2005

NAFTA and Mexico-U.S. Migration: Policy Options in 2004

Philip Martin
NAFTA AND MEXICO-U.S. MIGRATION: POLICY OPTIONS IN 2004

Philip Martin*

ABSTRACT

MEXICO'S population almost doubled between 1970 and 2000, from 53 million to 100 million. During this period, the number of Mexican-born U.S. residents increased more than tenfold, from less than 800,000 to 8.5 million. The North American Free Trade Agreement (NAFTA), which went into effect January 1, 1994, aimed to free up trade and investment between Canada, Mexico, and the United States, and thereby speed up economic and job growth in all three countries. Trade and investment increased in the 1990s, but economic and job growth in Mexico were uneven.

One hoped for side effect of NAFTA was a reduction in unauthorized Mexico-U.S. migration. This did not happen: the number of unauthorized Mexicans in the United States rose from an estimated 2.5 million in 1995 to 4.5 million in 2000, an annual increase of 400,000 a year. Mexican President Vincente Fox, elected in July 2000, made a Mexican-U.S. migration agreement that better protected Mexicans in the United States, especially unauthorized Mexicans, one of his new government's top priorities, and in February 2001, Fox and U.S. President George Bush established a high-level working group to create “an orderly framework for migration which ensures humane treatment [and] legal security, and dignified labor conditions” (White House, 2001).

Fox's government proposed a four-point migration plan that included legalization for unauthorized Mexicans in the United States, a new guest-worker program, cooperative measures to end border violence, and changes in U.S. law that would exempt Mexico from U.S. immigrant visa ceilings. In presenting Mexico's proposal, Foreign Minister Jorge Castaneda, in June 2001, said: “It's the whole enchilada or nothing” (Zoellner, 2001). The U.S. government seemed willing to embrace historic changes in Mexico-U.S. migration management, although perhaps not the whole “enchilada.” United States Secretary of State Colin L. Powell, in September 2001, reported that: “We've made a great deal of progress with respect to principles. We are now getting ready to move

* Professor, University of California, Davis. Chair, U.C. Comparative Immigration & Integration Program. Editor of the monthly Migration News and the Quarterly Rural Migration News.

361
The September 11, 2001, terrorist attacks stopped the Mexico-U.S. migration discussions. There has been both continuity and change in migration since the terrorist attacks. Mexico-U.S. migration continues at historically high levels despite stepped up border controls, and many in both Mexico and the United States decry the loss of life at the border and the employment of millions of unauthorized Mexican workers in the United States. However, a new emphasis on ensuring that foreign terrorists do not arrive legally or illegally, the movement of the INS into the new Department of Homeland Security, and a recession in both Mexico and the United States, have combined to reduce the impetus for a new Mexico-U.S. migration agreement.

There have been three major policy options discussed in the United States to better manage Mexico-U.S. migration—guest workers, earned legalization, and legalization. None is a panacea for unwanted migration. Instead, the best set of options include: (1) Mexico-U.S. government cooperation to build trust and establish a secure and efficient border, enhanced efforts to attract remittances and maximize their development impacts in migrant areas of origin; and (2) pilot guest worker programs that include economic incentives for U.S. employers to reduce reliance on unskilled Mexican guest workers over time as well as incentives for them to return when their work visas expire.

I. EVOLUTION OF MEXICO-U.S. MIGRATION

Migration has been the major relationship between Mexico and the United States for most of the twentieth century, but legal immigration remained low until recently—36 percent of twentieth century Mexican immigrants arrived in the 1990s, and 34 percent of the apprehensions of unauthorized Mexicans were in the 1990s (Table 1). Over the past century, Mexican migrants were negatively selected, that is, those who left Mexico usually had less education and skills than the average Mexican. In addition, most of the Mexicans who arrived had their first U.S. jobs in seasonal agriculture (Martin, 1993). The United States and Mexico had bilateral agreements to regulate Mexico-U.S. labor migration between 1917-1921 and 1942-1964, but most twentieth century Mexican migrants arrived and were employed outside these bilateral guest worker programs.

A standard treatment of Mexico-U.S. relations through the 1980s is entitled Distant Neighbors, reflecting the lack of economic integration and cooperation on migration and other issues, sometimes summarized in Mexico as "Poor Mexico, so far from God, so close to the U.S." The picture changed in the 1990s, as the Mexican government liberalized its economic policies, proposed NAFTA to formalize its desire for closer economic integration, and initiated discussions aimed at improving migration management, including the Binational Study (1997) to reach...
TABLE 1.
MEXICAN IMMIGRATION AND APPREHENSIONS: 1890-2001

<table>
<thead>
<tr>
<th>Decade</th>
<th>Immigrants</th>
<th>Percent</th>
<th>Apprehensions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1890-1900</td>
<td>971</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1901-1910</td>
<td>49,642</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1911-1920</td>
<td>219,004</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1921-1930</td>
<td>459,287</td>
<td>7%</td>
<td>128,484</td>
<td>0%</td>
</tr>
<tr>
<td>1931-1940</td>
<td>22,319</td>
<td>0%</td>
<td>147,457</td>
<td>0%</td>
</tr>
<tr>
<td>1941-1950</td>
<td>60,589</td>
<td>1%</td>
<td>1,377,210</td>
<td>3%</td>
</tr>
<tr>
<td>1951-1960</td>
<td>229,811</td>
<td>4%</td>
<td>3,598,949</td>
<td>8%</td>
</tr>
<tr>
<td>1961-1970</td>
<td>453,937</td>
<td>7%</td>
<td>1,608,356</td>
<td>4%</td>
</tr>
<tr>
<td>1971-1980</td>
<td>640,294</td>
<td>10%</td>
<td>8,321,498</td>
<td>19%</td>
</tr>
<tr>
<td>1981-1990</td>
<td>1,655,843</td>
<td>27%</td>
<td>11,883,328</td>
<td>28%</td>
</tr>
<tr>
<td>1991-2000</td>
<td>2,249,421</td>
<td>36%</td>
<td>14,667,599</td>
<td>34%</td>
</tr>
<tr>
<td>2001</td>
<td>206,426</td>
<td>3%</td>
<td>1,387,486</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>6,247,544</td>
<td>100%</td>
<td>43,120,367</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: INS Statistical Yearbook

Apprehensions record events, so one person caught three times is three apprehensions

Apprehension data for 1921-30 is 1925-30; Mexicans are 95-98 percent of those apprehended


Government-approved recruitment of Mexican workers for U.S. jobs has a long history. The United States government approved the recruitment of Mexican workers during World Wars I and II to obtain additional farm and railroad workers. These Mexican Bracero workers were admitted by making "exceptions" to immigration rules that otherwise would have blocked their entry. Both of the war-time Bracero programs were ended unilaterally by the United States, in part because of pressure from U.S. labor and civil rights groups arguing that the Mexican migrants depressed wages and increased unemployment for similar U.S. workers.

