in Guatemala – pending the ratification of the new FTA. CAFTA-DR was important to Company A because it could not justify the \$90 million cost of a mill in Guatemala without duty-free access for woven fabrics. As in China, Company A's Guatemalan strategy involves moving closer to its customers to deliver fabric more quickly, at lower cost, and with greater flexibility. The company's new mills will each produce 29-30 million linear yards per year of the high-end denim that Company A currently manufactures in the US.

Company A's high-end American denim sells for approximately US\$ 3.30 per linear yard, but the company expects to sell that same denim in Guatemala for

approximately 20% less. Company C estimates that Company A's new plant will reduce lead times by 2-3 weeks, incurring further inventory savings. If the Guatemalan plant is successful, it will ultimately cannibalize Company A's US production and lead a shift away from North Carolina. In theory, Company B, which requires 40-45 million linear yards of denim per year, could consume all of Company A's Guatemalan output.

This case is a good example of the tight integration of the value chain in Latin America, whereby major firms have formed a symbiotic relationship between textiles, apparel, and branded retailing. Company C anticipates that it will continue to source approximately 20% of its apparel production in the hemisphere so long as it has partners that are willing to invest in full service production on a significant scale. Like other US apparel firms sourcing in the Americas, Company C has reduced the number of contract manufacturers that it employs by approximately half in the last five years. Company C particularly values large, integrated firms like Company B, which are able to attract regional fabric capacity. Indeed, Company C believes that there must be at least four such blue jeans giants in the region to maintain the viability of its Latin American sourcing department.

The preceding case study illustrates not only the importance of developing textile capacity, but the necessity of so doing. The CAFTA-DR countries have few world class textile firms, but no shortage of foreign suitors. While American textile manufacturers have historical ties to the region, Brazilian, Spanish, Portuguese, Taiwanese, Korean, and Chinese rivals have also expressed interest in using Central America as a manufacturing platform. The region is attractive because none of these countries has duty-free access to the US market. Several of Central America's Korean and Taiwanese apparel manufacturers, which currently import fabric from Asia, are particularly eager to develop integrated regional fabric capabilities. Such investments may extend the tradition of triangle apparel manufacturing that pervaded during the MFA era (see Appendix A for historical analysis). Especially if US textile firms are in too weak a financial position to capitalize on CAFTA-DR investment opportunities, other foreign investors will be vital to the development of a regional textile sector.

The Outlook for Fibers, Yarn, and Dyeing

The new potential of Central American and Dominican textile manufacturing is important to both the US cotton and yarn industries. US cotton, in particular, faces a win-win situation, because it is used widely in regional fabrics. The Caribbean Basin does not cultivate significant quantities of the high-grade cotton needed to manufacture export-quality apparel. As such, under CAFTA-DR it will be forced to import cotton to spin yarn, or import US yarn, which is made from US cotton. Unlike Asian alternatives, US cotton offers the advantage of quick shipping and low transportation costs, which makes it attractive to CBI textile mills. In an era of declining US fabric output, therefore, US cotton interests would rather see an increase in hemispheric, rather than Asian fabric production. If Asian fabric continues to supplant US fabric, US cotton producers lose

their market; on the other hand, US cotton producers are likely to retain much of their market even if CAFTA-DR fabric is substituted for US fabric production.

US yarn manufacturers are in a similar, though slightly less advantageous position. Like the US cotton producers, they prefer regional fabric to Asian alternatives. Yet under CAFTA-DR, regional yarn has the potential to supplant US yarn in regional fabric, and regional dyeing likewise competes with US dyeing. In the case of yarn production, it is likely that Central American and Dominican spinning will be somewhat limited by the region's high energy costs. Electricity is the most significant production expense for a mill, and interviews reveal that electricity costs range from \$US 0.08-0.14 per kW/h in the CAFTA-DR countries, with varying reliability. El Salvador reported the lowest industrial electricity costs, but at \$0.08 per kW/h, electricity was less reliable and more expensive than in the US, where industrial rates average approximately \$0.06 (US Department of Energy: 2005). Large plants consuming more than 1 mW/h of electricity tend to enter co-generational agreements to secure electricity prices as low as \$US 0.07 per kW/h in Central American some countries. Still, Central American and Dominican electricity is expensive, whereas Chinese competitors enjoy somewhat unreliable energy that costs only \$US 0.05 (World Bank: 2005).

The high cost of electricity makes some forms of yarn spinning more attractive than others. Under CBTPA, the region tended to produce ring-spun cotton yarn for use in integrated knitting facilities. Yet significantly less energy is required to spin open-end yarns, which are commonly used in woven fabrics like denim. It is likely, therefore, that open-end yarn production will proliferate in a duty-free era for fabrics like denim. The only problem with woven fabrics like denim, however, is that they are most efficiently produced on a relatively larger scale than knits, and will require larger initial investments. Ring spun production, though a more expensive means of spinning yarn, can be done efficiently on a smaller scale. As such, this method is more suitable to on-site integration within an apparel plant.

The fact that ring spun yarn is currently being produced in the CAFTA-DR countries suggests that the business can be commercially viable, and the integrated yarn spinning model will likely persist. It is also possible that large, stand-alone yarn manufacturers will invest in Central America, and US giant Parkdale is said to be considering such a move. Ultimately, the decision to develop yarn spinning in the CAFTA-DR countries may be driven not so much by unit cost as a combination of unit cost and lead time and transportation cost savings. It seems likely, therefore, that yarn spinning will develop in CAFTA-DR countries where it can be tightly integrated into the textile and apparel value chain.

Regardless of whether yarn is manufactured in the CAFTA-DR countries, it is expected that regional dyeing and finishing will grow significantly as a result of the new FTA. Regional dyeing capacity allows apparel manufacturers to amass a grey stock of undyed fabric and color it as production requires. The grey stock affords apparel manufacturers greater flexibility. If orange shirts are selling well in the US, for example, and a manufacturer must suddenly begin producing orange shirts to replenish dwindling inventories, regional dyeing capacity saves the manufacturer from ordering orange fabric from the US. Similarly, finishing processes, like brushing and polishing, can now be applied in the CAFTA-DR countries. The time savings from regional dyeing and finishing may reduce lead times by 1-2 weeks. Regional fabric manufacturers already

have dye houses, but it is expected that new dyeing and finishing houses will be constructed in Central America and the Dominican Republic to process American yarn and fabric.

2. The Many Sides of CAFTA-DR

The inclusion of Central American textiles in CAFTA-DR is likely the most significant feature of the agreement. This is evidenced by the fact that CAFTA-DR contains only one safeguard clause, which allows the US to block surging imports of regional textiles in the event of market disruption. The fact that CAFTA-DR is a permanent agreement, whereas CBTPA was set to expire in 2008 is also important. Yet CAFTA-DR provides apparel manufacturers with a number of other new benefits, which are largely contained in the rules of origin. Indeed, it is in the nuances of the agreement that one finds many of the opportunities for CAFTA-DR countries to diversify their apparel exports by exploiting niche preferential trade provisions. These provisions tend to offer exceptions to the general yarn forward rule of origin, either by reducing the number of transformations that must take place in a signatory country or by offering an allowance for non-originating inputs. Some of these exceptions are meaningful, while others are not.

Cumulation

CAFTA-DR grants duty-free access to apparel made in the signatory countries from up to 100 million SME of Canadian and Mexican fabric. This cumulation allowance will rise to a maximum of 200 million SME in the second year of the agreement. The cumulation clause, however, is strictly limited. The clause only covers woven fabrics (HTS 62), which are further limited by sub-group, effectively restricting the use of Canadian and Mexican fabric in cotton trousers, denim, and skirts to 65 million SME. Apparel made from cumulating wool fabric is also limited to 1 million SME for the Dominican Republic and 1 million SME for the other five CAFTA-DR countries combined. The cumulation clause is contingent on reciprocity from Canada and Mexico, which must guarantee similar treatment for CAFTA-DR originating apparel. This requirement is somewhat vague, and the cumulation provision will not go into effect retroactively like much of the rest of CAFTA-DR. Some experts wonder if the cumulation allowance is too small to garner the government support that will be required to implement it. Others worry that the small cumulation allowance will not justify the high costs of documenting the origin of the fabric (Nathan Associates: 2004).

Even if the cumulation clause is activated, there is some debate about its importance. The Dominican Republic, which is the largest exporter of woven apparel in the region, is expected to be the chief beneficiary of the clause, and will see a \$148 million rise in apparel exports as a result of cumulation (Nathan Associates: 2004). Taken as a whole, it is estimated that the 100 million SME cap will produce \$410 million in exports from the CAFTA-DR region (Nathan Associates: 2004), and twice that amount once the limit doubles in the second year of the agreement. Other estimates are less optimistic, however, and one major American textile manufacturer believes that the clause will have almost no effect because the cumulation allowance is insignificant.

During the negotiations, the CAFTA-DR countries lobbied for the inclusion of broader tariff preference levels (TPLs) for non-originating third party fabric. It was argued that access to Asian and Mexican fabric, in particular, would boost the competitiveness of CAFTA-DR apparel manufacturing by allowing for more efficient

materials sourcing. The fact that almost no TPLs were granted was a disappointment to many, but it was a positive turn of events from a development perspective. Large TPLs would have diminished the incentive to invest in Central American and Dominican Republic textile manufacturing and would have stifled the integration of fabric production into the regional value chain. FDI in the textile sector has a vital role to play in CAFTA-DR, from technology transfers to worker and firm learning.

Yarn Forward and other Materials Exceptions

Rather than grant TPLs, CAFTA-DR tends to use relaxed rules of origin for certain apparel categories and fabric types. Significant exceptions single transformation requirements for brassieres, woven boxer shorts, woven nightwear and pajamas, woven dresses, and textile luggage. CAFTA-DR allows unlimited quantities of these types of apparel to originate, regardless of the origin of the yarn, so long as the fabric is formed in a signatory country. There is also a fabric forward rule of origin for wool apparel, with the exception of the Dominican Republic, which is subject to a yarn forward standard.

These yarn forward exceptions are of mixed significance. On the one hand, they cover some of the categories in which China has faced safeguard measures. In November 2003, for example, the US invoked the safeguard agreement that was a condition of China's ascension to the WTO, and used it to restrict Chinese brassiere exports to 7.5% annual export growth. Combined with restrictions on Chinese exports, these yarn forward exceptions will likely boost the competitiveness of CAFTA-DR apparel exports in the excepted categories. Nor are the excepted categories irrelevant; CAFTA-DR countries already export significant quantities of woven bras, and noticeable quantities of woven nightwear and dresses.

The importance of some of these new provisions is diminished, however when one considers both the previous CBTPA standard and the US Most Favored Nation (MFN) duty that these apparel categories would face in the absence of any trade preferences. In the case of woven brassieres, which are the most significant excepted category by export volume, the CBTPA already allowed 25% of the value of the finished garment to be non-originating. The importance of the CAFTA-DR exception for brassieres is further diminished when one considers that the US MFN *ad valorem* tariff on woven brassieres is only 0.4%. In the case of woven dresses and pajamas, on the other hand, the CAFTA-DR yarn forward exception is significant because the CBTPA provided no special treatment for these categories and US MFN *ad valorem* duties are 11.7% and 9.0%, respectively.

Other exceptions to the yarn forward standard are contained in an expanded CAFTA-DR Short Supply List (SSL), which denotes those materials that are not manufactured in commercial quantities in the signatory countries. Apparel manufacturers may use non-originating material on the Short Supply List in unlimited quantities without the finished garment losing duty-free status. Whereas the CBTPA used the NAFTA SSL, the CAFTA-DR SSL is longer, and covers 43 different products. Still, almost all of the products on the list are niche goods, and none of the new additions are of any great importance. The CATA-DR SSL is innovative, however, in that it allows for the addition and removal of products within 90 days of a decision regarding the sufficiency of production in signatory countries.

