



Global Commodity Chains and Endogenous Growth: Export Dynamism and Development in Mexico and Honduras

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Summary. — Mexico's garment exports to the United States soared in the mid-1990s, and recently Honduras has become one of the fastest-growing exporters in the Americas. We find little evidence that the apparel sector's dynamism is generating conditions for endogenous growth and sustainable development in either country, however. In spite of differences in the industrial organization of export-oriented garment production in Mexico and Honduras, the countries face similar challenges: regulatory regimes with rules of origin designed to benefit US fabric manufacturers, competitive pressures from China, and the broader institutional and macroeconomic environments associated with the region's liberalization strategy.

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1. INTRODUCTION

What opportunities has the adoption of export-oriented policies throughout the Global South created for local firms and workers? Many articles in this journal have asked how developing countries can leverage participation in global markets into desired outcomes; our paper contributes to this ongoing debate through a comparison of Mexico and Honduras—two countries that have experienced dramatic growth in clothing exports to the US market within the last decade. The analysis proceeds in five sections. In Section 2, we briefly review the relevant literature on the relationship between globalization and export-oriented development. In Section 3, we describe the global textile and apparel industry, focusing on its macroregional organization and the types of networks linking developing-country suppliers to foreign markets. In Sections 4 and 5, we

summarize recent developments in the Mexican and Honduran industries, respectively, before turning to a comparative discussion of challenges facing exporters in both countries. We find little evidence that the apparel sector's export dynamism is generating conditions for endogenous growth and sustainable development. While our analysis focuses on the trade regimes regulating regional trade, we also acknowledge macroeconomic and institutional aspects of the broader liberalization strategy being pursued in Latin America that are relevant for explaining the relatively disappointing developmental outcomes in both cases.

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2. EXPORT-ORIENTED DEVELOPMENT IN A GLOBAL ECONOMY

Over the course of the 1980s, the new orthodoxy of export-oriented industrialization (EOI) was widely adopted by policymakers in Latin America. The lessons of the East Asian miracle, famously summarized by the World Bank in its 1993 report, combined with influential analyses of the “rent-seeking” pathologies associated with earlier import-substituting industrialization (ISI) regimes in Latin America (Krueger, 1997), led to a categorical rejection of statist development strategies throughout much of the region and an embrace of export-oriented policies as the key to growth and development. Convinced that creating a market-friendly environment was the best way to generate foreign direct investment, policymakers eschewed targeted industrial policy in favor of a neutral or “horizontal” approach, and macroeconomic stabilization became the highest priority of governments that attached great importance to the task of getting the macroeconomic fundamentals right.

However, despite the dominance of the EOI model in Latin America today, and the broader liberalization strategy of which it is part (Dussel Peters, 2000), the record of export-oriented policies in promoting developmental objectives is ambiguous. For example, the Economic Commission for Latin America and the Caribbean (ECLAC) concluded that when compared with the ISI period, more recent years have been disappointing in terms of GDP growth, income distribution, employment generation, and balance of payments (Stallings & Péres, 2000). There is also accumulating evidence that EOI, in the context of globalization, generates dynamics of uneven development that have a profound territorial component which is ignored by neoclassical models that treat the economy as a single analytical unit. Looking at how trade liberalization and economic restructuring has impacted Latin America, for example, one sees dynamics of polarization, with firms and workers in areas that have become integrated into global circuits benefiting from these processes, while their less fortunate counterparts confront stagnation and even decline.

One approach that holds particular promise for understanding the developmental implications of globalization is the global commodity chains (GCC) framework. As has been developed by Gary Gereffi and colleagues, this framework provides a network-based methodology for analyzing the geography and organi-

zation of international production (Gereffi, 1999; Gereffi & Korzeniewicz, 1994). By explicating the dynamics of global industries, GCC scholars are able to examine where and by whom value is created and distributed (Appelbaum & Gereffi, 1994). Special attention is paid to the most powerful or lead firms within global industries, which are also known as chain drivers, because of their presumed importance as potential agents of upgrading and development.

The GCC approach has stimulated a body of empirical work describing the organization of particular commodity chains in various sectors and countries.¹ While this research agenda has usefully pushed analyses beyond earlier discussions of firm-level competitiveness (Porter, 1990) or macroeconomic stabilization (Krueger, 1992) as the critical ingredients of successful export performance, over the last several years a number of authors sympathetic to the GCC concept (and its related value chain variant) have nevertheless stressed the importance of territorial endogeneity as a critical dimension of meaningful and sustainable development that receives inadequate attention in narrow applications of the commodity chain framework.²

Applied commodity or value chain analysis focuses on inter-firm networks by which developing-country producers, through foreign buyers, access international markets. The ensuing policy recommendations, insofar as they are geared toward enhancing the competitiveness of exporters in the global South, focus on how links in particular commodity chains can be strengthened to the benefit of the firms involved. However, processes of upgrading as they are described in this literature frequently have limited territorial effects in terms of generating value-added, employment, or technology transfer impacting local capital and labor more broadly (Bair, 2005).³ What careful attention to the territorial dynamics of export-led growth strategies has revealed is the complicated matrix of developmental opportunities and pitfalls associated with the EOI model (Messner, 2002). These findings challenge a romantic view of the link between participation in global markets and local development processes on the ground.

3. THE APPAREL GCC: IMPLICATIONS FOR DEVELOPING-COUNTRY EXPORTERS

While a wide range of industries have been studied from the GCC perspective, the apparel

and textile sector has received the most extensive empirical attention (Appelbaum & Gereffi, 1994; Bair & Gereffi, 2002; Gereffi, 1999; Kessler, 1999). The garment business was one of the first to go global via offshore assembly and outsourcing strategies, and clothing production remains one of the most geographically dispersed manufacturing activities. Several migrations of production have characterized the global textile and apparel industry over the last several decades. In the 1950s, Japan reemerged as a global textile exporter, thanks largely to US-sponsored initiatives designed to resurrect the industry and consolidate that country's position as a regional economic power in the context of the Cold War (Bonacich & Waller, 1994; Rosen, 2000). By the 1970s, Japan had upgraded to higher value-added manufactured exports, and the center of gravity in the global apparel trade shifted to the "Big Three" Asian producers (Hong Kong, Taiwan, and South Korea) (Gereffi, 1999). During the past 10–15 years, and in the context of significantly lower growth in global textile consumption,⁴ a third relocation of production has occurred involving another set of developing economies that have emerged as major garment exporters—namely, China and several countries in Eastern Europe and Latin America.

However, aggregate data on international trade in textiles and apparel obscure two important aspects of this industry discussed below. The first is its regional organization, which reflects the importance of the United States and the European Union as the world's

two largest import markets that are being served, in large measure, by different suppliers. The second and related aspect is the existence of different models of export-oriented production, depending on the type of networks linking local suppliers to global markets.

