NAFTA, Trade Diversion and Mexico's Textiles and Apparel Boom and Bust

By William C. Gruben

A fourth to a fifth of Mexico's million-plus maquiladora workers once produced textiles and apparel, many of them in factories near the U.S. border. Employment peaked at nearly 300,000 workers in early 2001. Since then, widespread layoffs have slashed jobs. By December 2005, they'd fallen to 174,000, a 41 percent drop in five years (*Chart 1*).

The industry's massive downsizing has evoked great concern on both sides of the border, with hand-wringing about unbeatable Chinese competition and the imminent demise of Mexican apparel operations. The situation isn't that grim, though.

Mexico's textile and apparel export industry isn't going to disappear, although it has shrunk in response to market realities related to trade policy changes. What's happened reflects a facet of trade liberalization little understood by the general public: trade diversion. Coined by economist Jacob Viner, the term describes how discriminatory tariff policies can undermine the benefits of free trade, leading to inefficient allocation of resources and higher costs for consumers.[1]

Before joining the European Union, for example, Britain imported most of its lamb from New Zealand, the cheapest producer. Adopting the common EU tariffs made New Zealand lamb more expensive in Britain, opening the door for producers in member countries, particularly the French. For exporting nations, trade diversion can lead to dramatic ups and downs in sales—which is just what occurred with Mexico's textiles and apparel.

When the North American Free Trade Agreement took effect in 1994, its proponents emphasized the pact's efficiency and growth effects. Their arguments rested on the findings of long-dead economists whose writings still ring true. Adam Smith, David Ricardo and others had shown that increased international trade would allow economies to direct resources toward what they produced relatively efficiently, exporting what they didn't consume at home and importing what their trading partners could produce more effectively. World efficiency would increase. Products would be cheaper. Everyone would be better off.

To achieve these mutual gains from trade requires a world in which all economies are open and each nation treats all others the same. While regional free trade agreements like NAFTA do lower prices for their members, they are quite different from universal free trade.

By their very nature, regional accords lower tariffs and regulatory burdens for members, giving them an edge over nonmembers. Trade diversion occurs when these preferential trade agreements encourage higher-cost imports of member countries to replace the lower-cost imports of nonmembers.

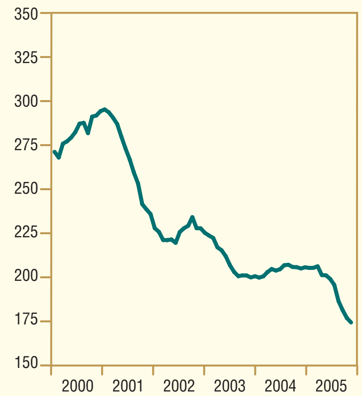
Where trade diversion exists, economic theory suggests that all good things must end—at least for those that have benefited from the trade preferences. As an industry's imports increase under a regional trade deal, resistance to opening markets falls off. At the same time, those excluded from the preferential arrangement lobby for the same benefits. More countries receive such deals and then even more do. This result suggests that a little bit of trade opening can lead to a lot.

When the importing countries extend preferential trade benefits to more nations, the boom from the original diversion may be followed by a bust as new trading patterns emerge and the world's low-cost producer regains its advantage. This may not always occur, but it's exactly what happened with Mexico's textiles and apparel. With the erosion of Mexico's NAFTA edge, China increased U.S. sales. Mexico lost market share—and as a result, employment fell in the textile and apparel maquiladoras.

Mexico's Experience

Comparing the trends in U.S. apparel imports from Mexico, China and countries that eventually became part of the Domini-

Chart 1
Jobs in Mexico's Textile and Apparel Maquiladoras Plunge



SOURCE: Instituto Nacional de Estadística, Geografía e Informática.

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can Republic–Central American Free Trade Agreement suggests that trade diversion was behind the boom-and-bust cycle in Mexico's textile and apparel maquiladoras.

In the early 1990s, China topped Mexico in apparel exports to the U.S. (*Chart 2*). A shift toward Mexico began with NAFTA's signing in 1993 and accelerated with implementation in 1994.

Under NAFTA, Mexican apparel enters the United States duty-free, provided all its components from the thread forward are made in the United States, Canada or Mexico. This provision was included in the agreement to benefit not only Mexican apparel manufacturers but also U.S. textile and fiber companies.

