



# Immigration and the Pandemic Recovery

## *Current and Future Issues*

ECONOMIC OUTLOOK SYMPOSIUM  
FEDERAL RESERVE BANK OF CHICAGO  
DECEMBER 1, 2023

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*The views expressed here do not necessarily reflect the views of  
the  
Federal Reserve Bank of Chicago or the Federal Reserve*

# If you want to know more....

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Chicago**FedLetter**

October 2023, Number 486

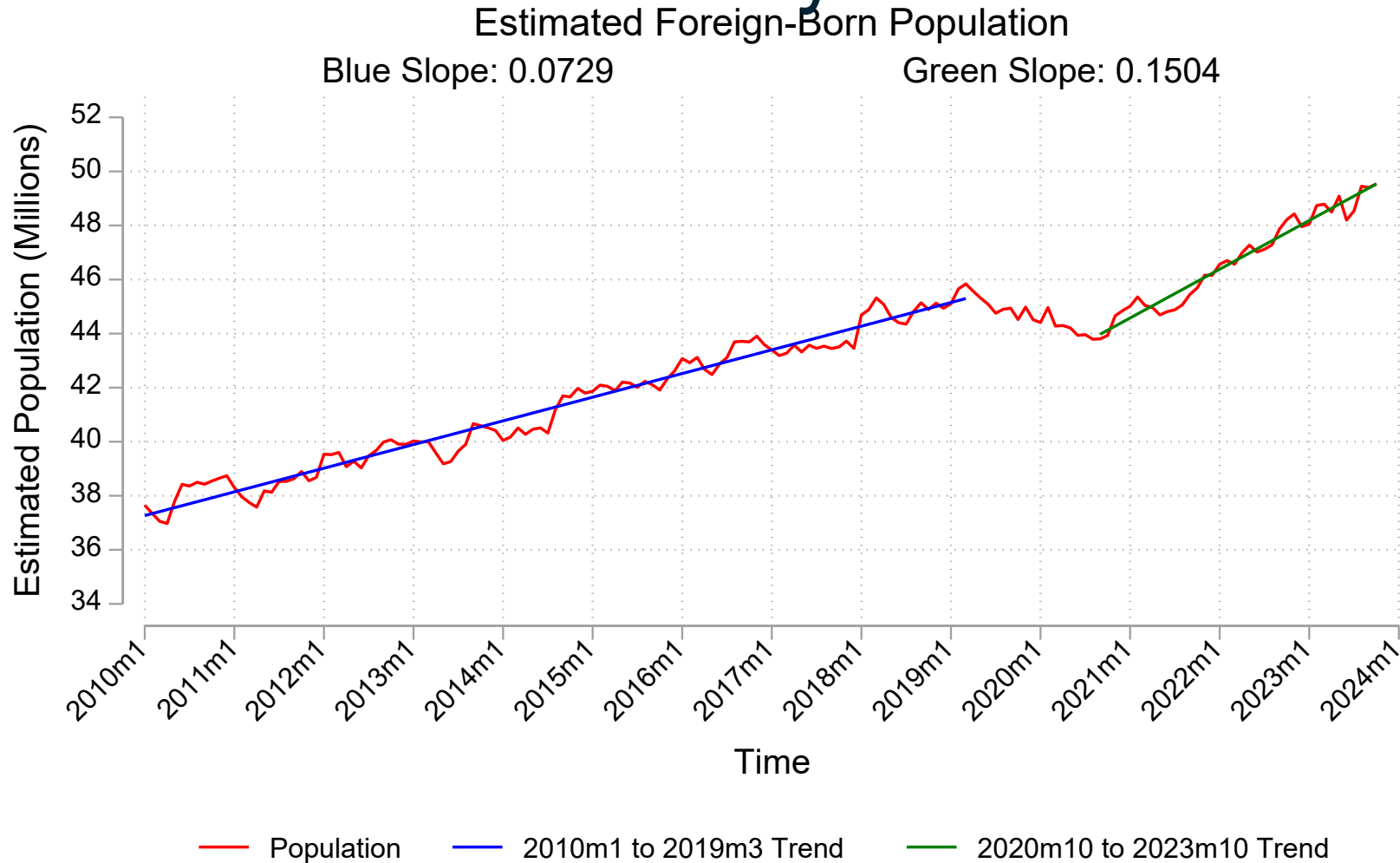
<https://doi.org/10.21033/cfl-2023-486>

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## **Immigration and the labor market in the post-pandemic recovery**

Kristin F. Butcher, vice president and director of microeconomic research, Lucas Cain, research assistant, Camilo García-Jimeno, senior economist, and Ryan Perry, research assistant

# Immigration rebound in Current Population Survey



Source: CPS via IPUMS

# Nonresponse bias

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## Abstract

Nonresponse rates have been increasing in household surveys over time, increasing the potential of nonresponse bias....We show that survey nonresponse was unique during the pandemic:

Nonresponse increased substantially and was more strongly associated with income than in prior years. Response patterns changed by education, Hispanic origin, and citizenship and nativity.... In the 2020 CPS ASEC, nonresponse biased income estimates up substantially, whereas in other years, we do not find evidence of nonresponse bias in income or poverty statistics.

Coronavirus Infects Surveys, Too:

Survey Nonresponse Bias and the Coronavirus Pandemic\*

Jonathan Rothbaum  
U.S. Census Bureau<sup>†</sup>

Adam Bee  
U.S. Census Bureau<sup>‡</sup> May 3, 2021

# Nonresponse bias

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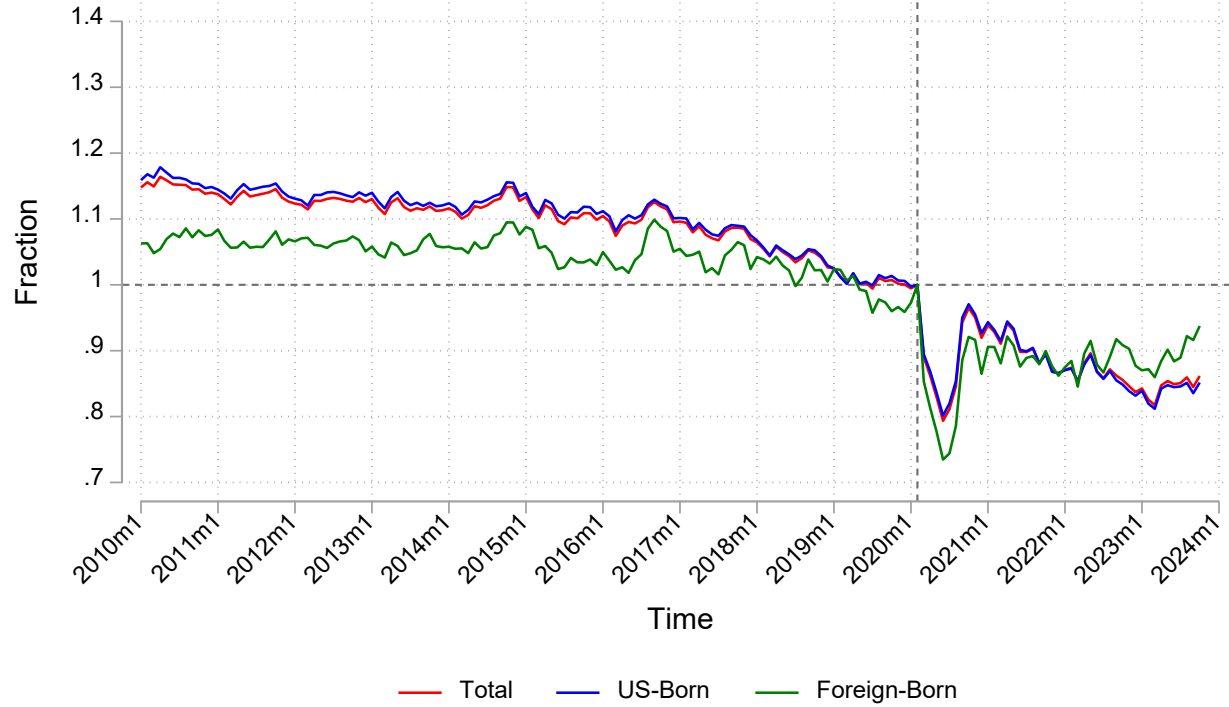
Could nonresponse bias affect estimates of the size of the foreign-born population?

What happened to nonresponse by foreign-born status?

What happened to the weights?