Table 1 lists the top 10 exporters of textile products (yarn, fabric, and garments) to Europe and the United States.⁵ The composition of this table points, on the one hand, to the dominance of a small number of Asian exporters that are major suppliers of textiles and apparel to *both* markets, and on the other hand, to a group of regional suppliers in Eastern Europe/North Africa and Latin America whose exports are focused on *either* the EU or US market. Three Asian countries are the only ones to make the list as leading suppliers to *both* the EU and US markets—China, India, and Bangladesh. Two of the largest exporters to the European Union (Turkey and Romania), and three to the United States (Mexico, Honduras, and the Dominican Republic) fit the description of regional exporters. They reflect the existence in Europe and the Americas of a division of labor between higher- and lower-cost countries in each macroregion, which is, in turn, associated with a particular type of production network connecting near-by suppliers to core markets, traditionally described as the assembly model of subcontracting.⁶

The development of assembly subcontracting networks within North America has been promoted by several policies. US firms are able to export cut parts of garments to lower-wage

Table 1. *Leading textile and clothing exporters to regional markets, 2004^a*

Top 10 suppliers to the EU market	Market share (%)	Top 10 suppliers to the US market	Market share (%)
1. China	13.3	1. China	18.4
2. Turkey	9.0	2. Mexico	10.1
3. Germany	7.9	3. Hong Kong	5.2
4. Italy	6.6	4. India	4.2
5. Belgium	4.4	5. Honduras	3.7
6. Romania	4.1	6. Vietnam	3.4
7. Bangladesh	4.0	7. Indonesia	3.3
8. France	3.8	8. Dominican Republic	2.8
9. Netherlands	3.4	9. Thailand	2.7
10. India	3.2	10. Bangladesh	2.6
Subtotal	59.7	Subtotal	56.4
Rest	40.3	Rest	43.6

Source: Authors' calculations based on Eurostat for EU and US Department of Commerce import data for United States.

^a Refers to chapters 61–63 of the harmonized tariff system.

countries for assembly and re-import under a regime known as production-sharing (sometimes called “807 production” for the numbered clause of the US trade law that governs this type of offshore assembly arrangement). The 807 trade law (now clause 9802), provides preferential access to US firms importing garments that were assembled offshore from fabrics cut in the United States, with duty assessed only on the minimal value-added abroad. A 1986 amendment of the 807/9802 clause known as 807A further benefits some countries in the western hemisphere by giving them essentially limitless quotas known as Guaranteed Access Levels if they export apparel assembled from fabrics both cut *and* formed in the United States. When it was created in 1986, the 807A revision applied to the countries of the Caribbean Basin, and was known as the special access program. It was extended to Mexico’s maquiladoras in 1988 under the name of the special regime. Mexico and the countries of the Caribbean Basin are the most important exporters of 807 apparel, accounting for 95% of all garments imported to the United States under this tariff regime in 2000 (USITC, 2001). However, in the Americas the old 807/production-sharing regime is being superseded by new regional agreements.

Implemented in 1994, the North American Free Trade Agreement (NAFTA) initiated free trade among the signatory countries for all products that meet NAFTA’s North American rules of origin. In a sense, NAFTA trumps the 807/special regime because while the latter is designed to protect the US textile industry by granting preferential access only to those garments assembled in Mexico from US fabrics, the former established new rules of origin specifying that a garment sewn in North America is eligible for duty- and quota-free treatment under NAFTA as long as it contains yarn and fabrics produced in any of the signatory countries. This so-called yarn forward rule means that Mexican exporters producing garments from textiles woven or spun in Mexico from Mexican yarn receive the same preferential access to the US market as traditional maquiladoras that assemble garments from US-formed and cut fabrics under the old 807A program.

Manufacturers in the region’s other major apparel-exporting countries—the Caribbean and Central American countries often referred to as the Caribbean Basin—worried that exclusion from NAFTA would hurt the competitiveness of their garment exports, which were, unlike

Mexico’s, still subject to the value-added tariff (Matthews, 2002). They argued that the negative impact of NAFTA on the region would be especially pronounced given the type of apparel products the CBI countries export—primarily underwear, foundation garments, and t-shirts. These items were included in the group of apparel products for which tariffs were eliminated immediately under the NAFTA timetable.

As a result, a movement to give the Caribbean Basin a version of “NAFTA parity” emerged in the US government, resulting in the passage of the United States–Caribbean Basin Trade Partnership Act (CBTPA) in May 2000. The CBTPA provides both duty- and quota-free treatment for most apparel products exported from the Caribbean Basin countries that meet one of the following criterion: garments made from fabric that is both cut and formed in the United States, or garments made from US-formed fabric (which may be cut in the assembling country) and assembled using US-made thread. Essentially this amounts to an extension of the old 807/special access program, giving 807A exports duty-free as well as virtually quota-free status. However, some specific categories of garments are still subject to quotas under the CBTPA, which is slated to extend until 2008 (Dussel Peters, 2004). Shortly after the CBTPA was passed, negotiations for a US–Central America Free Trade Agreement (CAFTA) were launched. After a protracted and difficult battle, the CAFTA legislation was passed by the US Congress in late July 2005 by a two vote margin (Andrews, 2005). The CAFTA creates new rules of origin affecting garment exporters in the Caribbean Basin region, which we discuss in Section 6.

Intra-regional trade in North America has traditionally been organized through the assembly subcontracting model of production-sharing that is the *raison d’être* of both Mexico’s maquiladoras and the export-processing plants that are the Caribbean Basin’s analog to Mexico’s maquila factories. While important in giving regional suppliers an entry point to the US market, the assembly subcontracting model has also been roundly criticized. Its detractors claim that while these activities generate badly needed employment opportunities and access to foreign currency, they trap developing countries in low value-added activities which provide minimal opportunities for upgrading, few linkages to domestic manufacturers or suppliers, and strong incentives to

keep labor costs low (Matthews, 2002; Sklair, 1993). In an analysis of what he calls the “special access-export processing zone-low-wage” model, Mortimore (2002) concludes that the pernicious characteristics of assembly subcontracting can be instructively contrasted with an alternative model of integrated export-manufacturing known as full package.

Full-package production is a more complex form of export-oriented garment production than assembly subcontracting because it requires suppliers to manage more links in the apparel commodity chain. While the sole task of a traditional maquiladora or export-processing plant is to sew imported, pre-cut pieces of fabric together into a garment, full-package manufacturers are responsible for a range of activities that may include purchasing the fabrics needed for a particular garment, contributing to design specifications, producing a sample for the buyer to approve, grading and marking a pattern, laundering or finishing the garment, and occasionally shipping directly to retail outlets. From the vantage point of development outcomes, full-package production is considered preferable to assembly subcontracting because (1) it increases the possibilities for backward linkages to local suppliers of inputs; (2) it is more likely to stimulate investment in facilities such as textile mills and industrial laundries, which represent larger fixed capital investments than traditional sewing factories (Bair & Gereffi, 2001); (3) it increases the competitiveness of developing-country exporters *vis-à-vis* their rivals since full-package capabilities are less widespread (cf. Schrank, 2004); and (4) it often features close interaction between lead firms and local manufacturers, thereby allowing exporting firms to acquire knowledge about quality expectations, pricing, and fashion content in foreign markets (Gereffi, 1999).

Research on the North American apparel industry has identified a relationship between different types of lead firms, the way production is organized, and where it is carried out. Traditionally, offshore assembly subcontracting was preferred by domestic manufacturers that wanted to reduce costs by relocating the most labor-intensive part of the production process to near-by low-wage locations, predominantly Mexico and Central America. In contrast, branded marketers and retailers have opted for sourcing strategies that involve constructing networks with full-package producers, mostly in East Asia (Appelbaum & Gereffi, 1994). Unlike the garment exporting countries of the

western hemisphere, which have traditionally been tied to the US market through assembly subcontracting networks, apparel producers in East Asia developed full-package capabilities over three decades ago, which were reflected in the Big Three’s dominance of the US import market for clothing throughout the 1980s.

Although there are several reasons why the assembly as opposed to full-package model came to dominate in Latin America, with the reverse being true in Asia, one important factor is the production-sharing regime. Both Mexico’s special regime and the Caribbean’s special access program encourage offshore assembly subcontracting operations using US-manufactured textiles, while Asian contractors filling full-package order for US lead firms use a wide range of high quality, globally competitive fabrics, allowing them to manufacture fashion-sensitive apparel such as women’s outer wear, as opposed to the basic commodity garments being assembled in Mexico and the Caribbean Basin (Bonacich & Waller, 1994).