Both Bracero programs were followed, with a lag, by rising illegal Mexico-U.S. migration. Rural Mexicans in rain-fed farming areas had already learned to go north for higher wages and jobs outside the programs, and at first it was very easy to cross the border. The U.S. Border Patrol was not established until 1924, and immigration laws in 1921 and 1924 that restricted immigration from Europe did not apply to Mexico and the Western Hemisphere. By 1930, Mexicans were estimated to be 70 to 80

1. It was during the 1920s that California farmers argued they needed continued access to Mexican farm workers. The Farm Bureau asserted that "California's specialized agriculture [requires] a kind of labor able to meet the requirements of hard, stoop, hand labor, and to work under the sometimes less advantageous conditions of heat, sun, dust, winds, and isolation." Quoted in Fuller, 1940, 19840. A Chamber of Commerce spokesperson testified to Congress in 1926: "We, gentle-
percent of the 72,000 strong seasonal work force in California (Fuller, 1940, 19871). However, the 1930s Depression led to “repatriations” of Mexicans to free up jobs for Americans and practically stopped Mexico-U.S. migration, so that there were fewer Mexican-born U.S. residents in 1940 (378,000) than there had been in 1930 (641,000), according to the United States Census.

During the 1930s, Midwestern Dust Bowl farmers moved to California hoping to start anew. They found instead large, labor-intensive factories in the fields that were accustomed to paying relatively low wages to seasonal workers who had no other U.S. job options. John Steinbeck’s 1940 novel, The Grapes of Wrath, gave an emotional impetus to the common prescription for farm labor reform in the late 1930s, namely, to restructure southwestern agriculture in a manner that reduced its dependence on migrant and seasonal workers. Alternatively, if factories in the fields were maintained, reformers wanted the workers employed in them to be treated as factory workers and covered under nonfarm labor laws.

The United States Senate’s LaFollette committee recommended the second option, treating large farms as factories and covering their workers under labor laws, which was expected to raise farm wages and encourage mechanization. However, decades of low farm wages had been capitalized into higher land prices, and landowners unwilling to see land prices fall as a result of higher wages used the outbreak of World War II to win a new Bracero program (Craig, 1971; Martin, 1996, Chapter 2). During WWII, Braceros, prisoners of war, interned Japanese, and state and local prisoners supplemented the farm work force. Their presence in the fields sent an unmistakable signal to U.S. farm workers—economic mobility would require occupational and often geographic mobility, or getting ahead in the U.S. labor market would require getting out of farm work.

The Bracero program expanded in the 1950s, when irrigation opened new land for farming in the southwest, the cost of shipping produce by truck from west to east fell with the interstate highway system, and the baby boom increased the demand for labor-intensive fruits and vegetables. Western farmers assumed that Mexican or other foreign workers would continue to be available at U.S. minimum wages and invested accordingly. However, the Bracero program was ended unilaterally by the United States in 1964, amid predictions that labor-intensive agriculture men, are just as anxious as you are not to build the civilization of California or any other western district upon a Mexican foundation. We take him because there is nothing else available. We have gone east, west, north, and south and he is the only man-power available to us.” Quoted in Fuller, 1940, 19859.


3. California has been the number one farm state since 1950, and displaced New Jersey as the garden state supplying fruits and vegetables to eastern population centers.
would have to shrink, and that the commodities most dependent on Bracero workers would have to follow them to Mexico.

The commodity in the spotlight in the early 1960s was processing tomatoes. In 1960, 80 percent of the 45,000 peak harvest workers used to pick the 2.2 million tons of the tomatoes used to make catsup in California were Braceros, and growers testified that “the use of Braceros is absolutely essential to the survival of the tomato industry.” The Bracero program ended in 1964, and 35 years later, 5,000 workers rode machines to sort 12 million tons of tomatoes. Labor-saving mechanization was spurred by the higher wages that followed the end of the Bracero program and facilitated by the state government, which encouraged the University of California to develop a mechanical system for harvesting tomatoes and established random sampling stations to test machine-harvested tomatoes and determine the price paid to the grower.4

There were many consequences of tomato harvest mechanization, and some curtailed mechanization research. The number of workers hired for the harvest fell by 90 percent, and the number of farms growing tomatoes dropped 70 percent. Tomato harvesting machines were costly, and only farmers with large acreages could justify purchasing them. These impacts on farm workers and small farmers prompted suits against the University of California alleging that taxpayer monies, whose purpose was to help all rural residents, were instead spent on mechanization that displaced farm workers and small farmers (Martin and Olmstead, 1985). Researchers turned their attention elsewhere, and tomato mechanization proved to be the exception rather than the vanguard of the labor-saving trend expected in the 1970s.

Mexico-U.S. migration was low during the late 1960s and early 1970s, the “golden age” for U.S. farm workers. Farm wages rose sharply without Braceros: Cesar Chavez and the United Farm Workers (UFW) won a 40 percent wage increase for grape pickers in 1966, increasing entry-level wages from $1.25 to $1.75 an hour in the UFW's first contract (Table 2). However, some of the ex-Braceros had become U.S. immigrants during the 1960s, when a U.S. employer could issue a letter asserting that a foreigner was “essential” to fill even a seasonal farm job, and a foreigner could use this offer of employment to become an immigrant. Ex-Braceros, who became immigrants in this manner, received immigrant visas printed on green cards, and were known as green-card commuters—Mexicans who lived in Mexico and worked seasonally in the United States.

4. It was important to have random testing to determine price. Processing tomatoes today are worth about 2.5 cents a pound. When tomatoes were picked in fifty pound lugs by Braceros, and each lug was worth $1.25, the loss was relatively minor if a lug was rejected for having too many green tomatoes or too much dirt. But with machine-picked tomatoes arriving in 25-ton truck loads, a load is worth $1,250, and random sampling stations were crucial to overcome the perennial struggle between growers and packers over deductions for poor quality.
As green-card commuters aged out of seasonal harvest work in the late 1970s, many sent their sons north, using false or altered green cards, or simply entering the United States illegally. A smuggling infrastructure soon evolved to provide information and move rural Mexicans to rural America, and it was strengthened in the early 1980s by events in the United States and Mexico. In the United States, the UFW sought another 40 percent wage increase in 1979, when federal wage-price guidelines called for a maximum 7 percent increase. With no workers available from UFW hiring halls, growers turned to labor contractors, many of whom were green-card commuters, and they returned to their villages to recruit unauthorized workers. The contractors stayed in business after the strikes were settled, and competition between union hiring halls and labor contractors to supply seasonal workers to farmers favored the contractors, who increased their share of the farm labor market. The number of workers under UFW contract dropped from 60,000-70,000 in the early 1970s to 6,000-7,000 by the mid-1980s (Mines and Martin, 1984).

