



# Rethinking Trade Policy for Development: Lessons From Mexico Under NAFTA

Eduardo Zepeda, Timothy A. Wise, and Kevin P. Gallagher

December 2009

## Summary

- The North American Free Trade Agreement (NAFTA) is a good place to begin a comprehensive review of U.S. trade agreements, as called for by President Obama. Any U.S. review of NAFTA should, however, go beyond its impact on the United States to assess its effects on Mexico.
- The evidence points overwhelmingly to the conclusion that Mexico's reforms, backed by NAFTA, have largely been a disappointment for the country. Despite dramatic increases in trade and foreign investment, economic growth has been slow and job creation has been weak. Now, with its economy so closely tied to that of its northern neighbor, Mexico is suffering the most severe economic crisis in the region.
- Reforms to the template for U.S. trade agreements must go deeper than the incorporation of improved labor, environmental, and intellectual property provisions, as seen in more recent U.S. trade agreements. Such measures are laudable, but they would have had little impact on the negative trends we have seen in Mexico under NAFTA.
- U.S. trade agreements with developing countries should avoid NAFTA's restrictions on government policies proven to promote dynamic development. They should leave countries such as Mexico the flexibility to deploy effective policies for industrialization, rural development, poverty alleviation, and environmental protection.
- Mexico's experience under NAFTA shows that U.S. trade agreements must include robust funding for development to create a more level playing field among trading partners.

U.S. President Barack Obama's promise to carry out a comprehensive review of existing and pending trade agreements between the United States and developing countries is welcome, as is his vow to establish a "new template" for such agreements. The time is right to revisit the record on the economic benefits and costs of such agreements and the policies they mandate. A good place to start such a review is the North American Free Trade Agreement (NAFTA). NAFTA remains the current template for U.S. trade agreements in the hemisphere—with Chile, the Dominican Republic, Central America, and Peru, and for the pending agreements with Colombia and Panama.

NAFTA may well represent the most any developing country can hope for from such trade agreements. When the treaty took effect in 1994, Mexico was already a high-middle-income country, with a diversified economy and an economic reform process already well underway. Mexico had a long history of bilateral trade with the United States across a shared 2,000-mile border. Most important, NAFTA gave Mexico meaningful preferential access to the U.S. economy during what turned out to be the longest economic expansion in U.S. history. It is therefore critical to begin the review by evaluating the extent to which the path-breaking trade agreement delivered on its promises, particularly under such favorable conditions.

Any U.S. review of NAFTA should go beyond its impact on the United States to assess its effects on Mexico. While there is contentious debate about whether NAFTA has been good for the United States and Canada, it is often assumed that Mexico was the undeniable winner from NAFTA. After all, by gaining preferential access to its neighbors' huge markets, Mexico expanded exports dramatically and drew increasing levels of U.S. investment, particularly in manufacturing. These two results constitute the core of most positive assessments of NAFTA.<sup>1</sup> The problem, however, is that Mexico's growth record since NAFTA has been disappointing and the treaty's effects on income distribution have been at best neutral.<sup>2</sup> After fifteen years, it seems clear that NAFTA's promise of broad-based dynamic growth did not come true in Mexico.

The NAFTA treaty and its implementation cannot be held entirely responsible for Mexico's economic performance. The 1995 crisis clearly lowered Mexico's medium-term growth performance. Competition from China put a brake on Mexico's export growth and other related policy measures also had a more decisive impact on Mexico's economy than NAFTA (for good and ill). For example, Mexico's gradual devaluation of the peso during most of 1994 and sharp depreciation during the 1994–1995 crisis contributed more to export growth than the liberalization measures included in the NAFTA text.<sup>3</sup> Still, NAFTA was a key component of Mexico's trade-led economic strategy. Access to U.S. markets opened by NAFTA helped to increase exports and investment after the 1995 crisis. Most important, NAFTA locked into place a set of economic policies that collectively produced such disappointing results. These are the policies that are now in need of review.

While attractive at first glance, most of the analysis comparing Mexico's performance under NAFTA to a no-NAFTA scenario is flawed. Common to this view is the assumption that the no-NAFTA scenario would entail Mexico following the very same policies it has since the 1980s, only without NAFTA. Such an analysis misleadingly attempts to separate policies—NAFTA and other main economic policies—that should be considered simultaneously. This study's assessment of Mexico's performance since NAFTA thus does not attempt to discern the narrow effects of the treaty from the broader impacts of the economic strategy of which they were a part. Nor do we ascribe to NAFTA alone either the credit or the blame for those impacts.

To open the country's economy, the Mexican government made strategic choices in the late 1980s,<sup>4</sup> opting to integrate more fully with the United States and closely following the tenets of the Washington Consensus with NAFTA as the key international initiative. Many factors played into this choice: a lack of interest from Europe, geopolitical alliances with U.S. strategic interests, special interests in both countries that stood to gain from integration, and an ideological commitment to the free-market model then in vogue. Mexico was indeed at an economic crossroads when NAFTA negotiations began, but the model pursued by Mexico was not the only road that could have been chosen. The fact that many countries—China, India, Brazil, and Chile—in the last two decades have had greater success following less orthodox policies than Mexico's attests to the range of development strategies that were open to Mexico. It makes little sense, then, to dismiss the poor economic results from the NAFTA period with the argument that things would have been worse without NAFTA.

Drawing from a number of studies and from various statistical sources, this study will assess what did and did not work for Mexico and will contribute to the active debate over how to approach the review of the treaty, should the Obama administration follow through on its promise to re-open the agreement. We also hope to focus these debates over the architecture of trade on the central issue of development. Many provisions in NAFTA are worth reviewing, and a review would in all likelihood improve its functioning. However, even a carefully executed mending of NAFTA will miss the point that the United States and Mexico, as well as other governments in Latin America, need to review their entire approach to trade and its role in achieving broad-based development.

## NAFTA's Successes

The Mexican government's NAFTA-based economic strategy was successful in some important ways. One of the goals was to increase trade, foreign investment, and productivity while providing a more stable macroeconomic climate for business. The data suggest that those objectives were largely achieved.

**TRADE GROWTH:** Mexico's exports increased 311 percent in real terms between 1993 and 2007, and non-oil exports increased 283 percent.<sup>5</sup> Exports to the United States were up a similar percentage.<sup>6</sup> The export growth was overwhelmingly in manufacturing, with manufacturing exports rising from 43 percent of total exports in 1990 to 77 percent in 2007.<sup>7</sup> Agricultural exports doubled in real terms from 1993–2007.<sup>8</sup>

**FOREIGN DIRECT INVESTMENT (FDI):** FDI more than tripled between 1992 and 2006.<sup>9</sup> Fueled by investment liberalization under NAFTA, the majority (58 percent) came from the United States.<sup>10</sup>

**MACROECONOMIC STABILITY:** Mexico tightened its fiscal and monetary policies. On their own terms, these measures were a success. Inflation was brought below 5 percent, from over 80 percent in the 1980s.<sup>11</sup> Since NAFTA, federal budget deficits have been low, about 1 percent of GDP (at least until the current economic crisis when deficits initially increased to stimulate the economy).<sup>12</sup> This has been achieved while Mexico dramatically reduced its international debt to a more sustainable level.

**RISING PRODUCTIVITY:** Productivity increased about 80 percent in Mexico's domestic manufacturing sector, as Mexican firms were forced to compete with foreign firms.<sup>13</sup> The rise of productivity is at the core of the efficiency gains that are among the most important goals of trade liberalization.

