How China Is Eating Mexico's Lunch

The Maquiladora system's comparative advantage is being challenged head on.

BY DANIEL H. ROSEN

Mexico's Maquiladora system, a darling of the 1990s and sometimes referred to as a template for special economic zone programs in other emerging economies, suffered a double whammy over the past two years. The first whammy, U.S. economic weakness, has a built-in light at the end of the tunnel: there is a question of timing, but the downturn in U.S. demand from competitive export processors abroad won't last forever, and somebody will be a winner on the upswing. But the second whammy is competition from China, and if there is light at the end of that tunnel, it is more likely from raging wildfires than soothing rays of daylight. As a result, direct investors are hesitant; speculators are pondering a bet against the peso that might pay off if exports and Mexico-bound direct investment don't recover; and financial officials are concerned about the bilateral and systemic risks that could eventuate if a turn-around doesn't come.

Mexico's comparative advantage lies in lower labor costs than the United States, proximity to developed North America, and—for some industries—

Daniel H. Rosen is a visiting fellow at the Institute for International Economics in Washington, D.C. Michael Kovrig, a master's candidate at Columbia's SIPA graduate school, assisted with this article.

somewhat lower costs due to different regulations on areas associated with high per capita income economies such as environmental protection. On the other hand, comparative disadvantages include an intrusive bureaucracy that is sometimes corrupt, sometimes simply hostile to the private sector; poor utilities and transportation infrastructure; under-investment in human development; and a less than dynamic industrial structure reflecting imperfect financial intermediation and residual statism. "Clustering" of the right industries doesn't always take place, and demonstration effects from vibrant new industries are too few, despite successes. Maquiladoras were a strategy for maximizing the comparative advantages and protecting investors from the disadvantages, thus tipping the scales and making it attractive for U.S. and other multinationals to come on down.

And come they did. Today there are 3,288 Maquiladora plants in Mexico employing over one million citizens, and accounting for half of the country's exports (see Table 1). But Maquiladora exports have fallen with the U.S. recession and rising Chinese competition. More than two hundred plants closed last year, and hundreds of thousands of jobs were lost. Most went to Asia—primarily China.

What is going on here? Mexico's comparative advantage over *the world* in its Maquiladora-intense sectors, as revealed by changes in share of world exports, didn't erode in the years leading up to the recent troubles. Mexico grew its global export shares in most of these industries significantly in the late

Mexico's Maquiladora system suffered a double whammy over the past two years.

1990s. But as much as Mexico was changing, *China was changing faster*—and growing its share of global exports in most of these same industries even faster (see Table 2). That was a sign that there would be trouble when boomtimes burst. Importantly, this wasn't just rooted in what China was doing right; it concerned what Mexico was failing to do to keep up: from 1996–2002 Mexico's Global Competitiveness Report ranking fell

Mexico's proximity to the U.S. market is the remaining hope.

seriously from 33 to 45 (55 in terms of micro-economic competitiveness, or business environment), while China (despite fluctuations) moved from 36 to 33.

China's reforms challenge Mexico's comparative advantages head on, and make the disadvantages starker. China wins on low labor costs and many other costs of doing business, while quality control, technology

Maquiladora exports have fallen with the U.S. recession and rising Chinese competition. More than two hundred plants closed last year, and hundreds of thousands of jobs were lost.

TABLE 1
Mexico's Maquiladora Industry Today

	PLANTS	EMPLOYEES
Food-related products	71	9,459
Clothing, textile products	886	226,033
Shoe, leather products	42	6,642
Furniture, wood & metal products	349	53,583
Chemical products	142	23,315
Assembly of transport equipment	256	226,382
Assembly/repair of tools, machinery	61	16,427
Assembly of electrical articles	168	86,230
Electric, electronic parts, materials	533	236,846
Assembly of toys, sports items	49	10,438
Services	229	36,300
Other	502	128,826
Total	**3,288**	**1,060,481**

Source: After Economist Intelligence Unit, *Business Latin America,* based on Instituto Nacional de Estadistica, Geografia e Informatica, 2002.

diffusion, mid-level management skills, and physical infrastructure are improving fast enough to impress even skeptics and make Mexico's shortcomings in these areas more apparent.

What's left? Mexico's proximity to the U.S. market is the remaining hope. Proximity as salvation presupposes either the criticality of just-in-time timetables or else prohibitively high costs for

Mexican politics will not easily permit bolder business-friendly steps.

shipping weightier goods. Looking at the comparative advantage data post-1996, there are a handful of sectors where Mexico stayed ahead of both the world and China: television receivers, engines, various vehicle categories, vehicle parts, meters and control systems, and medical instruments. In several of these (the automotive cluster) and a number of others where Mexico's lead is far slimmer, recent Chinese advances portend steep export gains in coming years. Looking at Table 1 again, a saving of two weeks in shipping time (three weeks from China versus one from Mexico) is not alone going to rescue many Maquiladora plants. High-weight items more expensive to ship may be more important, although Chinese multinationals like Haier have set up manufacturing in North America precisely to compete in segments (such as refrigerators) where long-distance shipping is too costly. With the phase-out of global textile and apparel constraints over this decade, as much as 85 percent of global manufacturing in that

continued on page 78

As Mexico was changing, China was changing faster.