When NAFTA lowered U.S. barriers, Mexican producers could compete in the huge market north of the border, even though other countries could produce textiles and apparel more cheaply. By the late 1990s, Mexico was picking up market share so rapidly against China that it briefly became the No. 1 apparel supplier to the U.S.

With NAFTA in place, Mexico also began to increase its U.S. sales more rapidly than the Central American nations. The gains continued until 2000, when the U.S. offered low-wage Caribbean and African countries some of the same benefits it had bestowed on higher-wage Mexico under NAFTA. Last year, the United States signed a broader preferential trade agreement with DR-CAFTA.

Meanwhile, China had developed highly competitive apparel export industries, helping it become the world's low-cost producer. In 2001, China joined the World Trade Organization, just as the group was dismantling the Multifiber Arrangement, the textile and apparel quotas rich countries had maintained to protect their industries from imports. On a leveled playing field, China regained market share at the expense of both Mexico and Central America.

Maquiladora Jobs

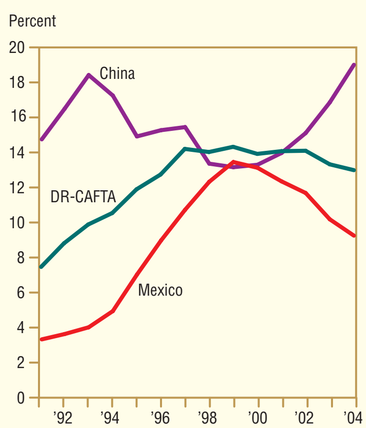
The NAFTA-created trade diversion benefited Mexican textile and apparel workers. Comparing employment indexes for textiles and apparel and other maquiladora industries since 1990 shows jobs surged when Mexico had a NAFTA edge and increased its U.S. market share (*Chart 3*). As the U.S. economy gained momentum after July 2003, employment in all other maquiladoras climbed steadily. Textile and apparel job growth, however, has faltered (*see box*).

But the sector's employment since NAFTA belies fears of an industry on the brink of demise. The early NAFTA-driven boom gave the industry a big lift, but the gains could not be sustained. Even with the recent declines, however, the number of textile and apparel jobs remains much further above its pre-pact level than other maquiladora employment.

NAFTA no longer provides Mexican textiles and apparel much benefit. The trade diversion has ended. To show this, we created an economic model that compares how the industry's employment would fare in two scenarios—one assuming NAFTA continued to give Mexico the same edge it had before 2001, the other assuming NAFTA didn't exist.

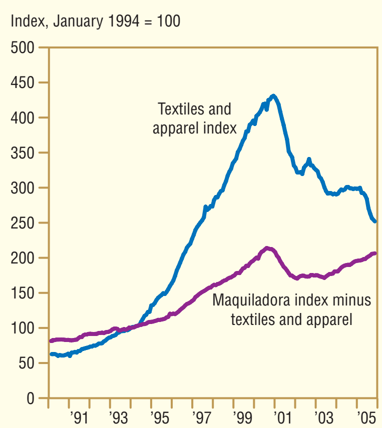
We needed to control for other variables that can affect apparel trade. The first is manufacturing wages in Mexico, the U.S. and a sample of Asian countries. If Mexican pay fell relative to U.S. or Asian wages, the country's textile and apparel maquiladora employment would likely rise. In a global world, when the cost of doing

Chart 2
China Gains as Trade Diversion Unwinds



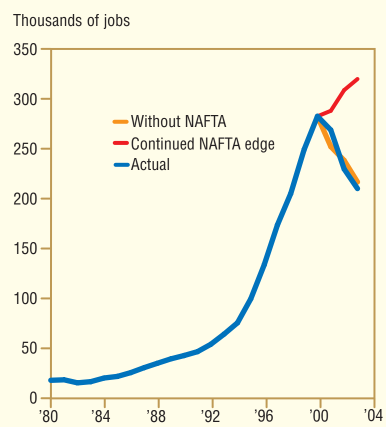
SOURCE: Organization for Economic Cooperation and Development.

Chart 3
Textiles and Apparel Lead Maquiladora Job Growth



SOURCE: Instituto Nacional de Estadística, Geografía e Informática.