In Mexico, there was a peso devaluation in 1982-83 that made work in the United States more attractive. Apprehensions of Mexicans just inside the Mexico-U.S. border reached their all time peak of 1.8 million in 1986, meaning that the United States was apprehending an average of three Mexicans a minute, twenty-four hours a day, seven days a week. In 1986, two events occurred that, contrary to expectations, increased Mexico-U.S. migration:
• The United States enacted the Immigration Reform and Control Act (IRCA) of 1986 to reduce illegal immigration by imposing sanctions on U.S. employers who knowingly hired unauthorized foreigners and to legalize some unauthorized foreigners in the United States.

• Mexico changed its economic policy from import substitution to export-led growth. IRCA included two legalization or amnesty programs, and the legalization program for unauthorized farm workers—the Special Agricultural Worker program (SAW)—was rife with fraud—over 1 million Mexican men became U.S. immigrants under the SAW program by presenting letters from employers saying they had worked ninety days or more in 1985-86 on U.S. crop farms as unauthorized workers (Martin, 1994). There were about 6 million adult men in rural Mexico in the mid-1980s, and the SAW program gave \( \frac{1}{6} \) of them immigrant visas. Their families were deliberately excluded from legalization, under the theory that SAWs wanted to commute to seasonal farm jobs and keep their families in Mexico, as had earlier green-card commuters (Martin, 1994).

The SAW workers did not behave as expected. Many switched to non-farm U.S. jobs and settled in U.S. cities with their families; others had never been farm workers and did not go into the fields. As state and local government costs of providing education, health, and other services to newly legalized immigrants and their often unauthorized families rose during the early 1990's recession, there were suits against the federal government that sought to recoup state and local expenditures to provide services to unauthorized foreigners. The perception that immigrants did not pay their way culminated in Proposition 187 in 1994 and federal welfare reforms in 1996. Meanwhile, SAW workers were replaced by newly arrived, unauthorized workers in the fields.

II. NAFTA AND THE MIGRATION HUMP

NAFTA went into effect January 1, 1994, locking in place policies that lowered barriers to trade and investment among Canada, Mexico, and the United States. Most of the benefits of this freer trade were expected to accrue to Mexico, in the form of more foreign investment, faster economic and job growth, and increased exports. The most frequently cited study of NAFTA's likely effects concluded that Mexican employment, which was projected to be 30 million in 1995, would rise by 609,000, or 2 percent, because of NAFTA. Mexican wages were projected to be 9 percent higher with NAFTA, largely because foreign investment (and Mexican money staying in Mexico) was expected to raise the value of the peso relative to the dollar, reducing the cost of imports (Hufbauer and Schott, 1992, pp. 47-64).

All studies agreed that most of the additional jobs due to NAFTA would be created in Mexico. Some studies anticipated simultaneous job creation and displacement in Mexico and predicted that the displacement of workers from previously protected Mexican sectors such as agriculture
SAWs and Unauthorized Farm Workers: 1989-2000
(percent of crop workers)

<table>
<thead>
<tr>
<th>Year</th>
<th>SAWs</th>
<th>Unauthorized</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>1990</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>1991</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>1992</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>1993</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>1994</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>1995</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>1996</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>1997</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>1998</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>1999</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>2000</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>


could lead to additional Mexico-U.S. migration. Hinojosa and Robinson (1991), for example, estimated that NAFTA would displace about 1.4 million rural Mexicans, largely because NAFTA-related changes in Mexican farm policies and freer trade in agricultural products would lead some farmers to quit farming: 800,000 displaced farmers would stay in Mexico, and 600,000 would migrate (illegally) to the United States over five to six years.

Hinojosa and McCleery (1992) developed a Computable General Equilibrium (CGE) model to project adjustments in the Mexican economy after NAFTA and sketched three migration scenarios. In 1982, they estimated there were 2.5 million unauthorized Mexicans in the United States, the cost of migrating illegally from Mexico to the United States was $1,200 (in the form of smuggling costs and lost earnings), and the U.S. earnings premium was $3,000 a year—unauthorized Mexicans earned $4,000 a year in the United States, and $1,000 a year in Mexico.

5. One reason this argument was made was to urge the United States and Mexican governments to create a North American Development Bank to spur job creation in especially rural Mexico. NADBank was created in 1994 to invest in water, sewer and trash disposal projects to improve the border-area environment; loans are limited to sixty miles on each side of the border. Despite having raised $304 million in the six years to 2001, NADBank made just seven loans, totaling $11 million, largely because: (1) U.S. communities can borrow more cheaply by floating bonds; and (2) Mexican law does not permit communities to issue bond debt to be repaid with user charges, as in the U.S. In Mexico, where sewers and water systems are being introduced, it is hard to set rates and collect payments.
They sketched three migration scenarios: (1) no more unauthorized Mexico-U.S. migration, (2) 4 million Mexican illegals, and (3) 5 million Mexican illegals, and they argued that the middle scenario could be achieved with NAFTA and a new guest worker program (what they called “managed interdependence”).

Martin (1993) examined NAFTA’s likely impacts on Mexican and U.S. agriculture. Most Mexican-born U.S. residents are from rural areas in Mexico, and most have their first U.S. jobs on farms. After examining how demand-pull factors in the United States and supply-push factors in Mexico would likely evolve after NAFTA, Martin concluded that the flow of Mexicans to the United States, running at 200,000 settlers and 1 to 2 million sojourners a year in the early 1990s, would increase by 10 to 30 percent for five to fifteen years, producing a hump when Mexico-U.S. migration was viewed over time. The upward slope of the hump in the 1990s was due primarily to previous demographic growth in Mexico, insufficient jobs and displacement in Mexico, and strong United States demand for Mexican workers. The downward slope of the hump was expected to occur when the number of new labor force entrants fell and economic growth created more and better-paid jobs in Mexico. The Clinton Administration used the migration hump to argue that Congress should approve NAFTA because the additional migration in the 1990s—the hump—was a reasonable price to pay in the short run for less Mexico-U.S. migration in the long run.