CAFTA-DR also allows unlimited quantities of non-originating findings and trim to be used in originating garments. Under the CBTPA non-originating findings and trim were capped at 25% of the value of the finished garment, so this CAFTA-DR provision will allow more efficient findings and trim sourcing, likely in Asia. There are several exceptions to this provision, including thin elastic waistbands, visible and invisible pocket linings, and sewing thread. Of these exceptions, only the last is particularly significant, and it is a new limitation that was not included in the CBTPA. This restriction may create new incentives for the initiation of thread production in the CAFTA-DR countries. The hardship of requiring thread to originate may be offset, however, by a more generous CAFTA-DR *de minimis* clause, allowing 10% of the weight of an originating garment to be composed of non-originating essential character materials. By comparison, CBTPA rules allowed only 7% of the weight of the finished garment to be composed of non-originating fibers and yarn.

Certainly some of these rules of origin provide important opportunities in some niche markets, and they tend to marginally enhance the competitiveness of most of the region's apparel exports. Taken as a whole, however, the significance of the exceptions for non-originating materials pales by comparison to importance of the inclusion of regional fabric in the CAFTA-DR. Even with the two TPLs, CAFTA's rules of origin exceptions currently apply to less than 10% of the total trade in textiles and apparel between the signatories to the agreement (OTEXA: 2004).

Tariff Preference Levels

CAFTA-DR grants two tariff preference levels, both of which are country-specific. Nicaragua initially negotiated a TPL of 100 million SME of non-originating fabric for the first five years of CAFTA, to be reduced to 0 SME over years six through ten. Under the terms of the TPL, apparel made from this fabric would receive duty-free access to the US market after a single transformation. This TPL proved unacceptable to key members of the US Congress during the last minute negotiations required to secure majority support for CAFTA-DR. Nicaragua's already low usage rates of US fabric raised concerns that this provision would further diminish Nicaraguan demand for American textiles. Ultimately, Nicaragua agreed to increase its use of American fabric by an amount that is unclear at the time of writing in exchange for a 10-year TPL at the full 100 million SME, rather than one that begins to phase-out after 5 years.

The TPL recognizes Nicaragua's extreme poverty – even relative to its neighbors – as well as the nascent state of the Nicaraguan apparel industry. According to Nicaraguan government officials, the TPL will allow Nicaragua to use non-originating Asian fabric to boost its competitiveness. According to these sources, the TPL will fuel the rapid expansion of the Nicaraguan apparel industry so that it will be able to consume more significant quantities of US fabric and become an attractive platform for US textile investments. The 100 million SME TPL is important to Nicaragua at this early stage, given that it exported only 177.2 million SME of apparel to the US in 2004, but its significance will diminish as the Nicaraguan apparel industry grows.

Costa Rica also received a TPL granting it 50% savings on the regular duties levied on 500,000 SME of non-originating tailored wool apparel for the first two years of the agreement. This provision was designed to give flexibility to the country's tailored

suit industry, which is led by American-owned firms like Confeciones Bor Kar. The Costa Rican TPL is subject to review after 18 months. Interestingly, CAFTA was the first US free trade agreement to award no TPLs to some countries (OTEXA: 2004).

Compliance Costs

CAFTA-DR includes provisions that will significantly reduce the costs of complying with the rules of origin governing textile and apparel exports from the signatory countries. Apparel manufacturers and retailers estimated that the cost of complying with the CBTPA rules of origin were significant, representing as much as 4% of the total cost of the garment (USITC: 2004). Extensive documentation had to be provided for every input, and the loss of paperwork for a seemingly insignificant component would result in the entire garment being declared ineligible for duty-free access. With few exceptions CAFTA-DR uses the essential character of the garment to determine its origin, and it is expected that this standard will reduce compliance costs significantly. CAFTA-DR also contains new initiatives to promote electronic customs documentation and improve customs efficiency, which will in turn reduce lead times. According to officials in the Dominican Republic, the goal is to guarantee customs clearance for shipments from the Dominican Republic within 48 hours of their arriving in the US.

Labor Standards

Labor standards were a concern of many CAFTA-DR opponents, especially Democratic Party members of the US Congress. CAFTA-DR requires each nation to meet its obligations as a member of the International Labor Organization (ILO), and enforce its domestic labor laws. Unlike the NAFTA side agreement, however, it does not impose new regulations or meaningful sanctions. In April 2004 it was revealed that the US Department of Labor had suppressed reports by its own consultants, who had found that CAFTA-DR labor standards were inadequate and poorly-enforced. These reports, authored by the International Labor Rights Fund, argued that CAFTA-DR labor standards were in violation of basic ILO regulations. These revelations led critics to contend that CAFTA-DR governments could not be trusted to enforce acceptable labor standards without stronger measures to ensure compliance.

The Department of Labor took issue with its consultants' methodology and has repeatedly maintained that the CAFTA-DR countries adhere to internationally recognized labor standards and are capable of enforcing their own labor laws. US officials were also quick to note that CAFTA-DR is a marked improvement over CBTPA labor provisions, which did not require countries to actually adhere to any internationally-recognized labor standards or to enforce their existing labor laws, just to take steps in the right direction. The administration of US President George W. Bush has declared that CAFTA-DR will incorporate a three-pronged approach to labor standard enforcement and improvement. The first prong will be the CAFTA-DR governments themselves, which will enforce their own labor laws. The second prong was announced in October 2003, when US Trade Representative Robert Zoellick pledged US\$ 7 million in US technical assistance over four years to boost labor standards in CAFTA-DR countries. Collaborating with the ILO

to improve working conditions in the CAFTA-DR countries constitutes the third prong of the Bush administration's strategy.

In spite of these promises, the Bush administration has dramatically underfunded the Department of Labor's Bureau of International Affairs, which is the entity charged with providing the promised technical assistance to CAFTA-DR governments. This has led some to question the Bush administration's commitment to ensuring the enforcement of meaningful labor standards in the CAFTA-DR countries (Elliott: 2004). The Bush Administration has also seemed unwilling to allocate funds to the ILO for any new CAFTA-DR projects, further strengthening the opposition to CAFTA-DR. Nor have private sector initiatives showed much promise, as the Bush administration has advocated only the implementation of Worldwide Apparel Responsible Production (WRAP) guidelines, an industry-sponsored program widely regarded to be grossly inadequate to protect workers' rights.

There is legitimate reason to be concerned about labor standards in the new free trade zone, and action must be taken to guarantee basic ILO labor rights, especially with regard to unionization and working conditions. The export-oriented textile and apparel sector has traditionally offered wages that are significantly higher than the national average. Yet worker abuse, deplorable working conditions, and aggressive anti-union campaigns continue to prevail in the sector and diminish the largely positive impact that it has had on the region.

3. Estimates of the Impact of CAFTA-DR on the Textile and Apparel Sector

Quantitative modeling has frequently failed to properly predict the effects of regulatory changes in the terms of trade. Indeed, many of the early attempts to model NAFTA seem comical with the benefit of more than a decade's hindsight. Unforeseen events like the Mexican peso collapse and the Asian financial crisis uprooted the assumptions that underlay many of these models, and there is no reason to expect that CAFTA-DR's will prove to be any less of a cipher. Nonetheless, it is instructive to consider these attempts at prediction, if not for their precise results, then for the general trends that they identify.

In reviewing a number of different approaches to predicting the outcome of CAFTA-DR for the textile and apparel sector, it is necessary, at the very least, to cover the computable general equilibrium (CGE) models, the rapid replenishment model, and the Partial Equilibrium (PE) model. Despite their differences, these methods tend to yield a common conclusion: CAFTA-DR will sustain or increase the Caribbean Basin's exports of textiles and apparel to the US, and the agreement will boost the number of people that the region employs in this sector. These approaches tend to suggest that the impact of CAFTA-DR will be significant, perhaps even significant enough to offset much of the damage caused by the phase-out of the Multi-Fiber Arrangement.

It is also interesting to consider the assessments of major American branded apparel manufacturers and retailers. These lead firms drive the demand for Central American and Dominican apparel, and despite what quantitative modeling predicts, it will be US corporate strategies that ultimately determine the future of apparel manufacturing in the region. After all, upwards of 95% of the apparel exports of every one of the CAFTA-DR countries is destined for the US. Though this report did not use formal surveying methods, the evidence from interviews with some of America's largest apparel manufacturers and retailers is nonetheless significant. This evidence tends to be less optimistic than the quantitative assessments, and there is a broad consensus that CAFTA-DR countries are unlikely to see a significant increase in their share of the US apparel market.

CGE Analysis

Brown, Kiyota and Stern's application of the Michigan Model of World Production and Trade to CAFTA-DR is, to the best of the author's knowledge, the most highly-regarded CGE analysis of the agreement (see Brown, Kiyota, and Stern: 2004). The Michigan Model considers the interactions between 18 sectors of the economy and incorporates aspects of New Trade Theory, such as product variety and increasing returns to scale. For ease of calculation, the model assumes that trade bilateral barriers are all removed simultaneously and instantaneously, and it ignores the non-trade aspects of CAFTA-DR, such as the agreement's new investor protection provisions. The model also uses aggregate data for the whole of the Caribbean and Central America (CAC), which is taken to be a proxy for the CAFTA-DR region.

The Michigan model predicts that CAFTA-DR will increase US economic welfare by \$17.4 billion (0.17% of GNP), with the vast majority of the gains concentrated in the service sector. CAC economic welfare will rise by \$4.6 billion (3.8% of GNP), while global welfare will rise by \$15.6 billion, even as some countries experience slight trade diversion as a result of the agreement. CAFTA-DR is predicted to have a slight positive impact on employment and output in all US sectors except textiles, wearing apparel, and trade and transport. The US textile sector is expected to lose 3,186 jobs (0.34%), while the US apparel sector will lose 12,320 jobs (1.58%). Overall, the effect of the agreement on US employment is predicted to be negligible. CAC countries, however, will be significantly affected by CAFTA-DR. Employment will decline in all sectors except for leather products and footwear, wearing apparel, and textiles, and output will decrease in most of these sectors. There will be a significant shift in employment from all sectors toward textiles, wearing apparel, and leather products and footwear, resulting in a gain of 47,887 jobs for textiles (26.99%), 225,091 for wearing apparel (43.16%), and 7,915 for leather and footwear (13.07%).

The significant structural shifts predicted by the model will boost CAC textile exports by 53.37% and exports of wearing apparel by 70.19% while increasing textile imports by 25.53% and imports of wearing apparel by 18.06%. These figures are impressive, to be sure, but CAFTA-DR's new investment provisions are expected to boost FDI in the region even beyond what is predicted in this model. Under the terms of chapter 10 of the agreement and annexes I-III, CAFTA-DR establishes a minimum standard of treatment for investments from other signatory countries, guarantees national, nondiscriminatory, and most favored nation treatment for such investments, and establishes an investor-state dispute settlement process. Because Honduras was the only nation to have a bilateral investment treaty with the US, these new provisions are significant, and their impact is difficult to gauge. As such, the authors of the Michigan study contend that their estimates are likely a conservative lower bound for the actual effects of CAFTA-DR.

