The Maquiladora Industry: Recent Downturn And Future Prospects

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ABSTRACT

The Maquiladora industry was created in the mid-1960 as the United States terminated the Bracero program. The main objective of the Bracero program was to bring in Mexican workers to fulfill U.S. agricultural labor demand. The end of the Bracero program left thousands of unemployed farm workers in Mexican cities bordering the U.S. The Maquiladora program's intent was to subsidize foreign manufacturers that set up plants on the Mexico side of the border to create jobs for the Mexican workers. Mexico allowed plants to temporarily import supplies, parts, machinery, and equipment necessary to produce goods and services in Mexico duty-free as long as the output was exported back to the United States. U.S. firms, as well as other multinational companies, responded enthusiastically to the lure of cheap labor. Mexico experienced high economic growth and become a major player in exporting intra-industry products to the U.S. The NAFTA and other free trade agreements signed by Mexico helped the economic growth of the Maquiladora region. Maquiladora employment increased significantly since the inception of the Maquiladora industry and Maquiladora exports now account for half of Mexico's total exports. The Maquiladora industry is U.S.-demand driven since most of Mexico's Maquiladora production is destined for the U.S. market. The recent recession in the U.S. took a heavy toll on Mexico's Maquiladora industry. Another challenge to the Maquiladora industry is raising global competition, particularly from China. Therefore, the magnitude of the industry's contraction during the most recent recession suggests that there are more factors influencing the industry than just the business cycle. This paper presents the creation of the Maquiladora industry, its success following the NAFTA agreement, and its recent downturn. It also explores the answers to the following questions: How much of the Maquiladora downturn was due to the business cycle? How much was due to structural change? Is the Maquiladora industry ready to face rising global competition?

Keywords: Maquiladora, FDI, NAFTA, Mexico, REA (Regional Economic Agreements)

INTRODUCTION

Mexico's Maquiladora industry has been one of the economic success stories of the last 40 years. Started in the mid-1960 with a dozen facilities and a few thousand employees and reached its peak in 2000 with over 3700 plants and over 1.3 million workers. With its facilities primarily located along the Mexican-American border, the Maquiladora industry benefits from a special system of preferences. This system allows for a temporary importation of raw materials from the U.S. into Mexico, where they are assembled and re-exported (no less than 80% of the output) to the U.S., paying a low import duty, approximately 7 percent, on the value added in Mexico only. Both U.S. and foreign US-based firms have benefited from this system.

The Maquiladora industry represents about 9 percent of Mexico's formal employment. It is Mexico's main source of foreign exchange—more than $18 billion last year—and provides 55 percent of the country's manufacturing exports. The importance of Maquiladora to the U.S. economy lies in the 26,000 companies located throughout the U.S. that supply Maquiladora with machinery, raw materials, and components (Garza 2003). The Maquiladora industry has, however, experienced its biggest unemployment and industry contraction between 2001 and 2003. The industry lost more than 290,000 jobs and approximately 873 plants (Castro 2003). This significant increase in unemployment and industry contraction suggests that there are more factors at work than just the effect of a business cycle. Many observers, including economists who are interested in the region, multinational companies, the Mexican government, and the media, are questioning the future of the Maquiladora industry. This paper presents the creation of the Maquiladora industry, its success following the NAFTA agreement, and its recent downturn. It also explores the answers to the following questions: How much of the Maquiladora downturn was due to the business cycle? How much was due to structural change? Is the Maquiladora industry ready to face rising global competition? The paper tracks the following outline:

- Creation of the Maquiladora Industry
- Success of the Maquiladora Industry
- The Maquiladora Industry Downturn
- The Maquiladora Industry and Global Competition
- Current Challenges to the Maquiladora Industry
- Future of the Maquiladora Industry
- Conclusion