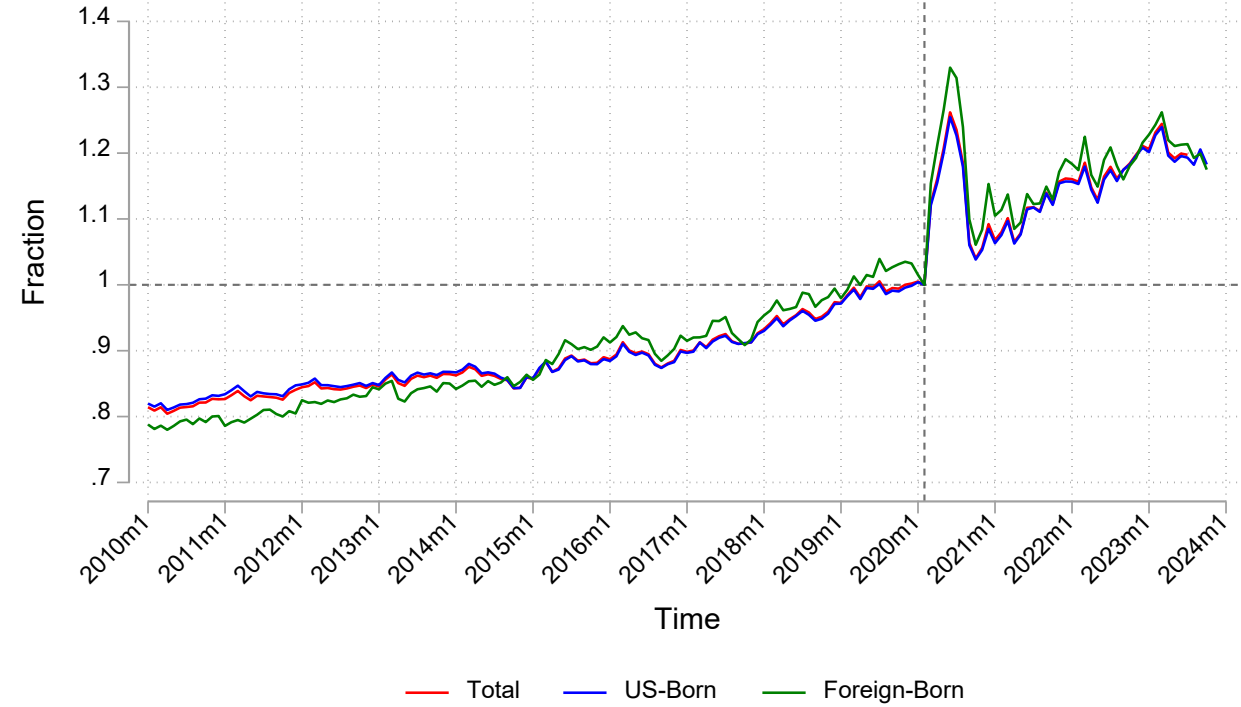
# Respondents and their weights

Sample Count February 2020 Baseline Comparison by Birthplace



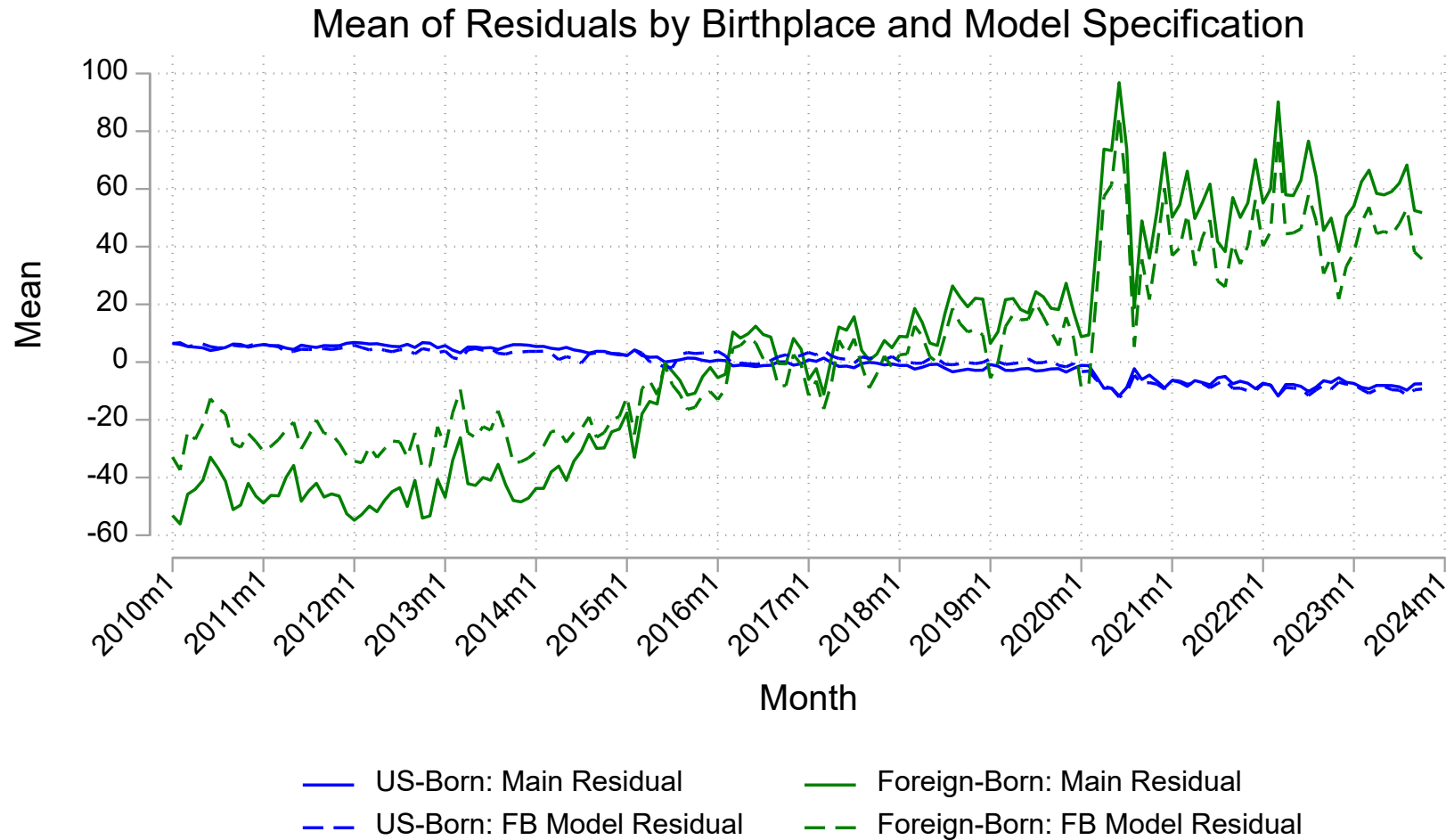
Source: CPS via IPUMS

Mean Weight February 2020 Baseline Comparison by Birthplace



Source: CPS via IPUMS

# Something changed....



Source: CPS via IPUMS

2010m1 through 2023m10. FB Model Includes All 7 Covariates

# How much does it matter?

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What if weights for foreign born responded to nonresponse similarly to the weights for the native born?

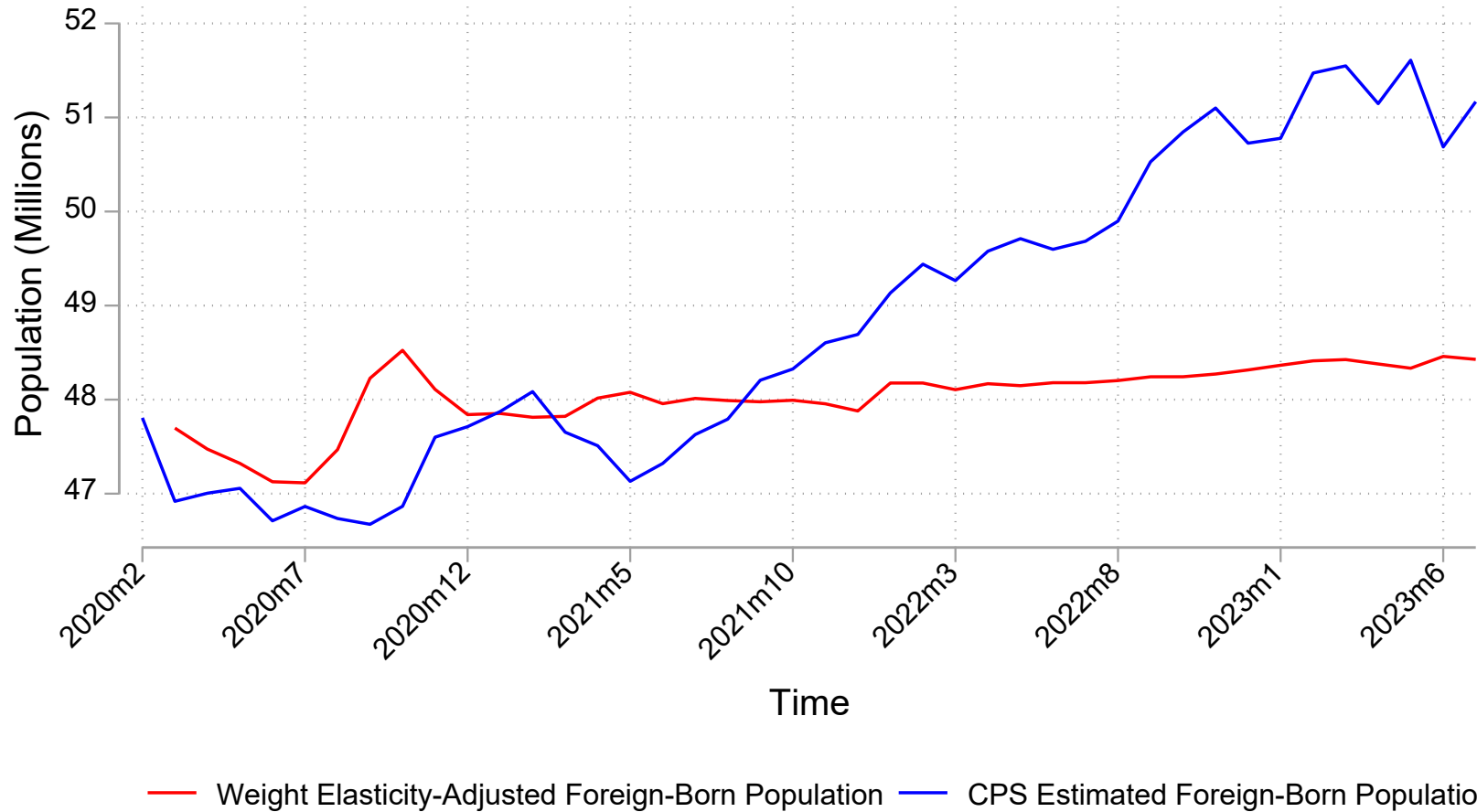
What would we estimate the size of the foreign-born population to be?

