Did NAFTA Help Mexico?  
An Assessment After 20 Years

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Acknowledgements

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Executive Summary

It is now 20 years since NAFTA went into effect, bringing Mexico into a new commercial agreement with the United States and Canada. At the time it was argued, and forecast, that the agreement would boost Mexico’s growth and development.

This paper compares the performance of the Mexican economy with that of the rest of the region over the past 20 years, based on the available economic and social indicators, and with its own past economic performance. Among the results:

- Mexico ranks 18th of 20 Latin American countries in growth of real GDP per person, the most basic economic measure of living standards.

- From 1960-1980, Mexican real GDP per person almost doubled, growing by 98.7 percent. By comparison, in the past 20 years it has grown by just 18.6 percent.

- Mexico’s per capita GDP growth of just 18.6 percent over the past 20 years is about half of the rate of growth achieved by the rest of Latin America.

- If NAFTA had been successful in restoring Mexico’s pre-1980 growth rate – when developmentalist economic policies were the norm – Mexico today would be a relatively high income country, with income per person significantly higher than that of Portugal or Greece. It is unlikely that immigration reform would be a major political issue in the United States, since relatively few Mexicans would seek to cross the border.

- According to Mexican national statistics, Mexico’s poverty rate of 52.3 percent in 2012 is almost identical to the poverty rate of 1994. As a result, there were 14.3 million more Mexicans living below the poverty line as of 2012 (the latest data available) than in 1994.

- We can use the poverty statistics of the UN Economic Commission on Latin America (ECLAC) to compare Mexico’s poverty rate with the rest of Latin America. These statistics are computed differently and show a decline in poverty in Mexico. However, according to these measures, the rest of Latin America saw a drop in poverty that was more than two and a half times as much as that of Mexico: 20 percentage points (from 46 to 26 percent) for the rest of Latin America, versus 8 percentage points (from 45.1 to 37.1 percent) for Mexico.

- Real (inflation-adjusted) wages for Mexico were almost the same in 2012 as in 1994, up just 2.3 percent over 18 years, and barely above their level of 1980.

- Unemployment in Mexico is 5.0 percent today, as compared to an average of 3.1 percent for 1990-1994 and a low of 2.2 percent in 2000; these numbers seriously understate the true lack of jobs, but they show a significant deterioration in the labor market during the NAFTA years.

- NAFTA also had a severe impact on agricultural employment, as U.S. subsidized corn and other products wiped out family farmers in Mexico. From 1991-2007, there were 4.9 million...
Mexican family farmers displaced; while seasonal labor in agro-export industries increased by about 3 million. This meant a net loss of 1.9 million jobs.

- The very poor performance of the Mexican economy contributed to a surge in emigration to the United States. From 1994-2000, the annual number of Mexicans emigrating to the United States soared by 79 percent. The number of Mexican-born residents living in the United States more than doubled from 4.5 million in 1990 to 9.4 million in 2000, and peaked at 12.6 million in 2009.

NAFTA was just one variable among others that could account for Mexico’s poor economic performance over the past 20 years. However, it appears to be related to other economic policy choices that have negatively affected the Mexican economy during this period. The IMF notes that “Mexico competes directly with China in the U.S. market, where China accounts for 23 percent of U.S. imports and Mexico accounts for 12 percent.” This is a very tough competition for Mexico for a number of reasons. First, Mexico was and remains a higher-wage country than China. Second, China has maintained a commitment to a competitive exchange rate, in effect fixing this exchange rate against the dollar or (since 2005) a basket of currencies. The Mexican central bank by contrast has, as the IMF notes, “a firm commitment to exchange rate flexibility.” In other words, the Mexican Central Bank will raise or lower interest rates as necessary to reach its target inflation rate (3 percent), and let the exchange rate go where it may. This means that Mexico’s exchange rate is unlikely to be competitive with China’s, which further worsens its cost disadvantage. The Mexican Central Bank’s form of rigid inflation targeting also adds a large element of unpredictability to the exchange rate, which has a negative impact on foreign direct investment; foreign investors will find it difficult to know how much their assets or output will be worth internationally in the future.