CREATION OF THE MAQUILADORA INDUSTRY

The Mexican government initiated the Border Industrialization Program in 1965 as a response to the termination of the "Bracero Program" by the U.S. government in 1964. The Bracero Program had allowed Mexican agricultural workers (mostly migrating northbound from the interior of Mexico) to work legally in the U.S. on a seasonal basis. After the end of the Bracero Program, the Mexican government was forced to implement the Maquiladora Program to alleviate the rising unemployment burden along the border. The Maquiladora program's intent was to subsidize foreign manufacturers that set up plants on the Mexico side of the border to create jobs for the Mexican workers. Mexico allowed plants to temporarily import supplies; parts, machinery, and equipment necessary to produce goods and services in Mexico duty-free as long as the output was exported back to the U.S. Highlights of the Maquiladora program are summarized in Exhibit 1. The Mexican government also sought to utilize this program to increase the level of "hard currency" and as a vehicle for the transfer of technology.

In the early 1980's, many U.S. businesses were feeling the "squeeze" from their Asian competitors and had decided that in order to remain in business, lower labor costs were necessary. As they began to look to Asia as an option for their investments, Mexico's currency devaluation, economic crisis, and proximity to the U.S., shown in Exhibit 2, became both an opportunity for U.S. companies to benefit from investment in Mexico, who badly needed hard currency, and an enthusiastic response to the lure of cheap labor.

Exhibit 1

Highlights Of The Maquiladora Program

I. Maquiladora firms can import materials and capital equipment free of duty and value added tax, on a temporary basis for use in the manufacture of exported goods or to support those activities related to export.
II. Maquiladora firms can be 100% foreign owned and have the right to employ foreign managers, technicians, and trainers.
III. After 2001, Maquiladora firms can sell up to 100% of their products in the domestic market, upon payment of duties on any in-bond inputs.
IV. Maquiladora firms can choose to locate anywhere in Mexico.
V. Maquiladora firms have full access to the United States market under the NAFTA Agreement while still taking advantage of in-bond incentives on sales to other countries.
VI. Many Maquiladora firms can benefit from new sectoral promotion program featuring import duties on machinery and inputs ranging from 0 - 5% after 2001.

Mexico experienced high economic growth and became a major player in exporting intra-industry products to the U.S. The NAFTA and other free trade agreements signed by Mexico helped the economic growth of the Maquiladora region. Maquiladora employment increased significantly since the inception of the Maquiladora industry and Maquiladora exports accounted for half of Mexico's total exports.

Exhibit 2

Map of U.S. – Mexico Border States and Cities

Source: GAO.

SUCCESS OF THE MAQUILADORA INDUSTRY

Mexico's system of export promotion incentives, which include duty-free imports of inputs and machinery as well as the ability to employ foreign managers and technicians, combined with supporting economic policies created a vibrant and diversified Maquiladora industry. The number of plants increased to its highest level of 3700 in 2000, with total employment of more than 1.3 million as shown in Exhibit 3. The success of the Maquiladora industry in the 1980's and 1990's has led to its rapid double-digit growth in both employment and new establishments, with investment primarily from American, Asian, Mexican, and some European sources.

Exhibit 3

Maquiladora Employment (in thousands) and Number of Plants 1998 - 2006

Year	98	99	00	01	02	03	04	05	06
Employment	1,063	1,195	1,347	1,122	1,089	1,072	1,139	1,173	1,201
No. of Plants	3,092	3,384	3,655	3,494	2,975	2,780	2,811	2,918	3,000
Source: www.maquiladoradirectory.com/statistics/index.htm									

Investors from around the world have taken advantage of the benefits of Mexico's Maquiladora program. In 1998 alone, nearly 400 new operations were approved under this plan. Since it was formalized, this system of export incentives has evolved far beyond its original focus on in-bond temporary imports of machinery and inputs. The government's strategies have enhanced the value of incentives to investors while at the same time honoring the country's international commitments to the NAFTA agreement as well as to agreements with the World Trade Organization (WTO).