Chart 4
No-NAFTA Scenario Predicts Actual Textile and Apparel Employment



SOURCES: Instituto Nacional de Estadística, Geografía e Informática; Federal Reserve Bank of Dallas.

business in one place becomes cheaper than in another, producers migrate. The second variable is U.S. apparel output. As production increases in the U.S., it will also go up in Mexico. This occurs whether Mexican apparel factories are suppliers to U.S. producers or Mexico's industry is swept higher by the same retail demand that boosts U.S. apparel employment.

Using our model for 1980–2000, we can estimate what happened in 2001–03 under two scenarios. We find that Mexico's textile and apparel manufacturing employment would have continued to rise sharply if other trade agreements hadn't eroded Mexico's preferred position in the U.S. market (*Chart 4*). Taking away NAFTA, however, produces an estimate of textile and apparel maquiladora employment that nearly matches the actual experience of 2001–03.

The same supply, cost and demand variables that once explained fluctuations in Mexico's maquiladora employment still seem to pick up much of what happens. Mexico's export industries will continue to benefit from being on the doorstep of the greatest consumer market on earth. But for textiles and apparel, NAFTA isn't what it used to be.

It's hard to predict what will happen to Mexico's textile and apparel maquiladoras now that China and the Caribbean countries have increasingly open routes to the U.S. market. Many analysts argue that Mexico maintains a competitive advantage based on its ability to deliver products to the U.S. quicker than China can. Because both countries stitch garments under contract with U.S. labels, it may be that the more trendy clothes will be made in Mexico. Any way you look at it, competition will be intense.

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Note

1 *The Customs Union Issue*, by Jacob Viner, New York: Carnegie Endowment for International Peace; London: Stevens & Sons, 1950.

Textiles Aside, Maquiladoras Back on Growth Path

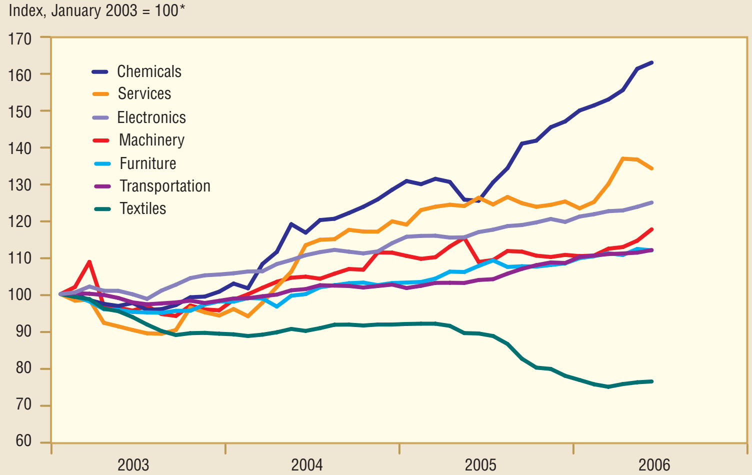
Textile and apparel maquiladora employment has continued to decline at a time when the rest of the industry is expanding. Overall, Mexico's assembly-for-export sector has been adding jobs since it bottomed out at a seasonally adjusted 1,042,085 workers in July 2003. The most recent employment count stood at 1,213,841 in June.

The strongest sector has been chemicals, up 67.8 percent since January 2003, followed by services at 45.1 percent, electronics at 25.4 percent, machinery at 21 percent, furniture at 17 percent and transportation at 14.9 percent. By contrast, textiles and apparel declined 15.6 percent over the same time span.

The maquiladora sectors' varying fortunes have geographic implications. The industry is growing in Mexican border cities that cater to mainstream U.S. manufacturers. Since January 2003, for example, maquiladora employment is up 40.9 percent in Reynosa and 25.8 percent in Ciudad Juárez. Elsewhere, border cities' maquiladora industries have been held back by various impediments, such as infrastructure difficiencies. Matamoros' job gains were 2.8 percent. Employment fell by 30.8 percent in Piedras Negras and 13.6 percent in Ciudad Acuña.

Because maquiladoras supply U.S. companies, their employment ebbs and flows with industrial production in the United States. The 1990s boom helped propel jobs to a record 1,332,147 in October 2000, right before the U.S. economy tumbled into recession. Maquiladoras resumed hiring as U.S. industrial production picked up in 2003.

Maquiladora Employment by Sector



*Seasonally adjusted.

SOURCE: Instituto Nacional de Estadística, Geografía e Informática; seasonal adjustment by Federal Reserve Bank of Dallas.