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Trade and Migration: The Mexico-US Experience

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## RIIM

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# **Trade and Migration: The Mexico-US Experience\***

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**Abstract:** This paper reviews the evolution of low-skill migration between Mexico and the US, the efforts of the US and Mexico to use first a border area industrialization program, and later, a trade agreement — NAFTA — to convert a low-skill migration flow into a trade relationship. The paper concludes with a discussion of current proposals in the US for an expanded guest worker program.

**Key Words:** agriculture, bracero, farm workers, guest worker, labour market, maquiladoras, Mexico, migration, NAFTA, trade

## **Introduction**

About seven percent of the 105 million persons alive today who were born in Mexico live in the US, and another one to two percent of Mexican-born persons work seasonally in the US. In 1999, some 4 to 5 million Mexican-born workers were employed in the US labor market, equivalent to about one-third of the 12 million Mexicans employed in formal sector jobs in Mexico (enrolled in the pension system IMSS).

For most of the 20<sup>th</sup> century, the major relationship between Mexico and the US has been a low-skill migration relationship that has been rife with problems. Mexico complained frequently about the poor treatment of Mexican citizens in the US, but there were few mechanisms to enable the two governments to work cooperatively to improve conditions for legal or unauthorized Mexican migrants. On the US side of the border, fewer than 10,000 farm employers set the terms for the bulk of Mexico-US migration for most of the 20<sup>th</sup> century. The US government alone, or the US and Mexican governments jointly, permitted US farmers to recruit Mexican workers for temporary US employment. However, many US farmers and Mexican workers preferred to operate outside the legal guest worker system, and periodic immigration and labor crackdowns by the US government led to mutual recriminations between the US and Mexico.

The legacy of the series of Bracero programs has increased illegal migration alongside increasing economic integration. Illegal immigration seemed to peak in the late 1980s after several peso devaluations in Mexico, an economic boom in the US — especially in California — and a flawed legalization-sanctions law. In the early 1990s, the focus of the Mexico-US relationship shifted from migration to trade. Leaders in both Mexico and the US urged the approval of the North America Free Trade Agreement under the theory that, in the medium to long term, trade would act as a substitute for migration.

## **Setting the Stage: Braceros and Migration**

There has been significant Mexico-US migration in every decade of the 20<sup>th</sup> century, but during only two periods, 1917-1921 and 1942-64, did formal bilateral agreements regulate the employment of Mexican workers who were temporarily employed in the US. In both cases, large numbers of Mexican workers were recruited to work in US agriculture because of wartime emergencies, the programs expanded after the war ended, and labor and civil rights arguments were used to end the programs.

The first program was launched near the end of World War I. US farmers, with “Food to Win the War” as a motto, persuaded the US Department of Labor (DOL) in May 1917 to suspend the head tax and the literacy test in order to admit temporary Mexican farm workers, and Mexicans arrived legally to work on US farms until 1921. The US Border Patrol was established in 1924, but it did little to impede the movement of Mexicans migrating north to be seasonal farm workers. The 1920s wave of Mexico-US migration was stopped by repatriations: between 1929 and 1933, some 400,000 Mexicans (including their US-born and US-citizen children) were returned to Mexico in an effort to free up jobs for Americans.

Contemporary Mexico-US migration has its roots in a series of agreements under which 4.6 million Mexican workers were admitted to the US as seasonal farm workers between 1942 and 1964. In some cases, the same workers were admitted year after year, but over the course of 22 years, one to two million Mexicans obtained work experience in the US as legal guest workers (Martin 1996; Massey, Alarcon, Durand, and Gonzales 1987). It is important to remember that (1) the Bracero program was very controversial in the US from the start and (2) that the program admitted the maximum number of workers in the mid-1950s, when western water projects opened new farm land.

### **1942–64**

The “farm labor supply agreement” between the US and Mexico of July 23, 1942, was bitterly opposed by US farm labor reformers. Throughout the 1930s, farm labor reformers argued that large farms in the western US were really “factories in the fields” that should be covered by the same labor laws as nonfarm factories or broken up into family-sized parcels so that there

would be no need for hundreds of thousands of seasonal farm workers. They appeared to be on the verge of changing government policy in 1939–40, when a series of academic and government reports demonstrated convincingly that (1) low farm wages were capitalized into higher land prices and (2) large landowners invested in the political process to ensure that they had a flexible work force willing to accommodate to seasonality and thereby preserved the land wealth acquired in part from previous immigration (Martin 1996, Chapter 2).

John Steinbeck's *The Grapes of Wrath* provided the emotional impetus for farm labor reforms but, before any could be enacted or implemented, World War II broke out, and the US young men who may have formed the core of a farm worker union exited the seasonal farm work force for the Armed Forces or factory jobs. Some were replaced by Braceros. Braceros were less than two percent of US hired farm workers during World War II, but their presence, along with prisoners of war, interned Japanese, and US prisoners sent an unmistakable signal to US farm workers — economic mobility would require geographic mobility, or getting ahead in the US labor market would require getting out of the farm work force.

The Mexican government, remembering the humiliation of early 1930s repatriations, insisted that the US government guarantee the contracts that farmers were required to provide to Mexican Braceros, including round-trip transportation and the payment of wages equal to those of similar American workers (Craig 1971). While the US-Mexican government agreement contained many safeguards for workers, it also required many workers to pay bribes to get on the list to be hired by US farmers, and required farmers to pay transportation and housing costs. It took little encouragement for Mexican workers and US farmers to go outside the program, and the number of so-called “wetbacks” increased significantly in the late 1940s and early 1950s.<sup>1</sup>

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<sup>1</sup> The usual practice was for a Mexican worker to enter the US illegally, find a US farm job, and go to work, usually under prevailing wages, but without, e.g., government-inspected free housing or other protections specified in the contracts that each Bracero worker received. If apprehended inside the US, the Mexican worker was usually taken to the Mexican border, issued work documents, and returned to his US employer, a process termed, even in official government reports, “drying out wetbacks.” The fact that there was no enforcement penalty on workers or employers for being outside the program encouraged illegal immigration, leading one researcher to conclude that “the