The United States International Trade Commission (USITC) also undertook a CGE analysis of CAFTA-DR and concluded that the welfare gains are smaller than those predicted by the Michigan model (see USITC: 2004b). US welfare is predicted to increase \$166.3 million (0.00% of GDP), while US GDP will increase \$227.6 million (0.00%). The USITC model predicts that US imports of textile, apparel, and leather products from CAFTA-DR countries will increase by \$3.07 billion or 26.08%. The model also predicts that Central American and Dominican imports of textiles, apparel, and leather products from the US will increase \$802.8 million, or 15.01%. Like the Michigan model, the USITC model predicts a slight decline in US employment in textiles, apparel, and leather products, which is expected to fall by 0.06% as a result of CAFTA-DR.

Proximity Analysis

Advocates of the importance of speed to market take issue with the USITC's modeling, arguing that it fails to capture the replenishment effect. As Abernathy, Volpe, and Weil explain, the USITC model is problematic because it considers apparel at the aggregate level rather than at the commodity level (see Abernathy, Volpe, and Weil:

2004). As a result, the USITC model misses sub-sectors that resist the trends predicted by conventional economic theory. These authors attach special importance to lead times, arguing that the emerging paradigm in American retailing requires a network of proximity manufacturers to replenish increasingly skeletal store inventories. In addition to the conventional factors determining the cost of manufacturing a garment in a certain country, these authors consider a variety of inventory carrying costs that increase in proportion to the lead time required to return an order. These advantages are magnified by preferential trade agreements that tend to favor proximate countries in order to promote regional political stability.

Abernathy et al argue that proximity producers as a whole will benefit from the continued trend toward greater replenishment sourcing in the American retail industry as the acceptance of lean retailing methods continues to expand (Abernathy et al: 1999). Though not stated explicitly, their description of the replenishment effect suggests that the USITC's predictions underestimate the growth of apparel and textiles in the CAFTA-DR countries. Ultimately, these authors believe that hemispheric sourcing is an indispensable and increasingly important competency of US apparel firms.

Partial Equilibrium Analysis

A team from Nathan Associates recently authored a report for USAID on the competitiveness of the Dominican Republic's textile and apparel industries using a Partial Equilibrium (PE) model (see Nathan Associates: 2004). This model predicted that CAFTA-DR would increase apparel exports from the Dominican Republic by 34% in 2005 if in effect for the full calendar year. This model also predicted that CAFTA-DR would support an additional 23,354 apparel and textile jobs once fully enacted. Nonetheless, the model predicts a net decline in textile and apparel employment and output in the Dominican Republic in 2005 due to the phase-out of the MFA and the devaluation of the peso. The authors predict that these two factors could combine to reduce textile and apparel sector employment by approximately 45,000 jobs, or 38% in the absence of CAFTA-DR. With CAFTA-DR, textile and apparel employment would still fall by 25,283 (21%), or 22,533 (19%) with a 10% revaluation of the Chinese RMB. Though MFA phase-out is expected to be particularly difficult for the Dominican Republic because of its high labor costs, the general effects of the regulatory changes examined by Nathan Associates can be generalized to CAFTA-DR as a whole.

The Lead Firm Outlook

Interview data from some of America's largest branded apparel manufacturers and retailers provide a neutral or slightly negative assessment of the prospects for apparel manufacturing in the CAFTA-DR countries. Despite the American ratification of CAFTA-DR, none of these companies believed that they will significantly increase the percentage of their total apparel buy that comes from the CAFTA-DR countries. About half stated that they planned to maintain the current percentages, while the other half believed that they would maintain current volumes, which would represent a diminishing share of their total buy. Irregardless of the type of apparel that these companies source in

the hemisphere, none believed that it could dispense with proximity production, even in the medium term.

All of the major American apparel firms agreed that speed is increasingly important. Yet they also cited Asia's improving transportation infrastructure and the advantage of proximate, inexpensive textiles in China and India. These firms tended to identify a serious fabric bottleneck in the hemisphere as a whole, contending that even US textile manufacturers do not offer the level of customization that they require. Without an answer to Asia's price competitiveness and fabric availability, these companies believed that hemispheric apparel manufacturing will be reduced to a few replenishment commodities.

Interviews also illustrate significant production shifts within the CAFTA-DR region. There was broad consensus that Nicaragua and Guatemala are attractive manufacturing platforms with huge growth potential. Several major American apparel firms planned to shift sourcing, and even plants from Mexico, Costa Rica, and the Dominican Republic to take advantage of opportunities in Nicaragua and Guatemala. These firms believed that Costa Rica, in particular, has effectively priced itself out of the market for all but very high value-added, fashion garments. El Salvador was frequently considered too small to serve as a manufacturing base, while Honduras and the Dominican Republic drew mixed reactions. Despite its experienced manufacturers, the high price of the Dominican peso and other domestic concerns have discouraged investment. Honduras, on the other hand, has been criticized for failing to move away from basic fabric and basic garments, and for the poor state of its banks.

Ultimately, these interviews reveal that large American apparel manufacturers anticipate largely flat or slightly declining demand for CAFTA-DR apparel. Without the FTA, there would have been an exodus from the region, but even with it, these large buyers do not see a hemispheric renaissance.

4. CAFTA-DR Today: in need of a paradigm shift

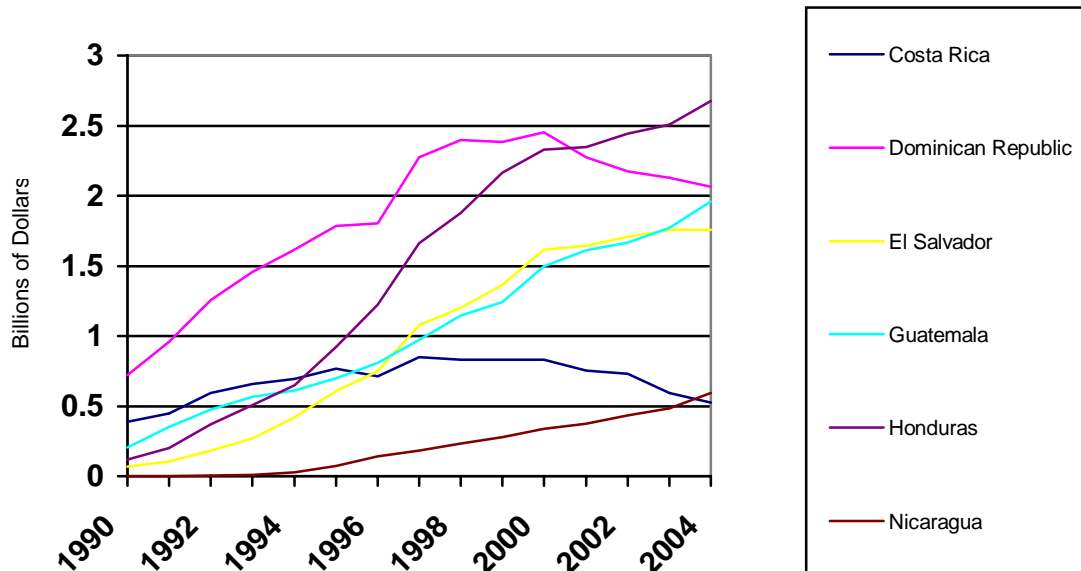
Ultimately, the impact of CAFTA-DR will depend greatly on the degree to which the region's manufacturers keep pace with the demands of their American clients. The recent approval of CAFTA by the US House of Representatives removed the last significant barrier to the enactment of the agreement. Though there will be some delay while other countries complete their ratification processes, it seems all but certain that the CAFTA-DR will enter into force in the near future. This agreement creates tremendous opportunities for the region, but it comes at a time when American clients are more demanding than ever. The continued rise of the lean retailing paradigm puts pressure on the hemisphere to increase the speed of manufacturing. Simultaneously, many American branded manufacturers and retailers are extricating themselves from non-branding activities, and require their contract manufacturers to adopt new production and pre-production nodes. It is worthwhile, therefore, to consider the state of the apparel industry in the CAFTA-DR countries today and the direction it must take to retain its American clients.

More than 95% of apparel exports from each of the CAFTA-DR countries have historically been destined for the US, and CAFTA-DR today holds a significant share of the US apparel market (USITC: 2004). If they were considered as a single country, the six nations that form the CAFTA-DR bloc would have been the single largest source of US apparel imports in 2004. Accounting for \$9.51 billion, or 14.7% of US apparel imports that year, the bloc bested second place China's 13.8% market share. CAFTA-DR was also America's second largest source of combined textile and apparel imports in 2004, representing 11.5% of the market. Despite these headline figures, however, the CAFTA-DR textile and apparel sector has encountered difficulties of late. As discussed in Appendix A, apparel exports to the US grew rapidly until 2001, when they began to stagnate. Within the region, some countries like Honduras, Guatemala, and Nicaragua continued to exhibit strong export growth, but their success has been counterbalanced by a downturn in apparel exports from the Dominican Republic and Costa Rica (please see figure 4.1)

Many attribute the downturn in Costa Rica and the Dominican Republic to those countries' high apparel wages, which are among the highest in the developing world (please see figure 4.2). Certainly this wage differential explains much of the migration of production within the hemisphere from the former leaders in apparel manufacturing to emerging markets. Nonetheless, the CAFTA-DR countries face deeper, and broader problems than high wages, and these challenges threaten to reign in even the region's most stellar apparel exporters. CAFTA-DR has become trapped in a production model that is not sustainable, and a failure to move the regional apparel industry in a new direction will only result in disaster.

The end of the MFA revealed China's apparel dominance, if only briefly before the US imposed safeguard quotas. In that brief span, however, it was clear that China's productive and inexpensive workforce, rapidly expanding infrastructure, improving transportation logistics, and plentiful access to inexpensive fibers and fabric make it a formidable apparel exporter. It will be difficult for the US to unilaterally maintain its China safeguards after 2008, and even in the interim, there are other nations with similar, if somewhat less dramatic comparative advantages in apparel manufacturing.

Fig. 4.1 US Textile and Apparel Imports by CAFTA-DR Country



Source: data from OTEXA

Problematically, these advantages translate well to the very few types of apparel that make up the vast majority of apparel exports from the CAFTA-DR countries. Apparel manufacturing in CAFTA-DR countries has been shaped by successive US preferential trade concessions, and is only now emerging from a rote assembly role. With the exception of a few large companies, backward linkages to the domestic economy remain stunted and the industry remains trapped in the low-value end of several newly-competitive apparel categories. The relatively high cost of labor, energy, and inputs creates an unfavorable climate for apparel manufacturing. The region can overcome this disadvantage, but only by meeting the needs of the modern American client. This will require the development of large, full service apparel firms or clusters with access to

Fig 4.2 Average Apparel Manufacturing Wages by Country

Country	Hourly Labor Cost 2002	Hourly Labor Cost 2004
Bangladesh	0.39	less than 0.30
China	0.68 inland / 0.88 coastal	0.60
India	0.38	0.90
Nicaragua	0.92	0.90
Honduras	1.48	1.29
Guatemala	1.49	1.65
El Salvador	1.58	
Dominican Republic	1.65	1.87
Mexico	2.45	
Costa Rica	2.70	

Source: 2002 data from Jassin-O'Rourke Group 2002
2004 data from O'Rourke, Mary 2004

regional textiles and the ability to develop and manufacture complex garments very quickly.

The Lean Retailing Paradigm

Whereas the hemisphere's contract apparel manufacturers were once limited to sewing garments, two major shifts in the industry have dramatically increased what is expected of them. One of these changes occurred in the retail sector, where firms adopted a lean retailing paradigm to promote greater efficiency. In traditional retailing, a retailer would receive a single, seasonal delivery from a manufacturer, which might be the Fall, or Fall/Winter collection. What sold well might be lightly replenished from the manufacturer's stocks, but generally what sold was gone (a stock-out) and a great deal of unwanted merchandise was left at the end of the season to be sold at large markdowns. Lean retailing was made possible by the UPC tag and database software that could accurately gather point of sale data, allowing retailers to actively measure inventory levels and consumer behavior (see Abernathy et al: 1999). Markdowns and stock-outs could be minimized, therefore, by reducing inventory to the bare minimum that was necessary to fill shelves and instantly reordering those products that had been sold. These new capabilities led retailers to reduce their seasonal stock orders and demand that manufacturers be ready to supply more of whatever sold well.