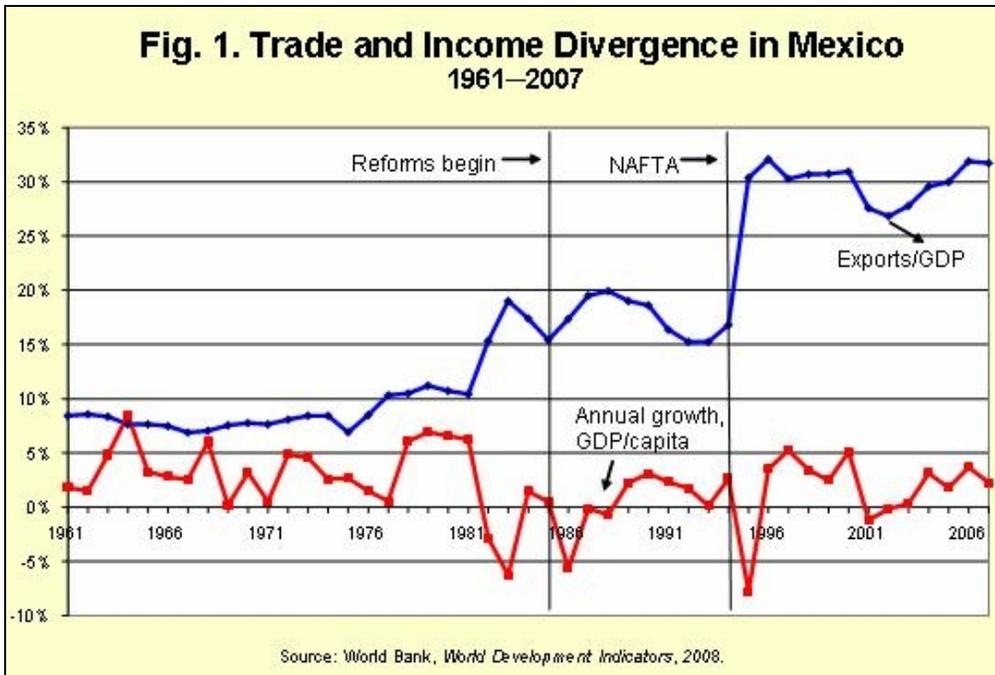
## The Shortcomings of the Model

The assumption inherent in Mexico's economic strategy was that the achievements of the above objectives would automatically lead to dynamic economic growth, which would translate into improved standards of living. Standard economic theory predicts that opening the economy will lead to increased trade and foreign investment. Demand for exports will fuel growth. Reduced protection will allow Mexico to find its true comparative advantage. Foreign investment will stimulate economic growth while increasing productivity, which will spill over to domestic firms. Employment and wages will increase in the expanding sectors of the economy, and the country will enter a period of dynamic growth.

But economic growth was sluggish and total levels of investment remained low despite the increase in trade and the infusion of foreign capital in Mexico. The country remained vulnerable to macroeconomic shocks given its fiscal dependence on oil revenues and its recurrent reliance on an overvalued currency. Job creation was limited even in growing sectors of the economy, and import competition eliminated many livelihoods, particularly in agriculture. Wages remained low and fell further behind those in the United States, contrary to the prediction of wage convergence. While poverty decreased due to multiple factors, inequality remained high. And without adequate environmental standards and enforcement, the ecological costs of economic growth remained high. Below is the evidence on each of these trends.

### **SLOW GROWTH**

Mexico's economy grew at an annual per capita rate of only 1.6 percent between 1992 and 2007. This is low by Mexico's own standards—from 1960 to 1979, real per capita growth averaged 3.5 percent<sup>14</sup>—and low by developing country standards as well. Mexico has had one of the lowest growth rates in Latin America. Countries with less orthodox trade and development policies—India, Brazil, and China—have achieved growth rates in the same period that were much higher than Mexico's. Contrary to Mexico's emphasis on deficit-reduction, these more dynamic countries adopted pro-growth policies with high levels of public investment to maximize the growth-stimulus of expanding trade.



Note: The exports to GDP ratio jumped in three occasions, around 1976, 1982, and 1995. All three of them were periods of crisis and sharp devaluations. The jumps are explained by the simultaneous occurrence of an increase in exports, a reduction of GDP, and a sharp change in the dollar value of the peso.

As the share of exports in the economy grew, the rate of growth faltered (see Figure 1). This is due in part to the rapid growth of imports. To the extent that Mexico's exports involved little value-added production on imported components, as was the case in much of the manufacturing sector, the rising value of Mexico's exports offered a misleading gauge of domestic economic activity.

It is particularly striking that Mexico grew so slowly through the period when the significance of Mexico's preferential access to the U.S. market was at a peak and when the U.S. economy was growing so dynamically. No other developing country had comparable advantages over its potential trade rivals. In fact, given the levels of integration and openness in the global economy, it may well be that no country will ever enjoy the trade advantages Mexico saw in the years after NAFTA took effect.

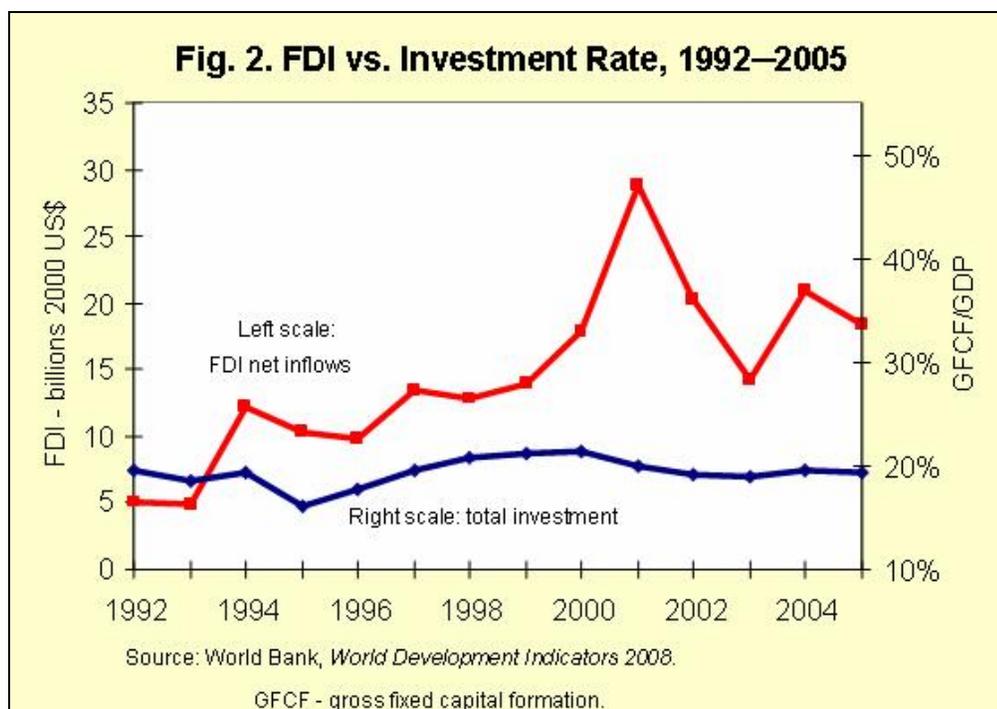
Since NAFTA took effect, changes have seriously eroded the value of the preferences granted to Mexico. The United States now has trade agreements with other developing countries, and China and other exporters are more fully integrated into the global trading system under the WTO. To be sure, since 2000–2001 Mexico has been losing business, particularly to China, and China has moved ahead of Mexico as the second largest exporter to the United States. According to some estimates, over half of Mexican exports to the United States are “under threat” from Chinese exports. And 82 percent of

Mexico's exports of "high technology" goods, representing 40 percent of total exports, are threatened by Chinese competition.<sup>15</sup>

Evidence suggests that at least in manufacturing, trade between Mexico and the United States decreased in importance since 2001. The most recent recession in the United States has erased any significant advantage opened by NAFTA. This is particularly true in sectors such as automobiles, a strategic NAFTA sector, where the current restructuring in the United States suggests the need to reconsider the manufacturing model nurtured by NAFTA and related policies.

