Rural Migration News

Blog 163

JUNE 15, 2020

U.S. Farm Employment and Farm Workers

The average employment of hired workers in U.S. agriculture is about 1.5 million, and there are 2.5 million individuals employed for wages on U.S. farms sometime during a typical year. Farm employment is concentrated in three interrelated ways: by geography, commodity, and size of farm. The 10,000 largest fruit and berry, vegetable and melon, and horticultural specialty (FVH) farms in CA, WA, FL, and TX account for over half of U.S. farm employment, including a third in CA.

Some two million workers, 80 percent of all farm workers, are employed on crop farms. The NAWS finds that 70 percent of crop workers are aging Mexican-born men settled in one place with U.S.-born children. About 70 percent of the farm workers born in Mexico are unauthorized, making half of all farm workers unauthorized (0.7x0.7 =0.49). The share of the unauthorized among all farm workers would be lower, perhaps only a third, if H-2A crop workers and workers employed in animal agriculture were included in the NAWS.

What would happen without unauthorized workers? Farm worker earnings of about $14 an hour are almost 60 percent of average nonfarm earnings of $24, up from 50 percent a decade ago, and farm worker earnings are rising faster. Rising farm labor costs have led to a race in the fields between labor-saving machines, H-2A guest workers, and imports. Adjustments to rising costs vary by commodity: mechanization in raisin grapes, H-2A workers in berries, and imports in tomatoes.

Employment

There are several sources of data on farm employment. Definitions of farm worker employment and the coverage and reliability of the surveys varies. The farm labor market is sometimes described as a room of unknown size and shape, with each data source opening a window that varies in size and reliability.

The Bureau of Labor Statistics estimates that average agricultural employment was 850,000 for self-employed persons and 1.5 million for wage and salary workers in 2016, the average employment of farmers and family members declined by five percent between 2006 and 2016 while the average employment of hired workers rose 23 percent. BLS projects stable hired worker employment through 2026, so that hired workers continue to account for two-thirds of average employment in U.S. agriculture.

The most comprehensive data on workers employed by commodity is from the Quarterly Census of Employment and Wages (www.bls.gov/cew) that come from employers who pay the taxes that provide unemployment insurance benefits to laid off workers. Employers report all employees who are on the payroll for the period that includes the 12th of the month, but the wages that

Primary farm workers earned less than a full-time worker would have earned in 2016

Commodity	Share of FTE Employ	FTE Pay ($)	Primary Pay ($)	Primary Share FTE	Hourly (4) for 2080 hours
All Agriculture	100%	32,316	16,142	50%	15.54
Crops	41%	34,411	20,540	60%	16.54
Vegetables	8%	39,809	26,092	66%	19.14
Fruits	23%	31,846	16,900	53%	15.31
Nursery	6%	35,250	27,124	77%	16.95
Animals	7%	37,372	30,989	83%	17.97
Dairy	4%	36,864	31,433	85%	17.72
Crop support	51%	29,956	12,297	41%	14.40
Machine harvesting	2%	35,457	17,571	50%	17.05
Other post-harvest	10%	40,846	23,485	57%	19.64
FLCs	34%	24,589	9,026	37%	11.82

Source: EDD analysis of unemployment insurance payroll tax data

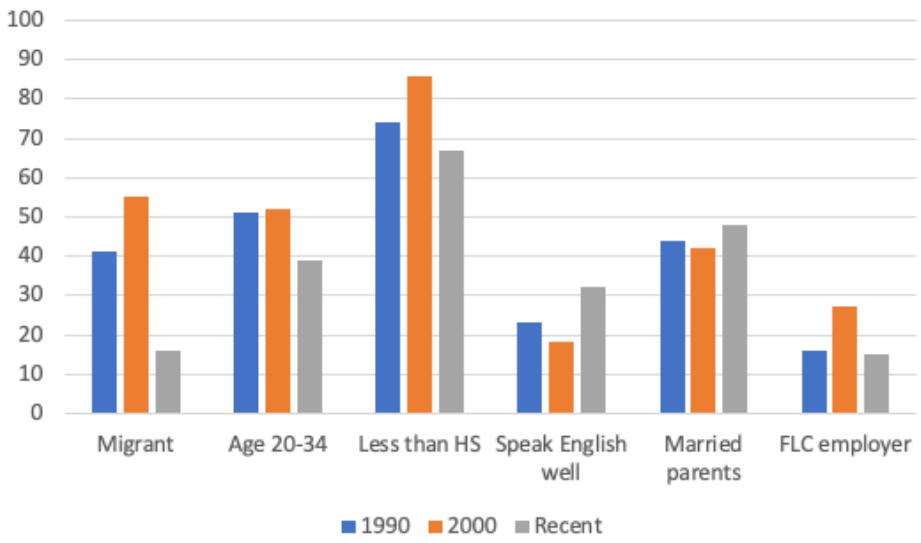
were paid to all workers who are employed. Most payrolls in agriculture are weekly, so QCEW employment data represent one week's employment. However, employers also report workers who were employed during non-survey weeks as well, making the QCEW data an estimate of year-round equivalent jobs, not the number of unique farm workers