Manufacturers, in turn, sought to tie production to consumer demand, a feat that required increasingly short lead times. Asian manufacturers cannot attain the standard of flexible quick turn production because slower manufacturing and 4 week shipping times create vast work in progress inventories that must be discarded to switch styles. Manufacturers have therefore been faced with a choice: produce enormous volumes of each style very cheaply and long before the season in a distant factory, or pay more to manufacture clothing closer to the market and allow production to trace consumer demand with a minimal lag. This choice requires an estimation of markdowns rates to clear unwanted inventory, where the savings from distant production will be either greater or lesser than the cost of avoiding markdowns by using rapid replenishment production.

As more retailers have gone lean, and the lean retailers have become more demanding – a weekly Sunday night replenishment is now fairly common among major retailers – the balance has shifted toward quick turn production for a growing variety of products. Sometimes the initial order will be placed in Asia, but it will be smaller than stock orders once were, and replenishment production in the hemisphere will be enlisted for the rest of the program. Frequently small initial orders of a number of styles will be placed in the hemisphere, followed by a series of additional orders to replenish popular styles. Yet replenishment is not the only driver of quick turn production. High-fashion concepts that capitalize on unplanned apparel trends also require high speed to market, and sometimes replenishment as well.

The Rise of Full Service Production

In addition to the need for swifter manufacturing, contract apparel manufacturers have also been pressured to take charge of a growing portion of the value chain. This second phenomenon reflects a fundamental reorientation of the lead firms that drive the chain. Many of the largest American branded apparel manufacturers and branded apparel retailers are exiting all production, product development, and logistics nodes. These American companies have chosen to focus on branding activities, such as marketing, consumer research, and either retailing or managing retail channels.

There are several reasons for this shift. By locating a growing portion of the value chain in low-wage countries, American branded apparel manufacturers and retailers reduce costs. The cost of employing a skilled finish designer in the US might be US\$ 75,000 per year, for example, but by shifting finishing design to Guatemala, similarly skilled labor might be hired for only US\$ 10,000. Aggregating the value chain at the manufacturing site also has speed advantages. Develop on site capabilities eliminate the need for a design to go back and forth between an American client and a contract manufacturer several times during the pre-production stage. Style variations and production design are also faster, and local product development capabilities allow for greater responsiveness to fashion trends.

Companies like JC Penney, Gap Inc., and Levi Strauss remain lead firms and continue to drive value chains, but they have chosen to focus on the increasingly distinct node of branding. These companies require full service partners, which source their own materials and provide design and development services, because they are increasingly unable to occupy these product development nodes themselves. This reality has led American lead firms to use fewer contractors and favor large manufacturers, which offer greater reliability, lower prices, and more integrated services, like warehousing with shipping on demand and direct-to-store shipping. Even US branded apparel manufacturers like Jones Apparel, Sara Lee Branded Apparel, and VF Corporation, which have their own Latin American factories, are adopting these new standards for contract manufacturers.

The following case study illustrates the effect that these two changes have had on the hemispheric apparel industry.

Case Study 3: Full Service Blue Jeans

Company A is a major American blue jeans manufacturer. Company A does not own any factories and contracts with local manufacturers to produce approximately 155 million garments per year. Latin America and the Caribbean account for approximately 55-60% of Company A's total volume, though this figure is declining. In 2005 Company A sourced 90 million units in the Americas, but expects that it will source only 80 million units in this region in each of the next 3 years. Most of the company's remaining production is located in Asia, and business is shifting in that direction. The company finds that manufacturing costs are competitive in the Americas and lead times are excellent; the problem is fabric. The CAFTA-DR countries have no high-end denim production, which forces the company to choose between expensive US fabric and paying import duties on Brazilian fabric. In the

post-MFA era, Company A has been sourcing apparel closer to the Asian mills, where fabric savings average \$US 0.75 per linear yard., or about US\$ 1 per pair of jeans. The company requires a significant amount of quick turn production, which will remain in the hemisphere; beyond that bare minimum, however, the tide is turning away from the Americas.

In the 12 months ending August 2005, Company A sourced 20-25 million garments in Mexico, down from 30 million in recent years. Though Mexico has significant denim capacity, the country is losing orders because its mills are unable to replicate the ten types of specialized denim that Company A requires to manufacture its core products. These mills also have difficulty developing their own fabric styles. The bulk of Company A's remaining hemispheric production is located in Guatemala, Honduras, and the Dominican Republic, with additional production in Colombia, Costa Rica, and Brazil. Brazil is very attractive because of the proficiency of its fashion blue jeans manufacturers and its world class textile mills.

If not for duty limitations, Company A would source most of its quick turn volume in Brazil and Colombia, where apparel manufacturers work closely with local textile mills. Duty-free access to the US market, however, makes the Caribbean Basin a better option. The CAFTA-DR countries are also gaining on Mexico because manufacturing costs are approximately 10-15% lower, and lead times actually tend to be shorter – 31 days manufacturing time in Guatemala and the Dominican Republic instead of 41 days in Southern Mexico.

Yet low-cost manufacturing and short lead times are not the only requirements of a major American lead firm like Company A. In the past year, Company A has ceased to work with any manufacturer that cannot offer full-package services, meaning that the manufacturer must finance the purchase of the fabric. Company A has also pressured all of its hemispheric partners to acquire product development capabilities. As in Case Study 2, a design team from Company A will visit large Central American and Dominican contractors to design the next season's collection on-site. Regional manufacturers must have an experienced design staff, therefore, with knowledge of both manufacturing processes and US fashions.

Almost all of Company A's contract manufacturers are large firms with more than 5,000 employees. Indeed, Company A has reduced the number of hemispheric contractors it uses from 35 in 2000 to 18 in 2005, while maintaining a relatively constant production volume. Those firms still working for Company A, therefore, tend to be big, full-service manufacturers, with fashion and quick turn capabilities. These manufacturers can easily accommodate the added volume and are able to finance the purchase of materials.

This case study illustrates the new standard for apparel manufacturing in the hemisphere, and it demonstrates that the standard is a moving target. Company A's will soon require its contractors to have access to regional fabric, and like the American branded apparel manufacturer in Case Study 2, it is encouraging its contract manufacturers to form joint ventures and alliances with textile manufacturers. This is the true potential of CAFTA-DR, according to Company A, and if Central America and the Dominican Republic can produce world class quick turn manufacturers, the company's hemispheric buy will stabilize as a percentage of total production volume.

There are certain kinds of apparel that lend themselves to quick turn production (see Abernathy et al: 1999), and combined with duty-free access to the US market, these items could sustain apparel manufacturing in the CAFTA-DR countries. These quick turn items tend to be varied in some way, such as color or finishing, that makes speed important. Yet several experts believed that in order for Caribbean Basin manufacturing to be competitive, lead times for landed goods (in-factory time plus shipping time) would quickly need to fall below 30 days, as compared to the current standard of 45 days (Rosenberg: 2005). The goal of 3 week in-factory time can be achieved by integrating production or developing integrated clusters, and by building strong backward linkages to local suppliers of intermediary inputs. New flexible production and inventory management techniques must be implemented, and significant funds will need to be invested in infrastructure improvements.

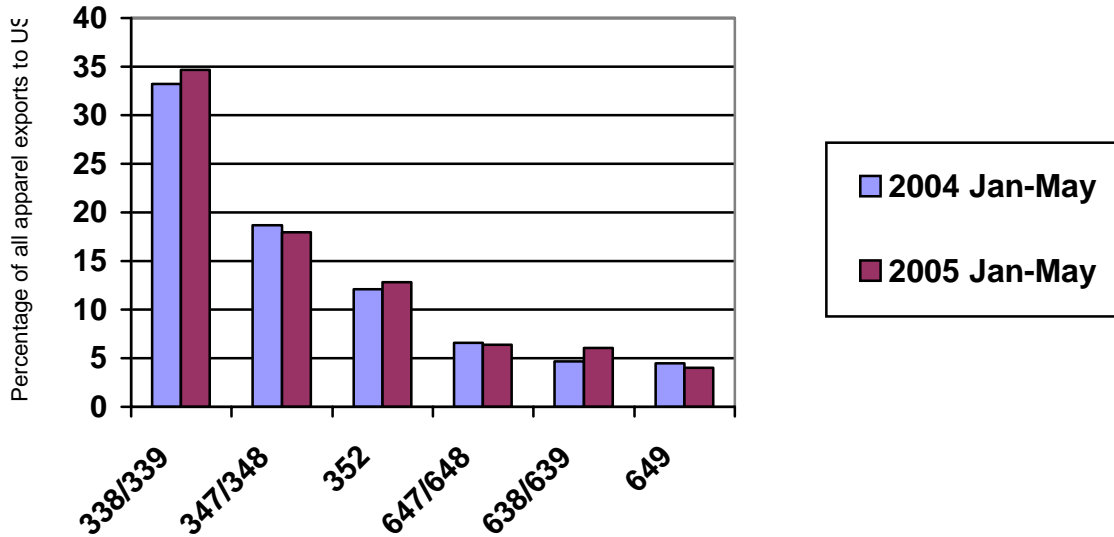
CAFTA-DR is important because it facilitates quick turn production in the region by securing expanded access for regional fabric. Yet apparel manufacturers must do more than develop backward linkages to textiles. They must adapt to the new needs of their American clients by offering more comprehensive services. Moreover, they must do so in a post-MFA environment where the region's preferential access to the US market is of diminished importance. In the absence of MFA quotas, Central America is no longer a vital leg in triangle manufacturing, and it will face the additional challenge of diminished Asian interest. After all, apparel assembled in Central America never qualified for preferential duties, and as such, it seems likely that integrated Asian textile and apparel manufacturers will shift apparel production closer to their domestic mills.

Public and private actors must understand that the industry has changed radically, and small, unsophisticated apparel firms will die quickly in this new environment. In order to maintain a viable apparel industry, the region must cultivate large firms and encourage them to offer an expanding array of services. Experts believe that the CAFTA-DR countries will be able to overcome high electricity prices and serious infrastructure gaps. Yet these experts also believe that a chronic regional shortage of credit limits the pace of change, especially for firms without access to foreign lenders. Textile mills are increasingly unable to offer credit to buyers, factoring lenders charge a 5% premium, and national banks lend at exorbitant rates. It will, therefore, be difficult to implement the necessary changes in the textile and apparel sector without the assistance external entities.