The migration hump is pictured in Figure 1, where the solid line through B represents the status-quo migration flow (without NAFTA and other changes) and the arced line above A depicts a migration hump—the volume of migration is measured on the Y-axis and time on the X-axis. Economic integration leads to an increase in migration over the status quo trajectory—the number of additional migrants is represented by A. However, economic integration also speeds up economic and job growth in Mexico, so that migration falls and the volume of migration returns to the status quo level at B, in this case after fifteen years. As growth continues, migration continues to fall, and area C represents the migration avoided by economic integration. Eventually, some migrants may return from abroad, Mexico, or another previously emigration country may attract immigrants from other countries, the area represented by D, as occurred in previous emigration countries including Italy, Spain, and South Korea.

The critical policy parameters in a migration hump are A, B, and C—(1) how much additional migration results from economic integration (A); (2) how soon does migration return to the status quo level (B); and (3) how much migration is “avoided or saved” by economic integration and other changes (C)? Generally, a pre-existing migration relationship and three factors must be present for economic integration to lead to a migration hump: a continued demand-pull for migrants in the destination country, an increased supply-push in the country of origin, and migration
networks that can move workers across borders. Comparative static analyses—comparisons of before and after equilibrium points—usually ignore the adjustments that occur during economic integration, implicitly assuming that trade is a substitute for migration in the short and long term. The migration hump, by contrast, is a short-run relationship between economic integration and migration.

Standard trade theory allows trade and migration to be complements when basic assumptions, including identical production technologies; factor homogeneity; constant returns to scale; instantaneous adjustment; and perfect competition, full employment, and complete markets, are relaxed. For example, if a country in the North (N) is capital rich, and a country in the South (S) is capital poor, the two countries share the same technologies or production functions, the same two factors of production, capital and labor, and produce the same two goods, free trade means that each country will export the good that is more intensive in the factor that is relatively more abundant. Country N will import labor-intensive goods from Country S, and Country S will import capital-intensive goods from Country N. Stolper and Samuelson considered the effect on factor prices (wages and the return on capital) of an import tariff that increases the domestic price of the import-competing good relative to that of the export good. Under the Heckscher-Ohlin assumptions, plus the assumption that the underlying trade pattern is not altered by the tariff, an import tariff increases the real reward of the relatively-scarce factor and lowers the real reward of the other factor, or a tariff levied against labor-intensive imports in Country N will increase Country-N wages. Migration in
response to international wage differentials means that protectionism in Country N should increase migration from the South, or the protection of capital-intensive industries in the South should spur emigration. Trade liberalization, on the other hand, shifts the production of labor-intensive goods to Country S and capital-intensive goods to Country N, which in turn puts upward pressure on Country-S wages, discouraging emigration.

However, if there are technology differences between countries, trade and migration can be substitutes. Corn in Mexico has been highly protected, and a guaranteed price of corn that was twice the world price has been the social safety net in rural areas. Mexico had about 3 million corn farmers in the mid-1990s, but the 75,000 corn farmers in Iowa produced twice as much corn as Mexico, at half the price. The United States produced about ten times more corn than Mexico and, using herbicides and other capital inputs, can export corn to Mexico cheaper than corn can be produced there. This example highlights the fact that, if the basis for trade is differences in technology, trade and migration may be complements, for example, trade in computers and software may be accompanied by the migration of computer specialists.

Factor productivity differences between countries are one reason to trade, but reasons for productivity differences can help to explain migration behavior. Suppose Mexican workers are more productive in the United States than they are in Mexico because of better public and private infrastructure. In such cases, migration can complement trade, as occurred when much of the Mexican shoe industry moved from Leon, Mexico to Los Angeles, California in the 1980s, with the result that shoes produced with Mexican workers in Los Angeles were exported to Mexico more easily when NAFTA lowered barriers to trade. Migration, by converting less productive Mexican workers into more productive U.S. workers, in this case, discouraged the production of a labor-intensive good in Mexico, and encouraged migration to the United States.

A third assumption of the standard trade model is that (identical) production functions in the two countries exhibit constant returns to scale. However, if costs of production fall as output expands, especially in U.S. industries that employ Mexican migrant workers, economic integration may expand U.S. production, thereby increasing the demand-pull for migrants in the United States. The availability of Mexican workers enabled some U.S. meatpacking and poultry processing plants, located close to sources of low-cost animal feed, to add second shifts, lowering meatpacking costs and increasing meat exports to Mexico, which displaced some Mexican farmers and workers. When the basis of trade is economies of scale, migration and trade can be complements.

The fourth assumption of the standard trade model is that adjustments to changing prices and wages are instantaneous. However, economic integration may displace workers faster than new jobs are created or displace workers in one area and create jobs in another. For example, freeing up trade in corn or meat may displace Mexican farmers, but there
may be few jobs created in the areas where they live. Instead, the new jobs created via economic integration may be in border-area maquiladoras, which may prefer to hire young women, not older ex-farmers. If the displaced farmers have better network connections to the U.S. labor market than to Mexican labor markets, there may be more migration despite more trade and job creation.

The fifth assumption of trade theory is that markets are perfect; there is full information, no risk, and no transaction costs. The new economics of labor migration is based on relaxing this assumption. It imagines, for example, a rural family viewing household members as portfolio of resources, and maximizes earnings and minimizes risks by, for example, having one member in the United States, one in a Mexican urban labor market, and one on the farm, so that there are three streams of income rather than one. The remittances that enable some families to buy TVs may encourage other families to send a migrant abroad so that they can keep up with the neighbors in consumption (Taylor and Martin, 2001).

III. MEXICO-U.S. MIGRATION IN THE 1990S

Trade and migration were complements in the Mexico-U.S. case in the 1990s, but not all of the increase in Mexican-born U.S. residents during the 1990s was due to NAFTA. Between 1991 and 2000, some 2.2 million Mexicans were admitted as legal immigrants and 15 million foreigners, 95 percent Mexicans, were apprehended just inside the U.S. border.6

Mexico needs formal sector job creation to reduce emigration. There are about 109 million Mexican-born persons, and 8 percent of them live in the United States; more importantly, 30 percent of Mexicans with formal-sector jobs are in the United States.7 In 2000, 15 million of the 40 million-strong Mexican labor force had formal sector jobs; with an additional 6 million Mexican-born workers in the United States, 29 percent of Mexicans with formal sector jobs are in the United States.

Much of the recent formal sector job growth in Mexico was in maquiladoras, foreign-owned plants in border areas that import components duty free, assemble them into goods, and then export the goods. The value added in Mexico—wages and utilities—is typically 10 to 20 percent

6. Some individuals were caught several times, and some eluded the US Border Patrol, but gross flows of Mexicans to the United States for legal and unauthorized settlement or employment are over 1 million a year.