### LOW LEVELS OF INVESTMENT

Just as export growth has not translated into income growth, NAFTA's strong record in attracting foreign investment has not translated into an increase in overall investment rates in Mexico—an important reason behind Mexico's slow economic growth. FDI may have tripled, but domestic investment receded, so overall investment levels (foreign plus domestic) languished at around 19 percent of GDP (see Figure 2). This is low by Mexico's standards; investment before 1982 was around 24 percent of GDP.<sup>16</sup> It is also significantly lower than the 25 percent level economists now consider necessary to achieve dynamic growth.<sup>17</sup> By comparison, total investment in China has been around 40 percent over the last two decades.<sup>18</sup>



The free-market case for FDI rests on the assumption that there is an automatic virtuous cycle. FDI brings needed capital and technology, which raises productivity, increases efficiency, and carries "spillover" effects in the domestic economy. Foreign firms source from domestic companies, whose dynamism stimulates additional economic growth. Better production

standards and processes raise the competitiveness of domestic firms. New domestic investment is stimulated by foreign investment and the economy moves toward higher growth rates.

The belief that FDI automatically stimulates domestic investment has been widely questioned.<sup>19</sup> In the case of Mexico, FDI failed to raise total investment levels for several reasons. First, in a context of poor infrastructure and lack of credit, many domestic firms went out of business due to pressure from imports, a process that was well underway as a result of earlier reforms. Second, a significant portion of FDI, particularly in services, went into buying domestic firms rather than establishing new facilities, which does not increase the stock of capital. Third, FDI in manufacturing has been concentrated in production-sharing operations that take imported components, add some value, and re-export the product. This generates limited spillover effects. For example, in the *maquiladora* sector as a whole, only 3 percent of inputs are sourced from Mexican firms; fully 97 percent are imported, a share that has not improved with NAFTA. Fourth, Mexican firms have found it particularly difficult to link with foreign companies and thereby stimulate local economies.<sup>20</sup> Finally, public investment collapsed as part of the macroeconomic adjustment enacted to reduce the fiscal deficit, policies very much in line with the free-market aversion to public intervention. This decline in public investment was not compensated by a rise in private investment. Far from “crowding out” private investment, public investment was needed to “crowd in” private capital.<sup>21</sup>

China’s experience offers a stark contrast. Throughout its recent period of dynamic, export-oriented economic growth, the Chinese government has continued to play an active role in directing the country’s development process. This has included a competitive exchange rate and a very active industrial policy designed to ensure that new export opportunities and new FDI contribute to the growth of domestic firms. Notably, many of the measures widely used by China—such as performance requirements that foreign firms source a significant share of their inputs from domestic suppliers—are illegal under NAFTA.

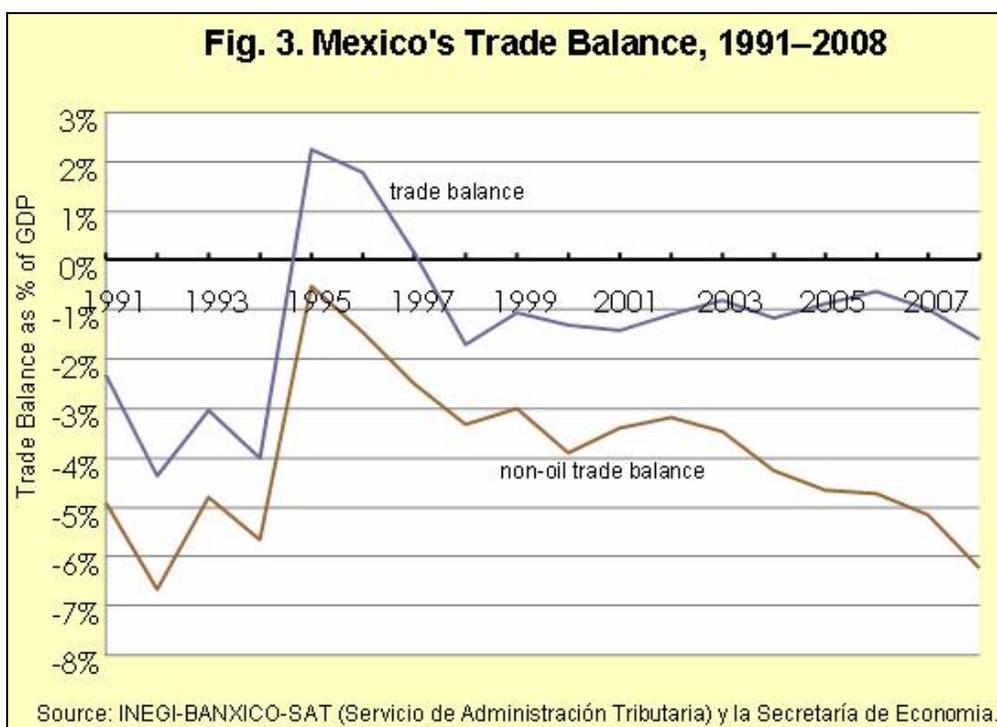
It remains open to debate whether such policies would be the answer for Mexico in today’s global economy. It is clear that Mexico’s strict adherence to the NAFTA model failed to translate increased FDI into increased overall investment—a precondition for dynamic growth. It is also clear that NAFTA prohibited some of the practices that have been shown to be effective in converting foreign investment into domestic economic activity.

### **MACROECONOMIC VULNERABILITY**

While the Mexican government can claim some notable achievements in the area of macroeconomic stability—particularly taming inflation and decreasing the external debt—there are areas of concern. Mexico’s tight fiscal policies have reduced inflation but they have also slowed domestic economic growth. Tight monetary policy has also led to a persistently overvalued currency,

making it more difficult for producers to compete with other developing country exporters, such as China. In the long term, an overvalued peso leaves the country vulnerable to runs on its currency and sudden devaluations, as occurred in 1994–1995, and as occurred again in the recent financial crisis, when the peso lost almost half its value. The belief that NAFTA’s ever-increasing U.S. inflows into Mexico would shield the country against currency attacks has been proved wrong.<sup>22</sup> Financial reform failed to deepen the Mexican financial services sector, which remains weak, with bank lending to private firms low and expensive relative to international standards.

Overvaluation also contributes to concerns about the current account. High oil prices in recent years have helped mask a host of underlying problems. Mexico’s trade deficit, counting rising oil revenues, hovered around 1 percent of GDP from 1999–2007. This could have been considered a sustainable trade deficit except that it hid a non-oil deficit that has worsened since the 1994–1995 peso crisis and by 2008 reached 6.2 percent of GDP, a level higher than that preceding the 1994 peso crisis (see Figure 3).<sup>23</sup>



Mexico deserves credit for maintaining a federal budget deficit around 1 percent of GDP before the current crisis. However, the revenue side of the equation is less solid, as the country remains heavily dependent on oil exports for government revenues. The state-owned oil company, Pemex, provides more than 30 percent of federal revenues.<sup>24</sup> Mexico collects a very low share of revenues from taxes, well under 15 percent of GDP,<sup>25</sup> compared to 36 percent for OECD countries.<sup>26</sup>

Government dependence on oil revenues drains investment and exploration funds from Pemex, undermining its capacity to continue producing and refining oil, and providing funds in the future to finance public expenditures. Estimates suggest that at current levels of exploration, Mexico has only nine more years of proven reserves.<sup>27</sup> Low levels of investment and productivity, in turn, feed calls to privatize the company.

