Whither NAFTA?
Agriculture, Autos, and Migration

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During his presidential campaign in 2016, candidate Donald Trump called the North American Free Trade Agreement “the worst trade deal ever negotiated by the U.S. government.” President Trump threatened to withdraw the U.S. from NAFTA if Canada and Mexico refused to renegotiate. Negotiations to revise NAFTA began in August 2017, raising questions about two of the sectors most affected by freer trade, agriculture and autos, as well as the future of Mexico-U.S. migration.

The North American Free Trade Agreement (NAFTA) is the first reciprocal and rules-based trade agreement between an industrial and a developing country. Canada and the U.S. signed a free-trade agreement in 1989 with little fanfare in the United States. Mexican President Carlos Salinas in 1990 proposed a similar FTA with the U.S. to lock pro-market Mexican policy changes into an international agreement and thus reassure foreign investors that Mexico was seeking to speed economic and job growth.

At a time when the Canada’s economy was the size of the California economy, and Mexico’s economy was the size of the economy of Los Angeles county, the major opposition to NAFTA was in the U.S., where presidential candidate Ross Perot predicted a “giant sucking sound” as U.S. jobs moved to Mexico. NAFTA was approved narrowly by the House of Representatives in November 1993 and went into effect January 1, 1994.

NAFTA reduced barriers to trade and investment between Canada, Mexico, and the U.S., leading to increased trade and investment in the three countries. Many U.S. firms moved manufacturing facilities to Mexico to take advantage of lower wages and relatively fast truck transport between Mexico and the United States. Millions of trucks cross the Mexico-U.S. and Canada-U.S. borders each year, and so many move goods from Monterrey Mexico to southern Ontario that U.S. Interstate 35 through the American Midwest has been dubbed the NAFTA superhighway.

As shown in Figure 1, Mexico-U.S. trade rose and so did the U.S. trade merchandise trade deficit with Mexico, to $64 billion in 2016, similar to the U.S. trade deficit with Germany and Japan. President Trump vowed to reduce U.S. trade deficits with other countries as part of his “America First” program. Even though the U.S. trade deficit with China, $347 billion in 2016, was over five times larger than the deficit with Mexico, NAFTA re-negotiations have put the Mexican trade deficit in the spotlight.

After five rounds of NAFTA negotiations between August and November 2017, the major issues were the U.S. demand to raise the North American content of goods that trade freely among the three countries and to sunset the agreement after five years unless all three countries agree to continue NAFTA.

Agriculture

The U.S. exported farm commodities worth $18 billion to Mexico in 2016, and imported farm commodities worth $23 billion from Mexico, for a $5 billion U.S. agricultural trade deficit with Mexico. The leading U.S. exports to Mexico were corn and soybeans worth $4 billion and pork and dairy products worth $2.5 billion. The leading U.S. imports from Mexico were fresh and frozen fruits and vegetables worth $11 billion, representing almost half of U.S. agricultural imports from Mexico.

Midwestern farmers producing meat and grains are NAFTA’s major agricultural winners, while Florida fruit and vegetable farmers are the major agricultural losers. Mexico’s major comparative advantage in fruit and vegetable production is climate, reflecting the fact that Mexico can produce tomatoes and other vegetables during the winter months when there is little U.S. production except in Florida. California farmers produce lettuce during the winter months in Arizona and the Imperial Valley, so the U.S. imports less than 10% of its lettuce.

Mexican export-oriented vegetable agriculture has been transformed over the past two decades, in part with U.S. capital and expertise. Many Mexican tomato growers farm under protected culture structures, which means they grow tomatoes and other vegetables under plastic in structures that make their farms akin to factories. Protected culture reduces pest and disease problem, while controlled entry and exit reinforces worker adherence to food safety protocols. Yields are up to three

![Figure 1: U.S. Trade with Mexico, 1990–2016](https://usatrade.census.gov/)
times higher for protected culture than in open fields.

Many U.S. growers and packers have partnerships with Mexican growers to produce for U.S. supermarkets. Produce supply chains are integrated in the sense that a U.S. grower-packer may sign a contract to supply produce year-round to a U.S. fast-food restaurant or supermarket chain, and then grow the requisite produce in both the U.S. and Mexico.

Mexico and the U.S. have made significant progress to establish science-based standards to evaluate the risk of transmitting pests and diseases across the border and to promote rapid trans-border shipments of perishable commodities. Re-negotiating NAFTA to favor U.S. producers and introducing a five-year sunset provision would likely reduce U.S. investments in Mexico’s export-oriented agriculture and Mexican fruit and vegetable exports to the U.S.

**Automobiles**

NAFTA helped make Mexico a major auto producer and exporter. Cars and light trucks with at least 62.5% North American content trade freely between Canada, Mexico, and the U.S., prompting most of the world’s major auto firms to make parts and assemble cars in Mexico, turning Mexico into the world’s seventh largest auto producer and fourth largest exporter. Mexico produced 3.5 million cars and light trucks in 2016 and exported 80% of them, and production is projected to increase to five million vehicles by 2023, with four million exported.

There are about 750,000 auto-related jobs in Mexico’s manufacturing sector, including 90% in firms that supply parts to highly automated assembly plants. Many Mexican auto parts are included in cars and light trucks assembled in the U.S.; most U.S.-assembled cars include at least 25% foreign content. U.S. auto makers assemble smaller cars in their Mexican plants, and import parts from Mexico for larger cars assembled in the U.S. For example, the Chevrolet Silverado, assembled in the U.S., includes more than half imported parts, including a Mexican-built engine. Mexico has 44 free-trade agreements, making it easier to import auto parts into Mexico from many countries than into the U.S.

