

# BUSINESS

## *Frontier*

ISSUE 4 – 1996

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FEDERAL RESERVE BANK OF DALLAS

## The Maquiladora Industry: Still Going Strong (Part 2)

*The maquiladora industry's renewed strength since 1995 illustrates the long-term economic potential Mexico offers foreign direct investors.*

The maquiladora industry's strong growth in 1995 has been followed by even stronger growth in 1996. However, as is the case for the industry's various locations, the industry's performance across sectors has been uneven. Part 1 of this article, in the last issue of *Business Frontier*, examined how the industry has fared this year in various locations. This second and final part covers the industry's 1996 performance by sector and looks at its source-of-capital profile.

### Performance by Sector

#### *Principal Sectors*

The maquiladora industry's principal sectors are electric/electronics, transportation equipment, and textiles and apparel. Together, these three sectors employ more than 73 percent of all maquiladora workers in Mexico. The electric/electronics sector is the maquiladora industry's largest employer. During the first eight months of this year, it employed more than 253,200 workers, a 34.7-percent share

of maquiladora employment. The transportation equipment sector, which holds the industry's second-largest employment share, at 21.5 percent, employed more than 157,200 workers during the same period. Third in importance is the textiles and apparel sector, which employed nearly 124,500 workers during January–August, 17 percent of maquiladora employment.

As can be seen in Table 1, among these three sectors, textiles and apparel had the highest employment growth rate during this period, followed by transportation equipment and then electric/electronics. During January–August, the textiles and apparel sector grew 37.4 percent relative to the year-earlier period; the corresponding growth rates for transportation equipment and electric/electronics were 14.7 percent and 11.7 percent, respectively. The greater strength of the textiles and apparel sector derives, in part, from the more open trade and investment rules for this sector that came into play with the start of NAFTA in 1994. For example, textiles and apparel maquiladora employment in 1994 grew at a double-digit rate of 16 percent, followed by 1995 growth of almost 27 percent. Chart 1 shows the employment growth trends for the maquiladora industry's three main sectors for 1986–95. Though the electric/electronics sector had the

Table 1

## Maquiladora Employment by Sector and Region January–August 1996

|                          | BORDER         | INTERIOR       | TOTAL          | % Change from<br>Year Earlier |
|--------------------------|----------------|----------------|----------------|-------------------------------|
| <b>TOTAL</b>             | <b>511,279</b> | <b>219,498</b> | <b>730,777</b> | <b>16.9</b>                   |
| <b>SECTORS</b>           |                |                |                |                               |
| Electric & Electronics   | 209,030        | 44,191         | 253,221        | 11.7                          |
| Transportation Equipment | 119,727        | 37,506         | 157,233        | 14.7                          |
| Textiles & Apparel       | 31,332         | 93,159         | 124,491        | 37.4                          |
| Furniture & Wood/Metal   | 35,441         | 3,772          | 39,213         | 14.4                          |
| Services                 | 21,274         | 9,131          | 30,405         | 15.2                          |
| Chemicals                | 11,313         | 2,011          | 13,324         | 8.1                           |
| Food                     | 5,177          | 6,030          | 11,207         | 43.9                          |
| Toys & Sporting Goods    | 10,036         | 577            | 10,613         | 23.5                          |
| Machinery & Tools        | 7,464          | 466            | 7,930          | 23.9                          |
| Footwear & Leather Goods | 5,358          | 2,082          | 7,440          | .8                            |
| Other Manufactures       | 55,128         | 20,573         | 75,701         | 12.0                          |

SOURCE OF PRIMARY DATA: *Instituto Nacional de Estadística, Geografía e Informática.*

lowest average annual employment growth rate for this 10-year period, this sector is still very much in first place in terms of employment and other indicators (See Table 2 for profiles of each of the three main sectors.)

### Other Sectors

Among the industry's remaining sectors (see Table 1), the food sector posted the highest rate of employment growth during January–August, almost 44 percent relative to the year-earlier period. The sector with the lowest employment growth rate was footwear and leather goods, with an increase of only 0.8 percent during this period.