China has other advantages that make it a formidable competitor for Mexico in the U.S. market: the Chinese government owns most of the banking system in China, and can therefore ensure that its most important exporting firms have sufficient access to credit. In Mexico, by contrast, 70 percent of the banking system is not only private but foreign-owned. The Chinese government also has an active industrial policy that enables it to help its exporting firms in various ways, and spends vastly more on research and development – both in absolute terms and as a percentage of its economy.

NAFTA also increasingly tied Mexico to the U.S. economy, at a time when the U.S. economy was becoming dependent on growth driven by asset bubbles. As a result, Mexico suffered a recession when the stock market bubble burst in 2000-2002, and was one the hardest hit countries in the region during the U.S. Great Recession, with a drop of 6.7 percent of GDP. The Mexican economy was even harder hit by the peso crisis in 1994-95, losing 9.5 percent of GDP during the downturn; the crisis was caused by the U.S. Federal Reserve raising interest rates in 1994.
The vulnerability to developments in U.S. financial markets continues: In May of 2013, after the U.S. Federal Reserve announced a future “tapering” of its quantitative easing program (QE3), there were fears of a repeat of the 1994 peso crisis, and gross foreign portfolio inflows came to a sudden stop. The Mexican economy took a hit, with projected growth at 1.22 percent for the year. This was mostly because, as the IMF noted, “Mexico’s deep and liquid foreign exchange and domestic equity and sovereign bond markets can serve as an early port of call for global investors in episodes of financial turbulence and hence are susceptible to risks of contagion.” This vulnerability is also a result of the policies that NAFTA was designed to facilitate.

As was well known at the time of NAFTA’s passage, the main purpose of NAFTA was to lock in a set of economic policies, some of which were already well under way in the decade prior, including the liberalization of manufacturing, foreign investment and ownership, and other changes.\(^1\) The idea was that the continuation and expansion of these policies would allow Mexico to achieve efficiencies and economic progress that was not possible under the developmentalist, protectionist economic model that had prevailed in the decades before 1980. While some of the policy changes were undoubtedly necessary and/or positive, the end result has been decades of economic failure by almost any economic or social indicator. This is true whether we compare Mexico to its developmentalist past, or even if the comparison is to the rest of Latin America since NAFTA. After 20 years, these results should provoke more public discussion as to what went wrong.

\(^1\) See Tornell and Esquivel (1997).
Income and Growth

The North American Free Trade Agreement (NAFTA) went into effect in January of 1994, bringing Mexico into a new commercial agreement with the United States and Canada. At the time it was argued, and forecast,\(^2\) that the agreement would boost Mexico’s growth and development. After 10 years of the agreement, the World Bank published a paper with an econometric analysis purporting to show that NAFTA had increased Mexico’s growth rate, at least relative to that of the United States.\(^3\) However, it turned out that this result was dependent on a data error.\(^4\)

It is difficult to demonstrate unequivocally whether Mexico would have done worse in the absence of NAFTA, because many elements of the counter-factual are unknowable. However, one can compare the performance of the Mexican economy with that of the rest of the region over the past 20 years on the available economic and social indicators, and with its own past economic performance. Such a comparison follows, along with some analysis of possible explanations for Mexico’s poor performance.

**Figure 1** shows the growth of income per capita in Mexico. This is the most basic measure of economic progress. As can be seen, per capita GDP has grown by just 19.0 percent, cumulatively, from 1994 through 2013. This is an average annual growth rate of just 0.9 percent, which is quite low for a developing country.

