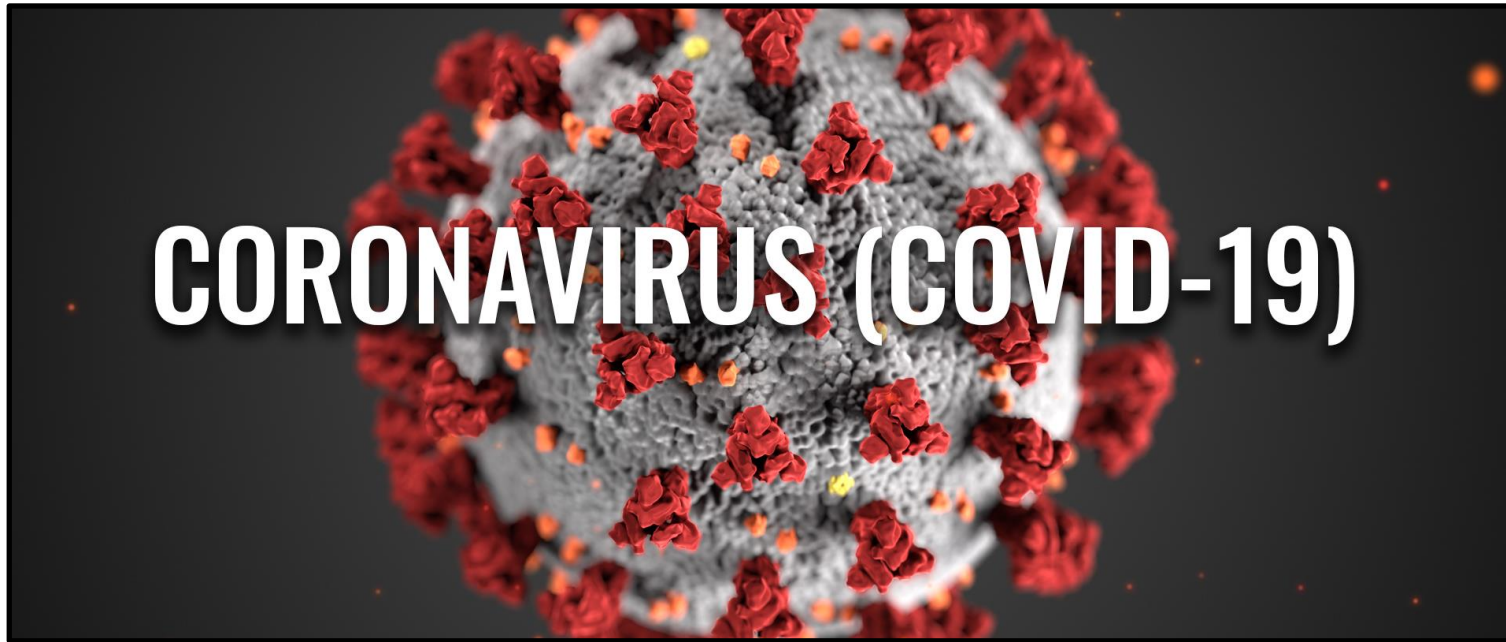


# Labor migration after Covid: Agriculture

Philip Martin: [plmartin@ucdavis.edu](mailto:plmartin@ucdavis.edu)



# Highlights 1

- **Global ag: 884 million, 27% of 3.3 billion LF**
  - **Ag = 80-20 sector: 80% of farms = 20% of output**
  - **40% hired or 353 mil: concentrated on 20% largest farms**
- **Industrial countries: <5% of labor force in ag**
  - **Hired do > 50% of farm work, more in FVH ag**
  - **Hired = vulnerable: local workers who can't find nonfarm jobs and guest workers**
- **North American ag depends on Mexicans**
  - **US: average hired employment 1.5 mil, total 2.5 mil+ workers, 80% born in Mexico**
  - **Unauthorized down, legal H-2A up to 10% of employ**
  - **Canada: Mexicans are 1/3 of seasonal crop workers**
  - **Autos vs ag: national versus migrant workforces**