The maquiladora industry's fourth-largest employer is the furniture and wood/metal products sector, followed by services in fifth

place. During January–August, these two sectors grew 14.4 percent and 15.2 percent, respectively, relative to the year-earlier period. Both the toys/sporting goods sector and the machinery/tools sector grew at rates above 23 percent, while the other manufactures sector registered 12-percent growth. Chemicals, with an 8.1 percent rate, was the only sector other than footwear and leather goods to register single-digit employment growth during the first eight months of this year.

### Sectors and Regions

A look at the various maquiladora sectors by region reveals that two of the three principal sectors—electric/electronics and transportation equipment—have a higher concentration on the border than in the interior (see Table 1). The

Chart 1

## Maquiladora Employment Growth Principal Sectors

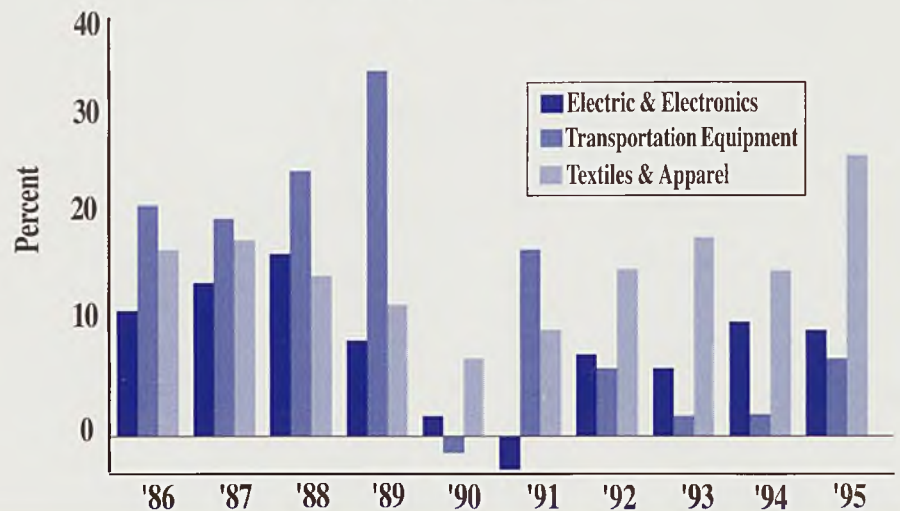


Table 2

## Maquiladora Industry: Profile of Principal Sectors

|   | Electric & Electronics |                            | Transportation Equipment |                            | Textiles & Apparel |                            |
|---|------------------------|----------------------------|--------------------------|----------------------------|--------------------|----------------------------|
|   | Jan.-Aug. 1996         | % Change from Year Earlier | Jan.-Aug. 1996           | % Change from Year Earlier | Jan.-Aug. 1996     | % Change from Year Earlier |
| Plants  | 528                    | 5.0                        | 180                      | 9.8                        | 565                | 31.1                       |
| Employment  | 253,221                | 11.7                       | 157,233                  | 14.5                       | 124,491            | 37.4                       |
| Total Raw Materials<br>(Billions of U.S. dollars) | 8.1                    | 21.5                       | 4.6                      | 27.6                       | 1.3                | 39.9                       |
| Imported<br>(Billions of U.S. dollars)            | 8.0                    | 20.9                       | 4.5                      | 27.5                       | 1.3                | 38.6                       |
| Domestic<br>(Millions of U.S. dollars)            | 90.3                   | 118.0                      | 38.4                     | 43.3                       | 41.2               | 97.8                       |
| Value Added<br>(Millions of U.S. dollars)         | 1,429.2                | 18.6                       | 950.1                    | 14.2                       | 451.7              | 45.2                       |
| Gross Production<br>(Billions of U.S. dollars)    | 9.4                    | 20.5                       | 5.5                      | 25.0                       | 1.7                | 40.3                       |

SOURCE OF PRIMARY DATA: Instituto Nacional de Estadística, Geografía e Informática.

textiles and apparel sector, on the other hand, has a greater presence in the interior of Mexico. All remaining sectors, with the exception of food, have a higher concentration on the border.