**FIGURE 1**

**Mexico: Real GDP Per Capita**

<table>
<thead>
<tr>
<th>Year</th>
<th>Constant 2008 Pesos, Thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>88.1</td>
</tr>
<tr>
<td>1996</td>
<td>101.5</td>
</tr>
<tr>
<td>1998</td>
<td>104.9</td>
</tr>
<tr>
<td>2000</td>
<td>101.5</td>
</tr>
<tr>
<td>2002</td>
<td>112.9</td>
</tr>
<tr>
<td>2004</td>
<td>105.6</td>
</tr>
<tr>
<td>2006</td>
<td>113.2</td>
</tr>
</tbody>
</table>


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\(^3\) Lederman, Maloney, and Serven (2004).

\(^4\) See Weisbrot, Rosnick, and Baker (2004). The authors of the study, and the World Bank, never acknowledged the error, but did not address it either in their correspondence on the subject. For a complete timeline with documents, including revisions to the WB paper and correspondence, see http://www.cepr.net/index.php/holding-the-world-bank-accountable-for-its-research-the-case-of-nafta/ .
Table 1 shows Mexico’s annual per capita GDP growth rate compared to the rest of Latin America (South America and Central America). Mexico’s growth ranks 18th of 20 countries. From these numbers, and in the absence of any natural disaster or war in Mexico during the past 20 years that could account for such poor economic performance, it would be difficult to argue that Mexico would have done even worse in the absence of NAFTA.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Panama</td>
<td>4.4%</td>
</tr>
<tr>
<td>2</td>
<td>Chile</td>
<td>3.4%</td>
</tr>
<tr>
<td>3</td>
<td>Peru</td>
<td>3.4%</td>
</tr>
<tr>
<td>4</td>
<td>Guyana</td>
<td>3.0%</td>
</tr>
<tr>
<td>5</td>
<td>Costa Rica</td>
<td>2.5%</td>
</tr>
<tr>
<td>6</td>
<td>Uruguay</td>
<td>2.5%</td>
</tr>
<tr>
<td>7</td>
<td>Argentina</td>
<td>2.5%</td>
</tr>
<tr>
<td>8</td>
<td>Suriname</td>
<td>2.4%</td>
</tr>
<tr>
<td>9</td>
<td>Colombia</td>
<td>2.1%</td>
</tr>
<tr>
<td>10</td>
<td>Nicaragua</td>
<td>2.0%</td>
</tr>
<tr>
<td>11</td>
<td>El Salvador</td>
<td>1.9%</td>
</tr>
<tr>
<td>12</td>
<td>Ecuador</td>
<td>1.9%</td>
</tr>
<tr>
<td>13</td>
<td>Brazil</td>
<td>1.8%</td>
</tr>
<tr>
<td>14</td>
<td>Bolivia</td>
<td>1.7%</td>
</tr>
<tr>
<td>15</td>
<td>Honduras</td>
<td>1.6%</td>
</tr>
<tr>
<td>16</td>
<td>Belize</td>
<td>1.5%</td>
</tr>
<tr>
<td>17</td>
<td>Paraguay</td>
<td>1.0%</td>
</tr>
<tr>
<td>18</td>
<td>Mexico</td>
<td>0.9%</td>
</tr>
<tr>
<td>19</td>
<td>Venezuela</td>
<td>0.8%</td>
</tr>
<tr>
<td>20</td>
<td>Guatemala</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

Source: IMF (2013a), Feenstra, Inklaar and Timmer (2013), authors’ calculations.

It is worth comparing Mexico’s growth rate since NAFTA to that of its past, again in the context of the rest of the region. This can be seen in Figure 2A. From 1960-1980, Mexico almost doubled its income per person, a growth rate which was comparable to Latin America as a whole. If this growth had continued, Mexico would be a high-income country today. However, both Mexico and the region suffered a sharp slowdown in the growth of income per capita over the following 20 years, 1980-2000, a period that coincided with first a badly handled debt crisis in the early 1980s and then a number of neoliberal policy changes. Regional growth of GDP per capita dropped from 91.5 percent for the prior two decades, to just 7.7 percent for 1980-2000, or just 0.4 percent annually.
FIGURE 2A  
Mexican and Latin America: Average Annual Real Per-Capita GDP Growth, 1960-2013

Mexico

Mexico and Latin America: Average Annual Real Per-Capita GDP Growth, 1960-2013

Total Growth: 98.7%

1960-1980

Total Growth: 15.6%

1980-2000

Total Growth: 8.2%

2000-2013

Note: Latin America region includes Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay and Venezuela.