7. There are about 15 million foreign-born workers in the U.S. labor force of 142 million, including 5 to 6 million Mexican-born workers. Mexico has a labor force of 40 million, but many Mexican workers are self-employed farmers, unpaid family workers, or in the informal sector—the usual indicator of formal sector employment in Mexico is enrollment in the pension system (IMSS). In 2001, there were 12.4 million Mexican workers enrolled in IMSS; their number was forecast to rise to 13.1 million in 2003 (http://www.banamex.com/weblogic/svltC71930EstSE?LNG=1&SEQ=3&folio=5). If there are 5.5 million Mexicans employed in the United States, and 13 million in IMSS in Mexico, 30% of Mexicans with formal-sector jobs are in the United States.
### TABLE 4.

<table>
<thead>
<tr>
<th></th>
<th>Mexico</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (Mils)-1970</td>
<td>53</td>
<td>203</td>
</tr>
<tr>
<td>Labor Force (Mils)-1970</td>
<td>15</td>
<td>83</td>
</tr>
<tr>
<td>% of population</td>
<td>28%</td>
<td>41%</td>
</tr>
<tr>
<td>Population (Mils)-2000</td>
<td>100</td>
<td>281</td>
</tr>
<tr>
<td>Labor Force (Mils) 2000</td>
<td>40</td>
<td>141</td>
</tr>
<tr>
<td>% of population</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>Labor Force Increase</td>
<td>167%</td>
<td>70%</td>
</tr>
<tr>
<td>Employment-2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal Sector Jobs (Mils)</td>
<td>15</td>
<td>125</td>
</tr>
<tr>
<td>Filled by Mexicans</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Employed in Ag (Mils)</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Filled by Mexicans</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Population (Mils)-2050</td>
<td>151</td>
<td>414</td>
</tr>
<tr>
<td>Labor Force (Mils) 2050</td>
<td>70</td>
<td>207</td>
</tr>
<tr>
<td>% of population</td>
<td>46%</td>
<td>50%</td>
</tr>
<tr>
<td>Labor Force Increase</td>
<td>174%</td>
<td>146%</td>
</tr>
</tbody>
</table>

Sources: US Census and Conapo, 2050 projections from PRB
IMSS Instituto Mexicano del Seguro Social. Subdirección General de Finanzas.

of the value of the finished good. The number of maquiladoras and their employment increased sharply after several peso devaluations in the 1980s and reached a peak of 1.3 million in 2000. During the summer of 2001, the state of Baja California posted signs on the border advising migrants attempting an illegal crossing to the United States that read: “Migrant Friend: Don’t put yourself at risk. Baja Californians will give you a hand.”

Maquiladoras never fulfilled their original goal of creating jobs for ex-Braceros. The Braceros were young men, while most maquiladora workers were young women—over 60 percent in 2000. Maquiladoras preferred to hire young women from the interior, many of whom were in their first jobs, believing that the young women were more likely to be satisfied with assembly-line work. Nonetheless, maquiladoras have very high worker turnover; in many maquilas, two workers must be hired dur-

---

8. The maquiladora or Border Industrialization Program was launched in 1965 to provide jobs for ex-Braceros and their families that had moved to the border to be closer to U.S. farm jobs, and they had no source of income with the end of the Bracero program. Many Braceros moved to the border area to increase their chance of being selected. The U.S. employer had to pay transportation from the workers' place of recruitment to the US job, and employers thus preferred border-area workers.

9. There were twelve maquiladoras employing 3,000 workers in 1965; 600 employing 120,000 workers in 1980; 2,000 employing 472,000 workers in 1990; and 4,000 employing a peak 1.3 million workers in fall 2000—maquiladora exports of $53 billion surpassed oil as Mexico's leading source of foreign exchange in 1998.
ing the year to keep one job slot filled, an annual turnover rate of 100 percent. High turnover is attributed by many analysts to uniform wages and benefits, that is, there is little cost to workers who change factories. Maquiladora wages in dollar terms in 2003 were below 1994 levels.

During the late 1990s, many Mexicans migrated northward with maquiladora expansion, but there is little smoking gun evidence of stepping-stone migration, in which internal migrants to border areas become U.S. migrants. The clearest evidence of such migration involves the 100,000 or more indigenous Mexicans, Mixtecs, and Oaxacans from southern Mexico, who were recruited to work in Mexico's export-oriented vegetable industry in Sinaloa and Baja California in the 1980s and 1990s. Their seasonal jobs end in the spring, just as the demand for farm workers in the United States rises, and some of them were recruited and later continued on their own to the United States to work in agriculture. One survey of Mixtec workers in the United States in the late 1980s found that two-thirds had worked in northern Mexico's export-oriented agriculture before arriving in the United States (Zabin et. al. 1993).

IV. MANAGING MEXICO-U.S. MIGRATION

The migration hump has both an up and a down side. Many pessimists look at the 1990s upside of the migration hump and see only continued high levels of Mexico-U.S. migration. But Mexico-U.S. migration may fall faster than expected for demographic and economic reasons. As a result, the U.S. border control build up may be completed between 2005 and 2010 just as Mexico-U.S. migration begins to fall for other reasons, and enforcement may get the credit that demography and economics deserve.

Mexico's population is growing by 2 percent a year. Mexican population growth peaked at 3.3 percent a year in 1970, but in 1974, the Mexican government launched a family planning program that resulted in a sharp drop in fertility, from an average 7 children per woman in 1965 to 2.5 by 2000. Declining fertility reduces migration directly and indirectly, because households with fewer children tend to keep them in school longer, reducing the need to create jobs for young people entering the labor market, and more educated Mexicans are less likely to emigrate.

Past demographic growth presents Mexico with a major job creation challenge. The number of Mexicans turning fifteen (the age of labor force entry in Mexico) is expected to drop 50 percent between 1996 and 2010, from 1 million a year to 500,000 a year. The rate of growth is projected to drop from 1 to 1.3 percent a year to 0.4 to 0.7 percent a year by 2010. Sustained economic growth, on the other hand, can create enough jobs for new labor force entrants so that fewer Mexicans will feel compelled to emigrate. At 5 percent sustained GDP growth, employment growth is expected to rise from 0.9 to 1.3 percent per year between 1996 and 2010, and with 4 percent growth from 0.7 to 1 percent a year. Mexico may be able to create jobs at an even faster pace: Appendix Table 1
shows that, between 1992 and 2001, GDP growth, labor force growth, and employment growth averaged 3 percent a year, while IMSS or formal sector job growth averaged 4 percent a year.