Mexico is also now excessively dependent on the United States as an export market, with more than 85 percent of Mexican exports going to the United States, up from 70 percent in 1990.<sup>28</sup> This leaves the country more vulnerable than ever to downturns in the U.S. economy. For this reason, the current recession is hitting Mexico harder than any other country in Latin America. Through October 2009, the Mexican economy has shrunk by about 7 percent.

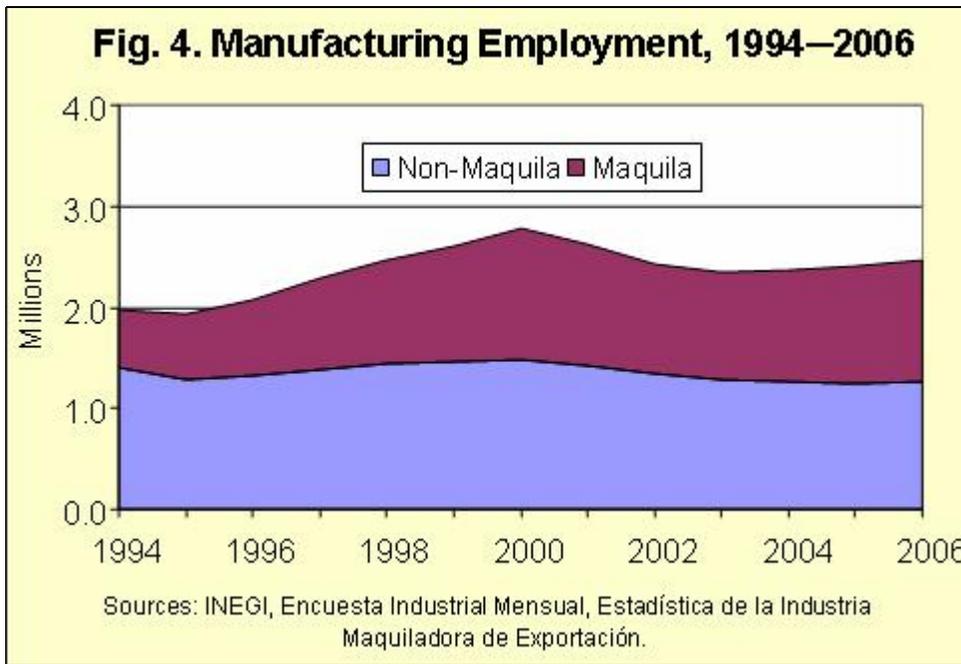
Finally, many Mexicans depend on remittances from family members in the United States. These have proven to be an important and consistently growing source of foreign exchange, jumping six-fold from pre-NAFTA levels to \$24 billion in 2007, an amount greater than FDI.<sup>29</sup> Remittances have already declined during the current recession, as U.S. employment in construction and other industries dependent on migrant labor weakens. This has important implications for families who have come to rely on remittances, as some of their members have chosen to migrate, and for the economy, as it reduces foreign exchange flows into the country.

### **WEAK JOB GROWTH**

With slow growth and overall investment weak, it should come as no surprise that employment growth has been poor. Still, it is striking that NAFTA could bring Mexico such large increases in trade and foreign investment but generate so few jobs. Overall, limited employment gains in manufacturing and services have been offset by large employment losses in agriculture. With roughly one million Mexicans entering the labor force each year, the NAFTA model has failed to deliver what Mexico needs the most.

In manufacturing, the data suggest a net gain of 500,000–600,000 manufacturing jobs since NAFTA went into effect (see Figure 4). Mexico showed employment gains in the *maquiladora* sector, adding about 660,000 jobs since NAFTA took effect, to total 1.2 million in 2006.<sup>30</sup> Employment in Mexico's non-*maquiladora* manufacturing sector was lower in 2008 than it was in 1994 (except in micro-enterprises, which are mostly outside the formal sector of the economy). In August 2008, there were 1.24 million non-*maquiladora* manufacturing jobs, 159,000 fewer than when NAFTA took effect.<sup>31</sup> The number of formal jobs in manufacturing plants (*maquiladora* and non-*maquiladora*) grew rapidly during the years between NAFTA's enactment in 1994 and 2000, but most of the growth came from an intensification of *maquiladora* activity brought by the sharp depreciation of the peso in 1995. Non-*maquiladora* formal manufacturing employment was already in decline early in 1994, and new jobs were only added once the shock of the 1995 crisis started to ease and firms reacted to the highly

competitive exchange rate that the crisis created.<sup>32</sup> Since 2000–2001, both the *maquiladora* and non-*maquiladora* sectors began to lose jobs, even before the impacts of the current recession are taken into account.<sup>33</sup>



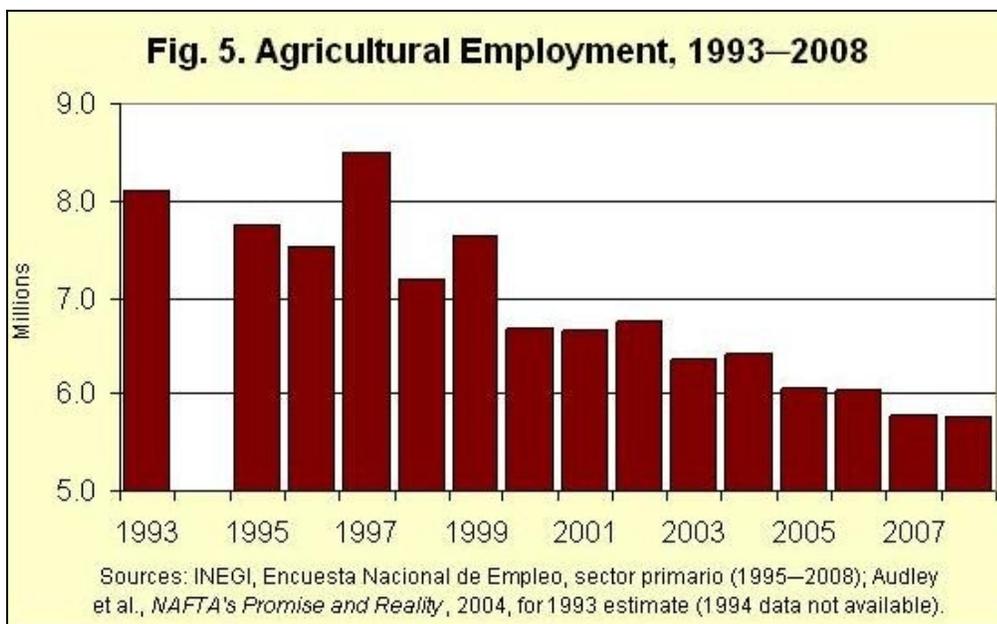
Note: Non-*maquiladora* manufacturing employment starts in 1994 because data before that year is collected based on a different basis. *Maquiladora* data stops in 2006 because the data stops then.

Why have so few jobs been created in a sector that has shown significant growth? In addition to the job losses from import competition, Mexico’s economic model is in part a victim of one of its recognized successes: increasing productivity. The 80 percent increase in productivity in the non-*maquiladora* sector has dramatically reduced the employment impacts of economic growth in existing firms. The increase in productivity is welcome, but the enclave nature of many enterprises means that there have not been additional opportunities to invest in manufacturing. Few modern plants have been built and too few new jobs have been created in the sector.