The Bracero program in the early 1950s became a kind of rolling quasi-amnesty program for seasonal workers from Mexico, many of whom arrived illegally. Newspaper headlines that read, “Wetbacks Swarm In,” led to the perception that Mexico-US migration was out of control. A retired Army general was appointed head of the INS. He launched Operation Wetback in 1954, a massive border control and interior enforcement operation that removed from the US over one million Mexicans. Simultaneously, the US government relaxed rules for employing Mexicans as legal Bracero workers, with the result that the number of Braceros admitted peaked at 550,000 in 1955-56. One result of the expansion of the Bracero program was that US workers, especially Mexican-Americans who faced competition from Braceros in the fields, responded by moving to cities such as Los Angeles and San Jose.<sup>2</sup>

The Bracero program was ended unilaterally by the US in 1964, amid predictions that US labor-intensive agriculture would collapse and that tomatoes and other commodities would have to be imported from Mexico. These predictions — by farmers and agricultural officials — proved to be false. Farm wages rose sharply in the mid-1960s, when the combination of the Vietnam-war economy and a smaller excess supply of farm workers permitted Cesar Chavez and the United Farm Workers to win a 40 percent wage increase for grape pickers, increasing their wages from \$1.25 to \$1.75 an hour in the UFW’s first contract in 1966. During the late 1960s, farm wages rose faster than other US wages, especially in California, and there were expectations that farm workers would become a career very similar to construction worker, offering high hourly wages when seasonal work was available, and then maximum unemployment insurance benefits.

## **1965-82**

The golden era for US farm workers — the time when there were relatively few newly arrived foreigners in the farm work force — lasted from the mid-1960s to the early 1980s. In the late 1960s, many ex-Braceros became US immigrants: at that time, US employers could sponsor

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Bracero program, instead of diverting the flow of wetbacks into legal channels... actually stimulated unlawful emigration.” (Scruggs 1961, 151).

<sup>2</sup> California vegetable production rose 50 percent, as the state replaced New Jersey, the “Garden State.” According to USDA, farm worker wages rose 41 percent, from \$0.85 in 1950 to \$1.20 in 1960, while factory workers wages rose 63 percent during the 1950s.

an unskilled Mexican as an immigrant on the basis of a letter that asserted that the Mexican was best qualified to fill the job. Most Mexican immigrants to the US in the 1960s were sponsored by US farmers: a 1963 article reported that 80 percent of the 222,000 immigrants from Mexico between 1957 and 1962 had been Braceros (Taylor 1963, 43).

There was illegal immigration as well — the UFW complained about farmers using unauthorized workers to break strikes, and the UFW was a major force behind the passage of employer sanctions in the US House of Representatives in the 1970s — but illegal immigration was relatively modest until the early 1980s. Some 110,000 deportable aliens were located in FY65, 212,000 in FY68, 420,000 in FY71, and 788,000 in FY74. The number first jumped over one million in FY83, after Mexico devalued the peso, and then rose to a peak 1.8 million in FY86.

There was a clear link between Braceros, legal immigration, and illegal immigration. Most Braceros were men between 18 and 40. Those sponsored by US employers in the 1960s tended to be in their 30s. As they aged out of seasonal harvest work in the 1970s, some of their US farm employers made them foremen, and asked their foremen to recruit seasonal workers. The foremen, who typically visited Mexico during the winter months, recruited workers there, and they arrived illegally the next summer. This process of network recruitment soon linked particular Mexican villages and regional US labor markets.

The UFW's fortunes rose when there was little illegal immigration, and fell when immigration surged. The high water mark for the UFW came in 1978–79, when it represented about 70,000 farm workers in California, 10 percent of all those who worked for wages sometime during the year on the state's farms. As contracts expired in 1978–79, the UFW demanded 50 to 60 percent wage increases at a time when President Carter asked US employers not to grant wage increases in excess of 7 percent. The UFW called a strike against major lettuce growers, and the growers were able to hire enough strikebreakers — often unauthorized workers — and harvest enough lettuce at prices that were triple normal levels to double their revenues. The UFW eventually won a 42 percent wage increase, raising entry level wages in 1979 from \$3.75 to \$5.26 per hour. But most of the companies that signed agreements increasing wages to these levels went out of business in the early 1980s, or

became only nonfarm marketers of lettuce, or adapted in some other way so that they employed no farm workers.

## **IRCA**

Farm worker wages and benefits were eroding in the mid-1980s when what became the Immigration Reform and Control Act began moving through Congress. Farm labor proved to be a major stumbling block to the enactment of IRCA, with western farmers insisting there be an alternative guest worker program available to them that did not require growers to obtain certification from the US Department of Labor before employing foreign workers. However, a bipartisan coalition of control-minded Republicans and worker advocate Democrats prevented the approval of a new guest worker program, and the compromise was one of strangest amnesty programs ever: the Special Agricultural Worker program.

The SAW program permitted unauthorized foreigners who did at least 90 days of farm work in 1985-86 to apply for US immigrant status. Because it was widely asserted that many US farm employers paid their workers in cash, the regulations implementing the legalization program were written in a manner that, once a foreigner applied for legalization — usually by attaching a short letter from an employer asserting that the worker was employed by him for 90 days — the burden of disproving the alien's claim of US farm work rested on the US government. The government had no mechanism to cope with the flood of applications, over 1.2 million rather than the expected 400,000, and no means of disproving what were in many cases false assertions. As a result, over 1.1 million foreigners were legalized, including one million Mexicans, the equivalent of one in six adult men in rural Mexico.

The theory of SAW legalization was that it would reverse the early 1980s slide in farm worker wages and working conditions by enabling now legal workers to join unions and press for wage increases. Instead, more Mexicans migrated to the US, as SAW legalization documents were widely forged or borrowed. The US farm work force in the early 1980s was estimated to be 20 to 25 percent unauthorized, and was 20 to 25 percent SAW workers in the early 1990s. But legal SAWs got out of agriculture as wages stayed low — a result of

workers continuing to arrive illegally — and SAWs were replaced by illegal workers. As a result, in the late 1990s, over half of US farm workers are believed to be unauthorized.

