

# Trade Conference Explores U.S.–Mexico ‘Common Bonds’

By *Jesus Cañas, Roberto Coronado and Robert W. Gilmer*

*As Mexico shifts its competitive focus, the maquiladora story is increasingly about more-skilled jobs and higher compensation, not just the number of jobs.*

The El Paso Branch of the Federal Reserve Bank of Dallas held a daylong conference, “U.S.–Mexico Manufacturing: Common Bonds,” in November 2010 to assess the future of U.S.–Mexico trade in manufactured goods following the global recession. Speakers reviewed the prospects for bilateral trade and Mexico’s maquiladora plants, which typically take inputs from the U.S. and assemble them into products for export back to the U.S. A summary of conference highlights follows.<sup>1</sup>

**U**.S.–Mexico manufacturing has undergone a transformation over the past 10 years following two U.S. recessions, thrusting Mexico’s maquiladora plants into a new age. In his presentation “Maquiladoras: Do We Still Benefit from Them?” Federal Reserve Bank of Dallas associate economist Jesus Cañas compared the effects of the 2007–09 recession and recovery with the 2001–02 cycle, when the U.S. entered a mild recession accompanied by a steep decline in industrial production that quickly spilled into Mexico.

In the earlier period, two events exacerbated cyclical challenges confronting maquiladoras and contributed to industrial restructuring in Mexico. The Sept. 11 terrorist attacks bolstered security requirements and dramatically slowed border crossings. Additionally, China entered the World Trade Organization (WTO) in December 2001, gaining access to North American Free Trade Agreement markets at tariff rates low enough to end Mexico’s low-wage advantage.

By contrast, Cañas said, the 2007–09 recession was tied primarily to the business cycle, with less industrial restructuring and labor market displacement through trade.

The structural shift to higher-end manufacturing and higher-skilled jobs that occurred in the 2001–02 cycle led to a better outcome for Mexico and its maquiladoras in the most recent recession—and bodes well for U.S.–Mexico manufacturing in the years to come.

## **The Maquiladora Redefined**

In 2001–02, Mexico lost 280,500 ma-

quiladora jobs, many in the lowest-wage industries, such as toys, leather, textiles and apparel. But it became apparent that Mexico’s role in North American production was based on more than just low wages, Cañas said. Its proximity to the U.S. mattered—for bulky items such as appliances and televisions, as well as for just-in-time inventory needs. Mexico, with a skilled and experienced workforce and intellectual property protections, found its place manufacturing higher-value-added goods such as medical instruments.

To evaluate the cycle, it was necessary to wait until the recovery to sort cyclical losses from longer-lasting structural damage.<sup>2</sup> By 2006, maquiladoras had recovered fewer than two-thirds of the jobs lost during the downturn, and there was no expectation that the lowest-wage positions would return. Yet based on production levels and real compensation per worker, the maquiladora industry reached its peak in 2005, retaining its most productive and best-compensated positions.

The focus has been on maquiladora employment because structural displacement of jobs through trade is an important labor market issue and the industry has been regarded as a jobs program. As Mexico shifts its competitive focus, however, the maquiladora story is increasingly about more-skilled jobs and higher compensation, not just the number of jobs.

A comparison of employment and real compensation shows that the latest cycle represents a serious cyclical event, without

**Chart 1**  
**Maquiladora Jobs, Wages Rebound from Recession**  
 (Real wages, seasonally adjusted)

Index, July 2007 = 100



SOURCES: Instituto Nacional de Estadística y Geografía; Federal Reserve Bank of Dallas.

structural losses, Cañas said.<sup>3</sup> The maquiladora industry as a whole experienced a jobs decline of 17.4 percent by July 2009, deeper than the previous recession. Total compensation fell as hard and fast as employment, suggesting that this time there was no bias toward the loss of uncompetitive low-wage jobs (*Chart 1*).

Employment has returned much faster during this recovery, Cañas said. About two-thirds of the maquiladora job losses were restored by late 2010, compared with virtually no job recovery in U.S. manufacturing.