In the period immediately following NAFTA, it appeared that Mexico was positioning itself to become the new full-package sourcing solution in North America, thanks to two developments. First, new North American rules of origin made possible the incorporation of local inputs in apparel being produced for the US market. Second, foreign investors, including a number of US textile companies, expressed an interest in developing Mexico’s raw materials base, thereby increasing the quality and quantity of locally produced fabrics to fuel the country’s clothing exports (Bair & Gereffi, 2002). While many expected that Mexican producers would benefit from NAFTA, some analysts predicted that Mexico’s gains in US import share would come at the expense of the Caribbean Basin countries (Matthews, 2002; Mortimore, 2002).

The hypothesis that Mexico would gain at the expense of other regional exporters in the post-NAFTA period is not fully supported by the trade data compiled in Table 2, however. Without question, there was a “NAFTA effect;” Mexico ranked seventh among leading exporters to the US market in 1990, but was first in 2000. Yet the Caribbean Basin region has also increased its share of the US import market during the post-NAFTA period, from 8% in 1990 to 15% in 2002. Some countries have fared less well than others. For example, in 1990, the Dominican Republic was the

Table 2. *US apparel imports by region and country, 1990–2004*

Country source	1990 Value		1994 Value		1996 Value		1998 Value		2000 Value		2002 Value		2004 Value	
	US\$ mn	%	US\$ mn	%	US\$ mn	%	US\$ mn	%	US\$ mn	%	US\$ mn	%	US\$ mn	%
<i>Northeast Asia</i>														
China	3,422	13	6,294	17	6,340	15	7,132	13	8,473	13	9,539	15	13,568	19
Hong Kong	3,977	16	4,393	12	3,998	10	4,494	8	4,571	7	3,928	6	3,919	5
Taiwan	2,489	10	2,269	6	2,066	5	2,224	4	2,160	3	1,665	3	1,627	2
South Korea	3,342	13	2,245	6	1,531	4	2,047	4	2,461	4	2,207	3	1,937	3
Macao	417	2	605	2	761	2	1,019	2	1,150	2	1,146	2	1,438	2
<i>Total</i>	13,647	53	15,806	43	14,696	35	16,915	31	18,815	29	18,485	29	22,489	31
<i>Southeast Asia</i>														
Indonesia	645	3	1,182	3	1,505	4	1,857	3	2,190	3	2,164	3	2,474	3
Philippines	1,083	4	1,457	4	1,569	4	1,797	3	1,929	3	1,839	3	1,810	3
Thailand	483	2	1,006	3	1,243	3	1,733	3	2,135	3	2,102	3	2,212	3
Malaysia	604	2	1,051	3	1,242	3	1,360	3	1,299	2	1,188	2	1,206	2
Singapore	621	2	472	1	327	1	307	1	355	1	287	0	243	0
Vietnam	0	0	0	0	23	0	28	0	47	0	848	1	2,567	4
<i>Total</i>	3,436	13	5,168	14	5,909	14	7,082	13	7,955	12	8,428	13	10,512	15
<i>South Asia</i>														
India	636	2	1,309	4	1,350	3	1,636	3	1,996	3	2,047	3	2,357	3
Bangladesh	422	2	885	2	1,125	3	1,628	3	2,116	3	1,887	3	1,978	3
Sri Lanka	426	2	871	2	1,059	3	1,342	2	1,507	2	1,449	2	1,595	2
Pakistan	232	1	508	1	642	2	771	1	1,013	2	979	2	1,215	2
<i>Total</i>	1,716	7	3,573	10	4,175	10	5,377	10	6,631	10	6,362	10	7,145	10
<i>Central America and the Caribbean</i>														
Dominican Rep.	723	3	1,600	4	1,773	4	2,358	4	2,444	4	2,177	3	2,064	3
Honduras	113	0	650	2	1,241	3	1,905	4	2,416	4	2,503	4	2,745	4
El Salvador	54	0	398	1	721	2	1,170	2	1,600	2	1,675	3	1,722	2
Guatemala	192	1	600	2	809	2	1,150	2	1,499	2	1,676	3	1,966	3
Costa Rica	384	2	686	2	706	2	827	2	830	1	729	1	519	1
Jamaica	235	1	454	1	505	1	422	1	268	0	124	0	262	0
Nicaragua	0	0	29	0	142	0	232	0	337	1	433	1	595	1
Other CBI	284	1	151	0	158	0	264	0	291	0	244	0	173	0
<i>Total</i>	1,985	8	4,567	12	6,056	15	8,329	15	9,686	15	9,561	15	10,046	14
Mexico	709	3	1,888	5	3,850	9	6,811	13	8,730	14	7,732	12	6,943	10
All other countries	4,009	16	5,859	16	12,880	31	9,318	17	12,395	19	13,147	21	17,622	24
Total imports	25,519	100	36,878	100	41,679	100	53,874	100	64,181	100	63,715	100	72,190	100

Adapted from Bair and Gereffi (2002); compiled from statistics of the US Department of Commerce, US imports for consumption, customs value.

hemisphere's leading garment exporter, and throughout the rest of that decade it consistently ranked between fourth and sixth among major suppliers of clothing to the US market. By 2004, it had fallen to eighth place. In contrast, during the course of the 1990s, Honduras' exports have steadily increased. Beginning that decade ranked 34th among leading suppliers to the US market, Honduras broke into the top five in 2002, when its \$2.5 billion of apparel shipments to the United States made it that country's fourth largest supplier of clothing.

However, it is clear from Table 2 that China has experienced the most dynamic growth in recent years. China's clothing exports grew 60% between 2000, when its \$8.4 billion in exports already ranked second only to Mexico's \$8.7 billion, and 2004, when its nearly \$13.6 billion worth of exports to the United States represented almost *double* the value of Mexico's (\$6.9 billion). China's performance is particularly remarkable considering that over the same period it consolidated its position as the leading supplier of garments to the world's three largest import markets—the United States, the European Union, and Japan (the latter of which China dominated with an import market share of 76% in 2000) (UNCTAD, 2005).⁷

In the remainder of this paper, we will look in greater detail at the two largest apparel exporters in the Americas, Mexico and Honduras. Our analysis is based largely on primary data collected by the authors through interviews with foreign and domestic textile and apparel manufacturers in both countries, as well as with members of local industry associations and development agencies over a four year period (2000–04). We aim to put these cases in comparative perspective with an eye to answering the following questions. Given the similarly dynamic export performance of the two economies over the past decade, how similar are the outcomes with regard to employment, investment, and upgrading? Are Mexico and Honduras linked to the North American apparel commodity chain in different ways? What are the competitive pressures threatening the continued growth of export-oriented apparel production in both cases? In short, the central question driving our study is what prospects for endogenous growth and territorial development are associated with the pursuit of exporting activities in Mexico and Honduras, and what are the limits of this export-oriented model?

4. MEXICO'S POST-NAFTA TRAJECTORY: FROM BOOM TO BUST?

Mexico's period of economic liberalization, signaled by the country's accession to the General Agreement on Tariffs and Trade in 1986, was a difficult one for many of the country's textile and apparel manufacturers. Import penetration of the domestic market for clothing, primarily in the form of Asian-made garments, increased rapidly in the early 1990s. For domestic firms, the situation reached its nadir in 1994, following a massive devaluation of the Mexican peso that devastated the purchasing power of Mexican consumers, thereby depressing domestic demand still further. Shifting production capacity to exports was one way that many companies attempted to cope with the crisis generated by the peso devaluation and the collapse of the domestic market.