In sum, the Mexico-US Bracero programs of the 20<sup>th</sup> century turned out to be anything but a managed flow of temporary workers:

- The programs were largest after the wartime emergencies that justified them had passed, and they created networks that linked the bottom of the Mexican labor force with the bottom of the US labor market.
- Braceros in the US farm labor market encouraged US workers with other options to get out of the farm labor force, reinforcing exit rather than voice responses to dissatisfaction that isolated the farm labor market from other US labor markets.
- Mexico neglected West Central Mexico, the area from which many migrants came, so that emigration and remittances became pillars of local economies there.
- The unequal exchange involved in the various Bracero programs and their illegal migration aftermath often made it hard for the US and Mexican governments to treat each other as equals on migration matters.

### **From Braceros to NAFTA: Maquiladoras**

When the Bracero program ended in 1964, there was an unemployment crisis in Mexican border cities. US employers were required to pay transportation costs from the worker's home to the US work place, and many Mexicans moved with their families to the border area to reduce US employers' transportation costs and thus increase the probability of being selected. This meant that in the mid-1960s, there were thousands of families living along the Mexico-US border who were dependent on the US labor market.

To create jobs for these workers in Mexico, Mexico and the US cooperated on a plan to create jobs for ex-Braceros in the border region in 1965. Under the Border Industrialization Program, trade and investment laws were modified in both countries so that foreign (US) investors could create jobs in maquiladoras or factories in Mexico border areas. Mexico allowed foreign ownership of the maquiladoras, and permitted the duty-free importation of

components and any machinery needed to produce and assemble maquiladora goods. Maquiladora goods had to be exported from Mexico and, as they entered the US, the US tariff schedule was modified to limit the duty on maquiladora products to the value that was added by Mexican assembly operations (wages and Mexican inputs usually account for 10 to 20 percent to the value of maquiladora products entering the US).<sup>3</sup>

The maquiladora program expanded slowly. There were 12 maquiladoras employing 3,000 workers in 1965, 600 maquiladoras employing nearly 120,000 workers in 1980, 2,000 maquiladoras employing 472,000 workers in 1990, and 4,000 maquiladoras employing 1.1 million workers in February 1999.<sup>4</sup> Foreign direct investment in Mexico averaged \$11 billion a year between 1994 and 1997, and much of it went into maquiladoras. By 1999, maquiladoras provided almost 10 percent of the formal sector jobs in Mexico, about 30 percent of the manufacturing jobs, and accounted for 44 percent of all Mexican exports. In 1998, maquiladora exports surpassed oil as Mexico's leading source of foreign exchange.<sup>5</sup>

Maquiladoras have been a major job-creating success: they created one million jobs that pay wages at least twice Mexico's minimum wage and also provide fringe benefits. They did not, however, create jobs for ex-Braceros. The Braceros were young men; the workers employed in maquiladoras were young women — even though the percentage of women is falling, it is still almost 60 percent in 1999. Instead of hiring men who had moved to the border to be closer to US farm jobs, the assembly plants recruited young women from the interior of Mexico; they were believed more willing to work for low wages, have more dexterity, and not complain about repetitive assembly line work. Young women have remarkably high labor force participation rates in border cities — 60 to 80 percent of the 20 to 24 year old women are in the work force.

Maquiladoras in Mexican border city labor markets act as local monopsonies facing an elastic supply of labor from the interior. Wages and benefits in the maquiladoras are

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<sup>3</sup> The value-added in Mexican maquiladoras remains low. In the first six months of 1997 maquiladoras exported goods worth \$20 billion, but imported goods worth \$16 billion, so Mexico's value-added was only about \$4 billion

<sup>4</sup> About 30 percent of maquiladora jobs are in Juarez, across the border from El Paso, and 20 percent are in Tijuana, south of San Diego.

remarkably similar — averaging about \$1.80 per hour — but turnover is high since it is easy for workers to learn the jobs. Disputes with a supervisor, or the opportunity to commute to work with a neighbor may cause a woman to switch from one assembly plant to another. Most maquiladoras pay daily wages of \$15 to \$20 and offer fringe benefits such as enrolment in Mexico's pension system, IMSS.

The young women who are the core of the maquiladora work force tend not to migrate on to the US, but their husbands and the men who often accompany them do. Thus, maquiladoras can serve as indirect stepping stones for Mexico-US migration, as younger brothers follow sisters to the border area in search of jobs and then continue across the border. It is thus clear that:

- Maquiladoras did not achieve their original goal of providing jobs for ex-Bracero men who had become dependent on the US labor market.
- Maquiladoras stimulated population and economic growth along the US-Mexican border. About 8 million people live within 50 miles of the US-Mexican border, one of the richest parts of Mexico and one of the poorest parts of the United States.
- Most maquiladoras pay more than the Mexican minimum wage, although critics note labor and environmental practices are sometimes poor. Employee turnover is very high.

Much of the criticism of maquiladoras centers on their alleged labor and environmental shortcomings. The major Mexican union federation, the CTM, which is closely associated with the ruling party, allegedly fails to represent maquiladora workers effectively and impedes the formation of “independent” unions. The struggle between the CTM and independent unions has been played out over the past two years at the Han Young maquiladora in Tijuana, which makes truck chassis for Hyundai. Workers trying to form an independent union contend that the CTM and local politicians have unlawfully blocked their effort. The labor side agreement to NAFTA requires each country to abide by its own labor laws, and in 1998 the US Labor Department wrote to the Mexican Labor Department about the Han Young workers.

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<sup>5</sup> About 81 percent of Mexican manufactured products exported to the US in 1998 were products assembled in maquiladoras.

While it has been difficult to show that maquiladoras increase Mexico-US migration, that is not the case for Mexico's export-oriented vegetable industry. This industry, symbolized by fresh tomatoes, is centered in Sinaloa, about 600 miles south of the US border. Mexican fresh tomato exports almost doubled between 1989-1993 and 1994-98, from \$256 million a year to \$477 million a year.

Both Mexican tomatoes and competing tomatoes in Florida are harvested by Mexican migrants. In Mexico, large farms in Sinaloa and Baja California employ about 170,000 Mexican workers — mostly migrants from southern Mexico — for four to five months between December and April. In 1996, typical wages for tomato picking in Sinaloa were reported to be about \$3 to \$5 per day, and children often join their parents in the fields.<sup>6</sup>

Seasonal work ends in Sinaloa just as US growers begin to hire farm workers. Most of the family migrants return to small farms in southern Mexico in April to tend to their own farms, but landless workers tend to migrate to the US if they have network connections that can help them find jobs. One survey of Mixtec workers in the US reported that two-thirds had worked in northern Mexican export-oriented agriculture, and were encouraged to migrate to the US by US-based friends and relatives (Zabin et al. 1993).