The combination of fewer work force entrants and rising employment forms an X, where the falling number of entrants equals employment growth. Projections made in the mid-1990s imagined the X-crossing being reached in 2002, when labor force growth of 1.1 percent matched employment growth of 1.1 percent. GDP growth averaged less than 4 percent, so the X-crossing is not likely to be reached until after 2005, but the point made by the X-diagram is clear—emigration pressures in Mexico are likely to fall between 2005 and 2010 for demographic and economic reasons. If the U.S. Border Patrol buildup is completed just as emigration pressures fall, we must be careful to credit the real reason for the drop—demography and jobs.

**TABLE 5/FIG. MEXICO: GROWTH OF 16-44 YEAR OLDS AND EMPLOYMENT GROWTH: 1996-2010**

Labor Force and Job Growth in Mexico: 1996-2010

V. GUEST WORKERS, LEGALIZATION, EARNED LEGALIZATION

How should Mexico-U.S. migration be managed until the X is crossed and emigration pressures begin to fall? The three major U.S. migration policy options are guest workers, earned legalization, and legalization. Ex-Senator Phil Gramm (R-TX) in 2001 proposed a guest worker program that would permit unauthorized Mexicans in the United States, and Mexican workers in Mexico, to obtain either seasonal or year-round work
permits that would make them legal U.S. workers.10 Gramm's proposal would have given unauthorized workers and their U.S. employers six months to register for the new program, and then enforcement of employer sanctions laws would have been stepped up to encourage employers and workers to participate. The 15.3 percent of gross wages paid by U.S. employers and workers in Social Security taxes would have been diverted to a fund to provide emergency medical care for guest workers, with any remaining balance placed in individual IRA-type accounts from which Mexican workers could receive payments when they gave up their counterfeit-resistant work permits in Mexico.

The other extreme is legalization for unauthorized workers. The AFL-CIO in 2001 called for a general legalization for unauthorized foreigners in the United States, an end to enforcement of employer sanctions laws and stepped up enforcement of labor laws, but no new guest-worker program. Rep. Luis V. Gutierrez (D-IL) in 2001 introduced the U.S. Employee, Family Unity and Legalization Act, which would have granted temporary legal status to persons in the United States before February 6, 2000, and immediate immigrant status to persons in the United States before February 6, 1996. The legalization date would then roll forward a year in each of the next five years, eventually encompassing all of those illegally in the United States in 2001.

The third option is earned legalization. Senator Bob Graham (D-FL) proposed an earned legalization program for agriculture, the Agricultural Job Opportunity Benefits and Security Act (AgJOBS). In December 2000, AgJOBS was endorsed by the United Farm Workers and the National Council of Agricultural Employers but was subsequently blocked by ex-Senator Phil Gramm (R-TX). To become an AgJOBS temporary resident, an unauthorized foreigner would have had to do at least 100 days of farm work in the previous year. Then, after satisfying a three-part farm work test that included doing at least 360 days of farm work over the next six years, including 240 days in the first three years, AgJOBS temporary residents and their families could become immigrants in five to six years. President Bush in 2001 seemed to endorse earned legalization when he said he was "willing to consider ways for a guest worker to earn green-card status" (Brownstein, 2001).

The Graham AgJOBS proposal would have applied only to agriculture. In fall 2002, Rep. Richard A. Gephardt (D-MO) introduced a general earned legalization program, the Earned Legalization and Family Reunification Act, to legalize the status of foreigners who had been: (1) physically present in the United States for at least five years; and (2) who had worked in the United States for at least two years. Legalization applicants would have to demonstrate some knowledge of English and pass

---

10. Seasonal workers would have an indefinite right to depart and return to the United States. Year-round workers could work in the United States three consecutive years, but would then have to stay in Mexico at least a year before returning.
a federal security check in order to convert their provisional status to a regular immigrant status.

President Bush, on January 7, 2004, unveiled an earned guest worker program that would permit the 6 to 8 million unauthorized foreigners in the United States with jobs to become temporary legal residents, free to travel in and out of the United States, obtain social security numbers and driver's licenses, and to apply for immigrant visas. The Fair and Secure Immigration Reform program aims to fulfill Bush's goal of "matching willing foreign workers with willing U.S. employers when no American can be found to fill those jobs" (White House, 2004).

A U.S. official gave this example of how the program would work. Someone is working illegally at Holiday Inn, which acknowledges [most likely in a letter or affidavit to DHS] that "she's been working here as of such and such date. [After registration] that person is now legal, let's say, for the three years of this program" (U.S. DOS, 2004). To become legal, the unauthorized worker would take the employer's letter to DHS, pay a registration fee of $1,000 to $2,000, and receive a three-year renewable visa. Bush administration officials emphasized that "there is no linkage between participation in this program and a green card [immigrant visa]... one must go home upon conclusion of the program" and then apply for an immigrant visa (U.S. DOS, 2004).

The number of green cards or immigrant visas available for U.S. employers who cannot find U.S. workers, currently 140,000 a year for workers and their families, would increase by some undetermined number, but there could still be long waits for employers seeking immigrant visas for needed foreign workers. For example, if 5 million unauthorized workers sought an additional 100,000 employment-based immigrant visas a year, it would take fifty years to convert all of them to immigrants.

The Bush plan also includes a new guest worker program for "the jobs being generated in America's growing economy [that] American citizens are not filling" (White House, 2004). The plan would allow U.S. employers to advertise jobs on a new internet labor exchange, and if no U.S. worker accepted, the employer could go abroad and get guest workers. These guest works would receive three-year renewable visas like those issued to unauthorized workers in the United States, but guest workers from outside the United States would not have to pay the registration fee charged to unauthorized workers already in the country.

Most observers said that Bush is likely to win points with U.S. Hispanics for what the White House called "a more humane, safe, orderly and legal immigration policy" (White House Press Briefing, 2004). Mexican President Vicente Fox said Bush's plan represented "a clear recognition of the value of these Mexicans who are working there in the United States" (Sullivan, 2004). Most U.S. employers welcomed the Bush plan for potentially offering an easier way to obtain guest workers, while unions were wary, emphasizing that Bush did not propose minimum wages
or government-supervised recruitment of U.S. workers, making it easy for U.S. employers to recruit "cheap labor" abroad.

Critics seized on the fact that an immigrant visa may not become available before the temporary status runs out, saying that Bush's proposal "is more likely to ensure their departure [unauthorized workers who register] than ensure their permanent residency" (Bumiller, 2004). Critics emphasized that there are long waits before immigration visas become available for unskilled workers sponsored by U.S. employers, and that without a 245(i) program, which allows foreigners in the United States when their immigrant visas become available to pay a fee and adjust their status in the United States, some of the workers returning to their countries of origin to receive an immigrant visa may be barred from legal re-entry for ten years because they were in the United States illegally.