The Maquiladora industry has been one of the most important export sector in Mexico largely because of its ability to produce high technology products and other consumer goods for world markets. These technological strengths, combined with a young and highly competitive labor force, a strategic location, and other advantages, have helped the industry to lead the country's export growth and establish Mexico as the 8th largest exporter in the world. The industry was also maturing somewhat, becoming less of an industry that was based on saving labor costs to an industry that was positioning itself as a platform for global production and export.

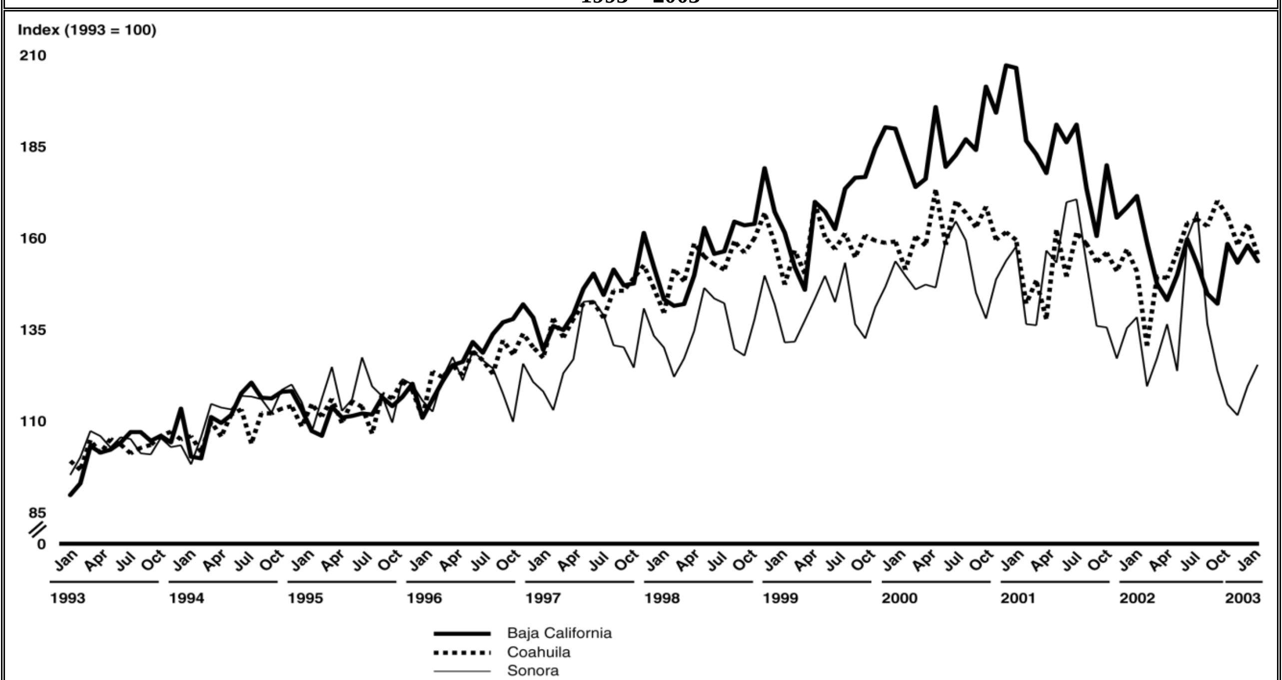
The Mexican economy has been one of the most open in the world, with significant access under preferential conditions to markets in North America and most of Latin America. Mexico is an active participant in the main multilateral form and has also negotiated free trade agreements with Latin American countries, Israel, Japan, and the European Union. Investors from around the world are taking advantage of the country's unique position and stronger protection for investments and intellectual property rights, making Mexico one of the leading destinations for foreign direct investment among all developing nations.