This shift was facilitated by the implementation of the NAFTA in 1994. While the government of outgoing President Carlos Salinas de Gortari hoped that the Agreement would stimulate investment from American and other foreign companies anxious to use Mexico as an export platform to the US market, much of the debate about NAFTA's implications for development focused on the question of rather or not the expected quantitative increase in exports would be accompanied by a qualitative transformation in the relationship between Mexico's maquiladoras and the rest of the economy. NAFTA's supporters argued that the Agreement would integrate the maquiladoras into the domestic industrial sector (Salinas de Gortari, 2004), while others predicted that NAFTA would consolidate Mexico's position as the US' low-wage periphery within a regional division of labor, and eventually result in the "maquilización" of the economy (Castañeda, 1993). The Agreement's actual impact on Mexico's development surely lies between these two stylized scenarios, and the trajectory of the apparel industry demonstrates the dangers implicit in concluding that NAFTA has been either uniformly salutary or ruinous.

Overall Mexico's export sector displayed impressive dynamism in the years following NAFTA's implementation, with exports increasing 173% from \$60.8 billion in 1994 to \$166.5 billion in 2000. Exports of garments increased even more dramatically, registering a spectacular growth rate of 357% during 1994–2000 (from \$1.9 billion to \$8.7 billion) (Dussel

Peters, 2005). Research on the Mexican apparel industry has focused on the performance of several apparel-exporting clusters in north, central, and southern Mexico, including Tehuacán in the central Mexican state of Puebla (Kessler, 1999), the region around Mexico City, and the near-by regions (Arciniega, 1999), Jalisco (Vera García, 1999), Morelos (Ordoñez, 1999), and Yucatán (Van Dooren & Zárate-Hoyos, 2003). While several studies of the Mexican apparel industry have discovered evidence of full-package networks between manufacturers in Mexico and US big buyers, including retailers such as J.C. Penney and the Gap, this literature has also revealed that the development of full-package capabilities, and the competitiveness of the Mexican industry more generally, is highly uneven across the industrial landscape of Mexico's textile and apparel sector (Bair & Gereffi, 2003; CANAINTEX & Werner International, 2002).

Perhaps the most extensively researched cluster among Mexico's apparel-exporting centers is the region known as La Laguna in north-central Mexico (Bair & Gereffi, 2001; Van Dooren & Zárate-Hoyos, 2003). The Laguna cluster, which has replaced El Paso, Texas as the so-called "blue jeans capital of the world," straddles two neighboring states in northern Mexico—Coahuila and Durango. It comprises several cities; the largest of these, Torreón, is located approximately 370 miles south of the US border at Laredo, Texas. Prior to NAFTA, the region was home to a few domestic manufacturers that produced garments for the Mexican market as well as a number of maquiladoras whose relatively modest production was coordinated by a small number of US apparel firms. Analyses of Torreón's post-

NAFTA trajectory have documented the cluster's transformation into a center of relatively integrated garment manufacturing in Mexico, and detailed the emergence of full-package networks linking local apparel firms, textile companies, and US buyers (Bair & Gereffi, 2001). While the limitations of this growth have also been underscored (especially with regard to the distributional consequences, since the majority of benefits resulting from it appear to accrue to a small set of well-connected, local industrialists), the development of integrated manufacturing involving local fabric makers and industrial laundries as well as sewing factories demonstrates the possibilities for export-oriented production in Mexico to evolve beyond the assembly subcontracting model associated with maquiladoras.

However, there is little evidence to suggest that Torreón's experience is being replicated among Mexico's other exporting centers. Partly this reflects the synergies that exist between La Laguna's apparel firms and local fabric suppliers. The region boasts a large joint venture textile plant that manufactures denim for the cluster's number one garment export—blue jeans. Although the availability of local denim may help fuel La Laguna's blue jeans boom, overall Mexico's dependence on denim pants as its number one export reveals the precariousness of the industry's competitiveness.

Table 3 provides information on the composition of US apparel imports by product category from Mexico, Honduras, and China, as well as the same information for total imports from all suppliers aggregated in the category world. Mexico's specialization in pants is reflected in its top two export categories, identified by their four digit SITC codes as 8414

Table 3. *Top apparel exports to the US market by SITC category, 2004*

Mexico	%	Honduras	%	China	%	World	%
1. 8414	24.6	1. 8454	27.2	1. 8453	11.9	1. 8453	17.6
2. <i>8426</i>	19.0	2. 8453	24.6	2. 8481	10.3	2. <i>8426</i>	10.9
3. 8454	11.3	3. 8414	7.0	3. <i>8426</i>	8.5	3. 8414	9.3
4. 8453	10.3	4. 8455	7.0	4. 8451	8.1	4. 8454	5.3
5. 8442	3.7	5. 8448	5.0	5. 8484	5.4	5. 8415	4.6
Top 5	68.8	Top 5	70.8	Top 5	44.2	Top 5	47.6

Numbers refer to the SITC 4-digit classification for apparel; % refers to percentage of total exports.

Categories in bold are common to Mexico, Honduras, and World.

Categories in italics are common to Mexico, China, and World.

Categories in bold italics are common to Mexico, Honduras, China, and World.

Source: Authors' calculations from US International Trade Statistics dataweb. Export data and a complete description of the SITC categories are available at <http://dataweb.usitc.gov/>.

(men's and boys' pants and shorts of woven fabrics) and 8426 (women's and girls' pants and shorts of woven fabrics). In 2004, these two categories accounted for nearly 44% of Mexico's \$6.9 billion in apparel exports to the United States. While Honduras' export profile displays a similarly high level of concentration, China's top two categories accounted for less than a quarter of its almost \$13.6 billion worth of exports in 2004.

Mexico's reliance on pants as its major export product—most of which is denim blue jeans—likely reflects two factors. First, because denim is a relatively heavy fabric, shipping costs become a factor which gives near-by suppliers of jeans an advantage over distant exporters. Second, denim is one of the few, export-quality fabrics manufactured in large quantities in Mexico. This is due, in part, to investments from foreign companies such as Cone Mills, which is part owner of the denim mill located in the Laguna town of Parras.

Perhaps even more worrying than the high degree of product concentration characterizing Mexico's export profile, or the geographic unevenness of upgrading processes across different exporting clusters, is the more general erosion of the apparel sector's overall competitiveness. Although Mexico's garment exports experienced spectacular growth in the first six years after NAFTA, its shipments to the United States have fallen sharply since, decreasing 20% during 2000–04. Employment has fallen by 34% over the same period (Dussel Peters, 2005; INEGI, 2005). Industry analysts interpret the loss of US import market share to China as evidence that the Mexican industry failed to capitalize on the window of opportunity opened by NAFTA. This is particularly worrying since Mexico has already enjoyed virtually the entire competitive boost to be gained from the elimination of tariffs and quotas under NAFTA's phase-in schedule. Furthermore, the final phase-out of the Multifiber Arrangement (MFA) under the Agreement on Textiles and Clothing inaugurated a global regime of quota-free trade in garments on January 1, 2005. Liberalization of the global garment trade is expected to have particularly grave implications for Mexico's less developed centers of apparel manufacturing, such as the Yucatan, where most production for export takes the form of assembly subcontracting carried out in maquiladoras. In Yucatan, and throughout Mexico, most domestic firms and traditional maquilas remain unable or unwill-

ing to fill full-package orders. Many cite lack of access to affordable credit as the reason, noting that without adequate financing it is not possible to purchase the raw materials necessary for this type of production.