In 2017, some 104,445 US agricultural employers (NAICS 11) paid $43.5 billion to an average 1.3 million workers, up from 95,346 US agricultural employers who paid $30.4 billion to an average 1.2 million workers in 2008. The QCEW data exclude workers who are employed on smaller farms and H-2A workers in some states, making total average employment about 1.5 million.

California has universal UI coverage, so its QCEW data include all workers employed for wages on the state's farms including H-2A workers. In 2017, some 16,252 California agricultural employers (NAICS 11) paid $14 billion to an average 422,000 workers. All Social Security Numbers reported by California agricultural employers are farm workers, and they can be assigned to the NAICS or commodity where they had their highest earnings if they had more than one job. In 2016, there were a million California farm workers, including 804,000 primary farm workers whose highest earnings were from a farm employer.

The number of farm workers exceeds the number of farm jobs due to seasonality and turnover. There is a difference between what a full-time farm worker would earn and what primary farm workers actually earn. For example, all workers with at least one job in agriculture earned 50 percent of what a full-time worker would have earned in 2016. The largest sector of employment, 115115 farm labor contractors, had the largest gap between what a full-time worker would earn, $24,600, and what workers who had their highest earnings with FLCs actually earned, $9,000.

The share of crop workers who were migrants peaked in 2000 at 55 percent



If the California ratio of two primary workers per full-time equivalent job is applied to U.S. agriculture, there would be over three million hired farm workers. However, the number of U.S. farm workers is likely closer to 2.5 million. First, the Hired Farm Work Force surveys in the 1980s, when average employment was at similar levels, found 2.5 million unique farm workers. Second, U.S. agriculture is a 50-50 industry, with half of sales from crops and half from animal commodities, while California agriculture is 85-15, with 85 percent of farm sales from crops, which offer more seasonal jobs than animal agriculture.

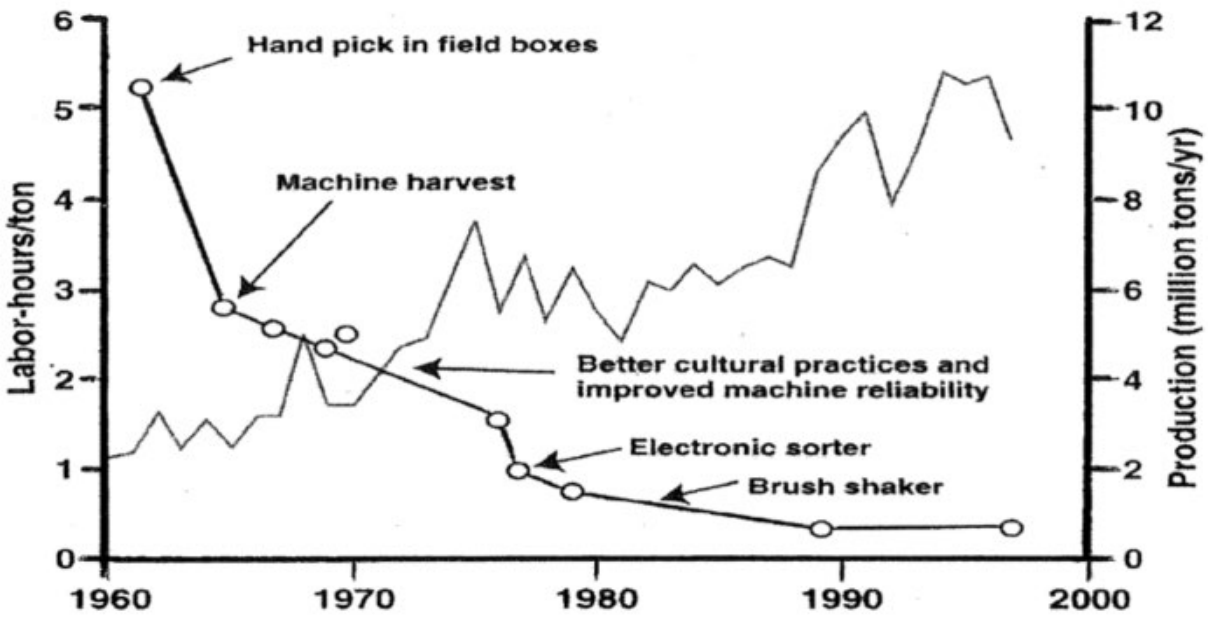
Farm Workers

The major source of data on the characteristics of farm workers is the NAWS, which covers non-H-2A guest workers employed in crop agriculture. H-2A guest workers are younger, almost 95 percent from Mexico, legal, and overwhelmingly male. There are no reliable data on livestock workers, but the limited data available suggest they are older and less Hispanic than crop workers.

