Beyond the Border

Maquiladoras: Mexico's Bright Spot

Two million Mexican workers have lost their jobs since the December 1994 peso devaluation, and some companies in Mexico have even shut down operations. But while most Mexicans must ride out the recession that followed the devaluation, the maquiladora industry is providing one of the country's few bright spots—creating jobs, earning badly needed foreign exchange and attracting direct investment in modern plants.[1,2]

Because maquiladoras have dollar-denominated budgets but pay costs in pesos, the devaluation brought a substantial, overnight reduction in their peso costs. In this sense, the maquiladora industry benefited from the dollar's higher value relative to the peso in 1995, as evidenced by recent employment numbers.

In the first five months of 1995, maquiladora employment rose 9.7 percent (relative to the year-earlier period) to a total of 617,984 workers. Ciudad Juarez, Chihuahua, across the Mexican–U.S. border from El Paso, Texas, employs the largest concentration of maquiladora workers, with about one-fourth of the total. Maquiladora employment in Juarez grew 12 percent during the first five months of 1995, far surpassing its growth of 6.1 percent in 1994 and 2.3 percent in 1993.

The maquiladora industry should continue to grow this year because of its enhanced cost effectiveness brought on by the peso devaluation. The net gain for maquiladoras in 1995, however, will not equal the rate of devaluation since inflation, especially through peso–wage pressures, will have eroded some of the sector's gains.

Increasing Economic Importance

Even before the devaluation, the maquiladora industry had become an important component of the Mexican economy. In 1994, it contributed nearly $6 billion in foreign exchange to Mexico, making it the country's second largest source of international reserves. The maquiladora industry's share in total Mexican manufacturing employment reached 26 percent last year, up from just 5.1 percent in 1982.

Maquiladora exports play a significant role in Mexican–U.S. trade. At $26 billion, 1994 exports represented more than 43 percent of total U.S. imports from Mexico. Maquiladora products represented an even higher share, 52 percent, of manufacturing imports from Mexico.

TABLE 1
Indicators of the Maquiladora Industry

	1994	Year-to-year change (percent)	Annual growth (percent) 1993	1992	1991
Plants	2,085	–1.4	1.9	8.4	12.4
Employment (Thousands of workers)	579.4	6.9	7.2	8.2	4.7
Imported raw materials (Billions of dollars)	19.9	14.1	23.2	15.6	16.8
Value-added (Billions of dollars)	5.9	8.6	12.8	16.0	18.4
Gross production (Billions of dollars)	25.8	12.8	20.6	15.7	17.2

Although the Mexican maquiladora program has existed since 1965, the industry is perhaps best known for its spectacular growth during the 1980s. From 1983 through 1988, the number of maquiladora plants averaged annual growth of 15.9 percent; employment in the industry grew an average 19.7 percent annually in the same period. Other indicators also grew during this period: imported raw materials rose 27.7 percent, value-added rose 20.5 percent and gross production grew by 25.4 percent.

The industry experienced a deceleration during 1989–91, which coincided with the slowdown in the U.S. economy. Since the great majority of maquiladora production is destined for the U.S. market, the industry is particularly sensitive to U.S. growth rates. Thus, with the recovery of the U.S. economy as of 1992 came a resurgence of maquiladora employment growth (*Table 1*).

Maquiladoras and NAFTA

The maquiladora program will change under the North American Free Trade Agreement (NAFTA). New rules for maquiladoras are taking effect in two phases, the first lasts from 1994 through 2000; the second starts with the next century.

The maquiladora industry's basic operating framework will not change in the first phase, but maquiladoras' access to domestic markets will be gradually liberalized. By 2000, maquiladoras will be able to sell to the domestic market 85 percent of the value of their export production in the preceding year, up from 50 percent in 1993. And in 2001, maquiladoras will be allowed to sell 100 percent of their production domestically.

NAFTA's more important change to the maquiladora program takes place under the second phase. In 2001, the provision that essentially defines the program—that of duty-free importation of inputs into Mexico, *regardless of origin*—is abandoned. Instead, *North American rules of origin* will determine duty-free status for a given import, while duty drawback provisions will apply to non-North American inputs.

By the turn of the century, it is very likely that Mexico will have revised its tariff schedules for third countries in a way that dramatically reduces most duties, especially for the inputs maquiladoras rely on heavily. Mexico's intent, in general,

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will be to ensure that maquiladoras continue to find the Mexican investment climate in 2001 sufficiently attractive to remain in the country. Moreover, it's foreseeable that even zero duties will apply to those inputs that are simply unavailable in North America, as is the case with some electronic components that are produced solely in Asian countries right now. As for the U.S.-imposed duties, these are already low in most cases and should remain low or fall if such duties are found to be negatively affecting maquiladora producers, who come primarily from the United States.

An important side effect of the duty drawback provisions of 2001 is that during the seven-year period 1994–2000, maquiladora producers may encourage third-country suppliers to locate in North America in order to guarantee that duty-free treatment will be preserved after 2000. Another option for maquiladoras is to develop relationships with potential local suppliers that could become new sources to replace third-country suppliers. Either way, the net result should be greater direct investment in the region.

Conclusion

To the extent that NAFTA creates a more competitive Mexican industrial sector, greater potential local sources of supply for the maquiladoras are likely to emerge, especially through joint-venture associations. Thus, as maquiladoras are able to sell more to, and buy more from, their Mexican manufacturing counterparts, they will become more entrenched in the national economy. In essence, these linkages between the maquiladora and nonmaquiladora sectors will end up blending the two into a single, stronger Mexican manufacturing sector.

Although NAFTA brings about the elimination of the maquiladora program in 2001, the program's reason for being will have also been eliminated. By 2001, Mexican industry will be benefiting from more generalized conditions of freer trade and investment that in the past were associated exclusively with maquiladoras. At the start of the next century, there will probably be few distinguishable characteristics between what is now a maquiladora and a nonmaquiladora operation since by that time maquiladoras, if they desire, can direct their entire production to the domestic market. Conversely, there will be nonmaquiladora plants directing 100 percent of their production to the export market, as the maquiladoras are now required to do. In sum, the maquiladora label may no longer exist by 2001, but the industry itself will have become a critical part of a more modern Mexican manufacturing sector.

—Lucinda Vargas

Notes

[1] A *maquiladora* is typically a foreign-owned manufacturing plant that produces chiefly for exports to the United States.

[2] This column is based on material that appeared in *Business Frontier*, a publication of the El Paso Branch of the Federal Reserve Bank of Dallas. For more information about the publication, call (915) 521-8231. Back issues are available on the Dallas Fed's online bulletin board Fed Flash, (214) 922-5199 or (800) 333-1953.