THE MAQUILADORA INDUSTRY DOWNTURN

The Maquiladora industry grew rapidly during the 1990's. It, however, experienced a sharp decline after October 2000 as shown in Exhibit 3and 4. Between October 2000 and March 2002, the industry lost 278,000 jobs, a 21 percent decline. During the Maquiladora recessionary period, many observers questioned the Maquiladora industry's future. Some spectators identified the ongoing U.S. recession and the American industrial sector's poor performance as the main causes of the industry's plunge. Others pointed to structural factors, such as higher Mexican wages, high business taxes, and increasing foreign competition. This quarrel rises the questions of how much of the Maquiladora downturn was due to the business cycle, how much was due to structural change, and whether the Maquiladora industry is ready to face rising global competition.

Exhibit 4

Growth and Downturn of Manufacturing Production in Maquiladora
1993 – 2003



Source: National Institute of Statistics, Geography and Information Technology (Instituto Nacional de Estadística, Geografía e Informática).

Although the cyclical downturn in the U.S. economy has been a principle factor in the decrease in Maquiladora production and employment since 2000, the Maquiladora industry has also faced increased global competition, particularly from China, Central America, and the Caribbean. The real appreciation of the peso relative to the dollar and to key competitors' currency has heightened such pressure. Additionally, Mexican government policies, such as changes in the tax regime applied to the Maquiladora industry, have created a climate of uncertainty for investors. Meanwhile, commitment to the NAFTA agreement in Mexico has now phased out some benefits to the Maquiladora industry.

Acevedo (2003), Director of Macroeconomic Analysis in Mexico's Ministry of Finance and Public Credit, also discussed the primary causes of the Maquiladora recession, listing weak external demand, the higher cost of labor and services in Mexico, commercial and fiscal regulations, and international competition. Acevedo's economic model estimates that 80 percent of the decline in Maquiladora exports was due to a decline in U.S. demand for Maquiladora products. He blamed a combination of increasing costs (in the form of higher wages and more expensive services) and rising international competition. Certainly Chinese exports to the U.S. have rebounded to rates they enjoyed before the recession, while Mexican exports are still lagging. China's market share has continued to increase, with China now the first most important supplier to the U.S. economy. Meanwhile, Mexican exports to the U.S. have remained almost constant, at approximately 11 percent of the U.S. total imports.

The Maquiladora Downturn Due To Business Cycles

The fact that Maquiladora production is often linked to U.S. manufacturing through production sharing arrangements and that approximately 95 percent of the Maquiladora production is destined for the U.S. market, it is not surprising that the Maquiladora industry is sensitive to fluctuations in U.S. manufacturing and demand. This connection also indicates that Maquiladora employment typically increases when the overall U.S. economy expands and is decreases when the U.S. economy slows down. In addition, although the Mexican economy as a whole is very closely linked to that of the U.S., the Maquiladora industry appears to have been affected by the U.S. economic slowdown more severely than the overall Mexican economy.

Gruben (2003), Vice President of the Federal Reserve Bank of Dallas and Director General of its Center for Latin American Economics, discussed the impact of the 2001 U.S. business cycle slowdown on the Maquiladora industry. He presented the results of an econometric model that attributes more than 80 percent of the Maquiladora employment declines in 2001 and 2002 to changes in U.S. aggregate demand and increases in the cost of doing business in Mexico. He also concluded that structural factors, such as China's 2001 entrance into the World Trade Organization and North American Free Trade Agreement Article 303, caused significant negative impacts on Maquiladora employment, especially in the textile, apparel, and electronics sectors.

Gerber (2003), Director of the Center for Latin American Studies at San Diego State University, also indicated that some of this downturn is primarily cyclical and relates to the slowdown in world economic output and the recession in U.S. manufacturing. On a positive note, Gerber said that although global FDI has been down, Mexico's share has basically been unchanged. In other words, global investors are not seeing Mexico or the Maquiladora differently than before the downturn.