### **Trade and Migration: NAFTA**

In 1990, Mexico's President Salinas proposed a free trade agreement with the US. Canada, which had entered into a free trade agreement with the US in 1989, joined the negotiations for what became the North American Free Trade Agreement (NAFTA). NAFTA went into effect on January 1, 1994,<sup>7</sup> with the goal of lowering barriers to trade and investment and thus spurring job and wage growth in the three member countries. Passage of NAFTA was not a sure thing in the US. Ross Perot used opposition to NAFTA as a cornerstone of his 1992 presidential bid, and his prediction that there would be a "giant sucking sound" as US jobs left

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<sup>6</sup> The schools in the camps teach from 5 to 8pm, so that children can help their parents in the fields.

<sup>7</sup> In 2001, the maquiladora will be incorporated into the Mexican economy and, under NAFTA, restrictions on Mexican sales and temporary imports from the US and Canada will be no more. New Mexican laws passed in the last decade also stand to stimulate joint ventures and manufacturing employment.

for Mexico became part of one end of the spectrum of the likely effects of NAFTA on US jobs.

The other and ultimately winning end of the what-will happen-with-NAFTA spectrum was anchored by Presidents Bush and Clinton who, along with free trade theorists, argued that NAFTA was the best means of spurring Mexico's trade and economic development, creating jobs and thereby reducing unwanted Mexico-US migration. Although general agreements on migration were explicitly not part of NAFTA, the hope that NAFTA-led economic development would reduce the volume of undesired, illegal migration was a reason why some wavering Congressional representatives in the end voted for NAFTA.

The NAFTA debate highlights the larger question of whether trade liberalization is an effective means for reducing "unwanted" South-North migration.<sup>8</sup> The answer of most economists is of course: the standard comparative statistics analysis highlights the fact that the migration of labor tends to be self-stopping because of the adjustment processes that migration sets in motion, speeding the growth of wages in the sending area and slowing the growth of wages in the receiving area. The conclusion of the standard comparative statistics trade model is that migration and trade are substitutes in both the short and long run (Heckscher 1949; Ohlin 1933; Mundell 1957; Stolper and Samuelson 1949).

The major policy-relevant question was not what would happen in the long run after the North American economies reached a new equilibrium, but what would happen during the adjustment period. The US Commission for the Study of International Migration and Cooperative Economic Development, which embraced free trade as the best long-run solution for unwanted economically motivated migration — "expanded trade between the sending countries and the United States is the single most important remedy" — nonetheless concluded that "the economic development process itself tends in the short to medium term to stimulate migration" (1990, p. xv). In other words, the same policies that reduce migration in the long run can increase migration in the short run, creating "a very real short-term versus

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<sup>8</sup> We use "unwanted" rather than illegal to describe the migration industrial countries are trying to reduce because much of the migration most amenable to being reduced with trade and other economic development measures involves legal but not necessarily wanted foreigners, such as "economic refugees" in Western Europe, and Salvadorans with a "Temporary Protected Status" in the US. In both cases, the host countries would like to reduce the number of such aliens, but their presence is not unlawful.

long-term dilemma” (1990, p. xvi) for a country such as the United States considering a free trade agreement as a means to curb unauthorized immigration from Mexico.

The Commission embraced the hypothesis that trade and migration can be complements in the short run and substitutes in the long run, that is, economic integration can produce a “migration hump,” meaning that, when migration flows are charted over time, migration first increases with closer economic integration and then decreases (Martin 1993). The Commission concluded that the migration hump — a short-run increase in immigration — was a worthwhile price to pay for the adoption of policies in both Mexico and the US that would reduce unwanted migration in the long run.

A migration hump is most likely to occur when any or all of three conditions are met after freer trade is implemented: (1) continued job opportunities abroad to pull migrants across borders; (2) supply-push emigration pressures rise as the sending country economy adjusts to freer trade; and (3) social networks bridge the border. Mexican-US migration satisfies these three conditions.

The migration hump reflects historical and empirical evidence. Previous emigration countries such as Italy and South Korea have been transformed from labor exporters into labor importers.<sup>9</sup> There is also a theoretical basis for the migration hump: relaxing or abandoning several of the key assumptions of standard trade theory can also produce a migration hump. The alternative to a migration hump is a migration trough — migration falls immediately with closer economic migration — or a migration plateau — migration flows are not affected by economic integration.

### **NAFTA and Migration: 1994–99**

Those arguing for US approval of NAFTA were well aware of the migration hump as well as the fact that most economic models concluded that as a result of NAFTA Mexico would experience the greatest adjustments to free trade as well as the greatest benefits in the form of job creation would accrue to Mexico. No one knew how quickly Mexico-US migration flows

might be affected by adjustments and job creation. However, presidential statements often assumed that reductions in migration would be immediate, or noticeable after a relative short period of adjustment.

How good were the forecasts? Many of the forecasts derived from computable general equilibrium (CGE) models concluded that Mexico's economy would grow faster, creating more jobs at higher wages than would exist in Mexico without NAFTA (Hinojosa-Ojeda and Robinson 1991). The US International Trade Commission summarized the results of 10 models and reported that, because of NAFTA, estimates of how much faster Mexico's real GDP was projected to rise ranged from 0.1 to 11.4 percent, Mexican employment was expected to be at least 7 percent higher, and real wages 0.7 to 16.2 percent higher. The primary mechanism by which these results were to be achieved was through foreign investment. Foreign capital would flow to Mexico, the argument ran, bringing new technology and new management and creating jobs and hope. As a Latin American tiger, Mexico could run a trade deficit for years as foreign investors built up Mexico's productive capacity and infrastructure, much as South Korea did during a similar phase of development in the 1960s and 1970s.<sup>10</sup>

NAFTA got off to a rocky start. Foreign capital had flowed into Mexico in anticipation of NAFTA in the early 1990s, and Mexico permitted the peso to become overvalued in 1993-94, making imports of both capital and consumer goods cheap. The US and other foreign investors lent billions of dollars to Mexico, and Mexicans used many of these foreign savings to buy US and other foreign goods, not to build factories and create jobs. In 1994 a series of events dampened investor enthusiasm. Zapatista rebels launched an armed campaign in the state of Chiapas on January 1, 1994; the leading presidential candidate was assassinated in March 1994; and the Mexican money supply was increased sharply in summer 1994 in support of the ruling party's candidates in July elections. President Salinas resisted an "orderly" devaluation of the peso in the fall of 1994, but in December 1994, just

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<sup>9</sup> Migration humps are not new. The 48 million Europeans who emigrated from Europe between 1850 and 1925 represented about one-eighth of Europe's population in 1900.