Concentrated and Vulnerable

If the CAFTA-DR countries fail to meet the new needs of their American clients, the results will be disastrous. The region's apparel production is highly concentrated in a few categories that had been protected by the MFA until this year. Without the MFA, therefore, almost all of Central America and the Dominican Republic's apparel exports are vulnerable. This vulnerability has been heightened over the past decade as the region has trended toward higher export concentration in manmade fiber and cotton knit shirts (HTS 638/639/338/339), manmade fiber and cotton trousers (647/48/347/48), and cotton underwear (352) (please see figure 4.3). These top 5 categories accounted for 77.8% of US apparel imports from CAFTA-DR in 2004 - high for a large apparel exporter, though

Fig 4.3 Leading US Apparel Imports from CAFTA-DR by HTS Category



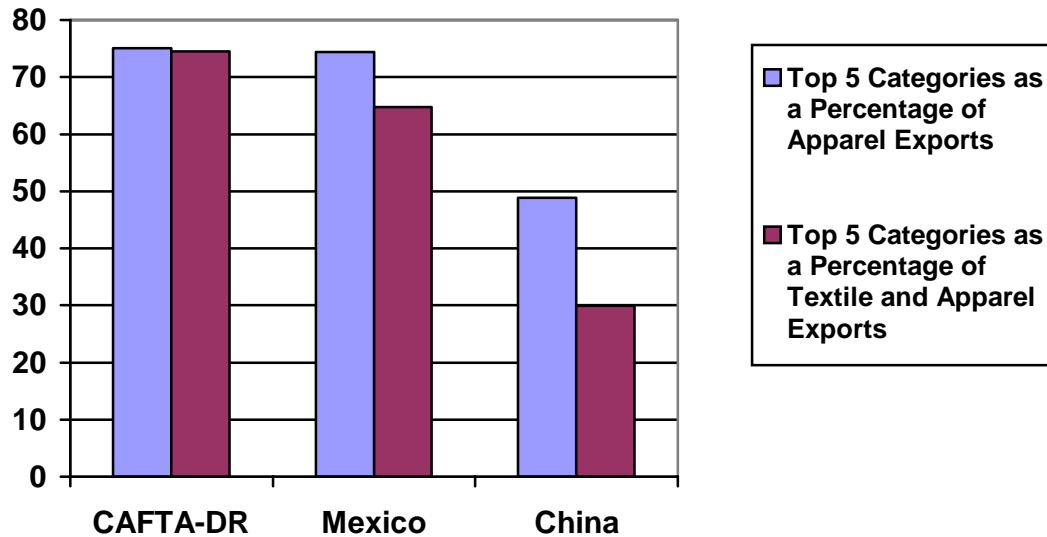
Source: calculated from OTEXA data

only slightly higher than Mexico. The difference, however, is that Mexico exports significant quantities of yarns, fabrics, and made-ups, which accounted for \$1.11 billion, or 14.2% of its total textile and apparel exports to the US in 2004. Thus, while the top 5 HTS categories may account for 75.1% of Mexican apparel exports to the US, they account for only 64.4% of the country's textile and apparel exports to the US. Apparel exports accounted for 99.3% of CAFTA-DR's combined textile and apparel exports to the US in 2004, so the top 5 apparel categories were still a very significant 77.3% of total textile and apparel exports to the US (all HTS data from OTEXA).

Compared with major apparel exporters that were constrained by quotas, however, even Mexico lacks diversity. Quotas forced countries with a comparative advantage in apparel manufacturing to distribute their production across a wide range of apparel categories. These countries had an incentive to diversify their apparel exports because they needed to maximize quota usage. The top 5 HTS categories of China's 2004 apparel exports to the US, for example, represented only 48.9% of the country's total apparel exports to the US, and just 30.0% of textile and apparel exports to the US (OTEXA). With regard to China's total exports (the US accounted for only 10.2% of Chinese textile and apparel exports in 2004), the top 5 HS apparel categories (which are much broader than HTS categories) accounted for only 65.6% of apparel exports, and only 40.5% of textile and apparel exports (all HS data from GTAN).

With the removal of quotas, it seems likely that formerly quota-constrained countries will reverse past diversification efforts and concentrate their apparel exports more heavily in the categories where they are most competitive. During the first 5 months of 2004, for example, China's top 5 apparel HTS categories accounted for 31.3% of textile and apparel exports to the US. Yet in the first 5 months of 2005, during which

Fig. 4.4 Top 5 HTS Categories as a Percentage of Exports to the US



Source: calculated from OTEXA data

time China was not restricted by quotas, those same 5 apparel categories accounted for 33.1% of the total. Even after this increase, however, China's apparel exports to the US, of which the top 5 categories accounted for 49.2% in the first 5 months of 2005, are still far less concentrated than the apparel exports of countries that did not face MFA quotas (please see figure 4.4).

The loss of a sheltered market for CAFTA-DR's key exports is a serious problem because there is strong evidence that formerly quota-constrained countries are well positioned to seize market share. Prior to the phase-out of the MFA, Asian competitors exhibited high quota utilization rates in CAFTA-DR's top categories, and were limited in the quantities that they could produce. In the case of cotton shirts and trousers, for example 14 of America's top 15 suppliers exhibited quota usage rates in excess of 80% - the threshold at which embargoes are frequently imposed - in every year since 1997 (Birnbaum: 2003). These high quota usage rates forced US importers to source production from less efficient manufacturers in countries where quota was available. This sort of quota pressure also created an incentive for constrained exporters to maximize the value of their quota by producing higher-value items. With the phase-out of the MFA, both the need to distribute production so widely and the need to focus on high-end apparel disappeared.

On the face of things, CBI prices seem very competitive in some of its major apparel categories. In cotton knit shirts, for example, landed costs in the Honduras, Nicaragua, and El Salvador are significantly below world average prices, and Guatemalan prices are approximately in-line with the world average. Likewise, the CBI is competitive in cotton trousers, where average landed prices are below the world price. Yet the fact that the quota-free CBI countries are consistently able to offer lower prices

than Asian rivals even as those rivals fill their quotas suggests that the CBI's apparent cost advantage is mostly explained by its low value-added goods (Birnbaum: 2003). In other words, the CBI is able to compete in its top five categories because it has specialized in producing more basic garments than its rivals. Indeed, the CBI region excels at producing long runs of low value-added apparel, with little need for skilled labor, quick turnaround times, or seasonal changes.

With regard to labor-intensive fashion garments, major American apparel manufacturers said that the landed cost of Asian apparel is 5-30% lower than that of similar goods from Central America. This estimate compares the cost of manufacturing a pair of fashion jeans in both areas, for example, and it avoids the problem of comparing a pair of Asian fashion jeans with Central American basic jeans.

The problem for the CAFTA-DR countries is that Asia is increasingly entering the basic clothing market with many of the advantages that have allowed it to succeed in high-end production. MFA quotas had previously limited Asian apparel exports in unit terms, not value terms, giving Asian manufacturers an incentive to produce higher value garments. If the price of quota was US\$ 1 per unit, for instance, that cost would have represented 20% of the cost of a \$US 5 basic garment or only 10% of the cost of a \$US 10 fashion garment. Labor intensive fashion garments further capitalized on Asia's low labor costs. Yet with the elimination of MFA quotas, Asia can play both the high and low ends of the market without incurring penalties.

According to interviews, Asia's relatively lower wages and energy costs are mostly offset by lower productivity labor, higher transportation costs, and US duties. The region's main advantage is in textiles, and the advantage is two fold: first, Asian textiles are very inexpensive, and second, regional access to textiles eliminates the need for apparel manufacturers to build fabric inventories. Asian-owned Central American apparel manufacturers tend to take advantage of inexpensive Asian fabric, which is often supplied by a parent company. The correlation between high concentrations of Asian-owned apparel factories in Nicaragua and Guatemala and dependence on Asian fabric is captured in these countries' low CBTPA usage rates (see Appendix C). Yet this model incurs high transportation costs and long lead times, making it incompatible with a quota-free world. During the MFA era, Asian apparel firms needed a hemispheric base to secure US market access; in the absence of quotas, however, they have no reason to ship fabric such great distances for assembly.

Clearly, therefore, CAFTA-DR apparel manufacturers need regional fabric to compete with Asia. Implementing full service production will also be important because it will differentiate hemispheric production. Yet apparel manufacturers in the CAFTA-DR countries must do more to fully capitalize on their strengths. Full service quick turn production capabilities are useless if the product does not require them. With regard to product selection, however, the choices are far from clear. Some authors have suggested that the CAFTA-DR countries need to diversify to minimize risk and exploit duty preferences by developing capacity in America's most heavily protected apparel categories (Nathan Associates: 2004). Yet this first strategy would undermine the formation of the specialized, world class full service clusters that American clients demand. As products diversify within categories, there is value to diverse regional capacity in a single garment to ensure that hemispheric production is able to meet the needs of the American client.

With regard to the second strategy, it is true that US Most Favored Nation duties are significantly higher on some garments than on others. The *ad valorem* US MFN duties on woven cotton trousers are 16.6% and 28.3% on man-made woven fiber, which suggests that the CAFTA-DR countries duty-free access affords them broader margins in the latter category (Nathan Associates: 2004). Yet to build an apparel industry around these preferential duties is to remain vulnerable to America's unilateral modifications to its tariff schedule. Rather than languish in temporary and illusory competitiveness, Central America and the Dominican Republic should focus on products where proximity and high-value added manufacturing are assets, regardless of the provisions of the US Harmonized Tariff Schedule.

In this case, the CAFTA-DR countries should not diversify from t-shirts, jeans, and underwear. Rather, they must change the kinds of t-shirts, jeans, and underwear that they are manufacturing. There is little value added by manufacturing a pair of basic white cotton underwear quickly. Beyond preferential duties, therefore, there is little difference between sourcing that underwear in Central America or in Asia beyond preferential duties. As such, sourcing decisions for such an item will be made on the basis of landed cost calculations alone. On the other hand, if chartreuse underwear with green lace is in fashion at the moment, speed to market may be required to capitalize on fleeting consumer demand. The same principal can be applied to screened t-shirts, intricately finished blue jeans, and a wide range of other garments. The region's future lies in high value, high speed, highly customized apparel, and it needs to build these capacities within the apparel categories where it is already strong. If it fails to do so, however, its concentration in these categories will be its downfall.

Apparel manufacturers in CAFTA-DR countries must understand that their survival, even in the near term, hinges upon adaptation. The coming years will be difficult because WTO regulations will limit the subsidies that apparel manufacturers enjoy in free trade zones. This change will do away with many of the tax concessions that export-oriented manufacturers receive in the wealthier CAFTA-DR countries. This challenge, like the MFA phase-out and the evolving needs of American clients, can best be met by developing backward linkages, moving to higher value apparel products, and commanding a much larger portion of the value chain. All of these solutions further the economic development of the region, and if enacted, they may prove to be the silver lining to the present turmoil.

A Snapshot of Export Performance in 2005

2005 has been a tumultuous year for the global apparel industry as quotas have fallen, only to be selectively re-imposed. In the year to date, the CAFTA-DR countries have fared better than many had predicted, but they have slipped on a number of key indicators. It is particularly relevant to consider the first five months of 2005 because the US did not limit imports from China during this period, making it a decent, if somewhat imperfect proxy for a true post-quota world. During the first five months of the year, US apparel imports from CAFTA-DR were \$3.77 billion, an increase of 4.85% over the same period in 2004 (OTEXA). On the surface, these results seem positive.

The evidence from American apparel executives, however, demonstrates that there is little cause for celebration. Several executives remark that they have maintained

their programs in CAFTA-DR because they are bound by significant sunk costs in plants and equipment. Others comment that the shift away from the region was spread out over the years leading up to the MFA phase-out. Overwhelmingly, there is a feeling that the regulatory environment is still too uncertain to allocate production efficiently, and it is currently necessary to retain inefficient programs in countries with guaranteed access to the American market. As safeguards continue to be imposed on China, therefore, American lead firms are loathe to put all their eggs in one basket. Yet if production in the CAFTA-DR countries is dependent on an uncertain regulatory environment – or even on safeguards – then it is sure to be short lived. The region’s precarious position is further evidenced by what the recent AAFA survey identified as a percentage of apparel executives who were willing to move production elsewhere if CAFTA-DR had not passed.

