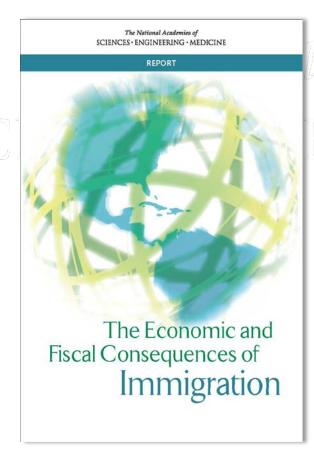
The National Academies of SCIENCES • ENGINEERING • MEDICINE

Committee on National Statistics Division of Behavioral and Social Sciences and Education



Academies of

The Economic and Fiscal Consequences of Immigration

Francine D. Blau, Cornell University, Chair

September 22, 2016

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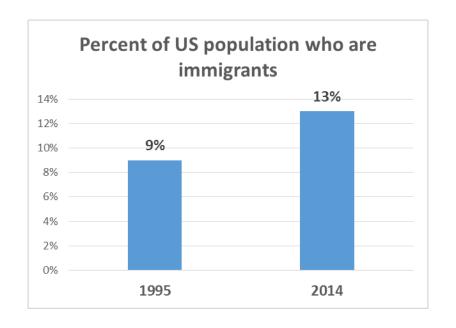
OVERVIEW

- How have immigration patterns changed recently?
- How does immigration affect the U.S. economy?
 - How does immigration impact the labor market?
 - What are the other ways that immigration impacts the economy?
- How does immigration affect public revenue and spending?
 - What are the fiscal effects on federal and state budgets at the aggregate (national) level?
 - How does immigration affect the fiscal picture in states?

How have immigration patterns changed recently?

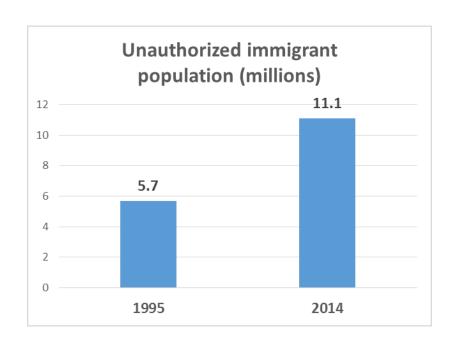


Today, nearly one in four Americans are immigrants or second generation (US-born children of immigrants)



Over the past twenty years, there was an increase in the immigrant share of the population.

Trends in the unauthorized population



Unauthorized immigrant population increased over the past 20 years...

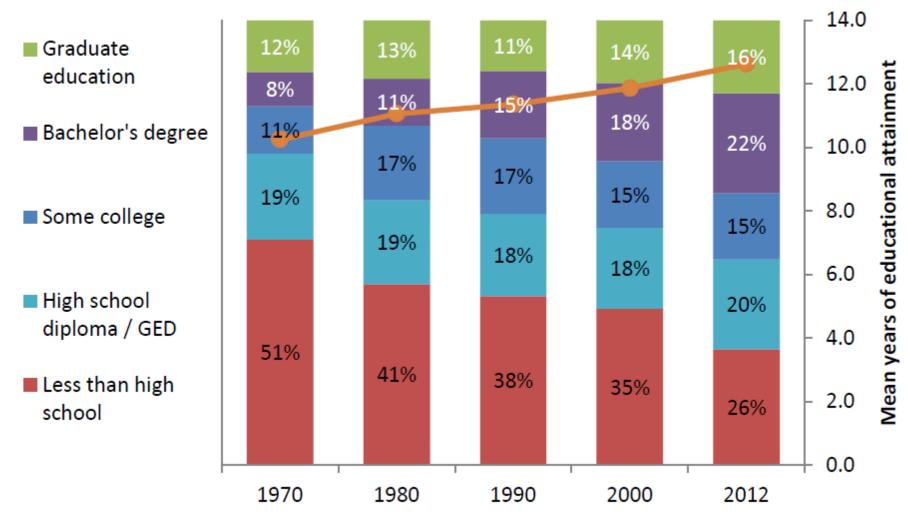
...but if we look at more recent history, we see that the unauthorized population actually shrank between 2007 and 2009 and has since leveled off.

=> unauthorized population has stopped growing

Immigrant education has increased

- Recent immigrants are more educated than immigrants of the past
 - Native education has increased as well so recent immigrants still have less education than natives, on average
 - Among recent immigrants, younger immigrants are particularly narrowing the education gap with natives
- Among full population, foreign born more concentrated at the extremes, *overrepresented*:
 - Among those with less than 4 years of HS AND
 - Among those with more than 4 years of college, particularly in STEM fields
- Foreign-born share of college grads about the same as natives

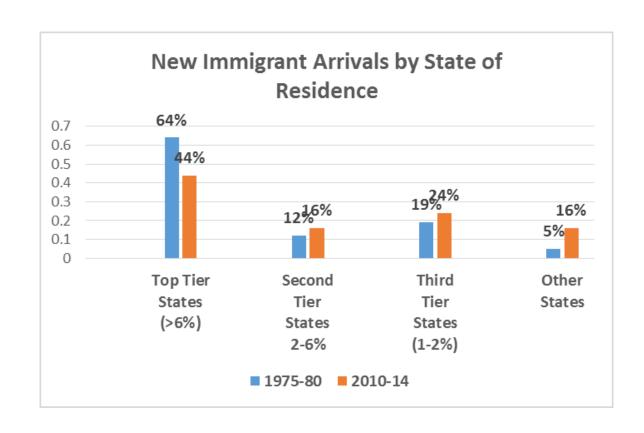
FIGURE 3-1 Educational attainment of recent immigrants (those who entered in the 5 years prior), by Census year, 1970-2012 (in percentages).