<sup>10</sup> However, aggregate models predicted that, in the mean time, agricultural liberalization policies in Mexico, including the removal of price supports for corn, would stimulate migration from rural areas, with many migrants heading to the US.

after Salinas left office, Mexican and foreign investors began converting pesos into dollars at the fixed 3.45 to \$1 rate. Mexico ran out of reserves to support the peso, and the peso was devalued in December 1994.

Although most migration experts had predicted that the closer economic integration symbolized by NAFTA would at least temporarily increase migration, none predicted the 1994-95 devaluation and severe Mexican recession. Mexico, a country with about 10 million formal sector private jobs for a paid labor force of 30 million, experienced almost one million layoffs from formal sector jobs in 1995. In the villages from which many migrants come, economic models projected a migration elasticity with respect to peso devaluations of 0.7 percent — that is, a 7 percent increase in emigration for every 10 percent devaluation of the Mexican peso — which fell almost 60 percent between November 1994 and November 1995.

Rather than job and wage growth with NAFTA, Mexico in 1995 suffered its worst recession in decades. Many Mexicans responded to the 1994-95 crisis by migrating to the US despite stepped-up border controls. The US apprehended 1.1 million foreigners, over 95 percent Mexicans, in FY94; 1.4 million in FY95; 1.6 million in FY96; 1.5 million in FY97; 1.7 million in FY98; and 1.5 million in FY99.

Since 1997, there has been remarkable economic growth in Mexico, and the type of migration hump associated with gradual economic integration may be coming into view. GDP growth was six percent in recent years and long-term foreign investment has returned to Mexico.<sup>11</sup> Employment has rebounded: the number of Mexican workers in formal private sector jobs rose by 400,000 in 1998.<sup>12</sup> Mexican exports have surged; Mexico has become the second largest trading partner of the US.

There has also been a new attitude toward migration, remittances, and development in many Mexican states. Mexicans in the US remit about \$6 billion a year to Mexico, usually in transactions that average \$300 each,<sup>13</sup> and several Mexican states have established programs

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<sup>11</sup> Between 1994 and 1998, foreigners invested \$57 billion for long-term projects, making Mexico second only to China in the receipt of foreign investment dollars.

<sup>12</sup> There were 10,216,940 permanently insured workers in IMSS, the Mexican social security system, in October, 1998, up 380,000 or four percent from the year before.

<sup>13</sup> In 1999, Western Union and Orlandi Valuta, subsidiaries of First Data Corp., and MoneyGram Payment Systems Inc. in May settled class-action lawsuits filed against them in Illinois, Texas and California that

to match remittances that are invested to create jobs. In Timbinal, a village of about 1,000 in the southern part of Guanajuato, remittances from migrants employed in California's Napa Valley created the first full-time jobs — a 32-machine sewing factory. About 150 people from Timbinal now live in Napa. Under Gov. Vicente Fox's "Mi Comunidad" program, which helps to form partnerships with remittance savings, they pooled their remittances with the state, providing training for managers and workers. The sewers in Timbinal are paid the area's minimum wage — 30 pesos or \$3 a day. There are nine Mi Comunidad sewing projects in Guanajuato. Remittances and a grant from Sutter Homes Wineries, where some of the village's migrants work, gave the village running water. It should be emphasized that few purely farming and ranching communities have made the switch to industry on their own, in part because going to the United States is such an easy alternative.

Interior Mexican cities and states are aggressively seeking maquiladoras and other foreign investment to create jobs, and more firms are responding because of high wages and living costs along the border. For example, Hermisillo, the capital of the Mexican state of Sonora, had 326 maquiladoras employing 96,000 workers in summer 1999 at an average weekly labor cost of \$28, half of the weekly wage on the border. Sonora, once known as an exporter of beef and shrimp, is rapidly becoming a manufacturing center via maquiladoras — Ford has an auto assembly plant in Hermisillo.

A team of Mexican and US scholars, organized as the Binational Study on Migration, released a report in 1997 that emphasized that the same demographic and economic factors that in the late-1990s were producing high levels of Mexico-US migration may lead to less migration by 2005-2010. Mexico in 1997 had 1.3 million youths turn 15, and 970,000 labor force entrants.

The Mexican population growth rate peaked at 3.3 percent in 1970, when 45 percent of Mexican residents were under 15 years of age. In 1974, the Mexican government launched an enterprising program to persuade families to have fewer children, and birth rates fell

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accused the companies of overcharging migrants who remitted money to Mexico by using unfavorable exchange rates. The companies agreed to provide discount coupons to those who had wired money to Mexico since January 1, 1987, and pledged more than \$2 million (First Data) and \$300,000 (MoneyGram) to Latino community organizations in the US.

sharply in the 1980s and 1990s, so that the number of new job seekers will be 500,000 to 550,000 per year by 2010. Mexico's population is expected to stabilize at about 141 million in 2025, when the US population is projected to be 335 million.<sup>14</sup>

Second, each 1.35 percent increment to economic growth was associated with 1 percent job growth in Mexico between 1988 and 1995. If this ratio persists, then 5 percent economic growth can generate 3.7 percent job growth, or 1.1 million new jobs each year, enough to employ new job seekers and begin to reduce un- and underemployment (Mexico's economy expanded by 4.8 percent in 1998, and is expected to grow by three percent in 1999). Mexico had 13.9 million workers in formal sector jobs enrolled in the social security system IMSS in March 1999 (12.4 million permanent and 1.4 million temporary in IMSS), up from 13.1 million in March 1998. Some 800,000 jobs of all types were created in 1998. About 4.1 million of the formal jobs were in manufacturing, 2.2 million were in business services, two million were in trade, and 2.1 million were in other groups, including students. Declining migration flows combined with the increased Mexico-US cooperation symbolized by NAFTA might usher in a new era in migration management in the North American migration system.