Despite first appearances, the trade outcomes of the first five months of 2005 tend to support this pessimistic view. Apparel exports for the 12 months ending May 2005 were \$9.75 billion, an increase of 7.07% over the 12 months through May 2004. Yet by comparison to the first five months of 2005, this figure indicates that growth has slowed in 2005. Furthermore, CAFTA-DR’s exports to the US did not grow quickly enough to prevent it from losing market share as American apparel imports have surged 11.14% in the year to date. Nor was textile and apparel growth distributed evenly among the CAFTA-DR countries. Whereas US apparel imports from Nicaragua grew 35.55% in the year to date, growth in imports from Guatemala and Honduras was less spectacular at 5.67% and 5.24%, respectively. US apparel imports from the Dominican Republic expanded only 1.2% in the first five months of 2005, and 0.54% from El Salvador. US apparel imports from Costa Rica actually fell by 3.95%. Within the CAFTA-DR region, therefore, there seem to be winners and losers emerging, with Nicaragua performing well and more established exporters like the Dominican Republic lagging.

Employment figures reflect a similar picture. Though no current figures exist, government officials maintain that Nicaragua enjoyed strong growth in apparel employment during the first half of 2005. Guatemala and Honduras saw a slight expansion of apparel employment during the first half of 2005. In the case of Honduras, the AHM found that apparel sector employment grew by 3,000 jobs over the first 9 months of 2005, reaching 133,000. According to government officials, El Salvador lost 5,000 apparel jobs during the first 6 months of 2005 to stand at 90,000. According to its National Export Council (RACSA), Costa Rica has already lost most of its apparel manufacturers, and apparel employment remained constant at 15,000 during the first half of the year. The Dominican Republic, plagued by a high currency and spiraling salaries, lost 30,000 apparel jobs in the year to date ended June 2005, leaving 90,000. Caribbean Basin apparel industry employment figures are always imprecise, and Appendix D contains other estimates for reference.

In the year to date period, CAFTA-DR apparel exports continued the trend toward increased concentration in a few key HTS categories. The top 5 categories (cotton and manmade fiber pants and shirts and cotton underwear) accounted for 77.8% of total apparel exports to the US, as compared to 75.2% in the first five months of 2004 and 75.1% in the 2004 calendar year. With the recent re-imposition of quotas on Chinese exports in all five of CAFTA-DR’s most important apparel categories, there is reason to believe that the trend toward higher levels of concentration will continue, especially as

niche exports continue to face strong competition in categories where China has not yet been restrained. CAFTA-DR cotton nightwear exports, for example, are down 53.96% in the year to date.

Thus far, CAFTA-DR's particular winners have included manmade fiber knit shirts men/boys (HTS 638), which expanded 56.1%, and cotton knit blouses women/girls (HTS 339), which grew 14.1%. Exports of cotton trousers (HTS 347/8) remained roughly the same, as did manmade fiber shirts (338/9), while cotton underwear (352) grew 11.3%. In all of the CAFTA countries, apparel continued to be one of the top two export industries, frequently representing more than half of national exports.

A Time for Change

Change in the hemispheric apparel industry has historically been driven by regulatory change, which has been abundant in 2005. Though the uncertainty surrounding Chinese imports has worked in the Caribbean Basin's favor, the close battle over CAFTA-DR led many investment decisions to be delayed until the agreement was ratified. If the effects of past regulatory shifts are any indication, however, there is the potential for real and meaningful change in the CAFTA-DR period. At the dawn of this era, there is much to be done. Yet there is evidence that the message is being received, and Central America, in particular, is seeing tremendous interest from foreign textile manufacturers. It will now take a broad coalition to ensure that apparel manufacturers have the tools they need to implement the full range of changes that are required, and to overcome technological, financial, and skill deficiencies as they reorganize for success.

5. Recommendations

Enacting the following five recommendations should be the top priority of both private and public actors in Central America and the Dominican Republic. Though not a comprehensive solution, these are the most urgent priorities.

1) Go big or go home. American apparel manufacturers are trying to decrease the number of contractors they use. Only the biggest factories will be able to meet their need for high volume production and comprehensive services. Governments must terminate programs designed to help small and medium apparel manufacturers. Instead, they should develop new credit subsidies and tax concessions that target the largest full service apparel firms. Credit is particularly important because apparel firms are increasingly unable to get short-term loans from textile mills and they pay significant premiums to factoring lenders to finance machinery purchases. Government credit subsidies can solve this problem while encouraging full service production and the development of backward linkages to textiles.

2) Access to local textiles is a deal-breaker. The use of Asian or US fabric in Central America and the Dominican Republic is no longer satisfactory. Full inclusion of regional fabric in CAFTA-DR is the most important feature of the new FTA because savings from reduced lead times and cheaper regional fabric are enough to keep the industry from leaving the region. US mills have liquidity problems, which may render them unable to fully capitalize on this new opportunity. Though Brazilian and Asian mills may partially fill the gap, any government that wishes to preserve its apparel industry must provide special subsidies specifically designed to encourage textile investment. As in Asia, successful textile industries will support prosperous apparel industries.

3) Integrated manufacturing will be the future of apparel production in the region. Flexible manufacturers can no longer afford to transport intermediary goods from far-flung suppliers. Developing integrated production through wholly-owned subsidiaries is one option, as is clustering. This latter option recognizes that it may be inefficient for even a large apparel manufacturer to be self-sufficient in the production of fabric, trim, labels, and thread. Though they are unlikely to survive as full service providers, Small and Medium Enterprises (SME) can succeed in this kind of cluster environment by supplying intermediary goods to a large full service manufacturer. Efficient clustering requires geographic proximity, and governments must provide incentives for the construction of full service industrial parks. Where applicable, governments must also modernize Value Added Tax regimes (VAT) to avoid penalizing clusters by taxing the purveyors of intermediary goods.

4) Ports and customs are a dangerous bottleneck. As lead times are squeezed, Central American and Dominican ports need to work 24 hours a day, 7 days a week to clear congestion and move goods more quickly. The time required to clear customs on both sides of the journey is unacceptable, especially for non-originating materials. This problem could be remedied by streamlining exit and entry procedures for companies that ship roughly the same order every day. Shipping reports would not be required for each

container and inspections would be less frequent for companies with demonstrated shipping patterns. Commercial ports of entry need better visa processing centers and consular centers to swiftly resolve personnel and merchandise disruptions. In the longer term, the CAFTA-DR countries should also consider a customs union, especially if they continue to import significant quantities of Asian fabric.

5) Infrastructure continues to be a problem in the region. The construction of new ports (especially in El Salvador and Nicaragua) and new power plants is a positive development. Nonetheless, energy and hydro costs remain very high, discouraging the establishment of certain textile operations and impeding the growth of the sector in general. Roads are a severe infrastructure problem, and key Honduran roads to Puerto Cortez (used by Nicaragua and El Salvador as well) are not satisfactory. Dry canals are an excellent remedy to this sort of problem. Better security infrastructure is also required to prevent theft, hijackings of trucks, and personal insecurity.

Appendix A

Textile and Apparel Manufacturing in the Caribbean Basin: A value chain two decades in the making

The organization of apparel manufacturing in the Americas has long been shaped by the regulatory framework imposed by the United States. This was not always the case, and through the middle of the 20th century many countries in the region developed small-scale domestic textile and apparel industries to satisfy national demand. Yet the influence of the United States grew when these industries ceased to focus on their domestic markets and turned instead to their neighbor to the north, which offered a consumer base unparalleled both in size and affluence. US textile and apparel imports have been tightly controlled since the 1960s, and market access has accordingly been granted with certain conditions. After an initial period of increasing protectionism, the 1980s saw the US begin to offer unilateral trade concessions to hemispheric allies, using strict rules of origin to control the disaggregation of the value chain. This evolving regulatory framework, more than any other factor, has dictated the structure of apparel manufacturing – and for many years precluded the development of textile manufacturing – in Mexico and the Caribbean Basin.

America's first systematic attempts to protect its textile and apparel sector came in direct response to the rising tide of apparel imports from a newly industrializing Asia. As first Japan, and then the Big Asian Three of Hong Kong, Taiwan, and South Korea rapidly expanded their light manufacturing capacities, American apparel manufacturers were increasingly forced to compete for their own market. Some American manufacturers opted to outsource production to take advantage of cost savings in Asia, but the majority lobbied for import controls. The American textile industry was similarly concerned by Asia's emerging textile manufacturing capacity, which was replacing American fabric in the lower end of the apparel market. The result was the Short-Term Agreement on International Trade in Cotton Textiles (STA) of 1961, which was succeeded by the Long-Term Agreement (LTA) the following year. These protectionist measures proved inadequate however, because they were restricted to cotton goods, leading to a boom in manmade fiber apparel exports from the developing world.

In response, US President Richard Nixon enlisted the support of the European Community to establish the Arrangement Regarding Trade in Textiles, more commonly known as the Multi-Fiber Arrangement (MFA). Implemented in 1974, this agreement provided a framework for bilateral negotiations between members of the GATT. This framework effectively allowed apparel importers like the US to impose strict quotas on apparel imports from Less Developed Countries (LDCs). In successive four year agreements (MFAs I-IV) developed countries further restricted garment imports from LDCs, slowing the growth of quotas and instituting a system of consultation calls. This latter measure allowed countries to block surging imports in a particular category from a particular country if the higher import levels threatened the domestic garment industry. Throughout the 1970s and the early 1980s the coalition of US labor, textiles, and apparel continued to support these intensifying protectionist measures.

Changing their tune

Problematically, however, all three members of the protectionist coalition continued to suffer setbacks from harsh foreign competition. By the early 1980s, many US apparel manufacturers were convinced that protectionism could not save them, blaming the high cost of American labor for their troubles. Indeed, imported garments had doubled their share of the American market from 1975-84, rising from 12% to 24% with no sign of slowing (Gereffi and Memedovic: 2003). America's solution to this problem advocated export-led development in Caribbean LDCs as a means of securing sufficiently inexpensive assembly labor to renew the competitiveness of the American textile and apparel sector. This production sharing strategy called for the alteration of the Caribbean Basin Economic Recovery Act (CBERA), which was the trade component of the 1983 Caribbean Basin Initiative (CBI), to relax quota restrictions on the re-importation of garments that had been assembled abroad from American components. The CBERA was initially used to encourage trade in winter fruits and vegetables, among other non-traditional exports, but it had also imposed tough quota restrictions on apparel exports from Caribbean countries. At the time, the American textile industry supported these limitations, but many manufacturers soon came to view CBI expansion as a way to boost declining demand.

Quotas imposed on US apparel imports from the Caribbean Basin under the terms of the MFA had become unpopular because they limited the ability of American manufacturers and retailers to take advantage of section 807.00 of the U.S. Tariff Schedule (USTS 807). Under this 1963 statute, goods that were assembled abroad from American-made components were subject to duty only on the foreign value-added, and not the full value of the good. By the 1980s USTS 807 was commonly being applied to apparel assembly, but the restrictive quotas on US apparel imports from the CBI made it impossible to fully capitalize on the potential of USTS 807 production in the Caribbean and Central America.

US President Ronald Reagan saw export-led apparel production as a starting point for both economic and democratic development in the Caribbean Basin, not to mention a way for the region to earn hard currency to repay its mounting foreign debts. Rather than ease the MFA quotas on apparel imports from the CBI, Reagan used the CBERA framework to create a new quota regime that imposed stricter rules of origin than USTS 807, but allowed for greater market access. Tying trade to the rhetoric of freedom, politically correct Caribbean Basin countries were invited to negotiate Special Access Programs (SAPs), which gave them virtually unlimited levels of the new quotas. Like 807 imports, SAP quotas only required duty to be paid on the foreign value added. In order to qualify for SAP quota access, however, apparel had to be assembled from fabric formed and cut in the US. This new initiative greatly expanded market access for CBI apparel and soon became known as the Super 807 regime, or 807 A.