The Maquiladora Downturn Due To Structural Change

In addition to the duty-free treatment on import of parts, components, and other inputs, Maquiladora plants enjoyed, at least until the mid-1990's, a virtual freedom from taxation. Although they were legally subject to income taxes, in practice, the companies paid only a small assets tax, a flat minimum of 2 percent of the value of the Maquiladora's assets. Moreover, the Maquiladora industry was permitted to use the cost of wages to offset their tax on assets. This practice virtually eliminated taxes for some Maquiladora companies.

The tax regime applicable to Maquiladora remained constant for almost 30 years but began to evolve rapidly in the 1990's. The most significant of these tax changes was the treatment of what are known as "permanent establishments." A permanent establishment typically is a branch of a company from one country that is doing business in another "host" country and which may be taxed in that host country; as such, permanent establishment is a concept found in virtually all double taxation treaties. Mexico essentially exempted Maquiladora from the tax that could be imposed on permanent establishments until 1998. However, starting in 1998, Mexico began seeking to treat the foreign parent companies of Maquiladora as having permanent establishments in Mexico for tax purposes. By treating the Maquiladora as permanent establishments, the Mexican government could subject the foreign parent companies to taxation, potentially allowing Mexico to increase the revenues it collects from Maquiladora operations.

Such changes in Mexican government tax policies created uncertainty that caused some firms to withdraw from Mexico, to downsize their operations, or to be discouraged from new foreign direct investment in Mexico. In particular, the frequent changes to the fiscal regime have increased the tax burden and administrative costs to the Maquiladora industry and have reduced its ability to develop long-term investment plans.

Canas, et al. (2007) used the Maquiladora data to cover broad industry categories and investigated the cyclical vs. structural aspects of the economic downturn and recovery between 2000 and 2004. They concluded that structural losses took place in furniture, toys, leather, and textile industries and cyclical losses occurred in the large electronics sector and the transportation industry, which includes automobiles.

The Maquiladora Downturn Due To Global Competition

Since China formally joined the World Trade Organization in 2001, it has become a more attractive choice for foreign direct investment, while foreign investment in Mexico's Maquiladora industry has decreased. Among the major suppliers of imports to the U.S., Mexico ranked second and China ranked third in 2002. Although both countries experienced significant growth in exports to the U.S. since 1995, the U.S. imports from Mexico grew at a slower pace than those from China. As a result, the gap between Mexico and China narrowed in China's favor as shown in Exhibit 5. Statistics show that during the economic downturn (2000-2002), China gained U.S. market share in 35 of the 47 import categories, including toys, furniture, electrical household appliances, television and video equipment and parts, and apparel and textiles.

Exhibit 5

U.S. Imports from Mexico and China in Billions of U.S. Dollars
1998 -2007

Year	1988	1999	2000	2001	2002	2003	2004	2005	2006	2007
Mexico	$94.63	$109.72	$135.93	$131.34	$134.62	$138.06	$155.90	$170.11	$198.25	$210.71
China	$71.17	$81.79	$100.02	$102.28	$125.19	$152.44	$196.68	$243.47	$287.77	$321.44

Source: U.S. Dept. of Commerce, Census Bureau, Foreign Trade Division

Maquiladora Downturn Due To NAFTA's Implementation Of Article 303

The phasing out of Maquiladora benefits as part of the NAFTA agreement also contributed to the decrease in Maquiladora production and employment. When NAFTA was signed in 1993, it envisioned fundamental changes to the Maquiladora model. The most significant of these changes was embodied in Article 303 of NAFTA, which eliminated duty drawback (or refunds of duties) for inputs from non-NAFTA origin as of January 1, 2001, if the final products incorporating these inputs were to be subsequently exported to another NAFTA country. The rationale behind Article 303 was to encourage firms to develop North American suppliers for critical inputs by providing an incentive for Maquiladora to shift sourcing of components or inputs to North America, including Mexico. The elimination of duty drawback would necessitate significant changes in the sourcing of Maquiladora inputs, particularly for Maquiladora operations of some Japanese and other Asian companies that were heavily dependent upon certain inputs from the Far East. Even though a 7-year grace period was provided, the Maquiladora did not develop a network of domestic suppliers in Mexico. As a result, implementation of Article 303 in 2001 has adversely affected the competitiveness of the Maquiladora industry that relies upon non-NAFTA suppliers for inputs and has resulted in closure of some Maquiladora firms.