However, even Mexico's most advanced center of full-package manufacturing has been experiencing difficulties. While at the height of the post-NAFTA export boom, Torreón's factories were turning out six million garments a week—the vast majority of which were jeans destined for the US market with labels such as Polo, Tommy Hilfiger, and the Gap—production fell by almost half during 2000–02, as exporters suffered from the combination of a strong peso and an economic recession in the United States. Although the situation has since improved somewhat, textile and apparel employment was similarly impacted by the sharp downturn during 2000–02, falling more than 25% from 75,000 to 55,000 workers in La Laguna (Bair & Gereffi, 2003).

5. HONDURAS: EXPORT GROWTH VIA VERTICAL REINTEGRATION?

Export-processing activities have been the major avenue by which successive Honduran governments have attempted to integrate their country into the global economy over the course of the 1990s. While Mexico and Honduras share a history of export-oriented apparel assembly for the US market, the smaller, poorer, and much less-diversified Honduran economy is far more dependent on the garment trade than Mexico. While apparel exports accounted for 5.2% of Mexico's total exports in 2004, clothing comprised 69% of total exports from Honduras to the United States in 2004, down from levels above 80% during the 1990s. Fully 90% of Honduras's 215 export-processing plants are dedicated to clothing production (AHM, 2003). Foreign capital is well represented in the Honduran maquila sector: weighted by employment, 52.7% of these plants were US owned in 2003, 17.4% were Honduran owned, and 15.1% were Korean owned.

Honduras' apparel exports grew at an annual average rate of 24.5% during 1994–2000. Although less spectacular than the increases achieved by Mexico over the same period, Honduras' export sector has continued to grow in recent years (albeit at a modest level of 3.2% average per annum during 2000–04), while Mexico's has contracted. In fact, some of the

foreign firms that left Mexico in recent years have relocated to Honduras. However, as we note below, Honduras's prospects for future growth are far less certain, given increasing competition from China for the US import market.

The Honduran apparel industry consists of three types of firms. The first and largest group consists of traditional maquiladoras that fill assembly subcontracting orders for US buyers under the 807 or CBTPA regimes discussed above. Second, there is a small group that includes a limited number of self-identified full-package manufacturers, whose presence in Honduras dates from the second half of the 1990s.⁸ The third and most interesting category of export-oriented garment makers in Honduras consists of vertically integrated manufacturers that produce fabrics as well as garments (Dussel Peters, 2004). This group of companies, though limited in number, has been the most dynamic in recent years, witnessing expansion in both production capacity and employment for most of the post-2000 period.

Table 4 lists the nine textile companies in Honduras. Six of these companies are vertically integrated apparel manufacturers, and another, Textiles Rio Lindo, was preparing to embark on garment production at the time of our fieldwork. The remaining companies listed in Table 4, Woong Chun and Cottonwise, sell fabrics they produce to local garment makers. Only one of the nine textile plants in Honduras manufactures yarn locally; the remainder import yarns, mostly from the United States. Two characteristics of this group should be underscored. The first is the large size of these companies, particularly in terms of employment. The textile operations alone employ more than 5,000 people, while another 18,000-plus are employed in the sewing factories of the same companies, meaning that these vertically integrated firms accounted for around 20% of employment in Honduras's *entire* export-processing sector in 2003. The second aspect of Table 4 that we want to underscore is the dominance of Asian capital among this group of vertically integrated manufacturers: five of the nine companies are from Asia. Two of the remaining four companies also have foreign ownership—one is a joint venture with US giant Fruit of the Loom and the other is a subsidiary of the Canadian activewear manufacturer Gildan. Two companies are fully owned by Honduran capital, and these are the oldest among the nine operations listed in Table 4, dating from 1951 and 1986. The foreign companies are relatively

new; four initiated local operations after 2000. At the time of our fieldwork in Honduras, four additional textile projects were either in the planning stages or were already under construction. Two of these involve local capital and the other two are projects of a Canadian and a US firm, respectively.

The set of vertically integrated manufacturers listed in Table 4 has played a major role in Honduras's recent export boom. Interviews with managers and owners of these firms over the course of 2003 revealed that they were producing at 100% of installed capacity, while other companies were running production at 40–50% of capacity, reflecting a lack of sufficient orders from US buyers (Dussel Peters, 2004). Most of the companies struggling to increase production are traditional assembly contractors whose clients have included Adidas, Fruit of the Loom, Nautica, Hanes, Gap, Nike, and Wal-Mart, among others. Throughout the 1990s, some of these firms enjoyed multi-year assembly contracts with US buyers, which afforded them the relative security of long-term, large volume orders. In contrast, local apparel manufacturers reported that new contracts might entail production runs of much shorter duration (such as three months). As a result, producers must manage increasingly complex logistics and continually readjust to the specific requirements of more and more short-term orders (i.e., various style changes, new equipment and training, etc.). Simultaneously, firms looking for a steady stream of orders expend increasing amounts of time and energy in a continual search for new clients.

The difficulties confronting traditional assembly contractors also reflect their relatively limited product range. Most of the garments made in Honduras's export-processing plants are basic, commodity knit products, which have been subject to a dramatic price war in recent years. Five years ago, firms received \$5 for a dozen t-shirts, while in 2003, they received \$2.50. By the end of 2005, the price per dozen was expected to fall below \$2.20. Table 3 lists knit t-shirts (SITC category 8454) and knit jerseys and sweaters (8453) as Honduras's largest export categories, accounting for over half of total garment exports. The third and fifth largest categories are underwear, including foundational garments (mostly bras, which is SITC category 8455) and men's knit underwear (category 8438).

Most of Honduras's vertically integrated manufacturers are subsidiaries of foreign firms

Table 4. *Textile firms in Honduras, 2003*^a

	Ownership	Year established	Employment	Textile production	Location of apparel plants	Apparel employment
1. Textiles Río Lindo ^b	Honduras	1951	375	175,000 yards/week	Honduras/Central America	0
2. Caracol Knits	United States/Honduras	2001	770	1 million lbs/week	Honduras (own plants and others)	7,000
3. Gildan Activewear	Canada	2002	500	1 million lbs/week	Honduras (own plants)	4,800
4. ELCATEX	Honduras	1986	2,100	1.6 million lbs/week	Honduras (own plants)	4,022
5. Yangtex	Taiwan	1999	217	462,000 lbs/week	Honduras (own plants and others)	1,200
6. ENINSA	China	2002	40	150,000 lbs/week	Honduras (own plants and others)	347
7. Woong Chun ^c	Korea	2002	550	450,000 lbs/week	Honduras/Central America	0
8. Shin Sung ^d	Korea	1997	240	302,000 lbs/week	Honduras (own plants and others)	747
9. Cottonwise Textiles ^c	Korea	Not available	264	431,200 lbs/week	Honduras/Central America	0
Total			5,056	5.2 million lbs/week (knitted) and 175,000 yards/week (not knitted)	Honduras and Central America	18,116

Source: Dussel Peters (2004).

^a This table includes all textile firms in Honduras at the end of 2003. At that time, there were also four additional textile projects in the planning stages or under construction.

^b This company was in the process of launching apparel production at the time of our fieldwork, but had not yet done so.

^c These two firms are not vertically integrated manufacturers of apparel. Rather than converting the fabrics they produce into garments, they supply other apparel manufacturers in the region.