### **Whither Mexico-US Migration?**

The INS believes that its border control strategy is working, that more agents, lights, and technology is gradually increasing the cost and difficulty of entering the US illegally, bringing to an end a century of unauthorized Mexico-US migration. Many migration experts are skeptical pointing to the results of surveys of migrants (Massey 1998) or the lack of upward wage pressures in US labor markets that hire recently arrived Mexicans (Martin and Taylor 2000).

The new border control strategy is costly in money, tensions, and lives. Some critics argue that, instead of further tightening border controls in a manner that pushes more migrants into desert areas where risks of unauthorized crossings are higher, a guest worker program

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<sup>14</sup> Fertility has dropped from seven children per woman in 1965 to 2.5 in 1998, so that there are fewer children to be supported. There is now a surge of 1.3 million young people turning 15 each year. Mexico includes those 15 and older in its potential labor force data, but the number of youth turning 15 is expected to drop to 650,000 a year in 2010.

should be implemented to permit Mexicans to work at least seasonally in the US. In theory, a guest worker program of sufficient size could stop illegal immigration — if enough guest worker visas were available, migrants would presumably have no need to pay smugglers.

US farmers have been the most aggressive advocates of a new guest worker program. Their major desire is for a program without certification, that is, without a US government agency operating the border gate. Under the current US guest worker program for unskilled farm workers — the H-2A program — a US farm employer must have his need for a foreign worker certified by the US Department of Labor, and DOL does not normally provide certification until the farmer actively recruits US workers at a DOL-determined wage, and offers workers free housing and other benefits. There are several farm worker unions, and California farmers in particular fear that, if they go through the certification process, they may be required to hire pro-union workers, or invite government inspections of their farms that uncover labor law violations.

Farmers could avoid certification in several ways, including (1) legalizing the estimated 50 percent of current farm workers who are unauthorized, or (2) using an attestation procedure to obtain foreign workers. Under attestation, the farmer asserts that he tried and failed to find US workers and this assertion opens the border gate. Enforcement comes after the workers are in the US. Both legalization and attestation are controversial — the Special Agricultural Worker program legalized 1.1 million foreigners in 1987-88, including over half who did not qualify. Few remain farm workers. The H-1B program, through which high-tech companies obtain foreign professionals with a BA or higher, is also controversial.

To overcome these obstacles, US farmers proposed a combination of quasi-legalization and a registry. Quasi-legalization would permit currently illegal farm workers to become probationary guest workers. They would have to do at least 180 days of farm work a year, and leave the US for at least 65 days each year to maintain their status. If they did at least 180 days of farm work each year for five of the next seven years, they could apply to become US immigrants. The registry proposal eliminates the need for government inspection of individual farms. Instead, legally authorized farm workers seeking jobs would register with the Employment Service, and an employer call to the new registry would largely satisfy the

recruitment requirements. If the employer requested 100 workers, and only 50 registered workers agreed to go to work, the employer would automatically be eligible to have 50 guest workers admitted.

It is not clear that the farmers' proposal is what the Mexican government and many US guest worker proponents have in mind. Mexico wants to play an active role in the enforcement of program rules and regulations, but the growers' proposal is not a bilateral agreement that offers an enforcement role for the sending country. It does not specify where additional workers would come from, nor does it require contracts that would be easily enforceable. President Clinton announced his strong opposition to a new guest worker program in 1995, saying, "I oppose efforts in Congress to institute a new guest worker or 'bracero' program that seeks to bring thousands of foreign workers into the United States to provide temporary farm labor."

### **Benefits and Costs**

There are several alternatives to a new guest worker program that adds to the supply of unskilled farm workers, including technology and trade. Economic theory suggests that labor shortages cannot persist in well-functioning markets, since wage changes will bring labor supply and demand into balance. Guest workers add to labor supply, which is the opposite of how supply and demand are usually brought together in agriculture: one shorthand indicator of a country's stage of economic development is a low share of the labor force employed in agriculture, suggesting that reducing the demand for farm labor, not increasing the supply, is the normal adjustment process.

The United States is on the verge of a new wave of labor-saving mechanization, and subsidies to spur mechanization might be preferable to the subsidies embodied in guest workers. Grape production provides an example. The US is the world's third-largest producer of grapes, after Italy and France, and 90 percent of US grapes are produced in California. California had a record 744,000 acres of grapes in 1996, including 378,000 acres of wine grapes, 277,000 acres of raisin grapes, and 88,000 acres of table grapes. In 1999, California

grape production is expected to total 5.9 million tons, including 2.9 tons of wine grapes (49 percent), 2.2 tons of raisin grapes (49 percent), and 750,000 tons of table grapes (13 percent).

The rapidly expanding wine grape industry has embraced mechanization, in part reflecting the influx of investment funds and managers from outside traditional agriculture. Between 1975 and 1995, the percentage of wine grapes harvested by machine increased from less than 10 percent to about 70 percent. Four hand harvesters can pick about one acre of wine grapes per day. A mechanical harvester, which uses a crew of five to harvest around the clock, can harvest 10 to 20 acres per day.<sup>15</sup> Workers who harvest by hand are paid \$6 to \$10 per hour; premium wine grapes are worth \$1500 per ton or \$0.75 per pound. Many hand harvesters are employed by wineries that want to protect their image, and some are represented by the United Farm Workers union.

California produced a record 82 million 21-pound boxes of table grapes in 1997; farmers received an average \$0.36 per pound. Most table grapes are field packed, which means that workers cut bunches of grapes, put them into plastic tubs, and take the grapes to the end of each row, where they are packed into boxes and taken to cold storage locations. Table grape harvesters are typically paid \$5 to \$6 per hour, plus about \$0.30 per box of grapes picked and packed. Many of the workers are women, and many are older than typical farm workers, often in their 40s and 50s. Many workers report earning \$7 to \$10 per hour, and those employed on large farms can obtain 1000 hours of work between May and October, and then draw unemployment insurance benefits.