# Highlights 2

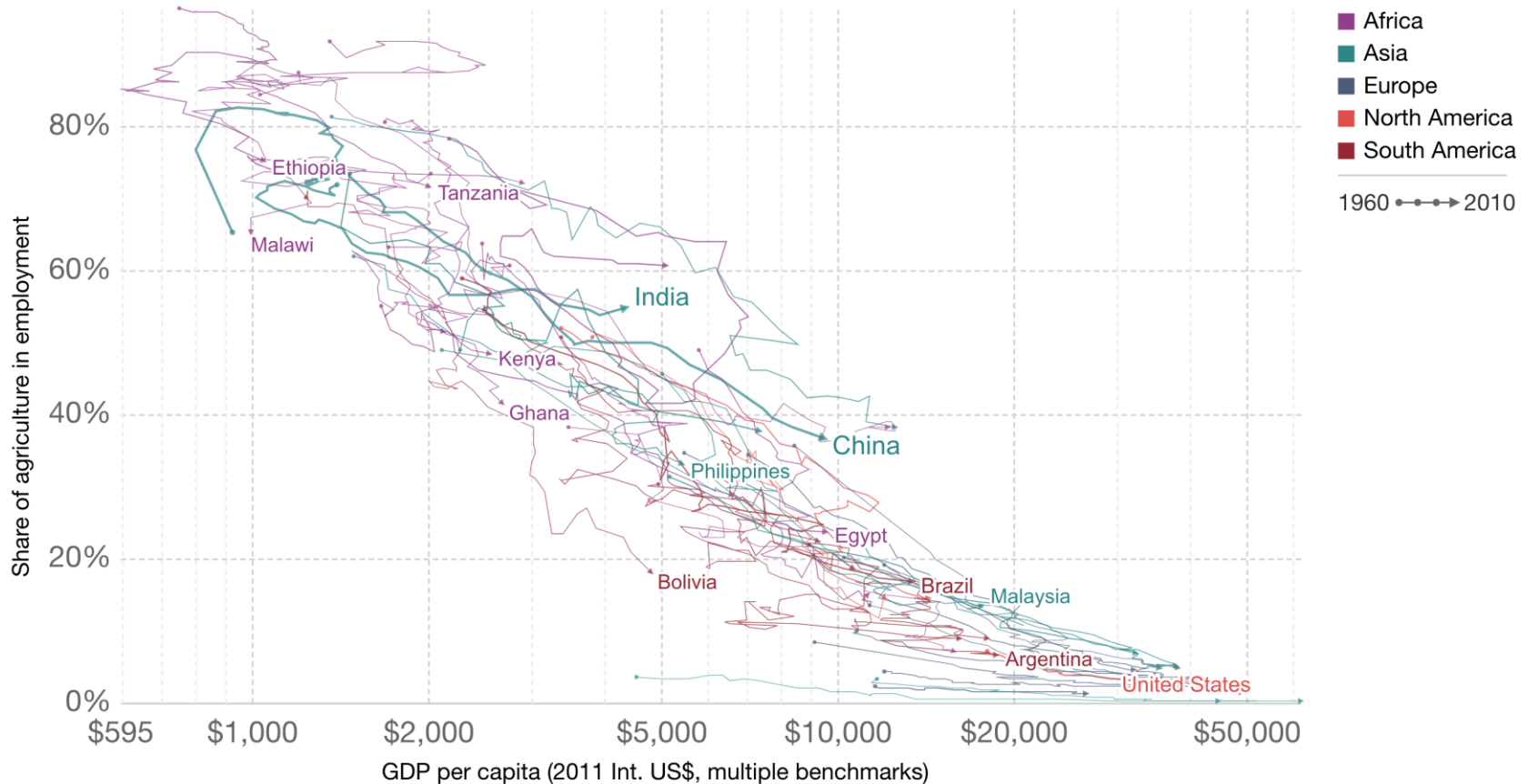
- **Covid: lockdowns to reduce spread of virus**
  - **Food essential, but uneven impacts on food sector employment: meatpacking jobs up & restaurant jobs down**
- **Do jobless workers shift within the food system?**
  - **NO: jobless rest workers lack links to farm jobs, poor temp housing, employers prefer guest workers**
  - **No BIG changes to farm wages and working conditions**
- **Impacts of Covid: accelerate trends underway**
  - **Speed labor-saving mechanization and labor aids**
  - **More just-in-time guest workers**
  - **More imports of FVH commodities**

# Share of employment in agriculture falls as incomes rise

## GDP per head vs share of agriculture in employment, 1960 to 2010

Our World  
in Data

The vertical axis shows historical estimates of the employment share in the agriculture sector. The horizontal axis shows GDP per head after adjusting for inflation (figures are in 2011 international US dollars) and uses multiple benchmarks for cross-country income comparisons.