Note: we are not suggesting this is the *\*right\** count.



# The weights make a big difference

Foreign-Born Weight Elasticity-Adjusted and Estimated Foreign-Born Population  
Foreign-Born Weight Elasticity-Adjusted Population Difference: 1.313 Million



Source: CPS via IPUMS

# Estimating using Administrative Sources

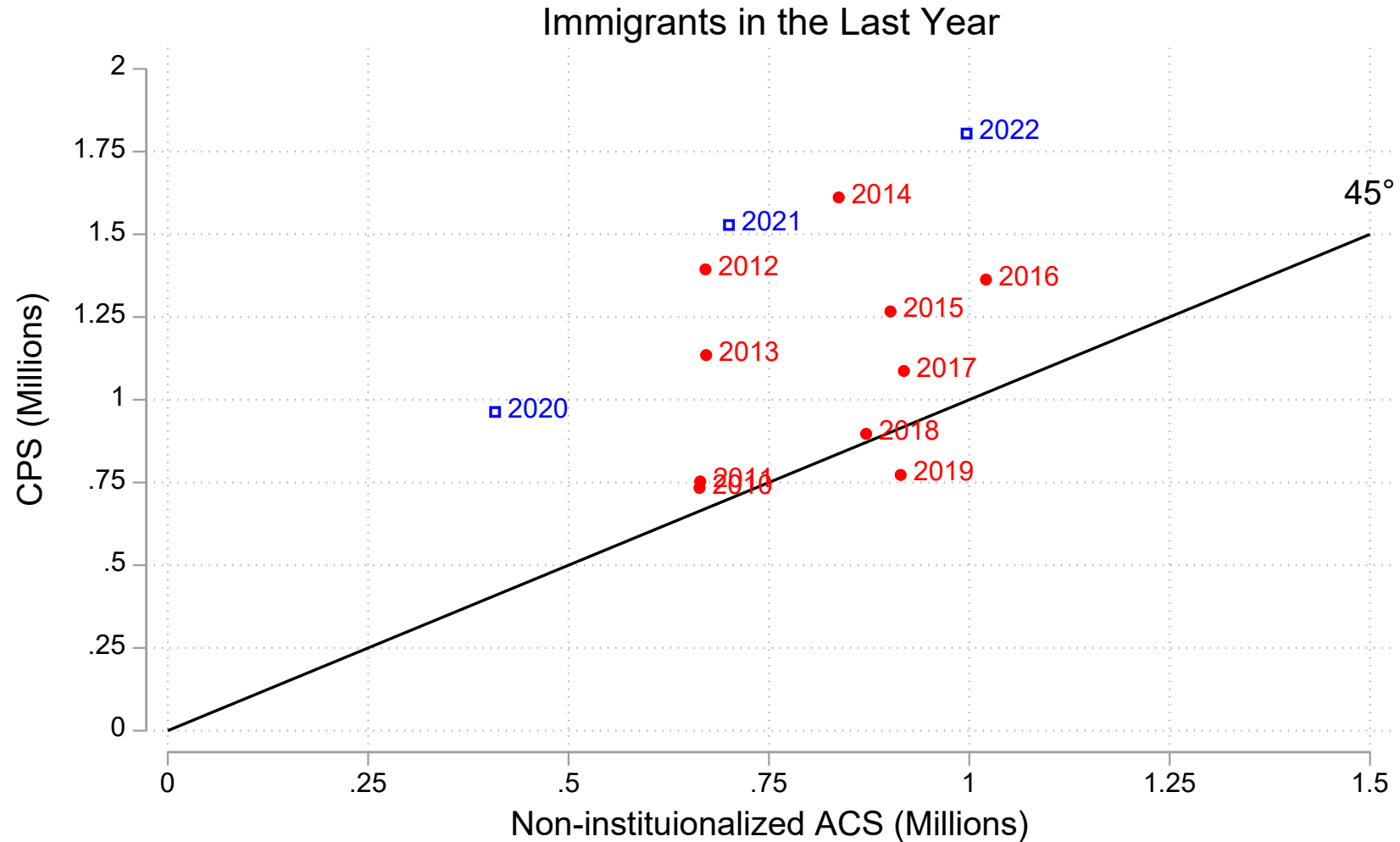
**Panel A: CPS and Model Foreign-Born Population Change (Thousands)**

4-Month Period	Immigrant Visas	Non-Immigrant Visas	Apprehensions	Inadmissibles	Asylees	Refugees	Deaths	Model Change in FB Pop.	CPS Change in FB Pop.
Oct 2020 - Jan 2021	42	544	38	72	9	4	100	-18	-1
Feb 2021 - May 2021	86	924	212	79	6	4	99	114	1425
Jun 2021 - Sep 2021	171	1328	371	112	6	4	99	285	-542
Oct 2021 - Jan 2022	143	1538	309	119	4	4	99	227	877
Feb 2022 - May 2022	167	2438	398	162	6	6	99	311	1009
Jun 2022 - Sep 2022	207	2851	454	222	6	6	99	384	318
Oct 2022 - Jan 2023	181	3034	505	286	6	6	99	386	1201
Feb 2023 - May 2023	218	3917	371	359	6	6	100	367	519
Jun 2023	52	955	101	111	2	2	34	85	-537
<b>Total</b>	<b>1267</b>	<b>17529</b>	<b>2758</b>	<b>1522</b>	<b>53</b>	<b>42</b>	<b>827</b>	<b>2142</b>	<b>4268</b>

**Panel B: Model Parameters**

Parameter	Immigrant Visa Stay Rate	Non-Immigrant Visa Stay Rate	Border Apprehension Stay Rate	Inadmissible Stay Rate	Asylum Stay Rate	Refugee Stay Rate	Death Rate
Value	1	0.0121	0.5	0.01	1	1	0.00225

# Comparisons between ACS and CPS



Source: ACS and CPS via IPUMS

# Why does this matter?

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# Why does this matter?

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Current issues

Future issues

# Why does this matter?

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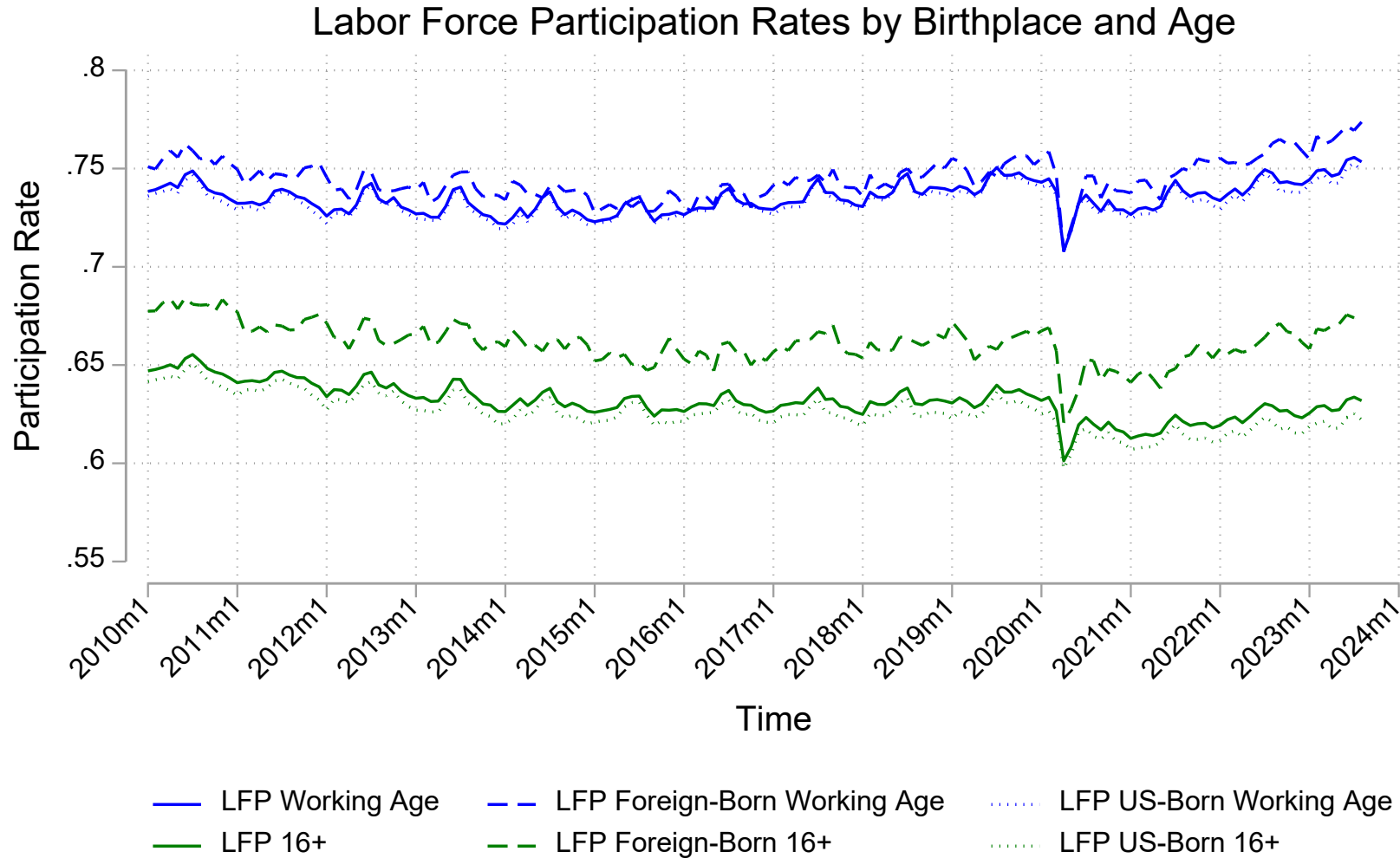
## Current issues