FIGURE 2B  
Mexican and Latin America: Average Annual Real Per-Capita GDP Growth, 1994-2013

Mexico

NAFTA (1994-2013)

Total Growth: 18.6%

Total Growth: 35.4%

Latin America

Total Growth: 28.7%


Note: Latin America region includes Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay and Venezuela.
It is also worth examining where Mexico would be today if its income per person had continued to grow at the rate that it did over the two decades prior to 1980. This is shown in Figure 3. This result was not impossible, as can be seen by the comparison with South Korea, which grew at a similar rate as did Mexico (although from a lower starting point) from 1960-1980, and did not suffer from Mexico’s growth collapse thereafter. Mexico in 2013 would have an income per person of more than $41,000, in international purchasing power parity dollars,\(^5\) which would make its living standards about the same as the Netherlands today. It might be argued that Mexico’s growth rate during this period was not sustainable; for comparison, Figure 3 includes the actual trajectory of South Korea, which is today a high-income country; its per capita GDP is more than $33,000 (between the level of Spain and France, respectively).

**FIGURE 3**

Mexico and South Korea: Real GDP Per Capita, 1960-2013

Source: IMF (2013a).

NAFTA was an integral part of a “reform” process that began with major trade liberalization reforms in the 1980s, and was designed to expand upon and lock in a set of policies that would set

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\(^5\) A purchasing power parity (PPP) estimate of per capita GDP attempts to adjust for the difference in prices between different countries so that the same PPP dollar amount represents the same purchasing power in the countries compared.
the economy on an irreversible path that was very different from that defined by the developmentalist state and protectionist policies of the pre-1980 period. However, even if we look at just the 20 years since NAFTA, and ask what Mexico would look like today if NAFTA had restored Mexico’s 1960-1980 growth rate – after more than a decade of failure --- it would still be a reasonably high-income country. Per capita GDP would be about $26,000 today, significantly more than that of Portugal or Greece.

Most of the rest of Latin America had a rebound in the 21st century, with average annual per capita GDP growth of 2.0 percent for 2000-2013. But Mexico did not share in that rebound, growing only 0.6 percent annually per capita for those years. Figure 2B shows Mexico’s per capita GDP growth for the 20 years since NAFTA: it was about half of that for the region as a whole.

As would be expected during such a period of very little economic growth, Mexico did not make progress in reducing poverty. Figure 4 shows Mexico’s national poverty rate. In 2012 it was 52.3 percent, almost identical to the 52.4 percent rate in 1994. As a result, there were 14.3 million more Mexicans living below the poverty line as of 2012 (the latest data available) than in 1994. Measures of more extreme poverty – “unable to afford health care, education and food” and “unable to afford food” also improved very little since 1994.

FIGURE 4
Mexico: Poverty Levels Based on Consumption Baskets (CONEVAL estimate)


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6 See e.g. Tornell and Esquivel (1995) for a review of this history.

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We can also compare what happened to poverty in Mexico with the region as a whole. This can be seen in Figure 5. For the region as a whole, there was no progress on the poverty rate for more than two decades, from 1980 to 2002. As seen in Figure 4, the poverty rate for the region then fell from 43.9 percent in 2002 to 27.9 percent in 2013.

**FIGURE 5**

**Latin America: Poverty and Extreme Poverty (ECLAC estimate)**

![Graph showing poverty rates in Latin America](source: ECLAC (2014)).