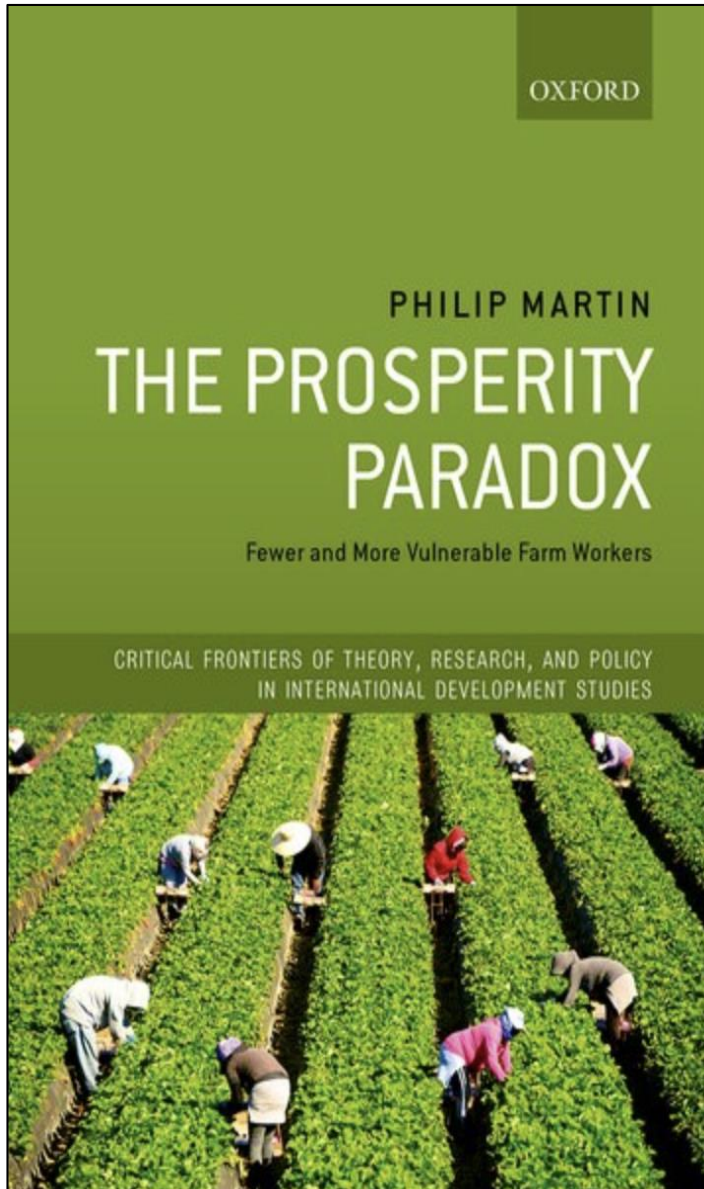


Source: Our World In Data based on Herrendorf et al. (2014) and GGDC-10 (2015), Maddison Project Database (2018), Population (Gapminder, HYDE(2016) & UN (2019)), Our World In Data  
[OurWorldInData.org/employment-in-agriculture](https://OurWorldInData.org/employment-in-agriculture) • CC BY