The SAPs marked the beginning of preferential treatment for apparel exports from CBI countries (see Appendix B for an outline of evolving trade preferences). This development was also the first of a series of unilateral trade concessions that used rules of origin to circumscribe the portion of the value chain to which CBI manufacturers had access. It is tempting to view this regulatory change as a milestone along the road to freer trade. Certainly, it was a striking contrast to the increasingly formidable barriers

that the US was then erecting to restrict apparel exports from other LDCs. Yet the CBI paid a price for increased market access. Whereas the 807 regime allowed goods to be assembled from US “components” – meaning fabric cut in the US – the SAPs required that apparel be assembled from fabric that was both cut and formed in the US. The SAP thus provided for the development of a certain kind of apparel industry – one confined entirely to apparel assembly and limited in its ability to source inputs competitively. In typical carrot and stick fashion, the US ensured that it would be costly to deviate from this model by raising the tariffs on apparel assembled in the region that did not meet the SAP conditions.

Illusory competitiveness

This regulatory structure led, as economist Michael Mortimore writes, to the emergence of the Caribbean Basin’s “illusory competitiveness” (Mortimore: 2003). CBI apparel manufacturers were confined to a small portion of the value chain because every production node up to the sewing stage needed to be located in the US for the finished goods to receive preferential duties. Firms were limited, therefore, only to the upstream linkages between assembly and transportation logistics. Initially, it was uncommon to see CBI firms performing anything more than assembly operations; later some firms developed finishing services and began to offer quality control, inventory management, and logistics coordination. Yet the SAP model made it prohibitively difficult for CBI firms to mimic their Asian and Mexican counterparts in becoming “full-package” manufacturers that occupy every node from product design to transportation logistics and finance the purchase of their own materials.

Manufacturing fabric, or even cutting it in the Caribbean Basin, though it might augment the competitiveness of the manufacturer, was to forego significant trade preferences under the terms of the SAPs. On the other hand, 70% of the labor in a garment assembled in the Caribbean Basin under the terms of an SAP was still American, as was an even larger share of the value (Rosen: 2002). This, therefore, was Mortimore’s illusory competitiveness. The success of CBI apparel exports was not based on any sort of real comparative advantage, nor could the CBI firms endeavor to develop one because they were limited in their ability to select the lowest-cost inputs and minimize manufacturing costs by fully substituting CBI labor for US labor.

With access to a domestic textile manufacturer and the freedom to source inputs efficiently, perhaps a full-package CBI firm would have competed with Asia on an even playing field. Yet this was not the kind of firm envisioned by the SAPs, which were designed to harness CBI assembly labor while keeping the higher value-added portion of the chain in the US. The SAPs were to arm the American textile and apparel sector for battle with Asia’s low-cost workforce, after all, not to transplant the sector in the Caribbean Basin.

Thus the initial round of American unilateral trade concessions limited the CBI manufacturers’ ability to pursue industrial upgrading, and virtually prohibited the region from developing backward linkages to domestic industry, which helps to explain the relative weakness of the Caribbean basin in textile manufacturing. Restricted to a small, low value-added portion of the value chain, the Caribbean Basin received little in the way of technology transfers, and contractors had few opportunities to learn from foreign lead

firms. Driven by the scale of American demand, “maquilas”, or assembly operations soon replaced the old integrated apparel firms that had produced for the domestic market. The industry that emerged was wholly dependent on the regulatory structure that justified its existence – a far cry from the kind of industrial development that had lifted Asia’s Newly Industrialized Economies in the preceding decades.

Export success and a new challenger

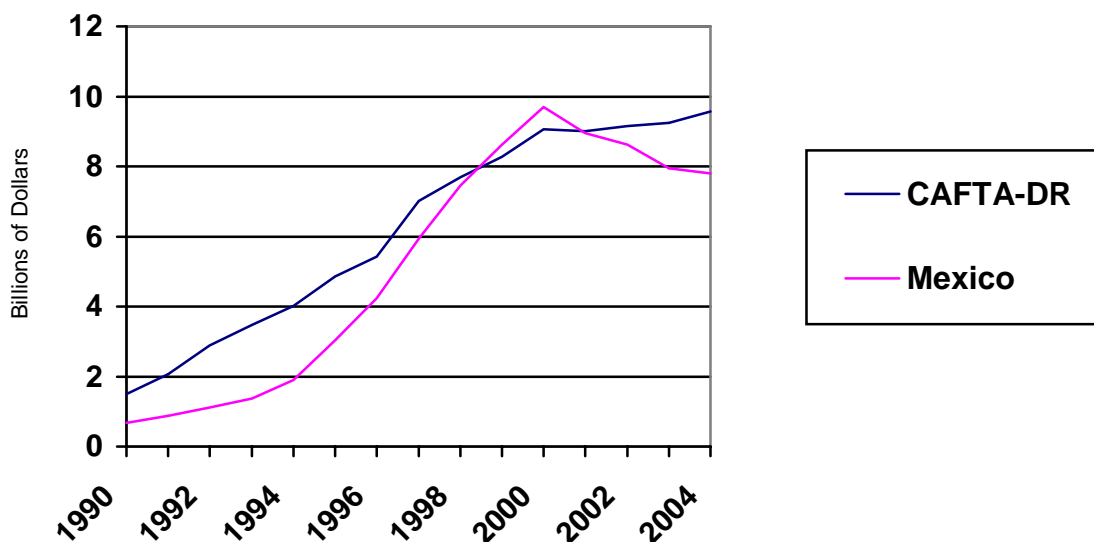
The Special Access Programs were well designed to promote their desired ends. American garment imports from the Caribbean Basin boomed, expanding 584% in the decade after the CBI went into effect (please see figure 1.1A), and the American textile industry enjoyed a renaissance (Rosen: 2002). Mexico joined the rising tide in 1988 when the US implemented the Special Regime (SR), granting Mexico automatic and unlimited quotas for any USTS 807 A apparel exports. Mexico’s apparel exports to the US surged, ushering in an era when the growth of US garment imports from Latin America and the Caribbean far outpaced the growth of garment imports from Asia, which were still limited by MFA quotas (Birnbaum: 2003).

It was in this atmosphere that Mexican President Carlos Salinas proposed the agreement that would become the North American Free Trade Accord (NAFTA). Despite the fact that NAFTA offered significantly more generous trade preferences than the SAPs, it eventually enjoyed the support of US apparel manufacturers and much of the US textile industry. NAFTA was a permanent agreement that could not be withdrawn unilaterally by the US, unlike the SPAs. Furthermore, Mexican apparel would be allowed to enter the US completely duty free after the initial phase-in period, whereas the 807 A regime would continue to levy duties on the foreign value added. Perhaps more importantly from a development standpoint, the rules of origin were relaxed to allow apparel made from fabric cut and formed in Mexico to enter the US duty-free.

Needless to say, NAFTA allowed Mexico to capture new production nodes without losing preferential access, and the new duty savings increased its competitiveness. Mexico was poised to offer both full-package manufacturing services and to develop backward linkages to textiles. With this broader range of production activities, the amount of firm learning was expected to be greater than in the Caribbean Basin, as was the potential for technology transfers. Mexican labor was already cheap in the early 1990s, and Mexico’s export competitiveness was further augmented by the 60% devaluation of the Mexican peso from 1994-95.

Mexico’s apparel industry had lagged far behind that of the Caribbean Basin during the 1980s, but it experienced extraordinary growth in the years after the signing of NAFTA. US imports of Mexican apparel grew 935% from 1991-2000, rising from \$840 million to 8.7 billion (UN Statistics Division). Mexico’s apparel export profile is remarkably similar to that of the CBI, and Mexico competes with the CBI for American orders. Mexico’s top apparel export, for example, is cotton trousers, which accounted for 36.2% of apparel exports to the US by 2000 (UN Statistics Division). Cotton trousers are also an important CBI export and rank second only to knit shirts. Notably, Mexico received significant foreign direct investment in textiles after NAFTA went into effect, largely from American textile manufacturers, but from some Asian firms as well.

Fig 1.1A US Textile and Apparel Imports from CAFTA-DR and Mexico



Source: data from OTEXA.

These projects yielded mixed results, their survival in part jeopardized by the Asian financial crisis and a wave of bankruptcies that swept through the US textile industry. The Asian financial crisis was particularly hard on the emerging Mexican textile industry because Asian currency devaluations flooded world markets with cheap textiles, often erasing the duty advantage of using NAFTA fabric. Despite these obstacles, Mexico developed a significant domestic textile industry that continues to be well connected to the country's export-oriented apparel manufacturers. In Torreon, Mexico, the blue jeans capital of the world, for example, fully 24% of the denim used by the largest 10 firms in 2004 was of Mexican origin, up from less than 5% in the late 1990s (Rosenberg: 2005).

Though the original Caribbean Basin Economic Recovery Act of 1983 was due to expire in 1995, the passage of the Caribbean Basin Economic Recovery Expansion Act (CBBERA) in 1990, extended CBERA provisions indefinitely. Yet CBBERA did little more than extend the provisions granted in 1983, and it seemed hollow by comparison to NAFTA, which was signed into law three years later. As such, the passage of NAFTA sparked demands from the Caribbean Basin for parity, with proponents arguing that CBI apparel manufacturing would no longer be competitive without it (Leon and Salazar-Xirinachs: 2001). Though this case was slightly exaggerated, growth in Mexican apparel exports did outpace that of the Caribbean Basin throughout much of the 1990s, and by the end of the decade, Mexico was America's largest supplier of apparel (UN Statistics Division). Nonetheless, Caribbean Basin apparel exports continued to grow over the 1990s, if only at slightly less spectacular rates. Though unable to match Mexico's 935% rise, US imports of apparel from the CAFTA-DR countries still rose 340% from 1991-2000, eventually surpassing Mexico in 2002 (OTEXA).

A return to political stability saw the emergence of new Central American countries as major apparel exporters in the 1990s. Stalwarts like the Dominican Republic

and Costa Rica suddenly had to contend with competition not just from Mexico, but from Honduras, Nicaragua, Guatemala, and El Salvador, as well. Honduras and Nicaragua enjoyed particularly strong growth, the former accelerating through the mid 90s while the latter picked up steam at the end of the decade. These new players exhibited significantly higher levels of Asian investment, particularly from Korea and Taiwan. The basic model of apparel manufacturing encouraged by the CBI was one of production sharing, where much of the value chain remains in the country of the lead firm. Yet many of these new Asian investors saw Central America as a prime base for triangle manufacturing and were interested in quota access and low wages more than preferential duties. These Asian investors specialized in taking orders from American branded manufacturers, manufacturing the goods in another country using imported Asian fabric, and then shipping the finished goods directly to the US from the country of manufacture to take advantage of that country's quotas (Gereffi and Memedovic: 2003). As such, these emerging Central American apparel exporters exhibited more integrated full-package production and lower usage rates of preferential duties (USITC: 2004, please see Appendix C).

A new trade deal, but not parity

In 2000 the Caribbean Basin secured a new unilateral trade deal from the US called the Caribbean Basin Trade Partnership Act (CBTPA). As with all of the CBI legislation, the goal was to support democratic development and economic stability in the region while providing the American textile and apparel industries with a platform of cheap labor from which to compete with Asia. The text of the act itself also made reference to the formation of a Free Trade Area of the Americas (FTAA), of which the CBTPA was to be taken as a precursor. CBTPA was hailed as "NAFTA parity" by many observers, but in reality, it did not go nearly so far. Under the terms of the new agreement, apparel from 14 of the 24 CBI nations would enter the US duty-free, if it had been assembled from fabric that was formed in the US, from US yarn. These 14 nations were the largest of the CBI members and were best able to meet the advanced customs requirements of CBTPA. All of the CAFTA-DR countries were included in CBTPA.