However, these poverty rates, from the U.N. Economic Commission on Latin America (ECLAC), are computed from national surveys somewhat differently than those of Mexico’s national poverty statistics. For a comparison between Mexico and the rest of the region, it therefore makes sense to compare ECLAC’s computation of the poverty rate for Mexico with its computation for the rest of the region (without Mexico). This is shown in Figure 6. By ECLAC’s measure, Mexico’s poverty rate falls from 45.1 percent in 1994 to 37.1 percent (8 percentage points) in 2012. But in the rest of the region, excluding Mexico, it falls two and a half times as much, from 46 percent to 26 percent (20 percentage points).
Figure 6 shows the path of real wages in Mexico from 1994-2012.\(^7\) There is a fall in real wages of 21.2 percent from 1994-1996, associated with the peso crisis and recession. Wages do not recover to their pre-crisis (1994) level until 2005, 11 years later. By 2012, they are only 2.3 percent above the 1994 level, and barely above their level of 1980.

The minimum wage, adjusted for inflation, fared even worse. From 1994 to 2012, it fell by 26.3 percent.\(^8\)

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\(^7\) These are wages of formal sector workers contributing to the Mexican Social Security Institute (Instituto Mexicano del Seguro Social).

\(^8\) ECLAC (2014c).
Figure 8 shows Mexico’s unemployment and underemployment rate. (Unemployment is shown since 1994; data on underemployment are only available since 2005.) Although the unemployment rate jumped during the peso crisis and then fell steadily until 2000, there seems to be a secular drift upward over the past 13 years. Unemployment is currently at 5.0 percent, compared to an average of 3.1 percent for 1990-1994 and a low of 2.2 percent in 2000. These numbers are small in absolute terms, because the official unemployment rate does not capture the full extent of unemployment in Mexico. In order to be counted as unemployed, a worker has to have not worked even one hour in paid activity during the reference period in which the survey was taken; and he or she must have been actively looking for work. But there are many people who would not be counted as unemployed in this data, who are not very much employed.

FIGURE 8
Mexico: Unemployment and Underemployment, Seasonally Adjusted

This is partly because Mexico has very little social safety net and no unemployment insurance outside of the Federal District. For this reason, heads of households especially will generally engage in some kind of economic activity in order to survive. There is a very high level of informal labor; more than half of all workers are employed in units of less than five employees. For these and other reasons, movements in the official rate should be seen as an indicator of the proportionate deterioration (and recovery) of the labor market, and not as a measure of the actual level of unemployment.

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9 See Salas (2013) for more data and analysis of unemployment in Mexico.
A somewhat better measure of the state of the labor market is underemployment, also shown in Figure 8, going back to 2005. This includes workers who have a demonstrated need and ability to work more hours, but were not able to do so due to labor market conditions. This was 8.4 percent for 2013, up from an annual average of 7.2 percent for the pre-crisis years 2005-2007.

At first glance, Mexico appears to have made moderate progress on measures of inequality in the post-NAFTA period. Figure 9 shows the Gini coefficient for household income for the years 1994-2012. It shows a decline from 0.54 to 0.49.

**FIGURE 9**

Mexico: Gini Coefficient

<table>
<thead>
<tr>
<th>Year</th>
<th>Gini Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>0.54</td>
</tr>
<tr>
<td>1996</td>
<td>0.51</td>
</tr>
<tr>
<td>1998</td>
<td>0.53</td>
</tr>
<tr>
<td>2000</td>
<td>0.51</td>
</tr>
<tr>
<td>2002</td>
<td>0.51</td>
</tr>
<tr>
<td>2004</td>
<td>0.53</td>
</tr>
<tr>
<td>2006</td>
<td>0.50</td>
</tr>
<tr>
<td>2008</td>
<td>0.48</td>
</tr>
<tr>
<td>2010</td>
<td>0.49</td>
</tr>
<tr>
<td>2012</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Source: ECLAC (2014d).