# The Prosperity Paradox

Share of labor in ag down, hired share up, hired vulnerable





# 3 US farm labor systems: family & slaves in early 1800s

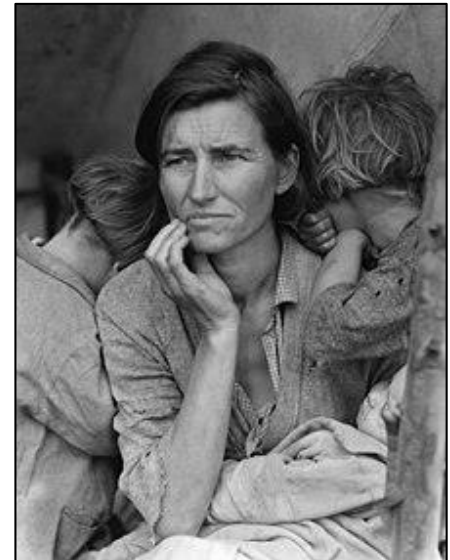


**Western states: large farms and migrants**  
**Chinese imported to build RR driven out of cities in 1870s**  
**Migrant FWs who “come with the wind, go with the dust”**





# Waves: Japanese, South Asians, Okies, Mexican Braceros





# US farm workers today: aging, unauthorized, and