The NAWS has been interviewing crop workers for three decades, and many key farm worker variables peak between 1998 and 2000 when unauthorized Mexico-U.S. migration was highest. The NAWS defines a migrant as someone who moves at least 75 miles from a usual home to do farm work, and found that the share of migrants rose from 40 percent in the early 1990s to 55 percent in 2000 before dropping below 20 percent recently. The share of workers who have less than a high school education peaked in 2000, as did the share employed by a labor contractor.

Regardless of definition, most crop workers are not migrants, and most of the migrants in the NAWS are green card commuters, who are Mexicans with immigrant visas who shuttle between homes in Mexico and one U.S. farm employer. Less than a third of migrants, and less than five percent of all crop workers, are follow the crop migrants who have at least two U.S. farm employers at least 75 miles apart. However, some farm workers are employed by labor contractors who move them from farm to farm, so some workers may commute an hour or more a day to jobs on multiple farms.

Tomato harvest mechanization reduced labor needs and led to increased production



The NAWS portrays an aging and settled workforce that lives in rented housing away from the one farm where the worker is employed. Farm work for most workers is like nonfarm work: drive or car pool to work and, at the end of the day, return to a nonfarm residence away from the workplace.

Adjustments

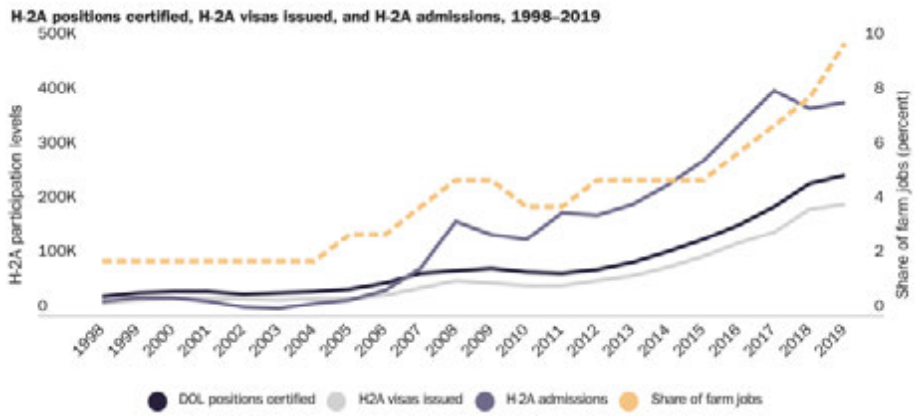
The share of labor employed in agriculture falls as per capita incomes rise in all societies, as farmers and farm workers are pushed by low incomes and wages, and pulled by higher wages and benefits, into nonfarm jobs. Rising farm wages speed up the farm to nonfarm transition by inducing the agricultural supply chain from equipment manufacturers to food processors to cooperate with farmers to reduce labor costs.

There are three major medium-term responses to rising labor costs. Labor-saving mechanization usually transforms a labor-intensive commodity into a capital-intensive commodity. Mechanizing hand tasks in agriculture requires a systems perspective, cooperation between biology and engineering, and trial-and-error innovation, as illustrated by the mechanization of the processing tomato harvest as the Bracero program ended in the early 1960s.

Instead of growing a few acres of tomatoes alongside other commodities, fewer and larger farmers expanded their tomato acreage to justify purchasing mechanical harvesters and trucks to convey harvested tomatoes to processing plants, which adapted to receiving 25 ton truck loads of tomatoes rather than 50-to 60-pound lugs. Plant scientists developed uniformly ripening tomatoes, and engineers designed a machine to cut the plant and shake tomatoes from the vines.