Immigrants have high labor force participation

Some sectors have high shares of immigrant workers

Those sectors have been especially tight in recent years

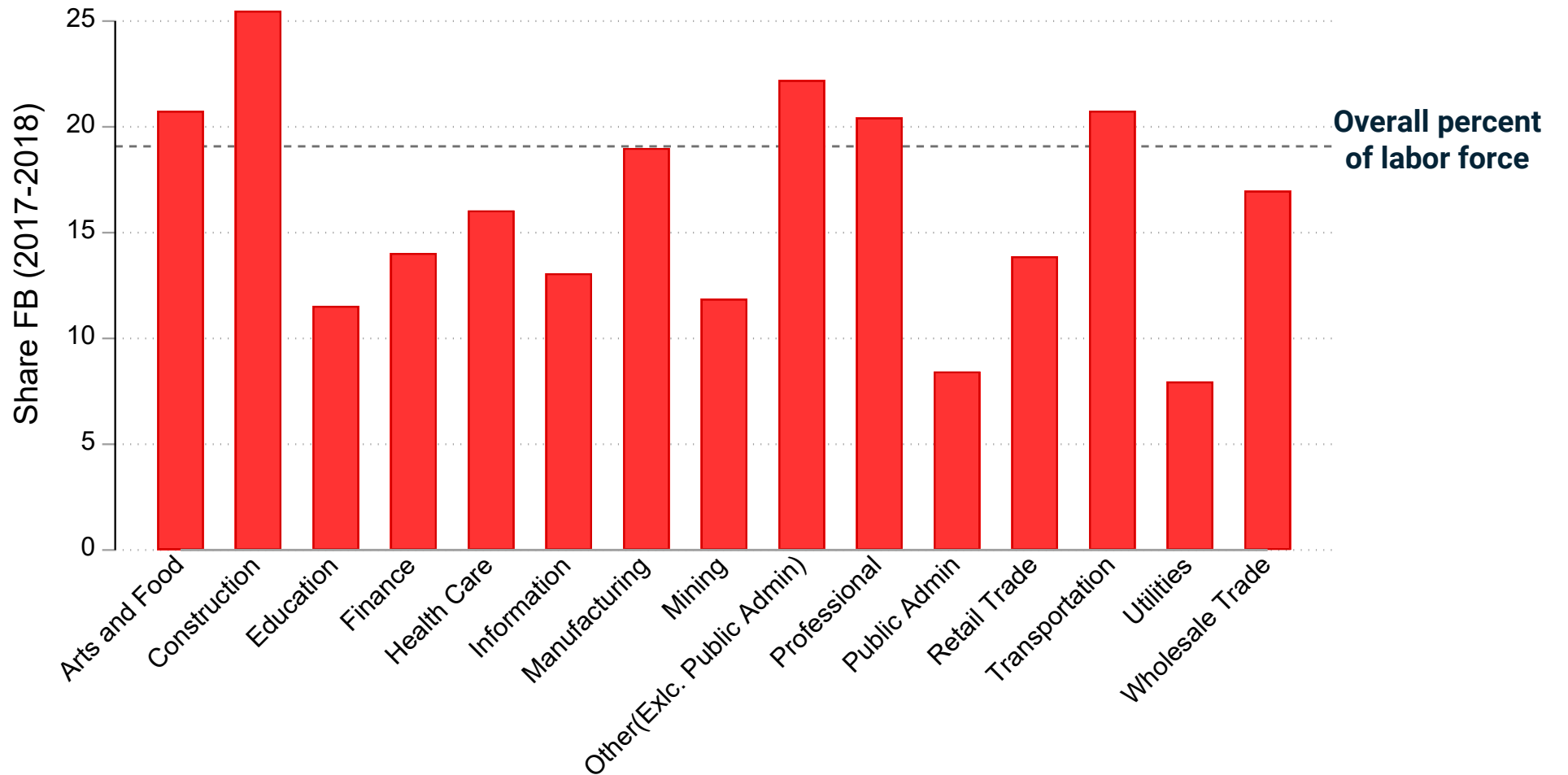
# Labor force participation rates



Source: CPS via IPUMS

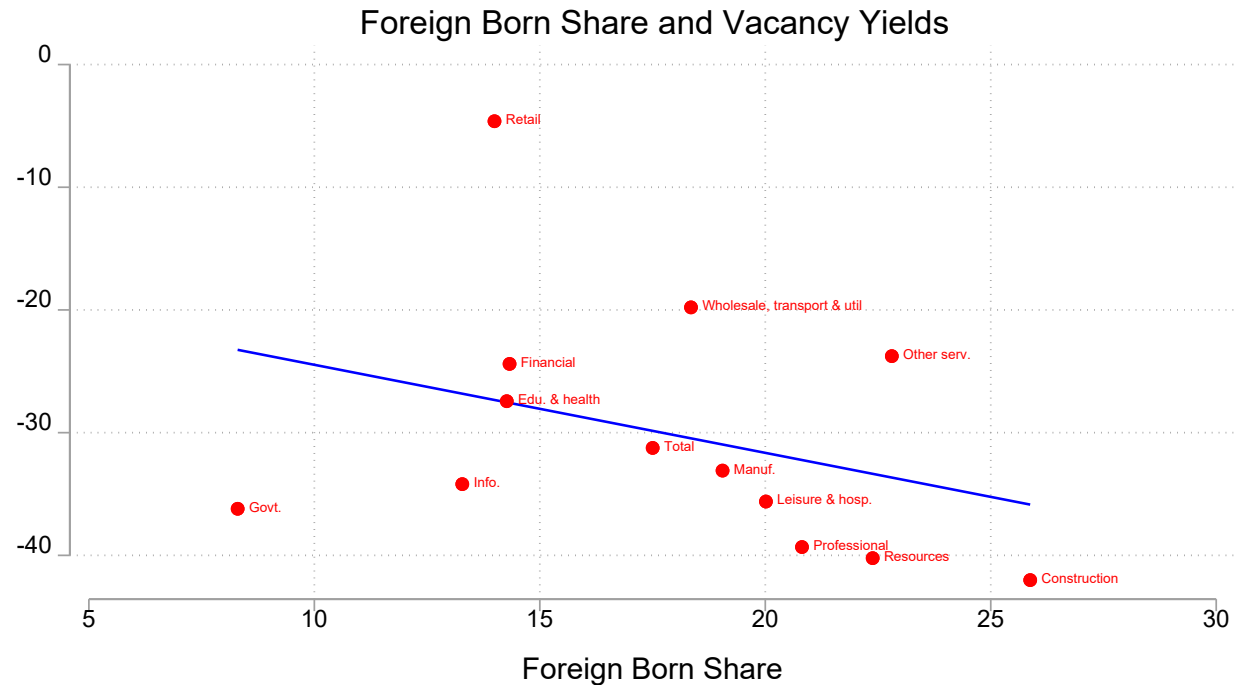
# Share foreign born

Industry Foreign-Born Share





# Labor markets are tighter in immigrant-intensive sectors



Source: CPS via IPUMS, JOLTS

Notes: FB intensity & pre-covid are 2017-2018. Post-covid is Jun. 2022 - Jun. 2023  
Growth =  $100 * (\text{post} - \text{pre}) / \text{pre}$ .