### Examining Integration

Daniel Chiquiar, Banco de México's director of economic measurement, brought another point of view to Mexico's restructuring of manufacturing after 2001, focusing on exports to the U.S. He noted in his presentation that the strong historical cyclical correlation between U.S. and Mexican manufacturing continued after China's entry into the WTO, and that after 2005, Mexico's share of exports to the U.S. grew again. Some reorientation of Mexican manufacturing took place in a short period.

Chiquiar examined specific industries in Mexico to determine if they gained or lost competitive advantage after 2001 and whether they became more or less integrated into U.S. manufacturing. Integration refers to maquiladora-style intra-industry trade, with Mexico importing inputs and

exporting final goods.

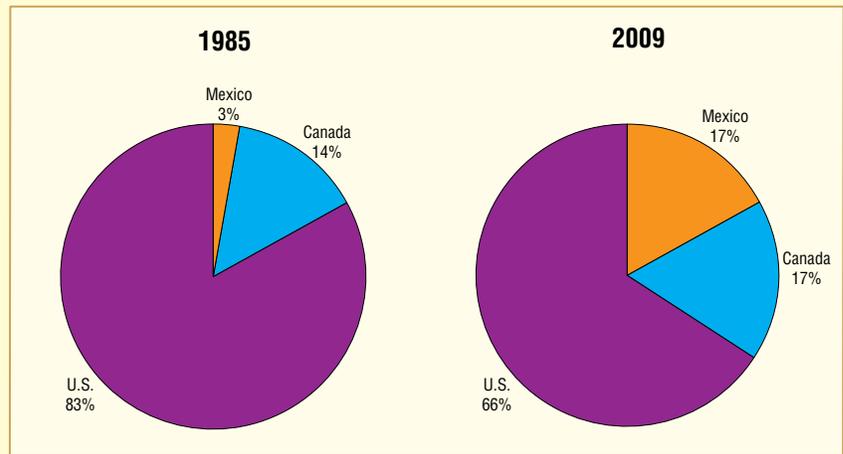
For Mexico, sectors that gain in competitiveness are more integrated into the U.S., suggesting that maquiladora-style production sharing has been at the heart of Mexico's restructuring. Further, he found that improved competitiveness in an industry was often tied to rising skill levels. As trade between the two countries evolved post-2001, U.S. firms shifted their least-skilled jobs to Mexico, effectively raising the skill level of both Mexican and U.S. manufacturing. The primary driver of improved competitiveness in Mexico appears to be increased skill levels, with no consistent role for a shift of physical capital, such as plants and equipment.

Carlos Bello, director general of the Mexican Federation of the Aerospace Industry, said his sector provides an example of how Mexico climbed the ladder in terms of manufacturing skills. No other industry imposes more exacting requirements for certification and quality production.

Mexico had 41 manufacturing plants, nine maintenance and repair operations and 20 design and engineering companies, generating a combined \$3.1 billion in revenue in 2008, the industry's peak year. About \$13 billion has been invested in aerospace by foreign and national sources. About 5 percent of suppliers to major aircraft manufacturers such as Boeing, Airbus, Bombardier and Embraer are Mexican companies.