VI. COOPERATIVE MIGRATION MANAGEMENT?

There is a search for a new "Big Idea" to accelerate North American economic integration, for which Hufbauer and Vega-Canovas (2002) suggested a "Common Frontier" project that would lead to cooperative border management, a defense alliance, and immigration reforms that aim to stabilize the stock of Mexicans in the United States and legalize the flow of any additional Mexico-U.S. migrants. Their "Big Idea" involves concepts that are likely to take time to negotiate. The suggestions below could be implemented much sooner, and they recommend that the best way to manage Mexico-U.S. migration until the downward side of the migration hump appears is with a three part strategy to:

- Promote a secure and efficient border that facilitates the movement of legitimate people and goods and deters unauthorized migration and smuggling, thereby helping the United States to achieve its security goals and helping both countries to reduce crime and violence along the border;
- Enhance Mexican governmental efforts to reduce the cost of remitting money to Mexico and increasing the economic development impacts of savings remitted by Mexicans in the United States; and
- Experiment with pilot guest worker programs to allow currently employed unauthorized Mexican workers, as well as future Mexican entrants, to obtain legal work permits, and to include economic instruments in these pilot programs that encourage returns and spur development.

Mexico and the United States share the goal of facilitating legitimate flows of people and goods over their 2,000-mile long border, a goal they can achieve with pre-screening and trusted traveler and transporter programs that allow expedited entries. Both countries can benefit by expanding the number of people and firms in such trust-expedite programs, so that limited enforcement resources can be targeted on others who may pose a danger. As Hufbauer and Vega-Canovas suggest, doing inspections of trusted travelers before they arrive at the border, and inspecting
goods away from the border, facilitates the movement of trusted travelers and goods.\textsuperscript{11}

Mexico has been a pioneer in recognizing the contributions that its citizens in the United States can provide to foster economic development in Mexico. President Fox has called migrants in the United States heroes for the $10 billion a year they remit to Mexico, and said that the migrants were indispensable to creating a modern and prosperous Mexico. Mexican governments in the 1990s launched policies that include issuing matricula consular documents to Mexicans in the United States, so that they have a government-issued ID card to open bank accounts, rent apartments, and operate in a security-conscious United States,\textsuperscript{12} educating Mexicans in the United States about the options and costs available for remitting money to Mexico, and encouraging competition among money transfer firms to lower the costs of remitting savings. Finally, Mexican federal, state, and local governments have developed programs to match remittance savings that are invested to spur economic development in migrant areas’ of origin. These efforts should be strengthened and enlarged.

\section*{VII. PILOT GUEST WORKER PROGRAMS?}

The third component of a new cooperative migration relationship is pilot guest worker programs.\textsuperscript{13} The United States has about twenty non-immigrant programs that allow the admission of foreigners for temporary periods to work, issuing visas that range from A for ambassadors to TN for NAFTA professionals with a BA or more. Most Mexicans entering the United States legally as guest workers arrive with H-2A and H-2B visas, for farm workers and unskilled non-farm workers, respectively, to work temporarily in temporary or seasonal U.S. jobs (double temporary criterion).

The H-2A and H-2B programs are certification programs, meaning that a U.S. employer must convince the U.S. Department of Labor (DOL) on a job-by-job basis that U.S. workers are not available. Each job vacancy to be filled by a foreign worker with an H-2A or H-2B visa needs a DOL certification that U.S. workers are not available to fill the job despite DOL-supervised employer recruitment efforts. Certification means the border gate to foreign workers remains closed until the government

\begin{itemize}
\item \textsuperscript{11} Hufbauer and Vega-Canovas include their trusted traveler proposal with immigration, and call for the creation of a NAFTA retirement visa that would allow retirement in any of the three NAFTA countries.
\item \textsuperscript{12} Mexico’s 47 U.S. consulates have been issuing matricula consular cards to Mexicans in the US for $29; over 600,000 were issued in 2001, and 1 million in 2002.
\item \textsuperscript{13} Hufbauer and Vega-Canovas call for a general guest worker program that would issue up to 300,000 visas a year to Mexicans after they undergo a background check, require them to have at least eight months of employment in the United States, and allow them to naturalize after five years—normally, legal immigrants must live in the United States five years to naturalize. For unauthorized Mexicans in the United States, after illegal crossings are reduced, unauthorized Mexicans in the United States could obtain a temporary legal status, and naturalize after five years.
\end{itemize}
agrees or certifies that Americans are unavailable. The alternative attestation process, as used in the H-1B program to admit foreigners with a BA or more to fill U.S. jobs that require a BA or more for up to six years, allows a U.S. employer to open the border gate by asserting or attesting that foreign workers are needed to fill vacant jobs. There is generally no enforcement of employer attestations unless DOL receives complaints. Under H-1B, H-2A, and H-2B programs, foreign workers are tied to a single U.S. employer by contracts—the employer's job offer becomes the contract—and must generally leave the United States if they are discharged.

The purpose of nonimmigrant or guest worker programs is to add workers temporarily to the labor force, but not settled residents to the population; the guest adjective implies that the foreigner is expected to leave the country when his job ends. In most cases, guest workers are to be a transitional presence in an industry or occupation, employed until jobs are mechanized or replaced by trade or until additional workers are trained locally. Proposals for twenty-first century guest worker programs include:

- allowing employers of unskilled workers to attest to their need for such workers;
- allowing unskilled foreign workers to change U.S. employers; and
- introducing economic mechanisms to improve employer and worker compliance with program rules.

The United States and Mexico could usefully experiment with new guest worker programs on a pilot basis to determine whether alternatives to the current H-2A and H-2B programs are viable, and whether Mexico-U.S. cooperation can reduce unauthorized migration so that workers and employers are legal rather than illegal.

Three U.S. industries that currently hire large numbers of unauthorized Mexican workers might be candidates for such pilot guest worker programs. The U.S. meatpacking industry has high worker turnover among the 400,000 workers who “disassemble” cattle, hogs, and poultry. Most meatpacking firms are enrolled in the voluntary Basic Pilot employee verification program, under which employers submit the INS-issued A-numbers of newly hired non-U.S. citizen workers for verification of their right to work in the United States.