As with NAFTA, CBTPA allowed for apparel to be cut in the country of assembly. The agreement also provided for a limited quantity of apparel made from "regional knit fabrics" to qualify for duty-free access to the US market. Unlike NAFTA, which allowed the use, and even the export of Mexican fabric in unlimited quantities, the CBTPA regional knit allowance was initially small. The agreement strictly limited duty-free regional fabric exports to knit apparel, and specified that only US yarn could be used in regional knits. In its first 12 months, which began in October 2000, CBTPA permitted regional knit fabric to be used in 4.2 million dozen t-shirts and 250 million square meter equivalents (SME) of most other kinds of knit apparel.

In exchange for these new concessions, CBTPA tightened rules of origin on to a NAFTA standard, generally imposing a yarn forward rule of origin on fabric. As such, most originating fabrics had to be formed in the US or the CBTPA countries from yarn formed in these countries as well. Though this was not NAFTA parity, CBTPA nonetheless marked the first time that Caribbean Basin fabric received preferential access to the US market, and as such, the provision was significant. Like NAFTA, CBTPA

created an incentive to develop textile manufacturing capacity in the country of assembly, and it allowed for Caribbean Basin firms to cover the entire apparel value chain from knitting through transportation logistics.

The US Trade Act of 2002 was a mixed blessing for the Caribbean Basin. On one hand, it clarified an ambiguous point of the CBTPA, saying that in order for fabric to be considered American-made, it had to be finished and dyed in the US. Caribbean Basin textile firms complained that this provision limited their ability to respond flexibly to the changing demands of their clients. According to them, the new restrictions hindered the emergence of a competitive Caribbean Basin textile industry and eliminated an important opportunity for firm learning (USITC: 2004). On the other hand, the Trade Act of 2002 dramatically expanded the quotas for regional knit fabric, raising the limit to 12 million dozens t-shirts and 970 million SME of other knit apparel by 2004-05. These quota increases broke with the CBTPA scheduled growth rate of 16% per year and raised regional knit fabric limits to levels representing about one-third of total CBTPA apparel exports to the US by 2005.

Doldrums

Despite the implementation of CBTPA in October 2000 and the subsequent Trade Act of 2002, the growth US apparel imports from the Caribbean Basin slowed after 2001 and eventually stagnated. Indeed, the 2001 US economic downturn caused a decline in CBI apparel exports for the first time in recent memory. Even as the US economy subsequently strengthened, CBI apparel exports never returned to the dynamic growth rates of the past. The US market share of apparel exports from the CBTPA countries also declined steadily over this period. With the phase-out of the Multi-Fiber Arrangement fast approaching, the region's difficulties could not have come at a worse time. The phase-out had begun in 1995, under the terms of the WTO Agreement on Textiles and Clothing (ATC), but it was only in the new millennium that CBI countries began to feel pressure from formerly quota-constrained rivals as key apparel categories were opened to foreign competition.

The ATC arranged apparel categories into four groups and called for quota phase-outs on the first three groups to be completed by 2004, at which point 51% of each nation's quotas on base volume had been phased-out. Problematically, the ATC required the elimination of a minimum percentage of *total* apparel imports – not a percentage of *quota constrained* imports. Fully 34% of US apparel imports were quota-free in 1990, the base year for these calculations, so it did not have to take much immediate action to comply with the agreement. When the US did begin to eliminate quotas, it focused on low-value imports like yarn and textiles (Abernathy, Volpe, and Weil: 2004).

As a result, the quota-constrained categories that accounted for the vast majority of CBI apparel exports were not to be integrated until 1 January 2005, when the quotas would suddenly disappear. The outcome of this final phase-out was expected to be dramatic, and it created a great deal of uncertainty in the CBI countries. The anticipated phase-out depressed investment in the region and yet, in spite of the CBI's mounting problems, it was widely agreed that the worst was yet to come. 2005 would rudely open the door to fierce competition in the vast majority of the region's apparel categories, and there was a broad consensus that CBTPA offered insufficient trade preferences to

maintain the sector’s competitiveness in the quota-free world that lay ahead. As 2004 arrived, a ray of hope emerged. The 2-year negotiation to reach a bilateral free trade agreement had borne fruit and the negotiators signed a trade deal called CAFTA-DR.

Appendix B: US trade preferences for apparel imports from the Caribbean Basin

Framework	Year Enacted	Preferential Access Level	Value Chain Limitations	Conditions
USTS 807 Production Sharing	1963	duties levied only on foreign value added, limited by MFA quotas	fabric cutting	Apparel assembled from US components
CBERA/CBI Expansion: SAP/807 A Regime	1986	duty-free access for very large quotas	Fabric manufacturing, fabric cutting	apparel assembled from fabric formed and cut in US, to expire 1995
CBBEREA	1990	duty-free access for very large quotas	Fabric manufacturing, fabric cutting	apparel assembled from fabric formed and cut in US, no expiration
CBTPA	2000	Unlimited duty-free access for apparel assembled from US components, with limited access for regional knits	Yarn manufacturing, not knit fabric manufacturing	yarn forward general rule of origin, to expire 2008
Trade Act of 2002	2002	Unlimited duty-free access for apparel assembled from US components, with expanded access for regional knits	Yarn manufacturing, not knit fabric manufacturing, dyeing and finishing US textiles,	modifies CBTPA, yarn forward general rule of origin, to expire 2008
CAFTA	2005	Unlimited duty-free access	None	“essential character” yarn-forward rule of origin, with exceptions

Appendix C: CBTPA Usage by Country

Country	2003 US Imports (\$ millions)	Percentage Duty-Free 2003
Dominican Republic	2,188	84
Honduras	2,570	81
Costa Rica	591	76
El Salvador	1,755	69
Guatemala	1,765	36
Nicaragua	484	32

Source: Nathan Associates 2004

Appendix D: Textile and Apparel Sector Employment in the CAFTA-DR Countries

Country	Textile and Apparel Employment 2002	Textile and Apparel Employment 2004
Costa Rica	45,000	19,728
Dominican Republic	125,000-150,000	118,652
El Salvador	80,000-90,000	87,030
Guatemala	137,600	140,346
Honduras	107,000	96,602
Nicaragua	46,000	39,539

Source: 2002 data from USITC 2004

2004 data from CANAINTEX 2005

Appendix E: Regional Knit Quota Usage By Country, October 2003-September 2004

Country	US Regional Knit t-shirt Imports (units)	Percentage of Overall CBTPA Quota Filled	US Regional Knit Apparel Imports (SME)	Percentage of Overall CBTPA Quota Filled
Costa Rica	3,132	0.03	2,335,024	0.27
Dominican Republic	631,033	6.31	6,580,491	0.77
El Salvador	1,815,211	18.15	98,364,905	11.57
Guatemala	720,089	7.20	56,682,390	6.67
Honduras	6,721,327	67.21	215,609,867	25.37
Nicaragua	53,373	0.53	2,214,542	0.26
CBTPA Total	9,947,836	99.48	384,651,326	45.25

Source: data from OTEXA

References

AAFA 2005: "AAFA Releases Survey on CAFTA-DR: CAFTA-DR Critical for Keeping Apparel Sourcing in the Region" American Apparel and Footwear Association. press release. 11 April.

Abernathy, Frederick H., John T. Dunlop, Janice H. Hammond, and David Weil 1999: A Stitch in Time: Lean Retailing and the Transformation of Manufacturing – Lessons from the Apparel and Textile Industries. Oxford University Press: New York, New York.

Abernathy, Frederick, Anthony Volpe, and David Weil 2004: The Apparel and Textile Industries after 2005: Prospects and Choices. Harvard Center for Textile and Apparel Research. unpublished manuscript.

Andrews, Edmund L. 2005: "Pleas and Promises by G.O.P. as Cafta Wins by 2 Votes," New York Times. online edition. 28 July.

Birnbaum, David 2003: Birnbaum's Guide to Winning the Great Global Garment War. New York, New York; The Fashionindex, Inc.

Birnbaum, David 2004: "The Rise and Fall of the Garment Industry in Mexico and the Caribbean Basin," Textile Outlook International. July-August.

Brown, Drusilla K., Kozo Kiyota, and Robert M. Stern 2004: Computational Analysis of the U.S Bilateral Free Trade Agreements with Central America, Australia, and Morocco. unpublished manuscript.

CANAINTEX 2005: "Canaintex en Linea: Edicion Especial CAFTA," Camara Nacional de la Industria Textil. Mexico. 3 August.

Elliott, Kimberly Ann 2004: "Labor Standards, Development, and CAFTA," International Economics Briefs. Institute for International Economics. Paper Number PB04-2.

Jassin-O'Rourke Group 2002: Global Competitiveness Report: Selling to Full Package Service Providers. New York, New York.

Gereffi, Gary and Olga Memedovic 2003: The Global Apparel Value Chain: What Prospects for Upgrading By Developing Countries. UNIDO Sectoral Studies Series. Vienna, Austria.

GTAN: Global Trade Atlas Navigator. <http://www.gtis.com/>

Leon, Rene and Salazar-Xirinachs, Jose Manuel 2001: "The New Caribbean Basin Initiative: Impact and Opportunities," Integration & Trade. Vol. 5 (13). p 113-25. Jan.-April.

Mortimore, Michael 2003: “Illusory Competitiveness: The Apparel Assembly Model of the Caribbean Basin,” United Nations University INTECH Discussion Paper Series.

Nathan Associates 2004: “Dominican Republic Textile and Apparel Export Competitiveness: Trade and Industry Report,” Trade Developments. USAID.

O’Rourke, Mary 2004: “The World After Quotas,” presentation at workshop sponsored by the U.S. Department of State, Bureau of Intelligence Research, and U.S. Central Intelligence Agency, Office of Transnational Affairs. 21 May.

cited in USITC 2004b: U.S. – Central America – Dominican Republic Free Trade Agreement: Potential Economywide and Selected Sectoral Effects. USITC.

OTEXA: The Office of Textiles and Apparel, US Department of Commerce.
<http://otexa.ita.doc.gov/>

OTEXA 2004: “CAFTA Facts,” The Office of Textiles and Apparel, US Department of Commerce. informational flier.

Rosen, Ellen Israel 2002: Making Sweatshops. University of California Press: Berkeley, California.

Rosenberg, H. Michael 2005: Dreams, Denim, and Destiny. unpublished manuscript.

UN Statistics Division: UN Commodity Trade Statistics Database.
<http://unstats.un.org/unsd/comtrade>

United States Department of Energy 2005: Annual Energy Outlook. www.eia.doe.gov

USITC 2004: Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market. Publication 3671.

USITC 2004b: U.S. – Central America – Dominican Republic Free Trade Agreement: Potential Economywide and Selected Sectoral Effects. USITC.

World Bank 2005: Honduras and Nicaragua Value Chain Analysis. unpublished manuscript.

Interviews

The author conducted approximately 30 interviews for the purposes of this report. Many of the interview subjects wished to remain anonymous, and their wishes have been respected. This report contains no list of interviewees, lest some be identified by their conspicuous absence. A partial list of interviews is available from the author, who can be contacted at hmrosenberg@gmail.com. These interviews covered all of the CAFTA-DR countries, and gathered the opinions of government and business representatives in each one. Executives from several major American apparel manufacturers and retailers were also interviewed for this report, and their input has been integrated anonymously into the case studies.

This report also used an electronic survey to gather comprehensive data from 15 large apparel manufacturers in the CAFTA-DR region. This data is strictly confidential and cannot be released. The author's interviews and survey data form the basis of this report and are frequently left uncited.