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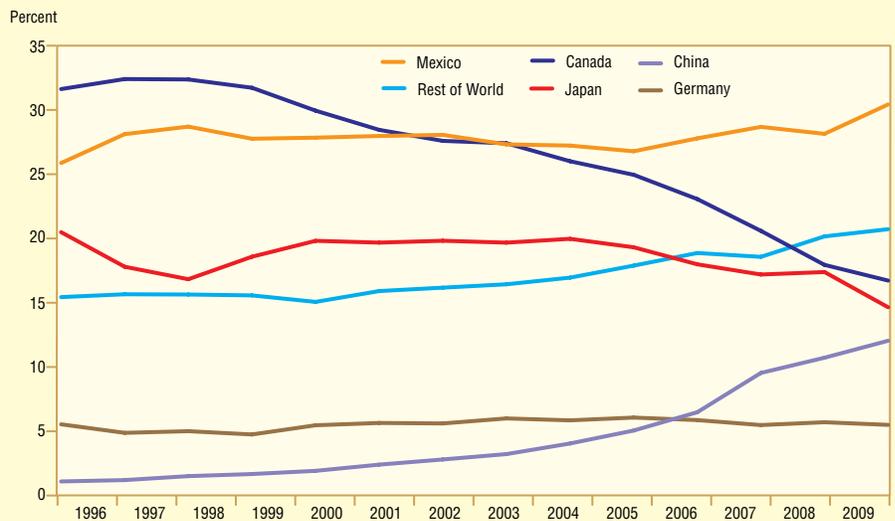
**Chart 2**  
**Mexico Gains Ground in North American Light Vehicle Production**



SOURCE: Thomas H. Klier, Federal Reserve Bank of Chicago, with data from Ward's Automotive Group.

*Mexico passed Canada in 2009 to become the largest exporter of auto parts to the U.S., with a 30 percent share of U.S. imports. China has made inroads as a parts supplier to the U.S. in recent years, largely at the expense of Canada.*

**Chart 3**  
**Mexico Becomes Largest Source Country of U.S. Motor Vehicle Parts**



SOURCE: Thomas H. Klier, Federal Reserve Bank of Chicago, with data from International Trade Commission.

### Auto Parts and Assembly

George Magliano, director of North American automotive research at Global Insight, and several other experts discussed the changing landscape of North American auto production. Auto parts and assembly is a large and important example of Mexico's maquiladora trade. Mexico now vies with Canada to be the second-largest auto producer in North America (*Chart 2*).

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ports (*Chart 3*). China has made inroads as a parts supplier to the U.S. in recent years, largely at the expense of Canada.

Magliano presented his analysis of the auto industry in the context of recession, recovery and longer-term growth. He said a slow U.S. recovery will carry over to the auto market in a number of ways. A weak job environment, lack of creditworthiness and a poor housing market could keep sales below prerecession levels until 2015. Relative to population or employment, 2015 sales will remain much lower than before

## Other Trade Topics

Conference speakers addressed other issues related to U.S.–Mexico trade. Those presenters included Andrew Selee, director of the Mexico Institute at the Woodrow Wilson International Center for Scholars; vice president and senior policy advisor Evan Koenig, vice president and senior economist Mark Wynne and economist Roberto Coronado, all of the Dallas Fed; and Vanda Felbab-Brown, a fellow at the Brookings Institution.

- Selee suggested four strategic initiatives to advance the needs of the U.S.–Mexico border: timely and efficient movement of goods across the border; expansion of the North American Development Bank into new and creative projects; border educational partnerships to train binational leaders; and the pursuit of green energy and health care opportunities unique to the region.<sup>1</sup>
- Koenig forecast a continued moderate pace of recovery in the U.S. but “a long slog” before the nation returns to the levels of employment and income indicated by the trend before the financial crisis.
- Wynne said initial fears of deglobalization—a reversal of global integration—resulting from the 2007–08 collapse in world trade are unwarranted. In retrospect, most of the decline is accounted for by the severity of the crisis and the highly cyclical durable-goods sector’s share of world trade.
- Coronado discussed how maquiladora growth affects jobs in El Paso and other border cities. For the border as a whole, the impact of the maquiladora is reduced from levels of 20 years ago, but it remains a particularly strong influence in Texas border cities. The impact no longer extends to manufacturing on the U.S. side of the border but is more evident in services such as transportation, real estate, and wholesale and retail trade, he said.
- Felbab-Brown brought into perspective the current drug-related violence in northern Mexico. So far, the large industrial plants of northern Mexico have not been targets of this criminal activity, although plant management has been placed at risk of extortion and kidnapping and employees live in fear. The violence continues as a significant threat to economic and social progress throughout northern Mexico.