Employment in the service sector has grown. Jobs in services have increased from 50 percent to 60 percent of total employment.<sup>34</sup> This sector includes a large proportion of informal workers, so many of the new jobs are not in the most desirable occupations, but formal employment has also increased. Modern business and financial services enterprises have been established, increasing the efficiency of the economy. Foreign direct investment has built new tourist services in world-class Mexican resorts. Significant investments, domestic and international, have supplanted traditional retail trade with U.S.–style department stores and supermarkets in large and medium-sized cities. As part of the retrenchment of the public sector, employment in the distribution and retail sale of gas and fuels expanded rapidly during these years. Mexico’s disregard for public education has resulted in an increasing share of jobs in

private education. According to economic census data, between 1993 and 2003, non-financial services to businesses and consumers added almost 4 million formal jobs.<sup>35</sup>

In agriculture, on the other hand, employment losses have offset most of the gains in the *maquiladora* sector and in formal sector services employment. As Figure 5 shows, total employment is down from 8.1 million in the early 1990s to 5.8 million in the second quarter of 2008, a loss of more than 2.3 million jobs.<sup>36</sup> With Mexico's unilateral liberalization of most agricultural sectors ahead of their NAFTA transition schedules, imports of subsidized grains and oilseeds have outpaced rising exports to the United States of fruits, vegetables, and meats. While the United States increased its farm subsidies in the post-NAFTA years, the Mexican government reduced its support, placing additional pressure on already-stressed farming conditions. Mexico's trade balance in agricultural goods with the United States has remained negative since NAFTA.<sup>37</sup> Employment increases in export crops have been limited because industrialized agriculture dominates these sectors, offering limited permanent employment. There has been a significant increase in seasonal work, drawing large numbers of internal temporary migrants.



Note: Agricultural employment includes livestock, fishing, and forestry.

These small and seasonal employment increases have been too limited to absorb losses from traditional agricultural sectors. Many of these losses came among small-scale farmers producing staple foods, most notably corn, where import competition undercut producers and real prices fell nearly 50 percent after Mexico accelerated liberalization ahead of NAFTA's schedule for sensitive products.



During the NAFTA period, Mexico’s workforce has been growing by about one million workers per year. NAFTA’s so-called “social deficit” is, significantly, a jobs deficit, as the formal sectors of the economy have provided far too few new jobs to absorb those displaced in agriculture and those newly entering the workforce.

One measure of the jobs deficit is the rise in informal employment, which accounted for a remarkable 57 percent of the economically active population in 2004, up from 52 percent in 1992.<sup>38</sup> Another sign is the rise in migration to the United States, which has deep historical roots but has grown during the NAFTA period. In spite of the rising militarization of the U.S. border, migration increased from about 350,000 per year before NAFTA to nearly 500,000 per year by the early 2000s.<sup>39</sup> According to some estimates, the Mexican-born population in the United States increased from 4.5 million in 1990 to 9.7 million in 2000, and 12.7 million in 2008, of which around 55 percent is undocumented.<sup>40</sup> The increased risks to migrants have reduced well-established seasonal flows of labor, as migrants choose not to risk the annual return to Mexico. As a result, migration to the United States is more permanent now than it was before NAFTA.

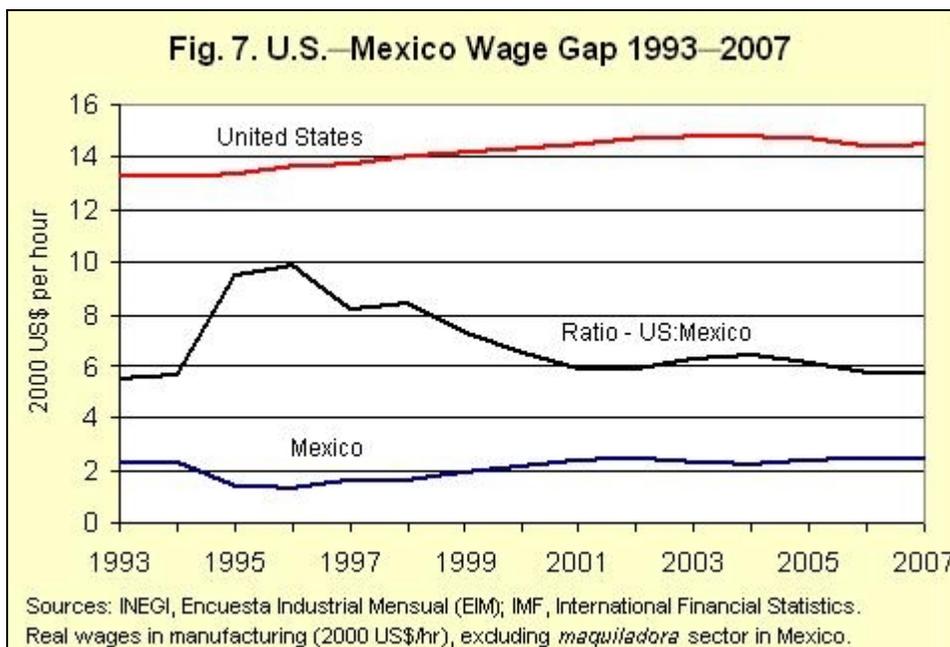
Thus, one of the paradoxes of NAFTA, which leaders promised would help Mexico “export goods, not people,” is that Mexico now “exports” more people than ever and more of them reside permanently in the United States without documents.

### CONTINUING LOW WAGES

The record on wages is disappointing, if unsurprising. Real wages in manufacturing fell after the 1995 peso crisis and recovered to their pre-NAFTA levels after 2001. But they are up only slightly (8 percent) in the *maquiladora* sector,<sup>41</sup> while wages in non-*maquiladora* manufacturing remain

at pre-NAFTA levels.<sup>42</sup> This is in sharp contrast to the impressive growth of productivity in the sector. Those gains have not been shared with workers.

It is noteworthy that Mexico has not seen the wage improvement for unskilled labor that is so much needed. Instead of convergence with wages in the United States, manufacturing wages have been diverging. As Figure 6 shows, the average U.S. manufacturing wage in 2007 was 5.8 times the Mexican wage, up from 5.6 in 1993.<sup>43</sup> What makes this result unsurprising is the persistent surplus of labor throughout Mexico. Real wages for agricultural workers, which have historically been lower than manufacturing wages, also fell after the 1995 crisis and remained below their pre-NAFTA levels at least through 2003.<sup>44</sup>



The real value of the minimum wage has fallen 25 percent since NAFTA took effect.<sup>45</sup> This is significant not because so many workers earn the minimum. In fact, while Mexico’s minimum wage is loosely enforced in the workplace, it is a reference for setting wage adjustments in a wide range of activities and for the definition of worker’s benefits.<sup>46</sup> Policy makers have used it as a powerful tool to stabilize the macro economy, as they did during the peso crisis, when they allowed the purchasing power of wages to fall to help achieve the desired inflation rate. Thus, the fall in the value of the minimum wage is significant because of its economy-wide effects on contract negotiations, government salaries, and so on.

Not only have wages stagnated, the quality of employment has declined as well. Half of the new jobs created in the formal sector between 1993 and 2004 did not offer the basic package of benefits—Social Security, annual bonus, and two weeks of vacation—mandated by Mexican laws.<sup>47</sup>

Mexico's economic strategy was premised in part on attracting manufacturing jobs on the basis of low wages. Government policies have been designed to keep wages low. Given the context of slow growth and government wage policies, it is not surprising that Mexico has seen few gains in wage levels. Still, Mexico's low wages are not low enough to compete with China, which is one reason many of Mexico's light assembly operations have moved to China or are under threat. Mexico is unlikely to maintain a competitive advantage in today's global economy on the basis of low wages.

NAFTA's labor side agreement has been largely ineffectual in ensuring respect for workers' rights in Mexico. Mexico's stagnant wages despite growing productivity are partly the result of the continued weakness in labor's bargaining power and partly the result of government low-wage policies. It is telling that persistent low wages have not even translated into more jobs.