settled





## Most unauthorized farm workers have US-born children





# Covid-19 accelerates 3 trends underway

## Mechanization, H-2A guest workers, imports



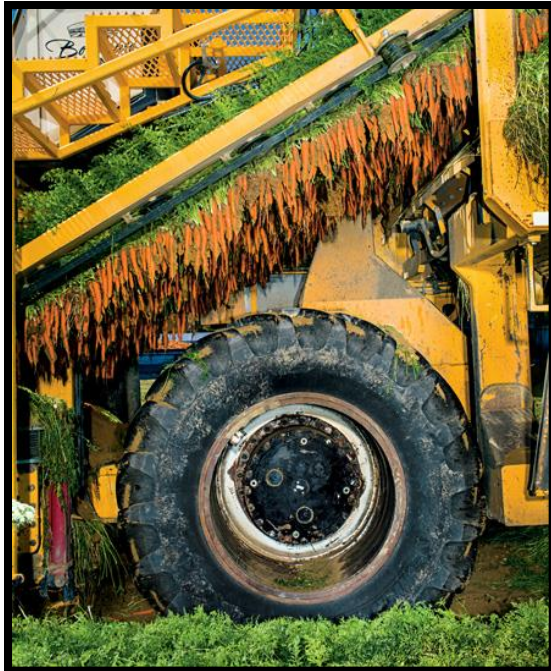


# LAT: July 21, 2017. Robots in the fields?



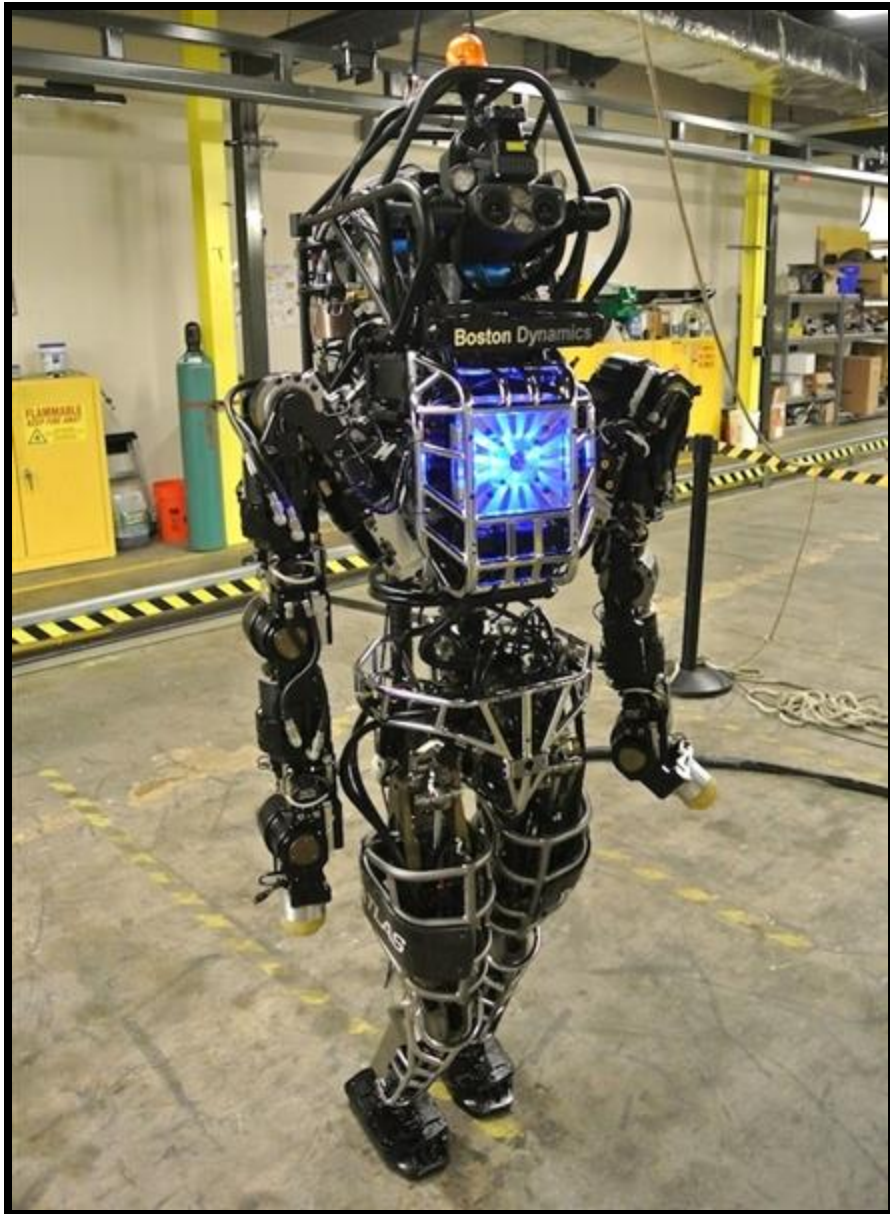


# Mechanize olives, carrots, tomatoes, nursery





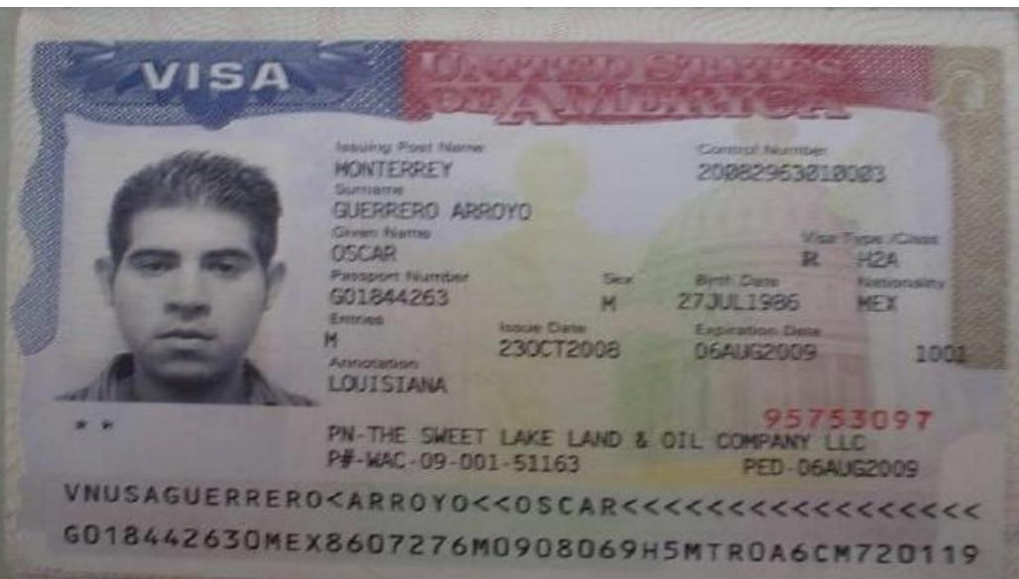
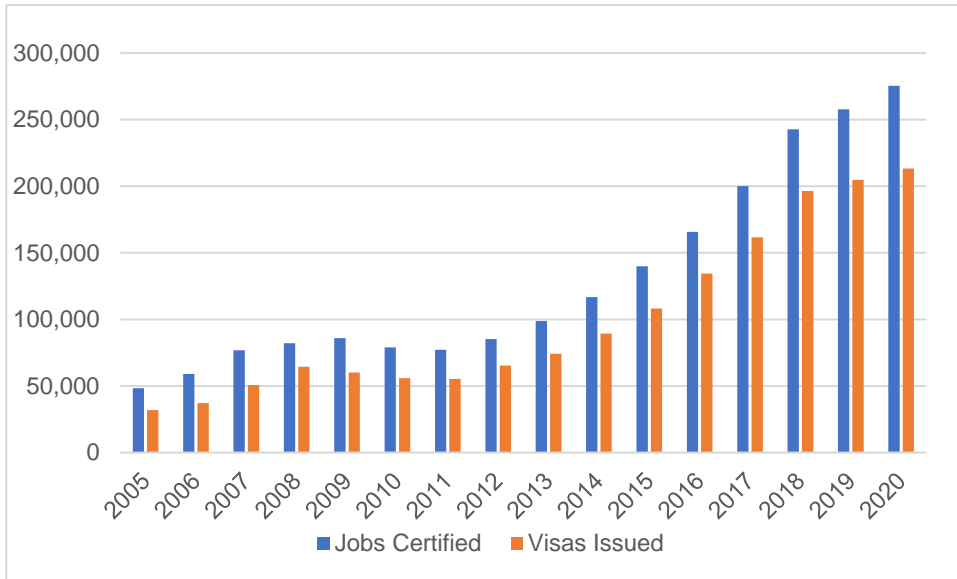
# Robots in defense vs ag: performance vs costs