### NOTE:

<sup>1</sup> See “Strategic Guidelines for the Competitive and Sustainable Development of the U.S.–Mexico Transborder Region,” presentation by El Colegio de la Frontera Norte and the Woodrow Wilson International Center for Scholars, Border Governors Conference, September 2009.

the downturn, with no recovery expected in these ratios. Magliano said, however, that the postrecession, restructured auto industry is profitable—and that will only improve as sales volumes return.

North American production has snapped back quickly from the depths of the recession. Ralph Watkins, International Trade Commission senior international trade analyst, tracked the most important sectors in the turnaround in U.S.–Mexico trade and found intra-industry trade in autos at the forefront. High on the list of fast-growing U.S. exports to Mexico in 2010 were engines, auto parts, cars, trucks and engine parts. Fast-growing Mexican imports from the U.S. included those items, along with seat parts and truck-tractors.

Over the long run, Magliano said, North American vehicle production will return to about 16 million units, the level before the recession began. He reiterated

that Mexico already has been a big winner in the North American auto market, and Mexican plants will continue adding capacity as it’s shut down in the U.S. and Canada. The 2 million light vehicles currently produced in Mexico should surge to 3.3 million units by 2015. Ford, GM and Chrysler have shifted premium production to Mexico, manufacturing large and expensive, high-valued-added vehicles such as bigger pickup trucks and SUVs.

Thomas Klier, a senior economist at the Federal Reserve Bank of Chicago, put Mexico’s niche in the North American auto market into perspective. In his address on U.S.–Mexico auto linkages, he said that Mexico is not well-integrated into the U.S.–Canada Auto Alley, a region centered in Detroit and stretching from the Great Lakes to Tennessee and Mississippi. But Mexico has a cost advantage; it offers the lowest wages in North America. Klier said this advantage

can be found in such labor-intensive activities as casting, machining and painting.

These auto-related skills are more than a notch above the low-wage assembly and sewing skills associated with the early maquiladoras. However, Thomas Kurfess, a professor at Clemson University’s International Center for Automotive Research, emphasized that the auto industry is increasingly driven by system integration, led by advanced electronics. He pointed to the critical role of research and development, noting that little of it occurs in Mexico. Some design and development takes place at the component level—many suppliers moved into Mexican industrial parks because of just-in-time inventory requirements—but nothing original is happening in engineering for assembly operations.

## Exploiting Its Advantages

Mexico lost many of its low-wage, low-skill jobs in the apparel and textile industry following the 2001–02 recession. In the early 2000s, low-wage competition in Asia, Central America and the Caribbean led to structural job losses in low-value-added sectors of Mexican manufacturing. New avenues for growth arose later in the decade, however, as U.S. and foreign car companies increasingly sought cost savings by turning to Mexican parts suppliers and assembly plants. Mexico’s proximity to the U.S., its experienced manufacturing workforce and its lower cost structure led to a growing role in North American auto parts production and auto assembly and contributed significantly to the global competitiveness of the North American auto industry.

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## Notes

<sup>1</sup> See the conference agenda at [www.dallasfed.org/news/research/2010/10/commonbonds.cfm](http://www.dallasfed.org/news/research/2010/10/commonbonds.cfm).

<sup>2</sup> “Maquiladora Recovery: Lessons for the Future,” by Jesus Cañas, Roberto Coronado, Robert W. Gilmer, *Southwest Economy*, no. 2, 2007.

<sup>3</sup> Mexico revised its coverage of export-oriented plants for data collection purposes in 2007 to include maquiladoras, plus domestic plants that enjoy similar tax and customs benefits. Thus, the data coverage in the 2007–09 chart is broader than prior figures, which were strictly for the foreign-owned maquiladoras. See “Mexican Reform Clouds View of Key Industry,” by Jesus Cañas and Robert W. Gilmer, *Southwest Economy*, no. 3, 2007.