SOURCE: Analysis of 1970, 1980, 1990, and 2000 Decennial Census data, and 2010-2012 3-year ACS data, accessed through IPUMS.

The immigrant population has gotten more dispersed

Immigrants have become more geographically dispersed – moving to states and communities that historically had few immigrants – though the majority continue to reside in traditional gateway cities and states.



Immigration contributes to labor force growth

- Foreign-born share of the *labor force* has increased from 11% to 16%
- US labor force growth has slowed with the aging of the baby boom cohort
- Immigration supplies prime-age workers who have helped counterbalance our aging population
- Immigrants and their children are accounting for the vast majority of current and future labor force growth

How does an influx of foreign-born workers affect nativeborn workers' employment and wages?

- Economic theory predicts:
 - Native-born workers whose skills are most similar to those immigrant workers (close substitutes) are most likely to be negatively affected
 - When immigrants' skills complement those of native-born workers, the presence of immigrant labor may improve their prospects
 - Returns to capital may be increased
- Because of these mixed predictions, theory alone cannot predict the effect on native workers; empirical evidence is needed to determine the direction and magnitude of any effects

Conceptual issues in empirically estimating effects of immigration on wages & employment

- Immigration is just one of many factors influencing native wages and employment
- Immigration itself is influenced by the same factors that shape overall wages and employment
 - Example: immigrants may be drawn to labor markets that are expanding
- Impact of immigration may differ across time and space depending on the characteristics of the immigrants and labor market conditions

What is the impact of immigration on wages?

- When measured over a period of 10 years or more, the impact of immigration on the wages of the native-born overall is very small
- Estimates for subgroups span a wider range
- To the extent negative effects are found, groups that are the closest substitutes to low-skilled immigrants are most likely to experience negative wage effects
 - Prior immigrants
 - Native-born, high-school dropouts

What is the impact of immigration on employment?

- Little evidence of effects on the overall employment levels of native workers
- Possible negative effects for subgroups
 - Immigrants may reduce hours worked (but not employment) of native teens
 - Some evidence of negative effects on employment rate of prior immigrants

How do high skilled immigrants affect employment and wages?

- Several studies have found a positive impact of skilled immigration on wages and employment of both college- and noncollege-educated natives
- This could be because
 - high skilled immigrants are complementary with native-born workers
 - high skilled immigrants increase innovation and productivity
 - high skilled immigrants interact with native-born workers and their skills "spill over"
- However, some other studies focused on narrowly defined fields find that immigrants can have adverse effects on wages or productivity of natives working in those specific fields

Immigration has a positive effect on economic growth

- High-skilled immigrants have boosted our capacity for innovation and technological change
 - Research suggests skilled immigrants raise patenting per capita, contributing to productivity growth
 - Immigrants contribute to entrepreneurship
- Immigration supplies prime-age workers who have helped counterbalance our aging populations (see case of Japan for a counterexample)

Other economic effects of immigration

- Reduction in prices of consumer goods in some markets benefits consumers—e.g., child care, food preparation, house cleaning and repair, construction
- Immigrants and the second generation are a source of demand in housing markets
- Immigrants may help to make labor markets more efficient by flowing where opportunities are best (both when they arrive in the US and in subsequent moves)

What are the fiscal impacts of immigration?

Immigrants' fiscal impact depends on the balance between:

Immigrants' contribution to revenues by paying taxes

versus

Immigrants' *contribution to expenditures* by consuming public services

- How are the costs of public goods treated?
 - Some expenditures increase with each additional person (education or health care)
 - Some expenditures are not affected when an additional person is added to the population —these are *public goods* (e.g., national defense)
 - We present results using both an average cost and a marginal cost approach for public goods; makes a big difference to the findings

- How should the costs of immigrant children/dependents be treated?
 - One approach—bundle their costs in with their parents (may be immigrants themselves or native born)
 - Dependent children increase government expenditures on education
 - Considering education as a "cost" does **not** take into account that education could be considered an investment in future productivity; rewards reaped when children grow to adulthood
 - Most of our estimates include children as a cost—this is an important assumption

- What accounting method does the estimate use, and how does the choice of method affect the results?
 - Some studies use a static method that focuses on a particular time period (like a tax year)
 - Others use a *dynamic* method that can capture fiscal effects over time (like a taxpayer's lifecycle)
 - We present both types of results

- Do the estimates take into account the impact of immigrant inflows on wages and employment of natives or on economic growth?
- We follow the standard approach and do not take these effects into account