Although it is not that large, the decline in inequality is something of a mystery, during a period in which real wages stagnated, unemployment and underemployment worsened, income growth was very slow, and the national poverty rate was the same in 2012 as in 1994. One possible explanation may be in the data. In general, in the kind of survey data on which these statistics are based, a large part of the income of the wealthiest households is not reported. For example, in the United States from 1976-2006, the Gini coefficient using income tax data and including capital gains showed an increase of 10.8 points, more than twice increase in the standard Gini coefficient using survey (CPS) data. And in Mexico, enormous fortunes were accumulated during the past 20 years. For example, Mexico’s richest billionaire, Carlos Slim Helu, reportedly increased his net worth by $66.4 billion (from $6.6 billion in 1994 to $73 billion today). The combined net worth of 15 Mexican billionaires in Forbes list is currently $150 billion. It is possible that the incomes of these billionaires and others in the top one percent, depending on how much was not reported in the household surveys, could erase or reverse the above decline in the Gini coefficient.

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10 See Atkinson, Picketty, and Saez (2011)
Efforts to decompose the sources of the decline in inequality shown in the Gini coefficient from household survey data in Mexico from 1996 to 2006 have indicated that most of it can be attributed to labor income per person. In other words there was a reduction in the inequality within labor income. However, with overall real wages stagnant from 1994 to 2012, the living standards of the vast majority of workers cannot have increased very much.

In any case, even if the redistribution had taken place as it appears in the Gini data, it was not enough to reduce the national poverty rate; nor was the economic growth of the past 20 years sufficient to reduce unemployment or underemployment.

**Agriculture and Employment**

NAFTA removed tariffs (but not subsidies) on agricultural goods, with a transition period in which there was a steadily increasing import quota for certain commodities. The transition period was longest for corn, the most important crop for Mexican producers, only ending in 2008. Not surprisingly, U.S. production, which is not only subsidized but had higher average productivity levels than that of Mexico, displaced millions of Mexican farmers. Table 2 shows agricultural employment in Mexico in 1991 and 2007, according to census data.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1991</td>
</tr>
<tr>
<td>Family*</td>
<td>8,370,879</td>
</tr>
<tr>
<td>Remunerated Total</td>
<td>2,305,432</td>
</tr>
<tr>
<td>- Permanent (more than 6 months)</td>
<td>427,337</td>
</tr>
<tr>
<td>- Seasonal (less than 6 months)</td>
<td>1,878,095</td>
</tr>
<tr>
<td>Total</td>
<td>10,676,311</td>
</tr>
</tbody>
</table>

*Family and other workers who are not paid in cash are sometimes listed as "non-remunerated."

As can be seen, there was a 19 percent drop in agricultural employment, or about 2 million jobs. The loss was in family labor employed in the family farm sector. Seasonal (less than 6 months) employment gained about 3 million jobs, but it was not nearly enough to compensate for the 4.9 million jobs lost in the family farm sector.

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Proponents of NAFTA of course knew that family farms in Mexico would not be able to compete with subsidized U.S. production but argued that displaced workers would shift to higher productivity agriculture (mainly vegetables and fruits for export), as well as industrial jobs. Although vegetable and fruit production did expand considerably (from 17.3 million tons in 1994 to 28.2 million in 2012), and presumably accounted for many of the 3 million seasonal jobs created, it was clearly not enough in terms of employment.

From 1994-2000, the annual number of Mexicans emigrating to the United States soared by 79 percent. This can be seen in Table 3, with the annual flow of migrants rising from 430,000 in 1994 to 770,000 in 2000. After 2000, the flow of migrants slowed, with a number of contributing factors: increased border security after the 9/11 attacks; the U.S. recession of 2001 and the prolonged weakness in job creation in the years that followed; and the increased costs and danger of crossing the border.12

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The increase in emigration can also be seen in Table 4, which shows the number of Mexican-born residents living in the United States. This more than doubled from 4.5 million in 1990 to 9.4 million in 2000, and peaked at 12.6 million in 2009.