^d This firm was not operational in 2003.

and operate as “cost centers” for their parent companies. This allows them to focus on improving quality, reducing costs, and increasing productivity, since unlike many of the locally owned assembly plants, they are not burdened with the constant pursuit of new clients and orders. These factories are self-contained units producing the garments their clients order as well as the fabrics needed to make them; they import whatever inputs they do not produce locally (in most cases, yarn) from the United States, and less frequently from Asia. Consequently, they have virtually no linkages to other companies. Thus from the point of view of local value-added, vertically integrated production may be a form of upgrading *vis-à-vis* assembly contracting, and the development of textile manufacturing in Honduras is generating more foreign direct investment than would be associated with an expansion in sewing factories alone. However, in terms of generating conditions for endogenous growth with impacts beyond the small set of (mostly foreign owned) manufacturers and service providers (e.g., transportation, cafeterias, banking), the shift toward vertically integrated production in Honduras’s export-oriented apparel industry may not be propitious.

6. MEXICO AND HONDURAS COMPARED: POTENTIAL FOR ENDOGENOUS GROWTH AND DEVELOPMENT?

In Section 3, we explained the difference between the traditional maquila and full-package models of export-oriented apparel production, and noted that the shift to full-package production can be considered a form of industrial upgrading that denotes greater competitiveness in global markets, higher value-added production processes, and presumably more profits as compared with the maquila model.⁹ Although this form of integrated production for export is most closely associated with Asian countries, NAFTA appeared to put Mexico on the path to developing analogous capabilities as a full-package supplier to the US market, drawing on fabric suppliers in the United States as well as an expanding base of textile production in Mexico.

This was the scenario imagined by the many US textile companies that were active in Mexico in the mid- to late-1990s. Some were invest-

ing in yarn spinning (Parkdale Mills), while others were building new textile plants (Guilford Mills), and/or acquiring existing production capacity through joint ventures (Cone Mills and Galey & Lord). A few companies, such as Dan River and Burlington Industries, also saw Mexico as an ideal base for the apparel manufacturing operations they wanted to launch as part of new “package” or “garment” services. Threatened by the increasing import penetration of the US apparel market throughout the 1980s, American fabric manufacturers decided to try to capitalize on the increasing demand for full-package network solutions among retailers and branded marketers by forward integrating into clothing production. They hoped this strategy of forward integration would shore up fabric sales to clients that might otherwise subcontract out production to Asian garment manufacturers less likely to use US textiles (Bair & Gereffi, 2002). NAFTA’s North American rules of origin were considered a boon to the US textile industry, since they encouraged the use of regional fabrics in Mexico’s clothing exports, and according to the apparel industry’s leading consultant, can be considered the United States “[g]overnment’s own admission that while the US textile industry is worth saving, the garment industry will eventually go entirely offshore” (Birnbaum, 2000).

However, the forward integration strategy has failed to save the domestic textile industry from foreign competition, and several of the projects pursued by US fabric manufacturers in Mexico have proven disappointing at best. Virtually every textile company that attempted to offer full-package garment services has abandoned the effort, although the sector’s need to find a competitive strategy *vis-à-vis* Asian fabric makers is more critical than ever. Over the last five years, more than 270 textile plants in the United States have closed, resulting in a loss of almost 200,000 jobs. Among the companies that have filed for Chapter 11 protection in recent years are several of the textile giants that invested in Mexico in the post-NAFTA period, including Burlington Industries, Guilford Mills, Galey & Lord, Cone Mills Corporation, and Dan River.

Textile and apparel manufacturers on both sides of the border had hoped that NAFTA would strengthen the competitiveness of the North American apparel commodity chain by encouraging the development of full-package production in Mexico using fabric formed in

the United States, or alternatively fabrics produced by a Mexican textile industry that would be modernized and expanded thanks to investments from US firms. The continuing crisis of the domestic textile sector in the United States, and Mexico's recent loss of US import market share to China, suggest that this hemispheric strategy has been only moderately successful. More than 10 years after NAFTA, Mexico lacks the kind of developed fabric base required for world-class full-package production, leaving the country's apparel exporters increasingly hard pressed to compete with their Asian, and especially Chinese, counterparts.

The recent emergence of vertically integrated production in Honduras represents a different form of industrial organization than the full-package model that some industry analysts anticipated would dominate Mexico's post-NAFTA textile and apparel sector. Instead of linking US buyers with local apparel manufacturers that would, in turn, fill orders using either Mexican- or US-formed fabrics, the Honduran model internalizes the full-package process within one vertically integrated textile and apparel operation. While we cannot extrapolate beyond the Honduran case for which we have data, we may be witnessing a "re-verticalization" trend in the textile and apparel industry, perhaps as a reaction to the de-verticalizing strategies pursued by traditional manufacturers in the mid-1990s, when companies that were anxious to focus on brand management and marketing restructured their operations to reduce, and occasionally, eliminate manufacturing operations (Bair & Gereffi, 2002).

Does this verticalization trend provide a solution for Honduras to the textile problem that has plagued Mexico's apparel exporters? Will the development of integrated apparel manufacturing in Honduras allow that country to emulate the success of Asian exporters, who are able to service a wide range of clients by providing garments with prices that reflect cost-competitive fabrics as well as low-wage sewing labor? To date, the vertically integrated manufacturing operations, like the rest of Honduras's apparel firms, are producing primarily basic, knit garments. At least two of these companies are producing clothing for their parent firms (Fruit of the Loom and Gildan) while other integrated manufacturers described their clients to us in interviews as "wholesalers." This customer base bears little resemblance to the set of big buyers that were sourcing full-

package apparel (much of it women's wear) from East Asian countries in the 1980s, such as Liz Claiborne and the Limited (Gereffi, 1994).

Specialization in the commodity end of the market does not bode well for Honduran exporters, especially given the phase-out of the MFA and the beginning of a quota-free trade regime in garments on January 1, 2005. Despite safeguards imposed by the administration of US President George W. Bush in May 2005, which restored quantitative restrictions on some categories of apparel imports (as permitted under the terms of China's accession agreement to the World Trade Organization), industry analysts expect that the long-term consequences of liberalization will be dramatic growth in China's exports. Some predict that in several years China could claim as much as half of the world-import market for apparel (UNCTAD, 2005). The foundation for this projected export surge is already being laid; China has invested heavily in the modernization of its textile industry, aided by inflows of capital from other Asian countries with an interest in developing this sector. In 2004 alone, China imported \$3.5 billion of textile equipment (Dussel Peters, 2005; Fong, 2005).

Although the phase-out of quotas has been underway since the Agreement on Textiles and Clothing came into effect in 1995, most of the liberalization was back loaded, with the elimination of quotas on 49% of apparel products left to the fourth and final stage of the process in December 2004. The impact of the first three rounds was already evident in China's growing dominance of the US import market. In the 29 apparel categories removed from quota control in 2002, China increased its market share from 9% in 2001 to 60% in 2003 (ATMI, 2004). Even more dramatic has been the surge in China's garment exports since January 1, 2005. Overall, garment and textile exports to the United States increased more than 57% during the first quarter, while in some product categories, such as cotton trousers, China's exports grew in excess of 1,000%. Because the Agreement on Textiles and Clothing granted importing countries relatively wide latitude in deciding which product categories to liberalize at each stage, many countries opted to delay quota phase-out of the most sensitive categories until the end of the process. This is particularly worrisome for Honduras and a number of other countries in the Caribbean Basin, including Haiti, El Salvador, and Nicaragua, because

their export profile is heavily concentrated in categories of apparel that have been highly quota-constrained and thus will be most affected by increasing competition after the quota phase-out.