### Sources of Capital

Source-of-capital statistics for the maquiladora industry are kept by the Ministry of Trade and Industrial Development (SECOFI), which issues maquiladora permits. According to SECOFI, of the maquiladora companies registered in 1995, 42.6 percent were Mexican-owned; 37.7 percent were U.S.-owned; 14 percent had mixed

Mexican-U.S. ownership; 2 percent were Japanese-owned; and the remaining 3.7 percent had other foreign ownership. This profile, which is based on the number of plants owned by each group, does not really capture the extent of each group's maquiladora investment. Using employment to measure the source of capital in maquiladoras would yield a more accurate assessment of which country's investors are truly the industry's dominant ones.

Though a breakdown of maquiladora ownership by employment is unavailable, a simple review of the maquiladoras shows that the U.S.-owned operations are the largest employers. For example,

the Delphi and Delco divisions of General Motors employ a total of 70,000 maquiladora workers in seven states, 18,000 of them in Ciudad Juárez alone. Asian-owned maquiladoras are also sizable employers, especially in Tijuana and Mexicali. Some estimate that about a quarter of Tijuana's maquiladora employment, for example, comes from Asian-owned firms. Though the Asian presence in the maquiladora industry is dominated by Japan, South Korea is also an important maquiladora investor. (See the last page for a box on Pacific Rim direct investment in Mexico.)

# Pacific Rim Direct Investment in Mexico

## 1994-96\*

Pacific Rim direct investment in Mexico represented 5.9 percent of total foreign direct investment in Mexico during the period 1994 through the first half of 1996. The figures in the table show direct investment in Mexico by the Pacific Rim countries and include investments in the maquiladora sector. Japan is the largest such investor in Mexico, followed by South Korea, Singapore and Australia. China and Taiwan show similar investment levels for the period. Interestingly, not only is North Korea represented in this group of investors, but the emerging economies of Indonesia, Malaysia and Thailand are also now making an incursion into Mexico, even if they represent a very small fraction of total investment.

\*Through June 1996.

### Total Foreign Direct Investment

(Billions U.S. dollars) 18.6

### Foreign Direct Investment by Pacific Rim Countries

(Billions U.S. dollars) 1.1

### % Share

100

### By country

(Millions U.S. dollars)

|             |       |      |
|-------------|-------|------|
| Japan       | 828.3 | 75.5 |
| South Korea | 195.8 | 17.8 |
| Singapore   | 37.3  | 3.4  |
| Australia   | 19.1  | 1.7  |
| China       | 7.3   | .7   |
| Taiwan      | 7.0   | .6   |
| North Korea | 1.1   | .1   |

(Thousands U.S. dollars)

|             |       |     |
|-------------|-------|-----|
| Hong Kong   | 421.1 | <.1 |
| Indonesia   | 361.3 | <.1 |
| Malaysia    | 359.8 | <.1 |
| Thailand    | 329.9 | <.1 |
| New Zealand | 22.5  | <.1 |

SOURCE OF PRIMARY DATA: SECOFI, Dirección General de Inversión Extranjera.

## Conclusion

Since 1995, the maquiladora industry has been growing at higher rates than it did in the early 1990s. Certainly, the December 1994 peso devaluation triggered an expansion by maquiladora companies, since it had the effect of cutting their peso-based costs in dollar-denominated budgets. However, other factors have also contributed to the industry's renewed vibrancy. For example, a healthy U.S. economy has helped boost growth, since most of the maquiladoras' production is destined for that market. Also, the maquiladora investment scheme has attracted foreign direct investors who are new to Mexico and who see the

maquiladora program as an easy inroad into the country. All in all, the industry's renewed strength since 1995 illustrates the long-term economic potential Mexico offers foreign direct investors.

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