### **PERSISTENT POVERTY AND INEQUALITY**

Not surprisingly, slow growth, limited employment, and low wages have left Mexico with persistent poverty and inequality, and the global recession now threatens to undermine what progress was made in recent years. Poverty numbers vary greatly depending on the poverty line used and methodology of estimation.<sup>48</sup> Here we use official data from the Consejo Nacional de Evaluación de la Política de Desarrollo Social, based on national poverty lines.

These data show poverty declining from 53 percent in 1992 to 43 percent in 2006 and extreme poverty falling from 21 percent to 14 percent.<sup>49</sup> The Mexican government has been credited with improving some of its targeted anti-poverty programs, which may account for some poverty reduction. Foreign remittances and the 'demographic bonus' have also been identified as important contributors to the rise in income of poor families. Still, these are high levels of poverty for a middle-income country. In 2006, an estimated 43 percent of Mexicans could not afford the "basic market basket" of food, clothing, housing, health care, public transportation, and education. Extreme poverty, defined as income too low to secure minimum food requirements, affected 14 percent of people. Rural poverty was worse: 55 percent overall, with 25 percent in extreme poverty.<sup>50</sup> The current recession is likely to erode some of the gains that have been made.

Inequality, as measured by the Gini coefficient, showed minor improvement, from 0.550 in 1992 to 0.511 in 2004.<sup>51</sup> Mexico remains one of the hemisphere's highly unequal countries. By all accounts, NAFTA contributed to growing geographical inequality between Mexico's southern and northern states. There was growth in states along the U.S. border and those with transportation infrastructure and/or industrial trade with the United States, as well as tourist areas. States in southern Mexico languished behind.

### **ENVIRONMENTAL COSTS**

Economic growth during the NAFTA period has come with a high environmental cost, but this is not because Mexico has served as a widespread

“pollution haven” for pollution-intensive U.S. firms, as some environmentalists feared. U.S. firms have not moved to Mexico in large numbers for these reasons, though there are certainly cases where that happened.<sup>52</sup> Mexico’s poor environmental record is mostly due to a weakening of the commitment to environmental protection in the post-NAFTA period. Indeed, real spending and inspection levels in manufacturing have declined since NAFTA, and the environmental impacts have been well documented.<sup>53</sup>

The net environmental costs of the restructuring of Mexican agriculture are difficult to quantify but are clearly negative. Costs related to the expansion of industrial agro-export farms include increased water use, particularly in export sectors in water-stressed regions, and the loading of nitrogen and other agro-chemicals. Economic pressure on poor farmers, particularly maize producers, has contributed to lost or threatened maize biodiversity under competition and price pressures from corn imports, as well as deforestation from the unsustainable exploitation of marginal lands, as poor farmers pursue survival strategies.<sup>54</sup>

The Mexican government estimates the costs of environmental degradation periodically in the national income accounts. Since 1985, the environmental costs, which include natural resource degradation and urban and industrial pollution across sectors, have averaged about 10 percent of GDP per year.<sup>55</sup> Clearly, the Mexican government has not done enough to address these significant environmental impacts.

NAFTA’s side agreement on the environment established an institutional framework for dealing with these issues—the North American Commission for Environmental Cooperation—as well as institutions to deal with border environmental issues. However, they have been underfunded and have been relegated to the role of interesting pilot projects rather than comprehensive, trinational ways to address environmental issues. The threat of global climate change just makes more urgent a trinational, comprehensive approach.

## Conclusions

There is increasing international recognition that trade policy in the Western Hemisphere should be overhauled. The evidence points overwhelmingly to the conclusion that the Mexican economic model, which hinged significantly on strict adherence to free-market policies backed by a trade agreement with the United States and Canada, has largely been a disappointment for Mexico. What does this mean for the Mexican and U.S. governments? For the United States, it is indeed time for a comprehensive review of the template for such agreements. That assessment must include the impacts on all three NAFTA countries. It is in both the short- and long-run interests of the United States to develop trading relationships with its less developed partners that stimulate economic development. In the short run, economic and political stability increase, and in Mexico's case these are closely related to two intractable problems for the United States: migration and the drug trade. In the long run, U.S. exporters will be better off if Mexico grows dynamically, just as they have benefited, despite competition, from rising demand from a rapidly growing China.

U.S. trade policy needs more than tinkering around the edges. While the incorporation of improved labor, environmental, and intellectual property provisions in more recent U.S. trade agreements, such as the agreement with Peru, is laudable, such measures would not have had any appreciable impact on the negative trends we have seen in Mexico under the development model enshrined in NAFTA. The flaws go deeper than labor and environmental standards.

For Mexico and other developing countries seeking to develop NAFTA-style trade relationships with the United States, the evidence here suggests the need for a serious review of national development strategies. Mexico had all the advantages that came with its early preferential agreement, its long border with the United States, and an expanding U.S. economy. No other country in Latin America can expect such favorable conditions. Similarly, no other country in Latin America can expect even the meager gains Mexico saw under NAFTA unless the trade agreement is reframed in the context of pro-growth, pro-development domestic policies.

Those policies would draw on the more successful strategies of other developing countries in the last two decades. They would avoid some of Mexico's key mistakes: overemphasizing tight fiscal policy over exchange rate competitiveness and economic growth; weak tax collection; falling public investment, which could have helped crowd in private investment; abandonment of public investment and research in oil and perhaps in other industries; and failure to develop government-led programs to correct for critical failures in credit markets. None of these domestic policies was mandated by NAFTA, though they are largely consistent with the model in which NAFTA was a central component. Trade policy was mistaken for development policy.

For developing countries assessing Mexico's experience, there are five important flaws to avoid in any trade agreements with the United States. First, they should avoid NAFTA's prohibitions on policies for industrial competitiveness, such as selective promotion of industries, temporary preferences to national entrepreneurs in particular areas, and similar measures. China, India, Brazil, and others have shown that the government needs to be strategic and help steer domestic industry and foreign investment in ways that stimulate dynamic domestic economic activity. NAFTA's limits on such policies meant that the growth in exports and foreign investment could not be channeled into strategic areas that could yield long-term benefits.

Second, Mexico's accelerated liberalization of the staple-food producing sector, mainly maize, led to high levels of underemployment because the economy could not generate alternative job opportunities to absorb displaced farmers. Liberalization of sensitive food-producing sectors should be done carefully, if at all, well sequenced with other employment-creating reforms, and with continued investments in rural development and agricultural productivity. Mexico's only remaining defense against highly subsidized U.S. agriculture is the protection of key sectors through tariffs, quotas, voluntary export restraints, or other means.

Third, agreements should ensure benchmark standards for labor and the environment. NAFTA's side agreements have proven woefully inadequate. The incorporation of language on labor and the environment in recent U.S. agreements will do little to increase labor rights and environmental standards and enforcement, at least not in a way that addresses the problems experienced by Mexico. North America needs to create dignified labor conditions and a sustainable environment across borders. That will take more substantive reform.

Fourth, the absence of any provision to include funding for development to bring Mexico to a position where it could realistically compete with the United States and Canada was a mistake of NAFTA negotiators. Such funding was significant and effective in the experience of the European Union. The original proposals for a North American Development Bank recognized the need to address these asymmetries, but funding was scaled back to a very limited mandate and budget in the North American Border Bank.

Finally, a trade agreement is no substitute for a coherent national economic development strategy. Mexico has relied too heavily on NAFTA to bring dynamic growth. The countries that have succeeded in recent years have not only resisted the limitations imposed by NAFTA-style trade agreements, they have generated and followed active and coherent economic development policies to ensure there are domestic benefits from expanding trade.