THE MAQUILADORA INDUSTRY AND GLOBAL COMPETITION

China has competitive advantages over Mexico in terms of labor costs, electricity costs, the diversity of component suppliers, the cost of water for industrial uses (important in the textiles industry), and corporate income tax rates. These resources are significant components of Maquiladora production. While Mexico faces increased competition from China in the U.S. market, some sectors are more threatened than others. For example, as a growing share of some textiles and apparel products sold in the U.S. are being produced in China rather than Mexico as shown in Exhibit 6, there has been no shift in competitiveness away from Mexico towards China in the machinery sector. Mexico also has comparative advantages over China which include lower transportation costs, shorter transit time, and lower international communication costs. Mexico also provides greater protection for intellectual property, more transparency in regulation and administration, and a network of free-trade agreements with third-party countries.

Exhibit 6

U.S. Imports of Textiles and Apparel from Mexico and China in Billions of U.S. Dollars 2005 -2007

Year	2005	2006	2007
Mexico	7.63	6.85	6.10
China	26.02	30.12	34.93
U.S. Total Imports	99.20	101.96	100.40

Source: U.S. Dept. of Commerce, Census Bureau, Foreign Trade Division

Watkins (2002), a program manager for the U.S. International Trade Commission, has addressed factors affecting export and investment competition between Mexico and China. Watkins emphasized production sharing as an important aspect of globalization. Production sharing, also known as cross-border manufacturing networks, occurs when the processes used to manufacture a good are conducted in more than one country. Such production sharing allows companies to reduce costs or improve response time, thereby becoming more competitive and increasing profits. According to Watkins, Mexico can compete more effectively with China in the U.S. market in high to medium value-added sectors where there is a high ratio of weight to value (major appliances), where competition is based more on quality than price (medical goods), where there are frequent design changes, and where it is vital to protect intellectual rights. China has gained in low-value-added, commoditized sectors, such as apparel, luggage, and footwear.

Berges (2003), in a separate study, expressed that Mexico’s proximity to the United States gives it an edge, allowing it to remain competitive as an outsourcing destination in industries characterized by constant changes in design specifications, short inventory cycles, and bulky items. The automotive industry is the perfect example. According to Berges, this industry should be safe from the “China threat” because original equipment manufacturers maintain low inventories and high-value, just-in-time delivery. Further, autos are heavy and bulky, making shipping an issue. Finally, auto parts need frequent retooling, making them impractical to produce in China for the U.S. market. Mexico can dominate production of products that have similar characteristics.

Avecedo (2003) additionally conducted a Granger causality analysis to explore the relationship between Mexican and Chinese exports. This analysis sought to determine whether Chinese exports to the U.S. displace Mexican exports or whether Chinese and Mexican components are complements, with both needed to produce the finished product. Acevedo found that only five of the top 15 Mexican exports compete head-to-head with China. In 10 industries, growing Chinese exports actually represent growth opportunities for Mexico.

Mexico also faces increased competition from countries in Central America or the Caribbean. The U.S. decision in May 2000 to grant NAFTA-parity access to Caribbean Basin Initiative (CBI) countries has eroded Mexico’s ability to compete in the U.S. apparel market, particularly because a number of Central American and Caribbean countries have lower labor costs than Mexico. The manufacturing wages in Mexico have almost been 67 percent higher than in the Dominican Republic and approximately 92 percent higher than in Honduras in recent years.