# Why does this matter?

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## Current issues

Immigrants have high labor force participation

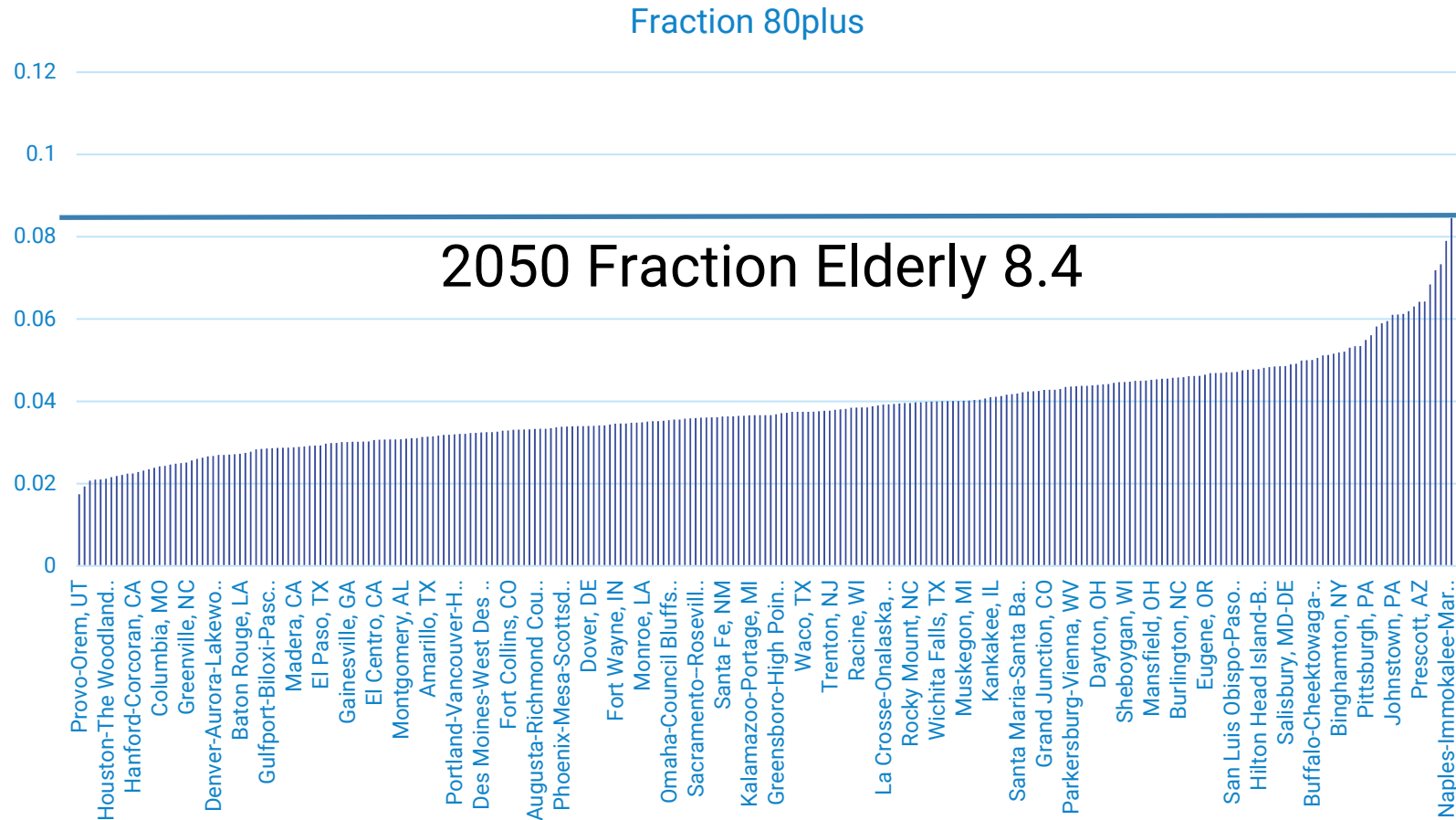
Some sectors have high shares of immigrant workers

Those sectors have been especially tight in recent years

## Future issues

The baby boom is approaching 80!

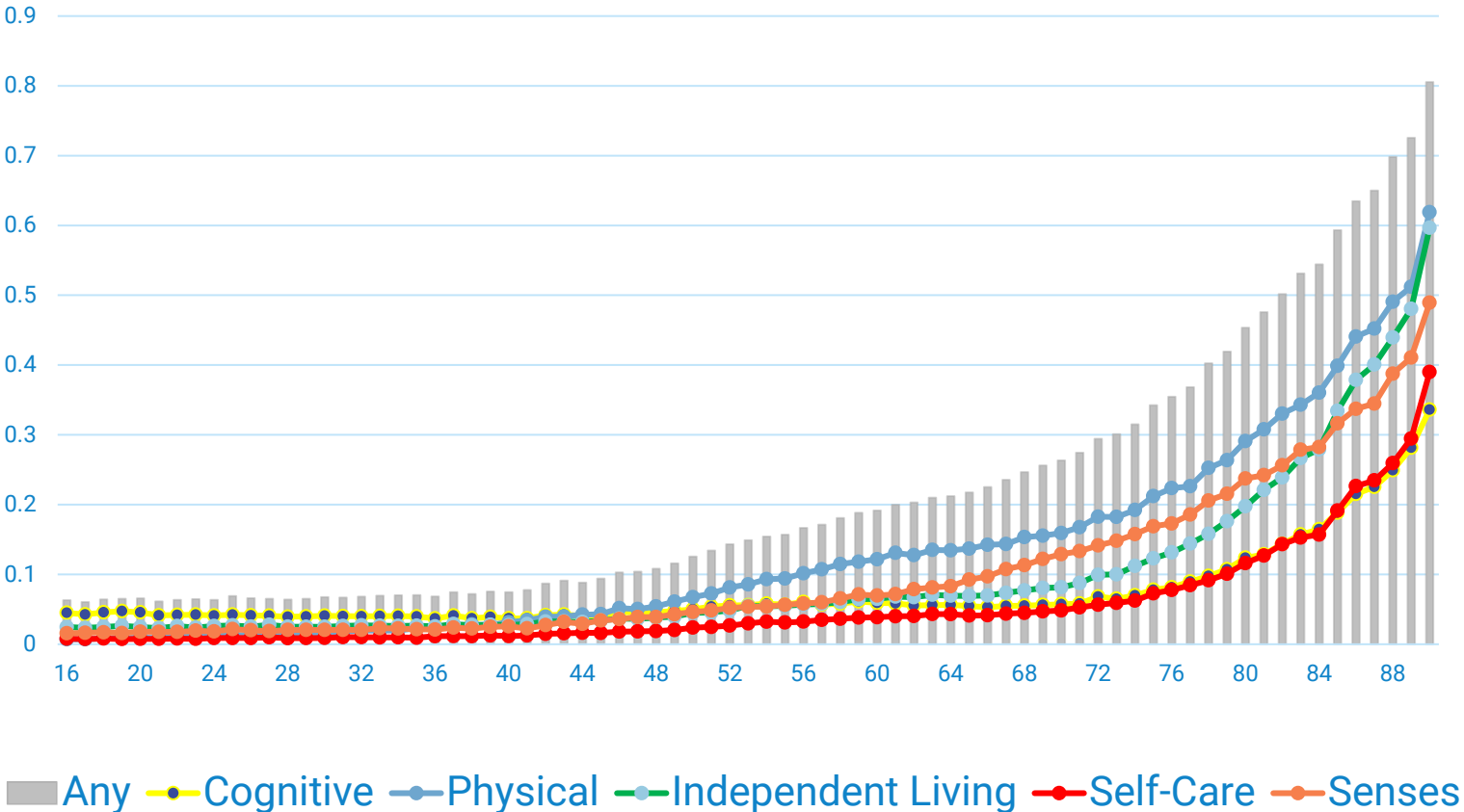
# The Baby Boom is aging



Source: Butcher and Watson (2019), Peterson Foundation US 2050 project.

# Oldest Boomers are turning 78; Youngest are turning 60

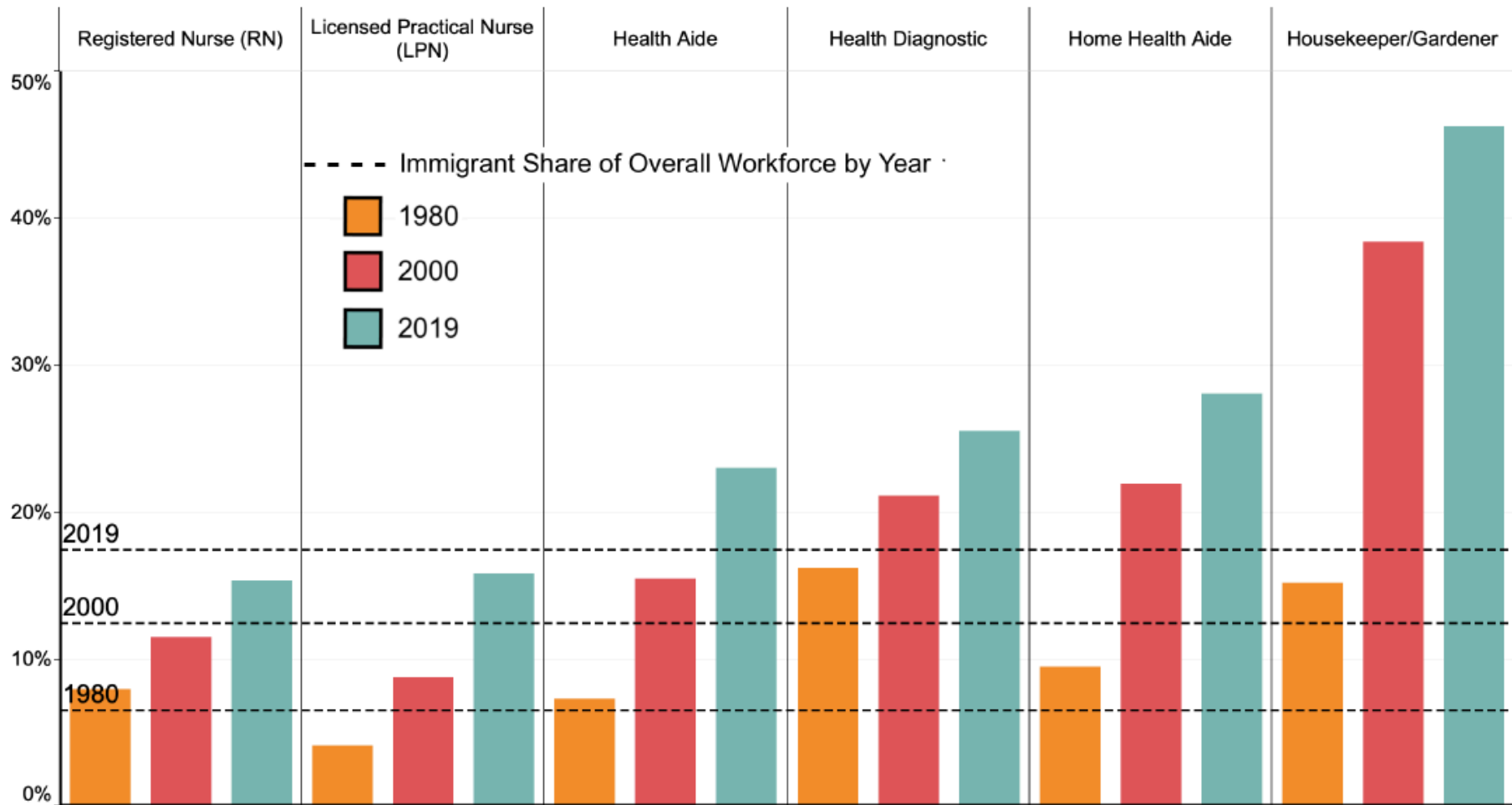
## Disability Prevalence By Age



Source: Authors' calculations 2017 American Community Survey

# GROWING SHARE OF FOREIGN-BORN WORKERS

In overall workforce and select occupations, 1980-2019



Source: 1980 and 2000 Census, 2019 American Community Survey.