It was noted previously that if the Mexican economy had continued growing at the rate of 1960-1980, Mexico would be a high-income country today; and that it would also have become a reasonably high-income country if its pre-1980 growth rate had been restored after NAFTA. There would still be a significant income and wage differential between Mexico and the United States, but the incentive to emigrate to the United States would have been drastically reduced along the way. It is questionable whether immigration reform would have become a political issue in the United States if not for the poor performance of the Mexican economy in the NAFTA years.

### Economic Policy and Mexican Integration with the United States Economy

As noted above, NAFTA was just one variable among others that could account for Mexico’s poor economic performance over the past 20 years. However, it appears to be related to other economic policy choices that have negatively affected the Mexican economy during this period.

The IMF notes that “Mexico competes directly with China in the U.S. market, where China accounts for 23 percent of U.S. imports and Mexico accounts for 12 percent.”\(^{13}\) This is a very tough competition for Mexico for a number of reasons. First, Mexico is a higher-wage country than China, in addition to China’s exchange rate advantage. In 1996, labor compensation costs in Mexico, in U.S. dollars, were $3.05 per hour, and rose to $5.59 by 2002.\(^{14}\) For China in 2002, hourly compensation costs in U.S. dollars were $0.73 per hour.\(^{15}\) Although these data are not exactly comparable because of differences in their construction, they indicate a huge gap in dollar terms – which is what matters for export or import-competing industries. By 2009, the gap was still very large: $1.74 for China versus $6.36 for Mexico.\(^ {16}\) So it is difficult to compete on the basis of wages. Second, China has maintained a commitment to a competitive exchange rate, in effect fixing this exchange rate against the dollar or (since 2005) a basket of currencies. The Mexican central bank by contrast has, as the IMF notes, “a firm commitment to exchange rate flexibility.”\(^ {17}\) In other words, the Mexican Central Bank will raise or lower interest rates as necessary to reach its target inflation rate (3 percent), and let

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\(^{13}\) IMF (2013).
\(^{14}\) BLS (2013).
\(^{15}\) Ibid.
\(^{16}\) Ibid.
\(^{17}\) IMF (2013)
the exchange rate go where it may. This means that Mexico’s exchange rate is unlikely to be competitive with China’s, which further worsens its cost disadvantage. The Mexican Central Bank’s form of rigid inflation targeting also adds a large element of unpredictability to the exchange rate, which has a negative impact on foreign direct investment; foreign investors will find it difficult to know how much their assets or output will be worth internationally in the future.

China has other advantages that make it a formidable competitor for Mexico in the U.S. market: the Chinese government owns most of the banking system in China, and can therefore ensure that its most important exporting firms have sufficient access to credit. In Mexico, by contrast, 70 percent of the banking system is not only private but foreign-owned.\(^{18}\) The Chinese government also has an active industrial policy that enables it to help its exporting firms in various ways.\(^{19}\) China also spends 1.84 percent of its (many times larger) GDP on research and development, as compared to Mexico’s 0.46 percent.\(^{20}\)

For all of these reasons, it is an uphill battle for Mexico to compete with China in the U.S. market. Although Mexico has done better than other countries in the U.S. market in terms of this competition since China joined the World Trade Organization and achieved “permanent normal trade relations” with the U.S. in 2001,\(^{21}\) its share of U.S. imports is still only about half that of China’s (see Figure 10).