# H-2A guest workers

## 275,000 jobs, 213,000 visas in FY20



Do you have questions about taxes as they relate to H-2A farmworkers?

North Carolina's Farmworker Health Insurance Team invites you to join our  
FREE WEBINAR on H-2A Workers and Federal income taxes



Speaker: Robert Wunderle of  
La Posada Tax Clinic

Tuesday, April 25th  
12:00 – 1:30PM EST

If you have questions about the webinar, please contact the Farmworker Health Insurance Team at [fhitnc@gmail.com](mailto:fhitnc@gmail.com)

This webinar will discuss H-2A workers' tax filing obligations, their eligibility to purchase health insurance under the Affordable Care Act, the different tax filing statuses, the requirements for requesting ITIN numbers, and other common questions as they relate to H-2A workers.

To participate using a PC, Mac, iPad, iPhone or Android device, please click this URL:  
<https://zoom.us/j/624602474>

Or to join by phone, please call:  
+1 408 638 0968 (US Toll) or +1 646 558 8656 (US Toll)  
Webinar ID: 624 602 474

International numbers available:  
<https://zoom.us/join?j=9151234567890>  
 AnBoM6xHUX43prdsf

Use of the Zoom services is subject to Zoom's Terms of Service (<https://zoom.us/terms>)

**H-2As cost \$20-\$23/hour; US \$15-\$17/hour**

**Just in time vs just in case**

- **H-2A: employer selects worker & uses *positive networks*. best workers bring relatives into crew & train new hires**
- **US: worker selects employer & potential *negative networks*. hire 60+ relatives to get 30-year olds**
- **H2A: reliable & loyal: willing to work extra hours. What is the value of labor insurance?**