EconoFact econofact.org

Note: The population represented consists of employed workers aged 16-64. Home health aides are a subset of health aides and are defined using a combination of the Census and ACS occupation and industry codes.

# Effects of aging of the baby boom

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- 87% of elderly reported (pre-pandemic!) that they would rather “age-in-place” than be in a nursing home.
- At 65, 4% of people report needing help with “self-care.”
- At 90, it is 40%.
- Caregiving burden will increase: Parental health shocks have significant negative effects on adult children’s labor market activities; particularly daughters and those who live near by. (Frimmel et al. (2020))
- Costly: 8 percent of total U.S. healthcare spending (\$286.2B) spent on nursing facilities and home health care in 2019 (CMS 2020).

# Why does it matter?

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## Current issues

Immigrants have high labor force participation

Some sectors have high shares of immigrant workers

Those sectors have been especially tight in recent years

Perhaps there is more supply-side repair to come?

## Future issues

The baby boom is approaching 80!

Research finds that immigration both reduces the likelihood of native-born elderly living in institutions, and improves health outcomes when they are in institutions.



[www.chicagofed.org](http://www.chicagofed.org)

Thank you.





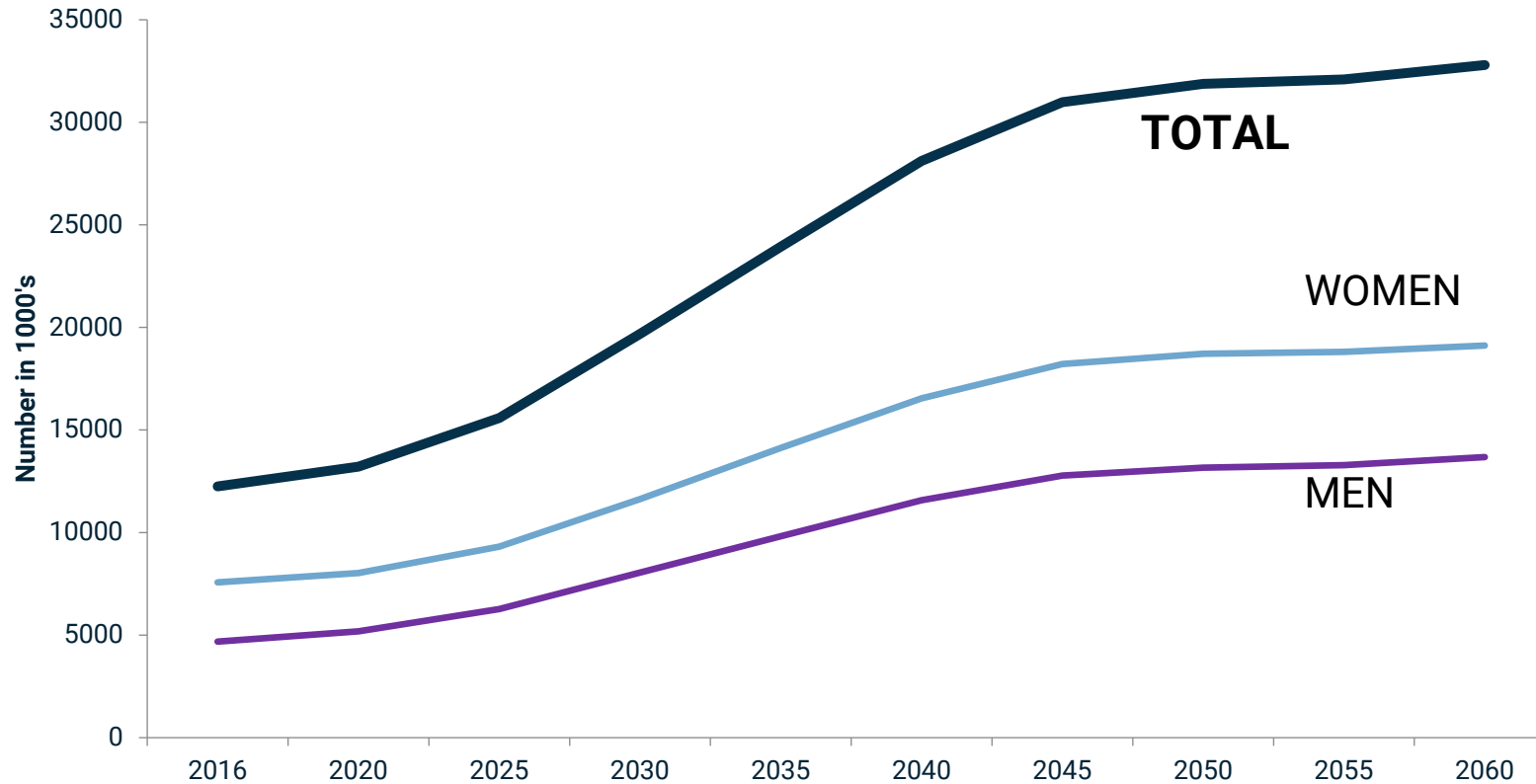
# Research Overview

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- “Immigrant Labor and the Institutionalization of the U.S.-born Elderly,” Kristin Butcher, Kelsey Moran, Tara Watson
- “Immigration and Tomorrow’s Elderly,” Kristin Butcher and Tara Watson, Peterson Foundation US 2050 project
- Summary of Findings:
  - The baby boom will have profound effects on caregiving needs.
  - In places that have received more (low-education) immigration, the U.S.-born elderly are less likely to live in institutions.

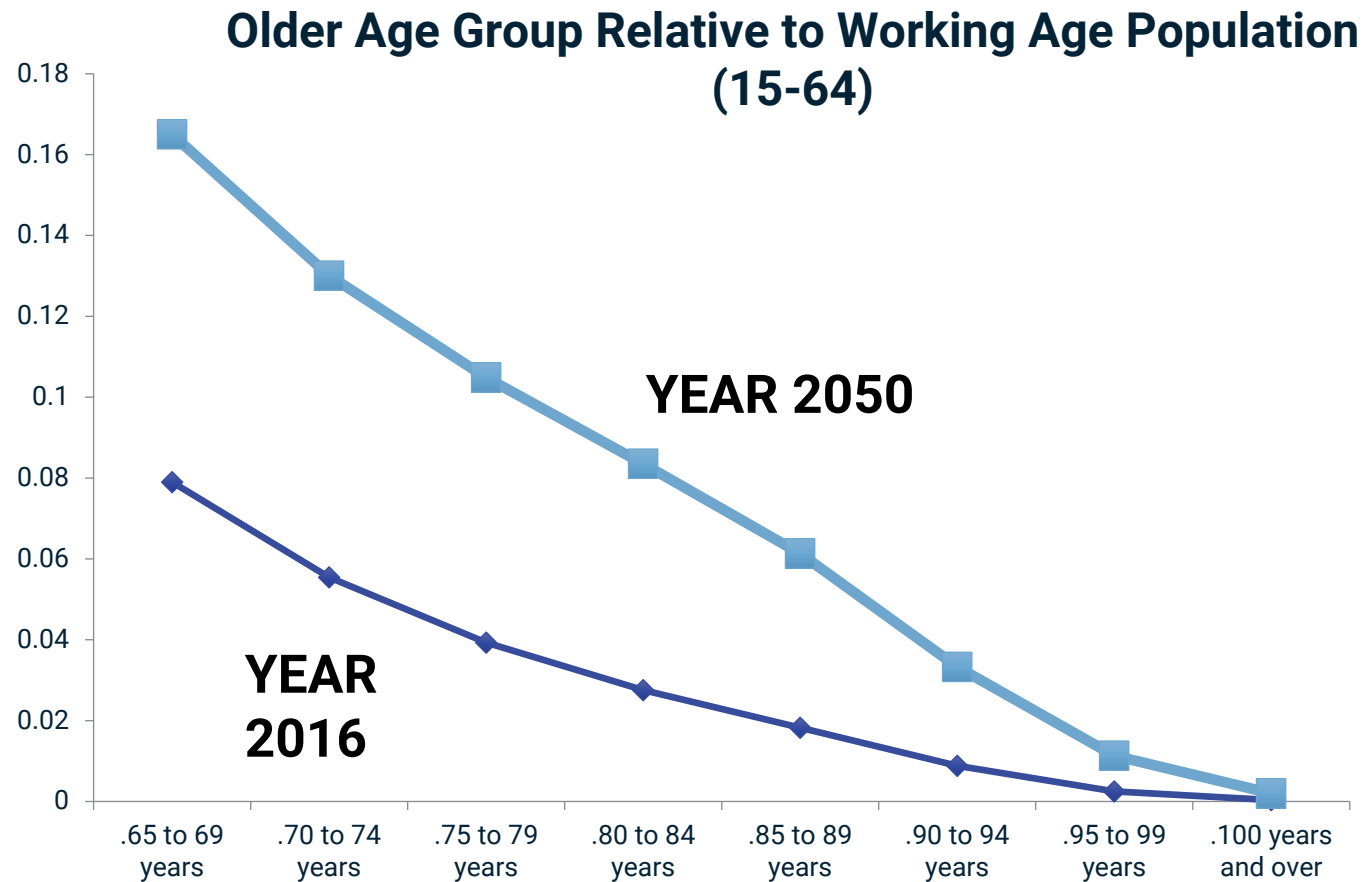
# The Baby Boom is Aging

## Projected 80+ year-olds by year



Source: From Projected 5-Year Age Groups and Sex Composition: Main Projections Series for the United States, 2017-2060. U.S. Census Bureau, Population Division: Washington, DC. Release Date: March 2018.