Many meatpackers, including Tyson Foods, also employ workers supplied by temp agencies, and these workers' data may not be submitted to Basic Pilot. Tyson, the largest U.S. meatpacker with 120,000 employees, was charged in 2001 with conspiracy to smuggle unauthorized workers into the United States when plant managers made arrangements with INS undercover agents to pay $200 for each worker who then went to work in Tyson plants as employees of temp firms. The federal government charged Tyson with conspiracy to smuggle aliens into the United States and sought $100 million and changes in hiring methods. Tyson main-
tained that a few rogue managers were responsible and was acquitted of the charges in March 2003.

A pilot guest worker program that relaxed the double-temporary requirement of the H-2B program in exchange for meatpackers hiring all workers directly and screening them in Basic Pilot could be linked with mechanisms to avoid long-term employer dependence and encourage returns. A pilot H-2BB program could isolate the Social Security and unemployment insurance taxes paid by U.S. employers and guest workers and: (1) use the employer’s contributions to enforce program rules, subsidize mechanization research and train U.S. workers and (2) return the worker’s Social Security contributions when he returns his work permit in Mexico. Both efforts could be supplemented with other steps to ensure compliance and achieve longer term goals. For example, Mexico could select guest workers from among those participating in Oportunidades (ex-Progresa program), a program that gives poor Mexicans cash payments. Payments or health check up dates could be adjusted to ensure compliance with guest worker rules.

The U.S. L-1 visa is available to “key employees,” executives, managers and workers with “specialized knowledge,” to allow them to move from a job in a multinational corporation abroad to a job in a U.S. branch, parent, subsidiary, or affiliated entity. On a pilot basis, multinational firms with operations in both Mexico and the United States could be permitted to use L-1X visas to bring unskilled Mexican workers to the United States for employment and training, in the expectation that the Mexican worker would return to Mexico and be employed in the firm’s Mexican operation after one to three years. Such a program involving hotels, medical care providers, and other services would provide continuity in employee seniority with one firm, and make the multinational firm a partner in ensuring that program rules are followed.

The third pilot guest worker program would involve agriculture. Seasonal employment on U.S. crop farms has been the port of entry for many Mexican-born U.S. residents, and 85 percent of the almost 2 million hired seasonal employees on U.S. crop farms were born in Mexico. An agricultural pilot program could test methods of using payroll taxes collected from participating guest workers and their U.S. employers to encourage worker returns as well as promote the mechanization or other changes in the farm labor market that are increasingly necessary because of increased global competition in labor-intensive commodities.

For example, 95 percent of U.S. raisins are grown around Fresno, California by about 3,500 farmers, many of whom have relatively small plots that average forty acres. Workers receive about $0.01 a pound for cutting and laying twenty-five pounds of green grapes on paper trays to dry in the sun. There is a “labor shortage” every year as farmers wait as long as possible to begin harvesting in order to raise the sugar content of their grapes, knowing that the longer they wait to begin harvesting, the more likely the drying grapes will be rained on, which lowers their value. Dried
on the vine (DOV) systems for mechanically harvesting raisin grapes increase the hours of labor needed for pruning in the winter months, when unemployment is high, and reduce the need for harvest workers. However, the up-front cost of retrofitting vineyards for mechanical DOV harvesting is about $1,500 per acre, or a total $225 million for the 150,000 acres of raisin grapes. If the DOV system were adopted, peak September employment in the raisin industry would fall from 50,000 to 10,000, and a magnet for unauthorized Mexican workers would disappear.

A pilot guest worker program in which employer contributions for Social Security and Unemployment Insurance (UI) were isolated and used to subsidize mechanization and encourage returns could generate significant funds to transform the industry, provide transitional jobs for Mexican migrants, and spur development in the migrants’ areas of origin. The 20 percent of wages paid by employers and workers for Social Security (15 percent of gross wages) and UI (5 percent) could generate significant funds to achieve these goals. For example, if raisin harvesters average $5,000 each, 20 percent payroll taxes are $1,000 per worker per season. The worker’s share of these taxes are about $375, and the employer’s share $625—if the money were divided fifty-fifty, then the employment of 50,000 guest workers would generate a total $50 million to subsidize mechanization and encourage returns.

More broadly, if there are 4 million unauthorized Mexican workers, and they were converted to guest workers earning an average of $15,000 a year, the 20 percent payroll taxes accounted for by Social Security and UI would generate $3,000 a year per worker, or a total $12 billion a year from gross earnings of $60 billion. This significant sum could be used to promote labor-saving mechanization and worker training or retraining in the United States, as well encourage returns and foster economic development in Mexico.

None of these pilot programs could achieve their goals unless illegal migration is reduced. As long as Mexicans can enter the United States illegally and find jobs, there will be little incentive for Mexican workers or U.S. employers to participate in pilot guest worker programs, even if they promise return bonuses for workers and other assistance for employers. Reducing illegal migration and employment is a prerequisite for any new guest worker or migration arrangement.

VIII. CONCLUSIONS

The number of international migrants is relatively small. In a world of six billion, the United Nations (UN) estimates the number of interna-

---

14. Yields average about eight tons of green grapes per acre, which dry into two tons of raisins. Workers are paid about one cent a pound for picking green grapes, so labor costs are about $160 per acre, and payroll taxes of 22 percent are $35 an acre. If guest workers received $10 an acre in refunded contributions, or a total $1.5 million, then $15 an acre or a total $2.25 million would be available to better enforce program rules and subsidize the inevitable change to a mechanized harvesting system.
tional migrants—persons outside their country of birth or citizenship—at 175 million in 2000, 3 percent of global residents. Mexico-U.S. migration is larger—about 9 percent of Mexican-born persons live in the United States.

The economic integration symbolized by NAFTA should eventually reduce economically motivated Mexico-U.S. migration. However, in the short run, migration and trade can increase together, producing a migration hump when migration levels are viewed over time. NAFTA went into effect in January 1994, in part to enable Mexico to export, in the words of ex-President Salinas, tomatoes rather than tomato pickers. However, during the 1990s, Mexico-U.S. trade and migration increased together because of large numbers of new labor force entrants, very uneven economic and job growth in Mexico, and an economic boom in the United States that provided a demand-pull for Mexicans with U.S. contacts.

High levels of Mexico-U.S. migration over the past decade should not obscure the fact that Mexico-U.S. migration may soon diminish for demographic and economic reasons. A combination of the sharp drop in Mexican fertility in the 1980s and 1990s, the potential for sustained economic and job growth in Mexico, and the completion of the exodus of surplus workers from Mexican agriculture should reduce Mexico-U.S. migration after 2010. If reduced Mexico-U.S. migration is apparent just as the United States completes its stepped-up border controls, it will be important to credit the real reason for the decline—the demographic and economic factors.

BIBLIOGRAPHY