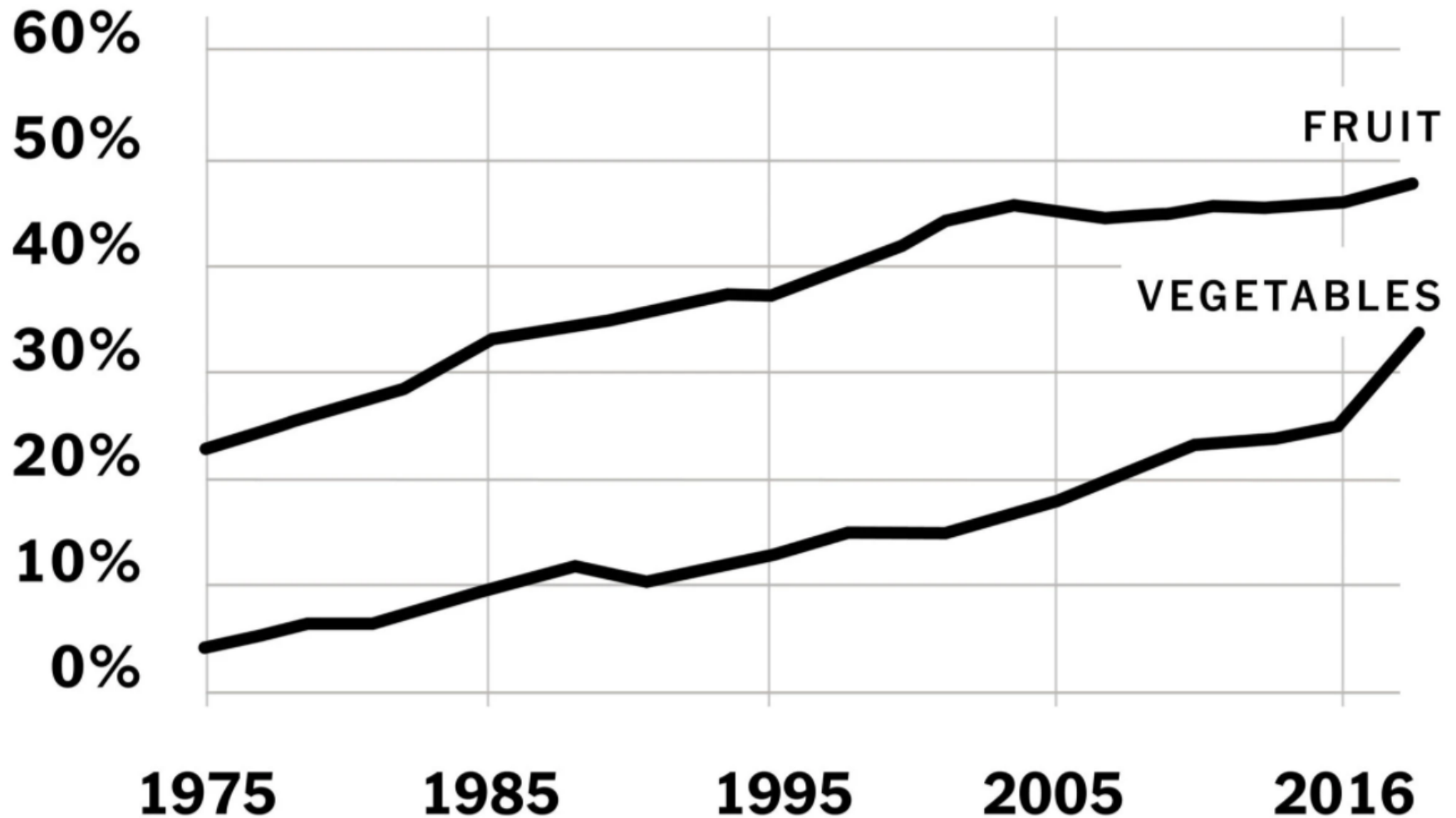
**H-2A VISA**



**H-2A VISA**



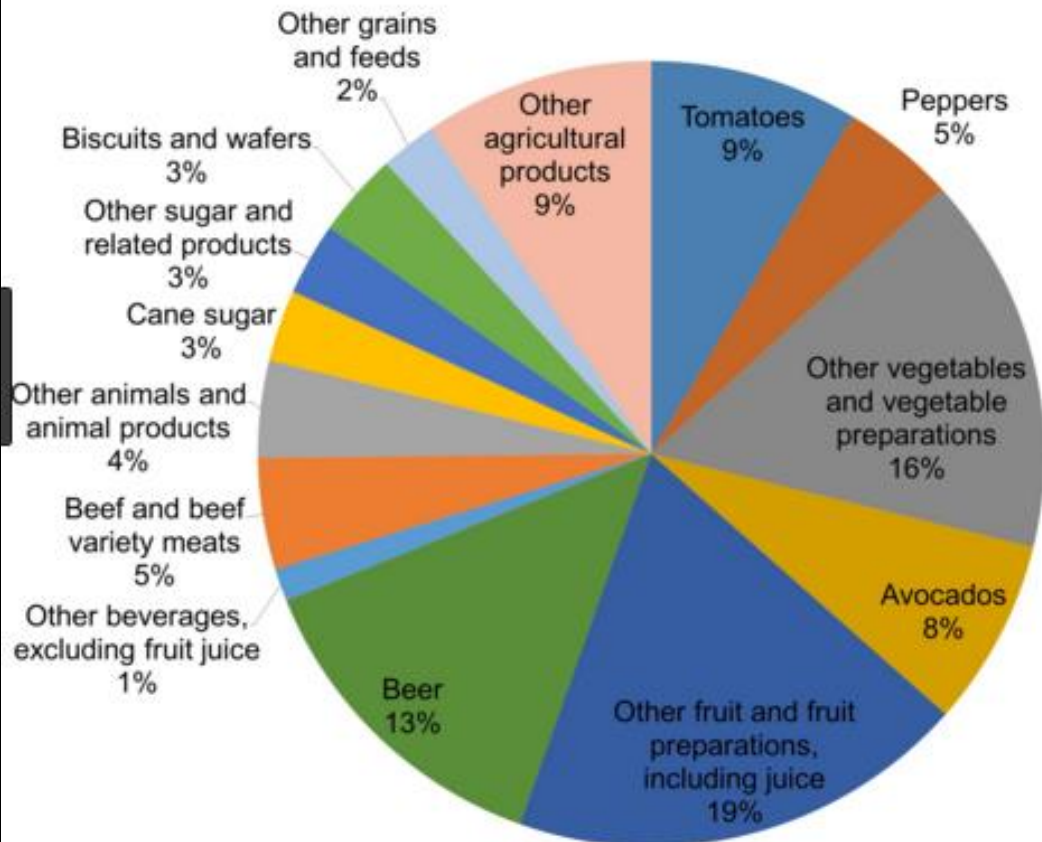
**$\frac{1}{2}$  of US fruit,  $\frac{1}{3}$  of US veks, are imported**  
**Mexico:  $\frac{1}{2}$  of fruit imports &  $\frac{3}{4}$  of veg imports**



# Big 3 Mex X: tomatoes, avocados, berries

Big 3 = half \$11 billion of US F&V imports from Mexico

More than two-thirds of U.S. agricultural imports from Mexico consisted of vegetables, fruit, or beer, in 2016





**Mexico: 25% of global tomato exports.**  
**Mexican Pres Salinas in 1990: Mexico can**  
**export tomatoes or tomato pickers to US**



# TOP TOMATO EXPORTERS 2016

COUNTRY	PERCENT OF TOTAL TOMATO EXPORTS	VALUE OF EXPORTS
1. MEXICO	25.1%	\$2.1 BILLION
2. NETHERLANDS	19.0%	\$1.6 billion
3. SPAIN	12.6%	\$1.1 billion
4. MOROCCO	6.1%	\$509.2 million
5. CANADA	4.4%	\$373.1 million
6. FRANCE	4.2%	\$355.1 million
7. UNITED STATES	4.2%	\$352.0 million
8. BELGIUM	3.4%	\$287.9 million
9. JORDAN	3.0%	\$255.5 million
10. TURKEY	2.9%	\$239.9 million
11. ITALY	2.3%	\$191.4 million
12. CHINA	2.0%	\$170.3 million
13. AZERBAIJAN	1.1%	\$92.1 million
14. INDIA	0.9%	\$76.1 million
15. BELARUS	0.8%	\$66.4 million

SOURCE: World's Top Exports, "Tomatoes Exports by Country," May 2017 (worldstopexports.com)



# **Trade offs in farm labor**

- **Mechanization: machines do not get sick but:**
  - Fixed machine costs vs variable-cost labor
  - Consumer acceptance of machine-harvested produce?
- **Guest workers:**
  - Do int'l wage gaps assure ample supply of workers?
  - Can “loyal” guest workers be kept safe & protected?
- **Imports:**
  - Trade in place of migration, but food safety & security
  - Should buyers help to enforce labor compliance on farms? How? What role for fair trade etc?
- **Food is essential, but which foods? Should govts make migration exceptions for fresh berries during pandemics?**