There is indeed much to be learned from Mexico's experience. Now is the time for the U.S., Canadian, Mexican, and other developing country governments to take a fresh look at NAFTA's experience and shape trade and

development policies to better meet the needs of their people in a manner that respects the right to development, job creation, and the environment.

## Notes

<sup>1</sup> See, for example: USTR, “NAFTA—Myth vs. Facts,” Washington, D.C., Office of the United States Trade Representative, 2008; Gary C. Hufbauer and Jeffrey J. Schott, “NAFTA’s Bad Rap,” *International Economy*, Summer 2008; Hufbauer and Schott, *NAFTA Revisited: Achievements and Challenges*, Washington, D.C.: Institute for International Economics, 2005; Sydney Weintraub, ed. *NAFTA’s Impact on North America: The First Decade*, Washington, D.C.: CSIS Press, 2004. See the essays in the three volume collection edited by Carlos Alba et al., *A diez años del TLCAN*, vol. I, II, and III, Mexico: COLMEX, 2005.

<sup>2</sup> A number of studies have been critical of NAFTA on various grounds. See, for example, Robert A. Blecker, “External Shocks, Structural Change, and Economic Growth in Mexico, 1979–2007,” *World Development*, vol. 37, no. 7, 2009, pp. 1274–1284; Sandra Polaski, “The Employment Consequences of NAFTA,” Carnegie Endowment for International Peace, Testimony submitted to the Senate Subcommittee on International Trade of the Committee on Finance, September 11, 2006,

<http://www.carnegieendowment.org/files/naftawrittentestimony.pdf>; Alicia Puyano and Jose Romero, *Diez años con el TLCAN: las experiencias del sector agropecuario mexicano*, Mexico: COLMEX-FLACSO, 2005. See also the essays in Carlos Alba et al., 2005, op. cit.

<sup>3</sup> Estimates from the U.S. International Trade Commission, cited in Polaski, 2006, p. 6.

<sup>4</sup> See Blecker, 2009.

<sup>5</sup> INEGI, Sector Externo: exportaciones no petroleras. Accessed November 2008. Deflated with World Bank WDI Deflator (2009).

<sup>6</sup> INEGI, Balanza comercial por países y zonas geográficas: Exportaciones: Estados Unidos. Accessed November 2008. Deflated with World Bank WDI Deflator, 2009.

<sup>7</sup> INEGI, Banco de Información Económica. Accessed January 2009.

<sup>8</sup> INEGI-BANXICO-SAT (Servicio de Administración Tributaria) and Secretaria de Economía. Accessed January 2009.

<sup>9</sup> An increase of 225 percent. World Bank, World Development Indicators, 2009. Accessed December 2008. Deflated with World Bank WDI Deflator, 2009.

<sup>10</sup> INEGI, *Total FDI and from US, 1994–2007*. Note that the base and end years for FDI growth and for the U.S. share of total FDI are different due to data availability.

<sup>11</sup> INEGI, overall CPI; the averages for the periods are 82 percent 1981–1988; 20 percent 1989–1993; 18 percent 1994–2002; 4 percent 2003–2007.

<sup>12</sup> Secretaria de Hacienda y Credito Publico, *Estadísticas Oportunas de Finanzas Públicas*, consulted for years 1990–2004.

<sup>13</sup> INEGI, Encuesta Industrial Mensual (EIM) 1993–2007.

<sup>14</sup> World Bank, World Development Indicators, 2008.

<sup>15</sup> Kevin P. Gallagher et al. “The Dynamism of Mexican Exports: Lost in (Chinese) Translation?” *World Development* vol. 36, issue 8, 2008, pp. 1365–1380; Kevin P. Gallagher and Roberto Porzecanski, “Climbing Up the Technology Ladder? High-Technology Exports in China and Latin America,” University of California Berkeley Center for Latin American Studies, CLAS Working Papers, no. 20, January 1, 2008; Juan Carlos Moreno-Brid and Jaime Ros, *Development and Growth in the Mexican Economy: A Historical Perspective*, London: Oxford University Press, 2009.

<sup>16</sup> Enrique Dussel, *Inversión extranjera directa en México: desempeño y potencial*, Mexico: Siglo XXI, 2008. See also Kevin P. Gallagher and Lyuba Zarsky, *The Enclave Economy: Foreign Investment and Sustainable Development in Mexico’s Silicon Valley*, Cambridge: MIT Press, 2007; World Bank, World Development Indicators, 2008.

<sup>17</sup> Commission on Growth and Development, *The Growth Report: Strategies for Sustained Growth and Inclusive Development*, Washington, D.C., World Bank, 2008.

<sup>18</sup> World Bank, World Development Indicators, 2008.

<sup>19</sup> Blecker, 2009, for example, found that FDI during the NAFTA period had no significant impact on economic growth in Mexico.

<sup>20</sup> Gallagher and Zarsky, *The Enclave Economy: Foreign Investment and Sustainable Development in Mexico's Silicon Valley*, pp. 53–61. See also Alicia Puyana, ed., *La maquila en México. Los desafíos de la globalización*, Mexico: FLACSO, 2008; Kevin Middlebrook and Eduardo Zepeda, eds., *La industria maquiladora de exportación: ensamble, manufactura y desarrollo económico*, Mexico: UAM and Eon, 2006.

<sup>21</sup> Moreno-Brid and Ros, 2009, op. cit.

<sup>22</sup> See Alejandro Foxley, *Recovery. The Global Financial Crisis and Middle-Income Countries*, Washington, D.C.: Carnegie Endowment for International Peace, 2009, p. 7.

<sup>23</sup> Moreno-Brid and Ros, 2009.

<sup>24</sup> David Shields, “Pemex: Problems and Policy Options,” University of California Berkeley Center for Latin American Studies Working Paper, no. 4, February 2006.

<sup>25</sup> World Bank, World Development Indicators, 2008.

<sup>26</sup> OECD.Stat, Revenue Statistics—Comparative tables (variable: TAXGDP).

<sup>27</sup> Shields, “Pemex: Problems and Policy Options.” One result of the siphoning of resources out of Pemex is the firm’s inability to refine crude oil. As of 2007, 41.2 percent of the gasoline consumed in Mexico was imported (calculated from Table 15a, p. 76, SENER, *Balance Nacional de Energía 2007*, Mexico: Secretaria de Energia, 2008).

<sup>28</sup> United Nations Statistics Division, United Nations commodity trade statistics database, 2008, <http://unstats.un.org/unsd/comtrade>.

<sup>29</sup> INEGI, Sector externo. Ingresos por remesas familiares, según medio de transferencia total. Data from Banco de Mexico.

<sup>30</sup> Data from December 1992 to December 2006. INEGI, “Estadística de la Industria Maquiladora de Exportación (EME).” Accessed December 2008. Also, see Sandra Polaski “The Employment Consequences of NAFTA” 2006, <http://www.carnegieendowment.org/files/naftawrittentestimony.pdf>; and <http://www.inegi.org.mx>.

<sup>31</sup> Data available from January 1994 to August 2008. INEGI, Encuesta Industrial Mensual EIM. Accessed December 2008.

<sup>32</sup> See Carlos Salas and Eduardo Zepeda, “Employment and Wages: Enduring the Costs of Liberalization and Economic Reform,” in *Confronting Development: Assessing Mexico's Economic and Social Policy Challenges*, Kevin Middlebrook and Eduardo Zepeda, eds., Stanford: Stanford University Press and Center for U.S.–Mexican Studies UCSD, 2003, pp. 522–560.

<sup>33</sup> INEGI, EME, through 2006, and EIM, through 2008.