The first harvesting machines could not separate tomatoes from dirt and leaves, so ride-along sorters were

The number of farm jobs certified to be filled by H-2A workers doubled between FY14 and FY17



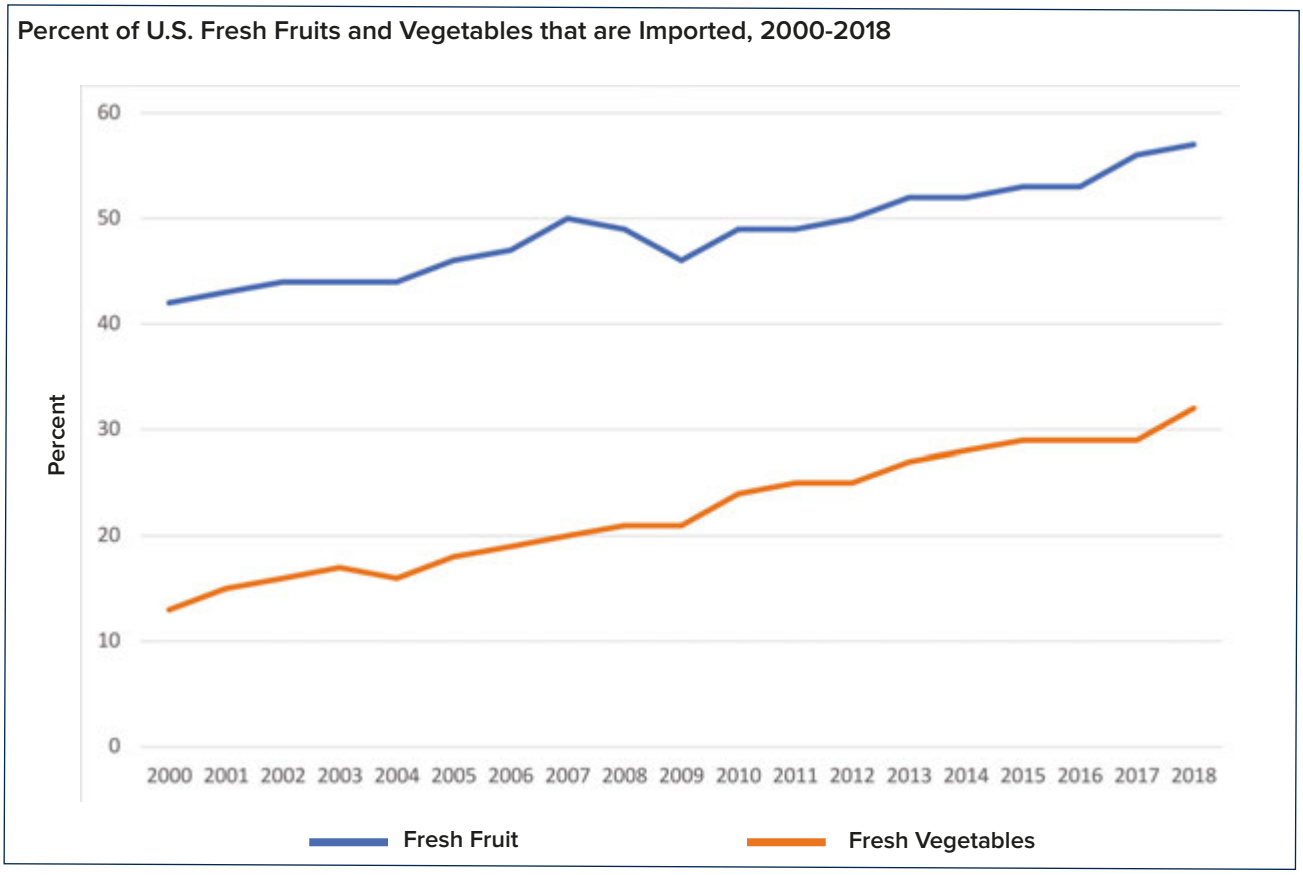
Note—DHS admissions data count each admission of an H-2A holder, so that each entry of an H-2A worker who elects to live in Mexico and commute daily to US farm jobs in border areas is counted. Admissions are NOT a count of unique workers

required until cutting and shaking systems were improved and electronic eyes separated tomatoes from debris. Contemporary predictions that farmers would have to follow their workers to Mexico were wrong, as the hours of labor necessary to harvest a ton of tomatoes fell and the number of tons produced rose.

Instead of mechanization, there could be more guest workers. The number of U.S. farm jobs certified to be filled with H-2A workers remained below 100,000 until 2014, doubled to over 200,000 in 2017, and has continued to increase; H-2A guest workers now fill 10 percent of the seasonal jobs in U.S. crop agriculture. Braceros at their peak in the mid-1950s filled 20 percent of the jobs in U.S. agriculture.

The third adjustment would be to import more labor-intensive fresh fruits and vegetables. Over 55 percent of the fresh fruit consumed in the U.S., and a third of the fresh vegetables, are imported. Mexico is the source of half of U.S. fresh fruit imports, led by avocados, and three fourths of the fresh vegetable imports, led by tomatoes. The U.S. imported FVH commodities worth an average $15 billion a year from Mexico in recent years.

Percent of U.S. Fresh Fruits and Vegetables that are Imported, 2000-2018



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