The raisin grape industry is different. Some 40,000 to 60,000 workers are involved in the single most labor-intensive activity in North American agriculture. The raisin industry is characterized by 40-acre vineyards operated by persons in their mid-60s. These growers, represented by the Neisei Farmers League, have been in the forefront of the push for a new guest worker program — in one early 1990s survey, fewer than one-third of raisin growers were interested in mechanization (Mason 1998).

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<sup>15</sup> About 16 percent of US adults consume 88 percent of the wine drunk in the US. As with most farm products, most of the value-added in wine grapes comes after the grapes leave the vineyard. The cost of the grapes in a \$20 retail bottle of Napa chardonnay is about \$2.25, while the distributor and retailer mark up is \$10. On a \$7 retail bottle of chardonnay, the grapes cost \$1, and the distributor and retailer mark up is \$3.50.

There are three major futures for the raisin industry, and each has different labor and immigration consequences:

1. The option preferred by most of the 4,000 raisin growers is to develop an alternative to the H-2A program so that currently unauthorized workers could be hired legally without changing wages or working conditions. Between 1986 and 1996, harvest workers were paid \$0.16 to \$0.18 per 18 to 22 pounds of grapes that are cut and laid on a 30-inch-square paper tray to dry; about 4.5 pounds of green grapes dry into one pound of raisins.

Piece rate wages rose to \$0.19-\$0.20 a tray in 1998. On March 1, 1998, California's minimum wage rose to \$5.75 an hour. California's minimum wage was \$4.25 an hour in September 1996, so that the minimum wage has increased by \$1.50 an hour, or 35 percent in 15 months. If a typical piece rate increased from \$0.17 in 1996 to \$0.20 in 1998, the piece rate rose 18 percent, half as fast as the minimum wage.

The farm labor contractors (FLCs) who organize most harvest workers into crews are paid an additional 30 to 33 percent, or \$0.06 per tray, as a commission to cover worker recruitment and supervision as well as payroll taxes and provision of toilets. Most workers harvest 300 to 400 25-pound trays of green grapes per nine-hour day, for daily earnings of \$63 or \$7 per hour. If workers are employed 300 hours of work during the harvest season, they would earn \$2,100 for harvesting raisins.

2. The cooperative that handles 35 percent of the US raisin crop, Sun Maid, has developed a dried on the vine (DOV) system that permits existing vineyards to be retrofitted into separate fruiting (higher vine) and harvesting/drying (lower vine) zones. Canes are trained to grow over guide wires on the southern side of rows planted in an east-west direction. The canes are cut by machine so that the grapes can dry while still in bunches on the vine, and then the raisins are harvested by a machine outfitted with rotating fingers and a catcher, with a blower eliminating most of the leaves. One machine with two operators can harvest about 15 acres a day, equivalent to what a crew of 35 to 40 workers can harvest by hand. The southside DOV system is used by a handful of Sun Maid's 1500 growers on 400 to 500 acres; if it were adopted throughout the industry, the peak number of workers might fall to by 5/6, from 50,000 to 10,000.

3. One raisin grower has designed a high-density DOV vineyard for the mechanical harvesting of raisin grapes that turns raisin grape growing into a year-round job. Grape vines grow on so-called pergola trellising that shades the whole vineyard floor for much of the summer — in this manner, the amount of sunlight on the leaves is maximized.<sup>16</sup> The advantage of this system, used on about 160 acres, is that yields are 5 to 6 tons of raisins per acre, three times the industry average of 2 tons per acre. High-density DOV smoothes out the demand for labor — about 31 hours of labor per ton of raisins are needed, versus the usual 40 hours — and workers are employed year round rather than during a four to six week harvest period. If this high-density DOV system were widely adopted, the same quantity of raisins could be produced with one-third of today's raisin grape acreage, and the current peaks and troughs in the demand for labor would be practically eliminated.

Government guest worker and trade policies are likely to guide the trajectory of the raisin industry. Under current industry practices, there is a “labor shortage” every September as growers wait as long as possible to hand harvest their grapes thereby raising sugar levels and the value of the raisins, but also risking rain, which can fall in September. If growers want to collect insurance payments in case of rain, they must have their grapes cut and drying on the ground before a critical date (September 20 in 1998). If there were a sustained labor shortage, growers would likely divide into two groups — those willing to make the investment needed for DOV, and those who go out of business. A second factor that might change labor needs in the raisin industry is international competition. The US is a high cost producer of raisins. As non-US raisin producers such as Turkey raise their quality, lower-cost imports could force production changes in the US.

Trade, rather than labor shortages, has encouraged mechanization in orange harvesting. Florida has about 775,000 acres of oranges, which yield 300 to 400 boxes of oranges an acre. Workers climb trees that are up to 15- to 18-feet high, hand pick each orange, and place the orange into a picking sack, which can weigh 70 to 90 pounds when full. Picking sacks are emptied into field tubs or bins that hold about ten 90-pound boxes or 900

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<sup>16</sup> Most raisin growers receive water from the Fresno Irrigation District, which charges a flat price for per acre regardless of how much water is applied. For this reason, most growers use flood irrigation.

pounds of oranges. A “goat truck” picks up these 900-pound field bins and dumps them in a trailer, which then hauls the fruit to a concentrate plant.

Growers receive \$5 to \$6 for a box of oranges, or \$0.05 to \$0.06 a pound, and workers typically receive about \$0.75 for each box picked and dumped into a plastic field bin, or less than \$0.01 a pound. The average worker picks about nine 90-pound boxes an hour, for hourly earnings of \$6.75; with 1,000 hours of work each season, seasonal earnings are \$6,750. An article discussing labor shortages near the end of the 1998-99 citrus harvest discussed piece rates of \$6 to \$8.50 a bin, or \$0.60 to \$0.85 a box.

There are several ways to harvest oranges mechanically, with the tree shaker the most likely of the six approaches under development to be adopted — a metal arm grabs the tree and shakes oranges into a catching frame that unfolds around the tree. A mechanical harvester costs about \$200,000, and replaces 20 to 30 hand harvesters. The trunk-shaker harvests 240 to 480 boxes an hour, while the average hand harvester picks nine boxes an hour. The machine works best on large acreages of uniformly spaced trees that are pruned to expedite mechanical harvesting.