Liberalization of the garment trade is expected to result in the consolidation of the global apparel industry and the emergence of a small number of extremely large, full-package manufacturers that will coordinate networks across a global, but rationalized base of suppliers and contractors—many of which will likely be directly owned subsidiaries of these giant parent firms. Asian multinationals appear best poised to assume this critical role in the reorganized, post-MFA apparel commodity chain, and a handful of companies headquartered in either Hong Kong or Taiwan with production on the Chinese mainland likely represent the future in this regard (UNCTAD, 2005). Thus, China is emerging as the manufacturing center of a regional production bloc in East Asia, and much of the production taking place in China is coordinated by firms from the traditional “Big Three,” where rising wage rates and industrial diversification have encouraged the development of triangle manufacturing networks; these networks allow for the relocation of labor-intensive sewing operations to near-by, lower-cost countries (Appelbaum & Gereffi, 1994). However, while low wage rates help explain the competitiveness of China’s garment exports, China’s role in the apparel commodity chain will not be confined to garment manufacturing. Since the 1980s, China has devoted substantial effort to developing the yarn and textile segments of the chain, and these efforts are paying off. At least in part, the recent expansion of China’s world market share reflects the development of a locally integrated supply chain—a clear advantage that China offers as compared with Mexico and Central America (Dussel Peters, 2005).

The preceding analysis points to the impact of the regulatory environment on the competitiveness of a country’s apparel industry. While the Agreement on Textiles and Clothing eliminates quotas on the global garment trade, it does not abolish tariffs. Consequently insofar as regional exporters enjoy duty-free access to core markets, they continue to enjoy some benefits *vis-à-vis* extra-regional suppliers such as China. However, the same preferential trade agreements that benefit regional exporters by eliminating tariffs can also disadvantage them by making those benefits conditional on narrow

rules of origin that must be met in order for garments to qualify for duty-free status. Both NAFTA and CAFTA contain yarn forward rules of origin, and these rules have the effect of restricting apparel manufacturers’ access to globally competitive fabrics being produced outside of the regional bloc.

This issue is particularly relevant for Honduras, given the recent passage of the CAFTA—an agreement modeled on NAFTA which initiates free trade between the United States and six countries of the Caribbean Basin region—Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, and Nicaragua. Proponents of CAFTA argue that not only will the Agreement’s trade preferences boost the competitiveness of regional apparel exporters *vis-à-vis* their Asian counterparts, but because Central America’s garment manufacturers (unlike China’s) rely heavily on US fabrics, a trade deal which supports regional apparel exporters will also help the US textile industry.¹⁰ In announcing its support for CAFTA, the US National Council of Textile Organizations pointed out that Central America’s garment factories consume approximately 40% of US yarn exports and 25% of US fabric exports, making textile mill products the leading US export to the region, and Central America the second largest customer for the industry behind Mexico. In other words, CAFTA’s boosters see the Agreement in terms that are identical to the ones used to describe NAFTA 10 years ago—that is, as the lynchpin of a broader hemispheric strategy that will enable the US textile industry to compete with China.

However, as was also the case with the NAFTA, discussions regarding the rules of origin to govern trade in textile products under CAFTA were among the most contentious of the negotiating process. The CAFTA countries argued that access to globally cost-competitive textiles was essential for the success of their garment exporters. Consequently, they called for more flexible rules of origin and opposed making preferential access to the US market contingent on the use of yarns and fabrics manufactured in the region. However in order to strengthen the potential benefits of CAFTA for the domestic textile industry, US negotiators sought narrower rules of origin. The logic behind their position was clear: Given the limited capacity of textile production in the CAFTA countries, “regional” rules of origin would help guarantee that Central America’s *garment exports* to the United States continue to be

fueled largely by Central America's *textile imports from* the United States.

Protracted negotiations produced something of a compromise, with the parties agreeing to a basic "yarn forward" rule of origin, meaning that every process from the spinning of yarn through the final assembly of the garment must occur in one of the seven signatory countries. Since the Central American countries lack a yarn-producing industry (and remain major importers of US textiles, despite recent investments in local fabric production as noted above), Caribbean Basin exporters will need to import yarn from the United States to comply with these rules. Overall the yarn forward rules of origin, as opposed to a more lenient "fabric forward" or "cut and sew" provision benefits the textile industry in the United States. However, some US textile manufacturers were disappointed that CAFTA includes a cumulation provision, which allows inputs manufactured in Mexico (also a major importer of US textiles) or Canada to be used in woven apparel products, and industry groups opposed the inclusion of tariff preference levels (TPLs) for Nicaragua which permit that country to export to the US market up to 100 million square meter equivalents of apparel containing fabric from any country in the world. While domestic textile companies complain that these loopholes could cost the industry \$1 billion in foregone sales, US retailers and importers lament what they consider restrictive rules of origin that do not provide Central America's apparel exporters with sufficient access to textiles produced outside of the hemisphere.

CAFTA's regulatory framework is intended to consolidate a regional production bloc in the western hemisphere which will strengthen the competitive position of textile and apparel manufacturers in the Americas *vis-à-vis* Asian producers. Although this hemispheric strategy is likely to have limited success, as suggested by the now decade-long experiment with the NAFTA, CAFTA's restrictive rules of origin will hinder the competitiveness of the region's exporters by discouraging the use of substantially cheaper fabrics and yarns produced in countries such as China, India, and Pakistan. Indeed, the CAFTA will likely help consolidate Central America's status as a region producing commodity products, such as basic knits, for which a local textile base already exists.

The policy recommendations of this analysis are clear—the regulatory environment created by regional trade agreements can best enhance

the competitiveness of Latin America's apparel industries if the Agreements contain flexible rules of origin. Why was this not the case with the CAFTA? Although there were various points of disagreement during the CAFTA talks between the Central American and US representatives with regard to rules of origin, the anxiousness of the former to see an Agreement reached, and the asymmetrical power relations that structured the negotiations between these economies and the United States appear to have foreclosed that possibility. However, the outcome of the negotiations also reflect the nature of domestic political institutions and local power relations in the Central American countries, especially the leading role played by well-established firms and other domestic actors with particular interests at stake in the CAFTA process.

As was also the case with NAFTA, a rather narrow range of stakeholders were active in shaping the CAFTA negotiations, while others were given little voice in the process. Commensurate with its importance as a source of export revenue and manufacturing employment, the apparel industry was accorded high priority during the talks, while negotiators from other sectors, such as agriculture, were scarce. Many of the negotiating rounds for the CAFTA that took place during the course of 2003 and early 2004 focused on the thorny question of the rules of origin that would govern trade in textile products, and issues regarding liberalization of agriculture were negotiated more expeditiously and in the last rounds, despite the fact that the number of Central Americans employed in agriculture far exceed the number of garment workers in the region. The implications of this biased representation will have a significant, and we expect deleterious, impact on the Caribbean Basin economies in the future, not to mention on the people of the region.

However, even if the CAFTA regime provided a more favorable framework for the region's exporters with regard to rules of origin, there is a set of macroeconomic issues quite apart from the regulatory ones affecting the competitiveness of several Latin American countries, including Mexico and Honduras. The general lack of financing available to the productive sector, the high costs of credit for those firms that can secure it, and the overvaluation of the Mexican peso¹¹ are examples of the pressure that countries in the region are under, to maintain exchange and interest rates

that meet with the approval of the international financial institutions. Insofar as this is an important element in the overall package of reforms that has become known as the Washington Consensus, it suggests the need to re-think fundamental aspects of this development model, and the discussion of second-generation reforms coming from institutions such as the World Bank, the IMF, and the Inter-American Development Bank point in this direction (Kuczynski & Williamson, 2001).