The heightened global competition from China and CBI countries is part of a larger phenomenon in which the benefits enjoyed by the Maquiladora industry and other Mexican producers have eroded as U.S. trade preferences or liberalization accorded to other countries have expanded. In addition, under the WTO Agreement on Textiles and Clothing, all quotas on textile and apparel products had been phased out in 2005 and therefore the U.S. imports of textiles and apparel from China rose significantly to make China the largest foreign supplier of these goods to the U.S. market.

CURRENT CHALLENGES TO THE MAQUILADORA INDUSTRY

Significant challenges continue to confront the Maquiladora industry. The downturn during 2000-2002 has accelerated ongoing industry evolution and has been a catalyst for several industry and government changes to improve the competitiveness of the Maquiladora. Some of fundamental challenges are as follows:

- Movement beyond the current "Maquiladora model" to attract a new generation of more technologically advanced operations that would allow Mexico to remain competitive including involvement in more sophisticated, capital-intensive operations that are less likely to close and move their plants because of cyclical downturns.
- Recognition by the Maquiladora that having sophisticated production and management methods would better position it to weather Maquiladora downturn and deal with the continuing challenges. The transition to more advanced production, however, requires skilled labor and the majority of Maquiladora workers do not have higher education experience.
- Development of energy reform and modernization of infrastructures.
- Development of labor reform and improvement of labor skills
- Pursue of free trade agreements by Mexico with other nations so that Mexico does not rely solely on the U.S. market for Maquiladora exports.

FUTURE OF THE MAQUILADORA INDUSTRY

The future success of the Maquiladora industry will require fundamental Mexican reforms in the development of affordable energy, the enhancement of labor regulations, the improvement of labor skills, the modernization of the infrastructure, as well as the ability to deal with the U.S. approaches to trade liberalization and homeland security. However, pursuing in some of these areas may be difficult.

Development Of Affordable Energy

Energy sector reform is important to the Maquiladora industries because they require reliable and competitive energy prices to compete with suppliers in other nations. Electricity and industrial water costs are two areas in which Mexico is less competitive than China. Without energy reform, Mexico may experience a power crisis in the Maquiladora.

Enhancement Of Labor Regulations

The Maquiladora benefits from labor productivity depend upon reform of labor regulations to provide increased flexibility to employers. The key elements of this reform include the use of secret ballots in union elections, the allowance of more than one union to represent worker interests, expanded employer flexibility to hire workers on a trial basis, and a strengthened binding arbitration process. This reform, however, lacks consensus support within the Mexican labor movement.

Improvement Of Labor Skills

The success of Maquiladora to develop more technology-intensive operations requires a large number of highly educated workers. However, there is a low level of educational attainment in the economically active population along the border, with over one-third of adults having completed only primary education or less. The search for better educated workers has led a number of companies to establish assembly plants in cities further from the border, with better reputations for good public secondary education and trade schools.

Modernization Of Infrastructure

The improvement of Mexico's infrastructure is critical to advancing Mexico's competitiveness. Although the six Mexican states that border the U.S. share the advantage of an adequate basic infrastructure, with a road network variously described as good, fluid, or satisfactory, about 32 percent of the Mexican federal highways are in poor condition. These infrastructure shortcomings are considered a disincentive for potential investors in Maquiladora.

Impact Of Recent U.S. Policies

Action by Mexico is the key to the Maquiladora's future viability, particularly since U.S. approaches to trade liberalization and homeland security may put additional pressure on Maquiladora operations.

The future development of the Maquiladora industry in Mexico may be affected by further changes in competitors' access to the U.S. market. The U.S. is engaged in trade negotiations in several venues, including the Doha Round among the 146 members of the WTO, the Free Trade Agreement of the Americas (FTAA) involving 34 nations of the Western Hemisphere, and the U.S.-Central America Free Trade Agreement. These negotiations may reduce barriers to non-NAFTA countries' products to levels similar to those enjoyed by NAFTA participants, Mexico, and Canada. For example, in the WTO, the United States has proposed to eliminate all industrial tariffs by 2015. Therefore, the expansion of trade benefits to wider numbers of competitors, while benefiting U.S. consumers and other trade partners, dilutes the benefits provided to Mexican suppliers in the U.S. market under NAFTA.