## **Conclusions**

International migration has great potential for disrupting orderly relations between nations, despite the fact that the number of migrants is relatively small. In a world of six billion, the number of international migrants — persons living outside their country of birth or citizenship for 12 months or more — approached 150 million in 2000, meaning that just about 2.5 percent of the world’s residents were legal or unauthorized immigrants, nonimmigrant guest workers, students, business people, or refugees or asylum seekers.<sup>17</sup>

Most of the world’s residents and migrants are in developing nations. In 1990, according to the UN, there were 66 million foreigners among the 3.6 billion residents of

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<sup>17</sup> These UN data do not distinguish foreign-born persons by their reason for migration, by their date of arrival, or by their duration of stay. The UN data also do not distinguish between people moving across borders as, for example, immigration into the US and Canada and borders moving over people, as occurred in India and Pakistan, or with the break up of Yugoslavia and the USSR. The UN defines developed countries to include Europe, the ex-USSR, the US and Canada, and Japan, Australia, and New Zealand.

developing nations, and 54 million foreigners among the 1.2 billion residents in developed nations. There were 28 countries with one million or more foreign-born persons in 1990 — they collectively included 77 percent of all foreigners — led by the US with 19.6 million; followed by India with 8.6 million; Pakistan with 7.3 million; France with 5.9 million; Germany with five million; Canada with 4.3 million; Saudi Arabia with four million; and Australia, with 3.9 million.

The number and type of migrants has increased faster than the capacity of national governments, regional bodies, or international organizations and agreements to deal with international migration.<sup>18</sup> However, several responses are apparent: increased expenditures on immigration control and new regional forums to discuss migration issues.

Migration has more often led to conflicts than to cooperation in Mexico-US relations. Leaders of both Mexico and the US expressed the hope that, by converting a migration relationship into a trade relationship, NAFTA would reduce migration disputes. This has not yet happened, largely because the migration hump has run headlong into a stepped-up effort to control Mexico-US migration. The INS changed its strategy to prevent illegal migration over the Mexico-US border in 1994, the year that NAFTA went into effect. Rather than trying to apprehend all migrants detected, the INS sought to deter attempts at entry by stationing large numbers of agents visibly along the border and using lights, fences, and other obstructions to funnel persons attempting unauthorized entry to places where they were likely to be caught.<sup>19</sup>

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<sup>18</sup> Most of the world's residents will never be migrants. Most people will live and die within the borders of one of the world's 190-odd countries without ever spending an extended period of time abroad.

<sup>19</sup> This INS strategy along the US-Mexican border is often referred to as Operation Gatekeeper, the INS name for the program along the California-Mexico border. The Immigration and Naturalization Service is one of the fastest-growing agencies in the US government—in 1999, it has a \$4 billion budget and 31,000 employees.

## Bibliography

- Craig, R. B. 1971. *The Bracero program: Interest groups and foreign policy*. Austin: University of Texas Press.
- Heckscher, E. F. 1949. The effects of foreign trade on the distribution of income. In *Readings in the theory of international trade*, ed. H.S. Ellis and L.A. Metzler, 272–300. Philadelphia: Blakiston.
- Hinojosa-Ojeda, Raul, and Sherman Robinson. 1991. Alternative scenarios of US-Mexico integration: A computable general equilibrium approach. Working Paper No. 609, Department of Agricultural and Resource Economics, University of California, Berkeley.
- Krauss, M. B. 1976. The economics of the 'Guest Worker' problem: A neo-Heckscher-Ohlin Approach. *Scandinavian Journal of Economics* 78:470–76.
- Martin, P. L. 1990. Labor migration and economic development. In *Commission for the Study of International Migration and Cooperative Economic Development, Unauthorized Migration: Addressing Root Causes*, 647–664. Research Addendum, Volume II. Washington, D.C.
- . 1993. *Trade and migration: NAFTA and agriculture*. Washington, D.C.: Institute for International Economics.
- . 1996. *Promises to keep: Collective bargaining in California agriculture*. Ames, IA: Iowa State University Press.
- Martin, P. L. and J. E. Taylor. 1996. The anatomy of a migration hump. In *Development strategy, employment and migration: Insights from models*, ed. J. E. Taylor. Paris: Organization for Economic Cooperation and Development.
- . 2000. California farm workers. *California Agriculture*. Forthcoming.
- Massey, D. S. 1988. Economic development and international migration in comparative perspective. *Population and Development Review* 14, no. 3 (September): 383–413.
- Massey, D. S., J. Arango, G. Hugo, A. Kouaouci, A. Pellegrino, and J. E. Taylor. 1998. *Worlds in motion: Understanding international migration at the end of the millennium*. Oxford: Oxford University Press.
- Massey, D.S., R. Alarcon, J. Durand, and H. Gonzalez. 1987. *Return to Aztlan: The social process of international migration from western Mexico*. Berkeley and Los Angeles: University of California Press.
- Mundell, R.A. 1957. International trade and factor mobility. *American Economic Review* 47:321–35.
- Ohlin, B. 1933. *Interregional and international trade*. Cambridge, MA: Harvard University Press.
- Schiff, M. 1996. Trade policy and international migration: Substitutes or complements? In *Development strategy, employment and migration: Insights from models*, ed. J.E. Taylor, 23–42. Paris: OECD Development Centre.

- Scruggs, O. 1961. *The United States, Mexico, and the wetbacks: 1942–1947*. Pacific Historical Review 30, no. 149 (May). Reprinted in *Selected readings on U.S. Immigration Policy and Law: A compendium*, prepared by the Congressional Research Service for the Senate Select Commission on Immigration (96<sup>th</sup> Cong. 2d Sess. 1980).
- Straubhaar, T. 1988. *On the economics of international labor migration*. Bern/Stuttgart: Paul Haupt.
- Stolper, W.F., and P. A. Samuelson. 1941. Protection and real wages. *Review of Economic Studies* 9 (November): 58–73.
- Taylor, D. 1963. How Mexico feels about the Bracero program. *California Farmer*, April 20: 3-15.
- Zabin, C., M. Kearney, D. Runsten, and A. Garcia. 1993. *A new cycle of rural poverty: Mixtec migrants in California agriculture*. Davis: California Institute for Rural Studies.

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