# The Baby Boom is Aging



Source: Census Bureau Projections

# Effect of Immigration on Institutionalization of the Elderly

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- Causal Story:



- Non-Causal Story:



# Methodology: Shift-Share Instrument

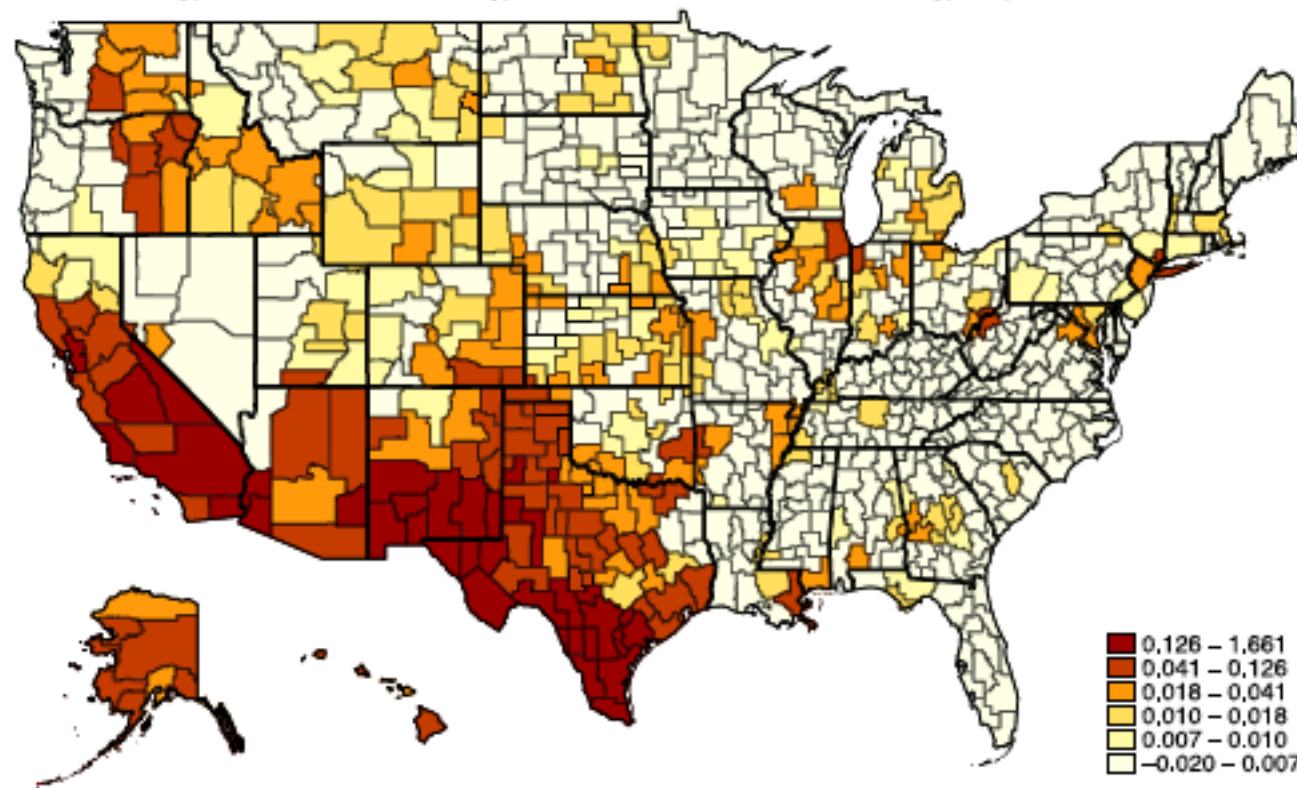
- Use prior immigrant settlement patterns to predict current share of working age population that is less-educated foreign-born (Bartel (1989), Altonji and Card (1991), and many others).

- $BaseShare_{jz70} = \frac{ImmPop_{jz70}}{ImmPop_{j70}}$

- $PredictedLEImmWAPop_{jzt} = BaseShare_{jz70} * LE\ Imm\ WAPop_{jt}$

- $PredictedShareLEImm_{zt} = \frac{\sum_j PredictedLEImmWAPop_{jzt}}{WAPop_{zt}}$

Figure 4. Predicted Change in Share Less-Educated Immigrant, 1980-2000.



# We find

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- Places with (exogenous) increases in low-education immigrant share had lower institutionalization among the elderly
  - A 10 percentage point increase in less-educated foreign-born labor share reduces institutionalization among the native-born elderly by 1.5 and 3.8 percentage points for those 65+ and 80+, respectively – a 26-29 percent effect relative to the mean.
  - These estimates imply that a typical U.S.-born individual over 65 was about 10 percent (0.5 ppt) less likely to be living in an institution than would have been the case if immigration had remained at 1980 levels.