<sup>34</sup> To be precise, employment in services increased from 53 percent to 60 percent from 1995 to 2008 (own estimates derived from micro data of the Encuesta Nacional de Empleo 1995 and Encuesta Nacional de Ocupación y Empleo 2008, second quarter), and from 50.1 percent in 1991 to 58.4 percent in 2003 (Gustavo Garza and Jaime Sobrino, *Evolución del sector servicios en ciudades y regiones de México*, forthcoming 2009, Mexico: COLMEX, Cuadro I. 4, p. 75).

<sup>35</sup> The share of these services in total employment increased from 18 to 25 percent. Estimates based on data from Gustavo Garza and Jaime Sobrino (forthcoming 2009). Jobs in businesses with a fixed address are likely to be formal jobs (all formal jobs are in these businesses), but there are also informal jobs, as these businesses include micro units, businesses that are not registered or whose workers might not receive mandatory social protection. Informal jobs will also be found in the household and self-production sector.

<sup>36</sup> INEGI. Encuesta Nacional de Ocupación y Empleo trimestral. Indicadores estratégicos. Población ocupada por sector de actividad económica.

<sup>37</sup> SAGARPA, cited in Fernando Rello, “Inercia estructural y globalización: la agricultura y los campesinos más allá del TLCAN,” Working Group Discussion Paper DP20, July 2008, p. 11, <http://ase.tufts.edu/gdae/Pubs/rp/DP20RelloJuly08.pdf>.

<sup>38</sup> Eduardo Zepeda et al. *Growth, Poverty and Employment in Brazil, Chile, and Mexico*, International Poverty Centre, Working Paper no. 42, 2007. Estimates of informal employment vary considerably. But these estimates are quite similar to the 57.0 percent that results from adding INEGI’s 2004 estimates of the proportion of workers in the informal sector (28.8

percent) and employees with no access to health institutions (29.1 percent), which is mandatory for all wage workers. INEGI data gives a similar time pattern change in informality. Between 1995 and 2004, not a very good starting year to compare to, informality increased from 53.2 percent to 57.0 percent in 2004.

<sup>39</sup> CONAPO, *Migración Quinquenal México-Estados Unidos*. Annual averages for three five-year periods: 1987–1991: 373,062; 1992–1996: 390,492; 1997–2001: 494,844. [http://www.conapo.gob.mx/mig\\_int/s2008/05.html](http://www.conapo.gob.mx/mig_int/s2008/05.html).

<sup>40</sup> Pew Hispanic Center “Mexican Immigrants in the United States, 2008,” *Fact Sheet*, April 15, 2009. Estimates based on U.S. Population Censuses.

<sup>41</sup> INEGI, EME.

<sup>42</sup> INEGI, EIM.

<sup>43</sup> INEGI, EIM, for non-*maquiladora* manufacturing. U.S.: International Monetary Fund, International Financial Statistics.

<sup>44</sup> Rello, op. cit., p. 21.

<sup>45</sup> Source: <http://www.conasami.gob.mx/formatestimonios.aspx?ID=10&int=0>.

<sup>46</sup> See David Fairris et al., Minimum Wages and the Wage Structure in Mexico, *Review of Social Economy*, vol. LXVI, no. 2, June 2008.

<sup>47</sup> INEGI, ENE, 1993–2004.

<sup>48</sup> For example, for 2004 the World Bank has poverty at 12.5 percent and extreme poverty at just 1.9 percent, while the UN’s CEPAL corresponding figures are 37.0 percent and 11.7 percent. For a discussion of these variations, see Ann Helwege and M. B. L. Birch, “Declining Poverty in Latin America? A Critical Analysis of New Estimates by International Institutions,” GDAE Working Paper no. 07-02, Global Development and Environment Institute, September 2007, <http://www.ase.tufts.edu/gdae/Pubs/wp/07-02LatinAmPoverty.pdf>; and Miguel Szekely et al., “Do We Know How Much Poverty There Is?” Inter-American Development Bank Working Paper 437, Washington, D.C., December 2000.

<sup>49</sup> CONEVAL estimates based on data from ENIGH, [http://www.coneval.gob.mx/coneval2/htmls/medicion\\_pobreza/HomeMedicionPobreza.jsp?categorias=MED\\_POBREZA,MED\\_POBREZA-med\\_pob\\_ingresos](http://www.coneval.gob.mx/coneval2/htmls/medicion_pobreza/HomeMedicionPobreza.jsp?categorias=MED_POBREZA,MED_POBREZA-med_pob_ingresos). Accessed January 2009. Overall poverty corresponds with “pobreza de patrimonio,” income less than needed to cover food, clothing, housing, health, public transportation, and education. Extreme poverty corresponds with “pobreza alimentaria,” income less than needed to cover the basic food basket defined by INEGI and CEPAL.

<sup>50</sup> Ibid.

<sup>51</sup> Eduardo Zepeda et al., 2007, Table A1, op. cit. Figures are for monetary income. CEPAL’s Gini coefficients for monetary and non-monetary income (Panorama Social de América Latina 2008, p. 86) show similar trends: 0.536 in 1989 and 0.506 in 2006.

<sup>52</sup> Kevin P. Gallagher, *Free Trade and the Environment: Mexico, NAFTA, and Beyond*, Stanford: Stanford University Press, 2004.

<sup>53</sup> Claudia Schatan and Jorge Carillo, *El medio ambiente y la maquila en México: un problema ineludible*, United Nations, CEPAL, 2006.

<sup>54</sup> Scott Vaughan, “The Greenest Trade Agreement Ever? Measuring the Environmental Impacts of Agricultural Liberalization,” in *NAFTA’s Promise and Reality: Lessons from Mexico for the Hemisphere*, J. J. Audley et al., eds., Washington, D.C., Carnegie Endowment for International Peace, 2003; Alejandro Nadal and Timothy A. Wise, “The Environmental Costs of Agricultural Trade Liberalization: Mexico-U.S. Maize Trade Under NAFTA,” Working Group on Development and Environment in the Americas, Working Group Discussion Paper DP04, 2004.

<sup>55</sup> INEGI, Sistema de cuentas económicas y ecológicas. Indicadores de síntesis: PIN ecológico.

**Eduardo Zepeda** is a senior associate in the Trade, Equity, and Development Program at the Carnegie Endowment. He also serves as a policy adviser to the Bureau for Development Policy's Poverty Group at the United Nations Development Program, a position he has held since 2003. Zepeda's research focuses on employment, poverty, and development policy. Prior to joining the Endowment, Zepeda was senior researcher at the International Poverty Centre of UNDP in Brasilia, Brazil, taught at the Universidad Autónoma Metropolitana-Azcapotzalco in Mexico City, and served as the economic and social policy coordinator in the Analysis Unit of the Chief of Staff in the Office of the President in Mexico.

**Timothy A. Wise** is director of the Research and Policy Program at the Global Development and Environment Institute at Tufts University. He specializes in trade, agriculture, and rural development. He is the co-author of *The Promise and the Perils of Agricultural Trade Liberalization: Lessons from Latin America*, and *Confronting Globalization: Economic Integration and Popular Resistance in Mexico*.

**Kevin P. Gallagher** is an associate professor in the Department of International Relations at Boston University and senior researcher at the Global Development and Environment Institute, Tufts University. He is the author of the following recent and forthcoming books, *The Dragon in the Room: China and the Future of Latin American Industrialization* (with Roberto Porzecanski), *The Enclave Economy: Foreign Investment and Sustainable Development in Mexico's Silicon Valley* (with Lyuba Zarsky), and *Free Trade and the Environment: Mexico, NAFTA, and Beyond*. He writes a monthly column on globalization and development for the *Guardian*.

© 2009 CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

The Carnegie Endowment for International Peace is a private, nonprofit organization dedicated to advancing cooperation between nations and promoting active international engagement by the United States. Founded in 1910, Carnegie is nonpartisan and dedicated to achieving practical results.