The need to re-evaluate the region's developmental trajectory returns us to the theoretical and policy-relevant issues which we addressed in Section 2. During the last 15 years, a growing body of literature has analyzed specific commodity chains, and the value-adding processes they entail, in a wide range of regions and countries. This research has yielded policy proposals designed to enhance the competitiveness and performance of firms (especially, small and medium enterprises) and clusters of firms in the context of global industries. It has also demonstrated the importance of private-public sector co-operation (e.g., investing in technology and training) in order to insure that exporting activities generate inter-firm linkages and facilitate learning processes (Humphrey & Schmitz, 2000). There are lessons to be drawn from this literature regarding the kinds of coordinated efforts necessary to pursue a sustainable upgrading strategy which can benefit local capital and labor, but there has been only modest success in translating this knowledge into action (Peres & Stumpo, 2001). In particular, targeted policies to assist the development of local manufacturers are largely missing from Latin America's adoption of the export-oriented model, although this type of support was a critical ingredient enabling the East Asian success story that the region has been trying to emulate (Stiglitz & Yusuf, 2001; Wade, 1990).

We are not optimistic about the developmental prospects generated by export-oriented apparel production in Mexico and Honduras. Links to the apparel commodity chain are somewhat tenuous in both countries, and despite the differences in industrial organization noted above, neither the full-package nor vertical integration model appear likely to facilitate endogenous growth within Mexico and Honduras. Our analysis suggests that there are significant structural limitations constraining the ability of these countries to leverage participation in the apparel commodity chain into positive development outcomes; In effect, only a

few segments of the chain touch down in each country, and neither Mexico nor Honduras has been very successful in anchoring those segments territorially by expanding the range of value-adding processes and activities that occur locally. In fact, as we have argued above, trade regimes regulating regional garment production and in particular rules of origin that largely reflect the prerogatives of US textile manufacturers, are unlikely to foster these developments.

Careful attention must be paid to how we interpret and define industrial upgrading and its implications for development. Commodity chain analyses of the apparel industry point to the benefits that full-package production offers *vis-à-vis* the maquila model. Yet in Mexico, the transition from assembly to integrated manufacturing has been highly uneven, and as the current difficulties of Mexican apparel manufacturers suggest, the emergence of full-package capabilities is not a guarantee of the industry's future competitiveness. In the case of Honduras, a vertical form of industrial organization is emerging, as a small number of companies integrate backward from local garment assembly to fabric production. This model represents a form of upgrading over assembly subcontracting, but here again our research yielded evidence of its limitations, and the still relatively modest volume of local textile production means that Honduran exporters continue to import most inputs from the United States—an outcome that the CAFTA rules of origin are designed to secure. Both NAFTA and CAFTA inhibit the access of regional exporters to inputs from Asia, a region which boasts a much more integrated and competitive yarn-textile-garment value chain than can be found in the Americas, and this will have a negative impact on export-oriented apparel production in Mexico and the Caribbean Basin.

Our main argument is that participation in GCCs does not guarantee sustainable industrial upgrading and development unless the export-oriented activities that link local suppliers to global chains take root territorially and enable endogenous growth. Much of the research oriented by the GCC framework has focused on how powerful lead firms shape the organizational dynamics of global industries and has sought to demonstrate how these chains provide opportunities for some developing-country exporters to upgrade production, as has occurred with a limited number of full-package manufacturers in the Laguna region of Mexico.

However, if we are interested in development outcomes more broadly, we must extend this analysis by asking how the benefits of chain participation can be expanded to encompass a greater swathe of local capital and labor. Sustaining export dynamism, and translating it into meaningful outcomes on the ground for

firms and workers in the Global South, requires simultaneous attention to the institutions and regulatory environments shaping commodity chains and the territorial dynamics of what is happening at the global–local nexus, in the particular spaces in which production, and ultimately development occur.

NOTES

1. See Gereffi and Kaplinsky (2001) and Bair (2005) for reviews and summaries of some of this literature.

2. See Romer (1993) on endogenous growth theory and Vázquez Barquero (2002) for a discussion of endogenous development. While the GCC concept focuses primarily on the *organizational* linkages that pattern global industries, territorial endogeneity highlights *spatial and temporal* linkages between the global and local. In this sense, the implications of globalization are approached by asking, how rooted are the connections between local firms and global chains? What kinds of processes and (value-added) activities characterize local linkages to such chains?

3. This criticism is not specific to the commodity chains literature. For example, it also applies to the literature on “systemic competitiveness” (Meyer-Stamer, 2004).

4. According to CANAINTEX and Werner International (2002, p. 8), average annual growth rates of textile consumption were above 3% during 1960–80, but have declined substantially since then. The decline in per capita consumption of textiles is even sharper over this period.

5. Table 1 reflects aggregate export data for the yarn–textile–apparel chain. This chain comprises 3,228 10-digit items of the harmonized tariff system, which can be classified into these three segments. The apparel portion of the chain is most significant in terms of international trade, accounting for 80.4% of US imports in this sector during 1990–2004. While most of our discussion focuses on the garment, and to a lesser extent textile segments of the chain, we also note below, commensurate with the GCC approach, that understanding the entire structure of the chain, and the links between them, is critical for analyzing the competitiveness of the sector in a particular region and its potential for generating opportunities for upgrading and endogenous growth.

6. In Europe, the assembly model is known as Outward Processing Trade (OPT). Although many of the benefits granted by the OPT regime were eliminated when the EU phased out quotas on apparel products, it remains

the dominant model of export-oriented apparel production in the European periphery (Begg, Pickles, & Roukova, 2003).

7. When we disaggregate the yarn–textile–apparel chain, China’s competitiveness *vis-à-vis* exporters in the Americas is even more apparent. While clothing accounted for 99% of Central America’s total yarn–textile–garment exports, China is also a globally competitive exporter in the yarn and textile segments. In 2004, apparel accounted for a much lower percentage (61%) of China’s total exports in the sector, with exports of yarn and fabric comprising the remaining 39% (Dussel Peters, 2005).

8. This second category is more nominal than empirical, however. Most of the firms surveyed in Honduras reported having full-package *capabilities*, but our efforts to identify a single (non-vertically integrated) manufacturer actually engaged in this form of production at the time of our fieldwork were unsuccessful. Firms that reported some previous experience with full-package production cited high financing costs and increasing uncertainty as reasons for abandoning it.

9. Many companies reported that there is little difference in the profit margin for the same garment produced as a full-package program as compared to an assembly subcontracting order. The higher price per piece in the case of the latter reflects the additional costs involved (most importantly the price of the fabric which, under the full-package model is borne by the manufacturer as opposed to the buyer), and some firms insisted that they were being “pushed” into full-package production by branded firms that prefer complete sourcing solutions to managing assembly networks. However, others reported that full package was slightly more profitable because the manufacturer could include a margin on the fabric that was purchased, instead of just on the labor needed to sew the garment.

10. The six CAFTA countries imported \$2.6 billion worth of textile products from the United States in 2004, while US imports of apparel from those countries totaled \$9.6 billion. In comparison, US textile exports

to China totaled less than \$268 million in 2004, while the United States imported nearly \$13.6 billion in clothing from China, and an additional \$4.2 billion in textiles (US International Trade Commission data, imports for consumption, customs value).

11. Since 1990, the real exchange rate in Mexico has been systematically overvalued (achieving levels above 25% in 2004) in order to control for inflation and help insure macroeconomic stability (Banco de México, 2005).

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