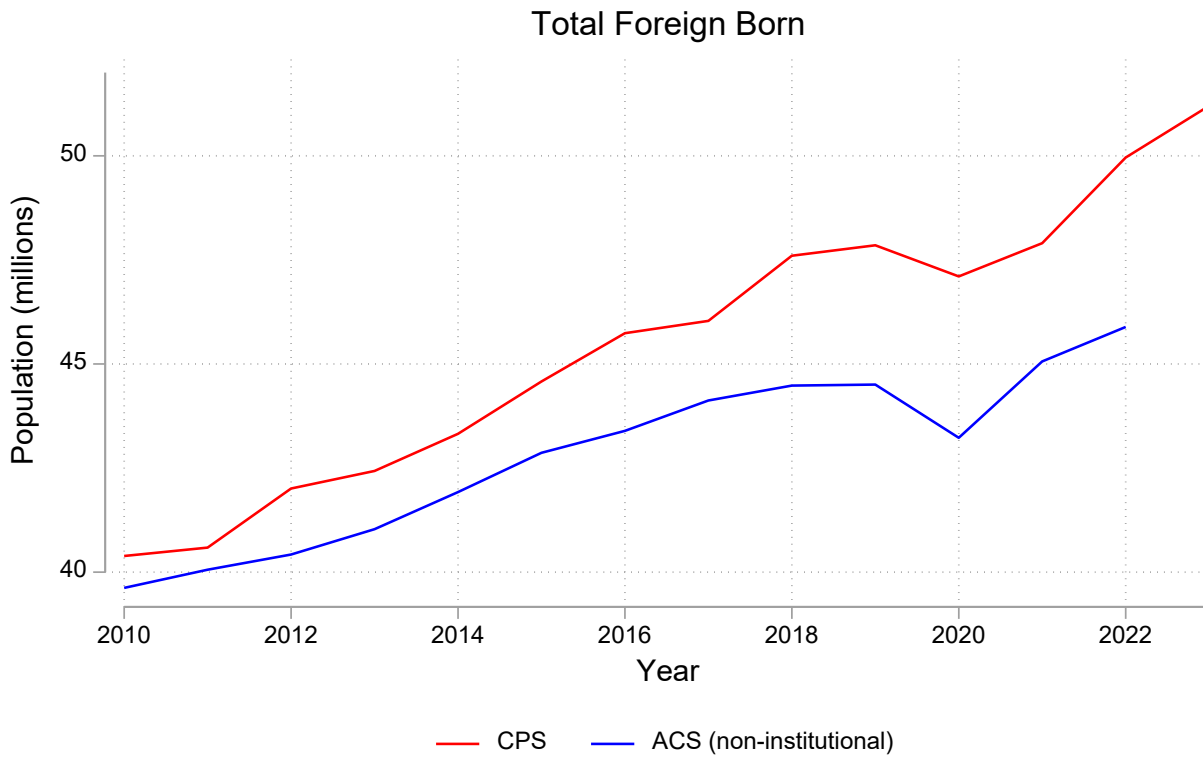


# Other research finds complementary evidence

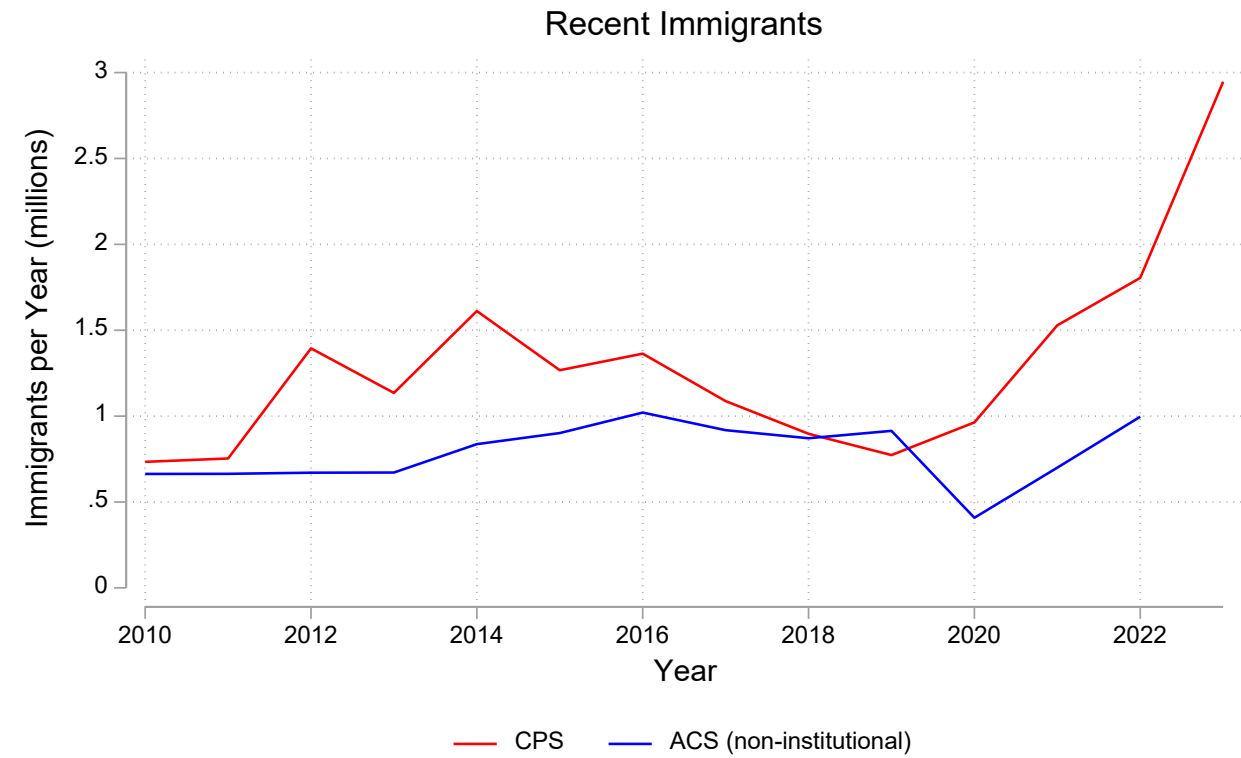
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- After reforms that allowed in more foreign care workers (in Austria) effect of parental health shock on adult children's labor supply was muted. (Frimmel et al. (2020))
- Among the elderly who are in institutions there are better health outcomes in places with an increase in low-education immigrant share of the workforce (Furtado and Ortega 2020; Grabowski et al. 2020)
  - Consistent with Stevens et al (2015) procyclicality of mortality
- Immigration of people with low-levels of education reduces the chances of the U.S.-born elderly being in institutions, and if they are in institutions, improves their health outcomes.

# Comparisons between CPS and ACS

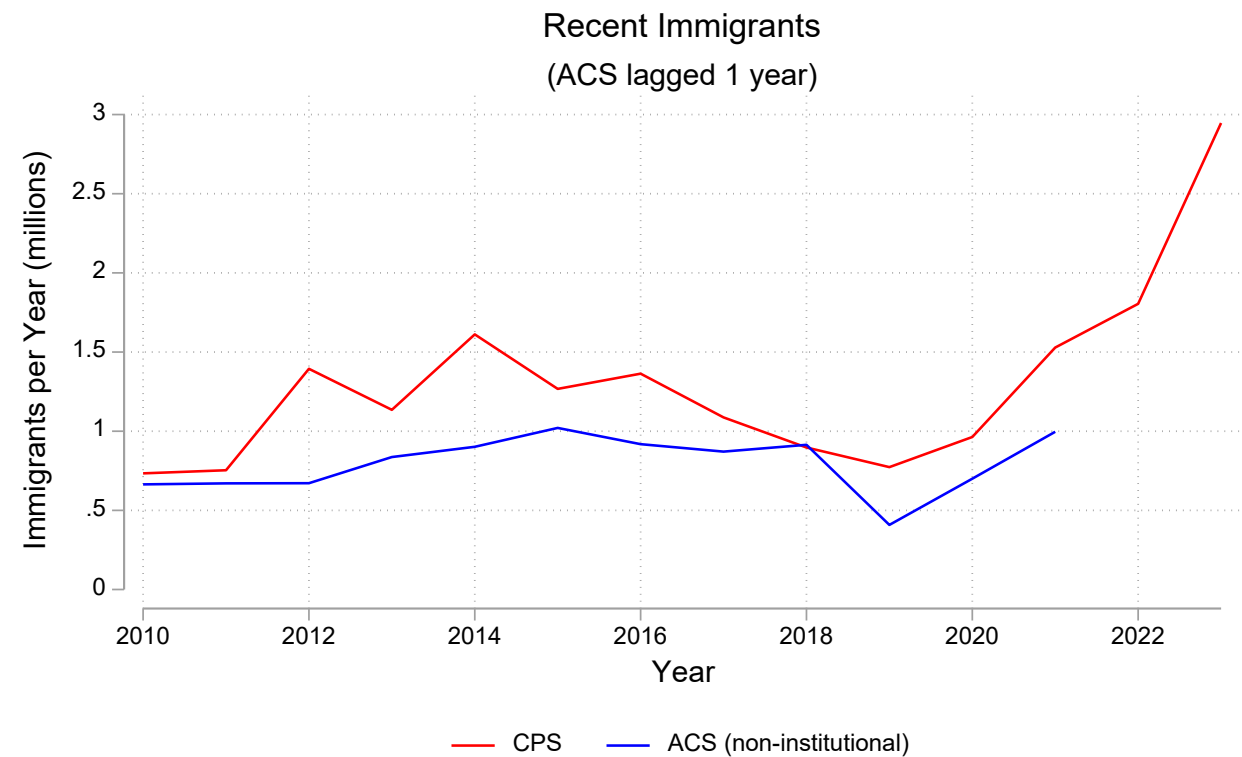
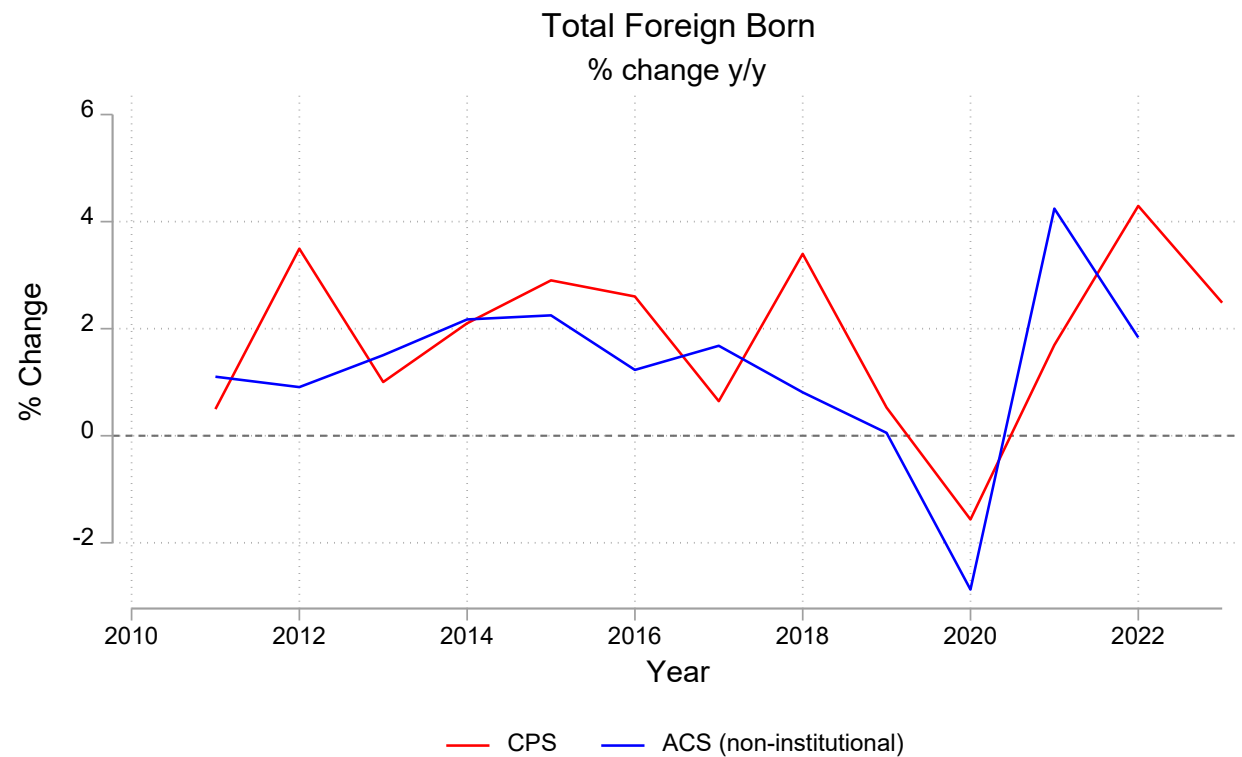


Source: ACS & CPS



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Note: 2023 CPS counts are annualized from the first 10 months



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