The U.S. has proposed raising the NAFTA car-content requirement to 85%, including 50% made in the U.S. Critics of this U.S. demand say that, if adopted, auto firms may move auto parts and auto assembly plants to China and pay the 2.5% tariff the U.S. levies on imported cars. After President Trump criticized Ford for a plan to move production of its small Focus car to Mexico in January 2017, Ford announced that the Focus would be built in China.

Mexican auto and auto parts plants pay employees more than Mexico’s minimum wage of $4 a day in 2017, often $2 an hour or $1,200 a month plus overtime and benefits that range from free meals to transportation and bonuses. Most Mexican auto plants are unionized, and most auto firms sign so-called protection agreements with unions before new plants are built so that newly hired workers become union members and have dues deducted from their wages. Some U.S. unions want to promote independent unions to raise Mexican auto wages.

Supply chains for fruit and vegetables and automobiles have become integrated over the past two decades, with U.S. farms and firms investing in Mexico to produce for U.S. consumers. NAFTA renegotiations have slowed U.S. and other foreign investments in Mexico. Changes to NAFTA aimed at helping U.S. farms and firms may shrink U.S. investments in Mexico, which could slow Mexican economic and job growth.

**Mexico-U.S. Migration**

The freer trade associated with NAFTA accelerated change in all three countries. In Mexico, economic integration speeded up the movement of labor out of agriculture. In Canada and the U.S., freer trade hastened de-industrialization. Workers displaced from factory jobs in Canada and the U.S. did not move to Mexico, but some rural Mexican youth realized that, with NAFTA’s freer trade in corn and grains, they could get ahead only by leaving rural Mexico. Many migrated to the United States.

The result was a Mexico-U.S. migration hump that peaked in 2000. Rural Mexican youth were often unable to get jobs in the auto and other factories that were created in response to NAFTA since they lacked secondary school diplomas and lived far away from new auto factories and parts plants. Many rural Mexicans had better connections to U.S. labor markets than to jobs in booming areas of Mexico, prompting an upsurge in Mexico-U.S. migration.
Over 4,000 Mexicans a day were apprehended just inside the U.S. border in 2000, when the Mexican labor force increased by a million but only 350,000 formal sector jobs were created. The U.S., by contrast, was adding over 10,000 jobs each work day or 2.5 million a year. Many U.S. farm, food, construction, and service employers were eager to hire rural Mexicans with relatively little education. For example, Mexican-born workers have been at least two-thirds of U.S. crop workers for the past quarter century.

Mexico-U.S. migration slowed during the 2000–01 recession, but surged again during the U.S. economic boom of 2002–07, when Mexican-born workers were very prominent in home-building and many service sectors. By 2007, over 10% of the 120 million people born in Mexico were living in the U.S., and 60% of the estimated 12 million unauthorized foreigners in the U.S. were Mexicans.

The 2008–09 recession and stepped up enforcement on the Mexico-U.S. border slowed northward migration, making the upsurge in Mexico-U.S. migration between the early 1990s and the 2008-09 recession appear as a 15-year hump. Mexico-U.S. migration rose with the changes accelerated by NAFTA and is now below the level that might have occurred without NAFTA. As Mexico-U.S. migration continues to fall, Figure 3 illustrates the migration that is saved or avoided by freer trade and investment.

The migration hump was not anticipated by the architects of NAFTA, who believed that freer trade would smoothly reduce Mexico-U.S. migration. Mexican President Carlos Salinas predicted in 1992 that NAFTA would create enough new jobs in Mexico to absorb the rural Mexicans who were leaving agriculture. Salinas said the U.S. faced a choice of “accepting Mexican tomatoes or Mexican migrants that will harvest them in the United States.” Salinas failed to realize that the small Mexican corn farmers did not have the capital, technical knowledge, or marketing expertise to switch from producing corn to tomatoes and other vegetables. Since most rural Mexicans lacked the education needed to find nonfarm jobs in Mexico, they faced the choice of working for wages in Mexican or U.S. agriculture. Wages in U.S. agriculture were up to 10 times higher than in Mexican agriculture, explaining why many rural Mexicans moved to the U.S.

Unauthorized Mexico-U.S. migration is poised to remain on a downward trajectory due to the much smaller share of Mexicans in agriculture today, slower labor force and faster job growth in Mexico, and better education systems that prepare rural youth for jobs in Mexico. There are still many rural Mexicans eager to work in U.S. agriculture, but they mostly travel and work legally. The number of legal Mexican guest workers employed in U.S. agriculture topped 150,000 in 2017, and another 30,000 were employed on Canadian farms. The Bracero program peaked at 455,000 admissions of Mexican farm workers in 1956. If legal guest worker programs continue to expand, there could be more Mexican guest workers in U.S. agriculture in the 21st century than there were Braceros in the 20th.

Conclusions

Freer trade can be a substitute for large-scale migration in the long term, but the NAFTA experience shows that freer trade can also be associated with a migration hump, as when trade and migration rise together. The first 15 years of NAFTA were marked by one of the largest migration movements in history, bringing 10% of persons born in Mexico to the U.S., some 12 million by 2007, up from less than three million in 1990.

NAFTA promoted the integration of supply chains producing fruits, vegetables, and autos. U.S. growers and shippers partnered with Mexicans to produce tomatoes, berries, and other labor-intensive commodities in Mexico for export to the U.S., and U.S. auto firms built plants in Mexico to take advantage of lower labor costs and fast transport to the United States. Re-negotiating NAFTA is not likely to lead to a resumption of large-scale Mexico-U.S. migration, but could slow the expansion of cross-border supply chains.

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