The U.S. security measures instituted at ports of entry after September 11, 2001, could also erode the Mexican Maquiladora industry's advantage of proximity to U.S. markets. In particular, U.S. government measures that require advance notice for transborder shipments of goods and additional information on the entry into and departure from the United States of every foreign citizen. Firms that use just-in-time operations, an important element in some Maquiladora operations, could be especially hurt by requirements related to advance notice for shipments because they could not ship goods immediately upon receipt of an order. Firms that rely on regular and efficient movement of workers and service operations across the border could be especially affected by the information requirements for Mexican workers who cross the border frequently.

Dieck (2003), Chief of Staff of Mexico's Ministry of the Economy, offered a realistic perspective of the future backdrop against which the industry will operate. He stated that Mexico can no longer offer the lowest wages, and it is unwilling to offer the kind of tax incentives some competitors have given. Such incentives are fiscally imprudent and a violation of World Trade Organization and Organization for Economic Cooperation and Development rules. Mexico can, however, offer an open economy with free trade agreements with 32 nations, low country risk, macroeconomic stability, rule of law, proximity to the United States, and the world's largest market. Mexico is moving toward a further opening of trade, reform of energy, labor, tax, and telecommunications, and some targeted incentives for research and development. With these advances, Mexico offers an attractive setting for future foreign investment.

The New IMMEX Program

The Mexican Secretariat of Economy launched the new IMMEX Program in November 2006 to expand the Maquiladora program with a broader scope. IMMEX is the Spanish acronym for the Program of 'Manufacturing Industry, Maquiladora and Export Services' which combined the Maquiladora Program with the PITEX Program.

PITEX is the Spanish acronym for the 'Temporary Imports for Exports'. This new IMMEX Program was created to promote the export activities of approximately 6,500 enterprises.

CONCLUSION

Both the U.S. and Mexico have an interest in the future of Maquiladora given their central role in the U.S.-Mexico trade and the border economy. Partly driven by Maquiladora, Mexico has assumed a more prominent place among U.S. trade partners in recent years, becoming the United States' third leading trading partner, after China and Canada. Moreover, production and employment linkages have developed between Maquiladora and producers throughout the U.S. and are based on the high volume of U.S.-generated components used in Maquiladora operations. Businesses in communities on the U.S. side of the border provide services to the Maquiladora, such as customs brokerage and commercial transportation. Retail sales to Mexican citizens in U.S. border communities contribute substantially to U.S. business and tax receipts. The decline in Mexico's Maquiladora production and employment has taken its toll on cross-border trade and trade-related employment in certain U.S. border communities.

Maquiladora have become an even more important element of the Mexican economy, particularly over the decade of the 1990's, when Maquiladora growth propelled Mexico into the ranks of the world's leading exporters and generated over a million new jobs. Employment created by Maquiladora on the Mexican side of the border has become a foundation of economic activities in that country. The downturn of 2000-2002 has served as a catalyst for further transformation of the Maquiladora industry as well as Mexican industry and government efforts to restore competitiveness. Although employment and the number of plants have increased since its lowest level in 2002, the Maquiladora industry still has a long way to reach the highest level of 2000 numbers.

With the creation of IMMEX program, the Maquiladora industry must reinvent itself to compete in the global market. The new model for Maquiladora should include emphasis on attracting and retaining high-tech plants, establishing capital-intensive plants with quick and just-in-time response for customers in volatile markets, expending full-fledged efforts at vertical integration of the industry, investing in R&D, and improving Mexican efforts to create an environment where cross-border links between U.S. and Mexican firms and communities can continue to prosper.

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