TABLE 2
Revealed Comparative Advantage of Mexico and China, 1995–2000

	SHARE OF WORLD EXPORTS (%)				
SECTOR	**1996**	**1997**	**1998**	**1999**	**2000**
Miscellaneous Chemicals					
Mexico	0.46%	0.54%	0.71%	0.62%	1.02%
China	1.29%	1.48%	1.33%	1.38%	2.70%
Leather					
Mexico	1.11%	1.01%	1.18%	1.42%	2.41%
China	1.99%	2.45%	2.88%	3.15%	7.34%
Manmade Woven Fabrics					
Mexico	0.47%	0.42%	0.49%	0.92%	2.49%
China	7.51%	9.44%	9.45%	9.73%	21.31%
Machine Tools					
Mexico	0.84%	1.28%	1.18%	1.38%	1.89%
China	4.63%	5.14%	5.49%	5.18%	8.96%
Combustion Engines					
Mexico	4.99%	4.84%	4.96%	5.17%	8.81%
China	0.40%	0.42%	0.40%	0.57%	1.17%
Heating/Cooling Equipment					
Mexico	2.04%	2.00%	2.49%	3.03%	5.46%
China	0.79%	1.12%	1.36%	2.00%	5.31%
Office Machines					
Mexico	2.85%	2.69%	3.11%	2.40%	3.66%
China	8.24%	9.63%	9.83%	10.31%	19.42%
Computer Equipment					
Mexico	2.02%	2.50%	2.98%	4.05%	9.59%
China	2.77%	3.56%	4.75%	5.02%	12.96%
Sound/TV Recorders, Etc.					
Mexico	2.20%	2.57%	2.75%	3.57%	4.15%
China	5.97%	7.21%	7.80%	8.86%	16.78%
Electrical Transmission Equipment					
Mexico	5.96%	6.38%	8.12%	8.88%	16.49%
China	7.51%	8.57%	9.88%	11.17%	22.10%
Passenger Cars					
Mexico	3.96%	3.77%	3.99%	4.28%	7.80%
China	0.01%	0.01%	0.01%	0.00%	0.01%
Motor Vehicle Parts					
Mexico	2.46%	2.74%	3.37%	3.90%	7.23%
China	0.32%	0.36%	0.43%	0.60%	1.41%
Motorcycles					
Mexico	0.44%	0.54%	0.82%	0.97%	0.84%
China	6.11%	7.28%	7.70%	9.03%	17.85%
Furniture					
Mexico	2.81%	3.55%	3.51%	4.09%	8.60%
China	3.94%	5.02%	5.38%	6.19%	11.89%
Medical Instruments					
Mexico	3.32%	3.85%	4.14%	4.42%	11.32%
China	1.19%	1.27%	1.39%	1.45%	3.89%
Meters and counters					
Mexico	3.16%	7.99%	11.76%	16.57%	30.64%
China	1.96%	2.35%	2.42%	2.43%	7.29%
Photographic Equipment					
Mexico	1.06%	1.32%	2.08%	2.32%	3.83%
China	6.83%	8.79%	9.98%	9.50%	14.17%

Source and clarification: Author's calculation based on UNCTAD ITC database and COMTRADE database. Year 2000 figures are inflated due to incomplete reporting of world export data. Figures accurately depict relative position of Mexico to China, but since national export data and world data are from different series, absolute values may be imperfect.

Continued from page 24

sector may end up in China, according to U.S. government estimates: for the 27 percent of Maquiladoras and 226,000 workers still in that sector, there is serious trouble ahead.

Mexico is flush with initiatives to counter the competitiveness trends. Slight tax reductions enacted thus far are trivial in light of the evolving economics. Mexican politics will not easily permit bolder business-friendly steps. Investments in infrastructure and human development, especially health and education, are well conceived but take time to pay off. Mexican officials talk of needing to get one step ahead of China on the value-added spectrum, as Taiwan has sought to do, but that is no small feat and must be built on a higher skills human resource profile that takes years of broader social reform to achieve. And besides, China is becoming the next semi-conductor boomtown—this is no longer a challenger just in plastic toys and cheap underwear.

So China is eating Mexico's lunch, but more due to the Mexican inability to capitalize on successes and induce broader reform than to China's lower wage workers per se (India has pennies-an-hour laborers, but is not directly threatening Mexico). If China were not attracting factories from the Mexican border and capturing new investments before they happen, then other countries probably would be.

A saving of two weeks in shipping time (three weeks from China versus one from Mexico) is not alone going to rescue many Maquiladora plants.

Mexico's comparative disadvantages include an intrusive bureaucracy that is sometimes corrupt, sometimes simply hostile to the private sector; poor utilities and transportation infrastructure; under-investment in human development; and a less than dynamic industrial structure reflecting imperfect financial intermediation and residual statism.

What are the implications of China's competitive challenge for the peso? For one thing, don't expect the Chinese currency, the renminbi (RMB), to be revalued this year or next. The Chinese government is committed to the stable RMB-U.S. dollar peg for the time being, and has the wherewithal to back it up. Contrary to some reports, the U.S. government is not leaning on Beijing to revalue. Some Mexican commentators have suggested an undervalued RMB is to blame for weak Mexican exports. But foreign investment into Mexico, which in turn drives exports (as is the case in China as well), was robust right through the peso appreciation of the late 1990s and into 2000, and should be a more fundamental driver of export growth than exchange rate fluctuations. Further, the peso effectively devalued against the RMB by falling against the dollar since 2002, and this should provide a modicum of export edge for the short term.

If Mexico fails to achieve deeper regulatory reform—the real determinate of peso strength—then the diversion of direct investment and manufacturing by reform-minded China could well be the proximate reason for another peso crisis. But Mexico has nearly $50 billion in reserves to employ in staving off currency crisis while the country finds its way to redouble domestic reform. If Mexico takes the course of eschewing bold restructuring appropriate to the challenges—and the peso flounders as a result in the face of diminished expectations—then please: don't blame China. ◆