**FIGURE 10**

United States: Nonpetroleum Imports from Mexico and China

![Graph showing percentage of U.S. nonpetroleum imports from Mexico and China from 1988 to 2012.](source)

*Source: BLS (no date, a), BLS (no date, b), Pemex (various years).*

*2012 data preliminary pending annual report from Pemex*

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18 Ibid.
19 See Weisbrot and Ray (2011).
20 WB (2014).
21 Blecker and Esquivel (2013).
NAFTA also increasingly tied Mexico to the U.S. economy. Figure 11 shows how the Mexican economy has moved with the U.S. economy over the past 20 years. Much of this synchronization is because 71 percent of Mexico’s exports now go to the United States. Unfortunately, 1994 was a particularly bad time for Mexico to hitch its wagon to the United States. First came the peso crisis, which was brought on by the U.S. Federal Reserve’s increases in U.S. short-term (policy) rates beginning in 1994. Mexico lost 9.5 percent of GDP in two quarters during the resulting crisis and recession, which started in December of 1994 and continued into the first half of 1995. The fall in the peso helped boost exports for a while, but the peso appreciated as capital flowed back into the country and the advantage of a competitive exchange rate was soon lost.

![Mexico and the US: Annual GDP Growth](image)

**Source:** IMF (2013a).

Perhaps more importantly over the longer run, the U.S. economy was just beginning a period in which its growth would be driven by enormous asset bubbles. First there was the stock market bubble, which burst in 2000-2002, causing a recession in both the Unites States and Mexico. The stock market bubble was then immediately replaced by what would then become the biggest asset bubble in world history, the United States’ real estate bubble. This bubble burst in 2006-2007, causing the Great Recession. Mexico’s loss of output from the U.S. Great Recession was the worst in Latin America, with a decline in real GDP of 6.7 percent from the second quarter of 2008 to the second quarter of 2009.22

In May of 2013, after the U.S. Federal Reserve announced a future “tapering” of its quantitative easing program (QE3), there were fears of a repeat of the 1994 peso crisis. Gross foreign portfolio

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22 INEGI (2014b).
inflows came to a sudden stop\textsuperscript{23}, and the Mexican economy took a hit, with projected growth at 1.22 percent for the year.\textsuperscript{24} As the IMF noted in its recent Article IV consultation for Mexico:

Based on a recent survey, the BIS reported that the Mexican peso is the most actively traded emerging market currency in the world, with a daily global trading volume of US$135 billion. This means that Mexico’s deep and liquid foreign exchange and domestic equity and sovereign bond markets can serve as an early port of call for global investors in episodes of financial turbulence and hence are susceptible to risks of contagion.\textsuperscript{25}

This is not a good situation for any developing country to be in: hedge funds and international portfolio managers seeking to reduce their overall exposure to emerging market assets, or hedge against currency depreciation in emerging markets because of trouble that may emerge from anywhere in the world, look first to sell off Mexican assets or bet against the peso. As the IMF also notes, “the Mexican peso is fully convertible and trades 24 hours daily.” While the policy decisions that led to this situation were not all written into NAFTA, many were closely related in that they were part of a strategy of guaranteeing foreign investors the kinds of capital mobility that they wanted, in order to attract foreign investment (both portfolio investment and FDI).

**Conclusion**

As was well known at the time of NAFTA’s passage, the main purpose of NAFTA was to lock in a set of economic policies, some of which were already well under way in the decade prior, including the liberalization of manufacturing, foreign investment and ownership, and other changes.\textsuperscript{26} The idea was that the continuation and expansion of these policies would allow Mexico to achieve efficiencies and economic progress that was not possible under the developmentalist, protectionist economic model that had prevailed in the decades before 1980. While some of the policy changes were undoubtedly necessary and/or positive, the end result has been decades of economic failure by almost any economic or social indicator. This is true whether we compare Mexico to its developmentalist past, or even if the comparison is to the rest of Latin America since NAFTA. After 20 years, these results should provoke more public discussion as to what went wrong.

\textsuperscript{23} IMF (2013b). Figure 5.
\textsuperscript{24} IMF (2013a).
\textsuperscript{25} IMF (2013).
\textsuperscript{26} See Tornell and Esquivel (1995).
References


_____ No date, b. “Additional historical data (Table 2b).” International Transactions. Online database, consulted February 6, 2014. http://www.bea.gov/iTable/iTable.cfm?ReqID=6&step=1#reqid=6&step=1&isuri=1