A word about generations:

- In our fiscal analyses we distinguish three immigrant generations:
- *First generation*—these are individuals who were born abroad—this is the immigrant group
- **Second generation**—these are native born persons with at least one immigrant parent—they are a subgroup of the native born
- *Third-plus generation*—these are native born persons with native born parents—these are *all* of the native born with the exception of the second generation

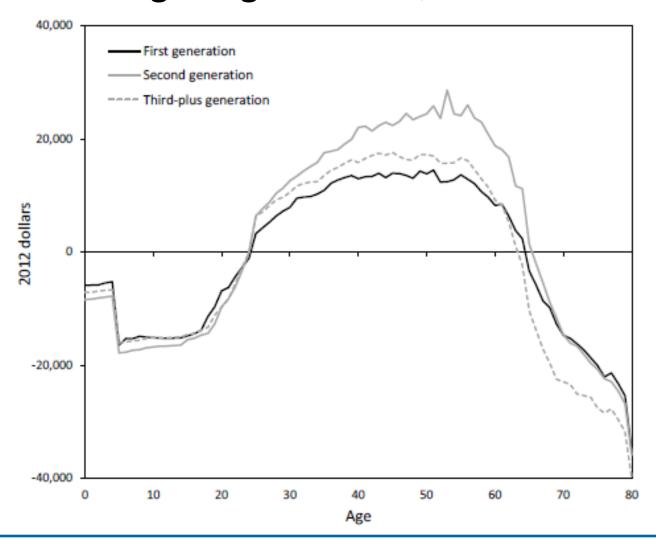
FISCAL IMPACTS: EMPIRICAL ESTIMATION

- We provide new empirical estimates:
 - National level (including federal and aggregate state)
 - Static or historical analysis (1994-2013 cross sectional data)
 - Dynamic (projections of net present value of an immigrant and descendants using a 75 year time horizon)
 - State level disaggregated by state
 - Static (2011-2013 cross section)

What are the *major determinants* of a group's fiscal contribution and thus the immigrant-native difference?

- Age-considering expenditures at the individual level:
 - Early years costly: educational expenses are high and people contribute little to revenues
 - Working years generally positive fiscal balance: people are in the prime working ages and thus make substantial contributions to tax revenues and less demands on government expenditures
 - Later years costly: individuals have retired or cut back on market work reducing contributions to tax revenues and they are receiving government retirement and health benefits
- Children/Dependents: If expenses of dependents are included, the middle years are not so favorable from a fiscal perspective (earnings high but children likely to be present so costs of educating children also high)
- Education: Lower education associated with lower wages and therefore lower contributions through taxes based on earnings and possibly greater use of transfer programs

Net fiscal impact in 2012, per capita, including all levels of government, by age and immigrant generation (2011-2013 March Current Population Surveys)



FISCAL IMPACTS: FINDINGS, NATIONAL LEVEL 1994-2013 Cross Section

- Immigrants tend to have a lower fiscal contribution than the native-born, especially at the state level
- Immigrants more concentrated in the prime working ages—raises their contributions, BUT
- Immigrants less well educated—lowers their contributions, controlling for age
- Their concentration in the prime working ages also means they are more likely to have dependent children present, and they also tend to have a larger number of children—raises government expenditures on education (benefits received)
 - Note: this does **not** take into account that expenditures on education could be considered an investment in future productivity; rewards reaped when children grow to adulthood

FISCAL IMPACTS: FINDINGS, NATIONAL LEVEL 1994-2013 Cross Section

- Second generation has better fiscal picture than 1st or 3rd + generation, controlling for age (see chart)
- BUT in simple tabulations look less favorable—especially earlier in the period; this is due primarily to their age distribution: higher shares of elderly (especially) and also of younger adults
 - Earlier in the period dominated by the children of earlier waves of immigration, especially the large inflow around the turn of the 20th century
 - Adult children of the later (more recent waves) are themselves relatively young (not in the prime working years)

FISCAL IMPACTS: FINDINGS, NATIONAL LEVEL 1994-2013 Cross Section

- All three groups (immigrants, second generation, and 3rd+ generation) had fiscal shortfalls—the deficit we are always talking about!
- In 2013, taking into account dependents and
 - using an average cost approach: immigrants accounted for 17.6% of the population and 22.4% of the deficit; the second generation accounted a slightly higher share of the deficit (8.7%) than their share of the population (7.4%)
 - using a marginal cost approach: immigrants accounted for 4% of the deficit and 17.6% of the population
 - Assumptions really matter!

FISCAL IMPACTS: FINDINGS, NATIONAL LEVEL Dynamic Analysis (75 year time horizon)

- Permits taking into account contribution of children of immigrants when they mature and as their education converges to (or exceeds) native levels
- Fiscal impacts of immigrants are generally positive at the federal level
- But fiscal impacts still tend to be negative at the state and local levels
 - Their methods of taxation recoup relatively little of the later contributions of educated taxpayers

FISCAL IMPACTS: FINDINGS, DISAGGREGATED STATE LEVEL (2011-2013)

- Consistent with national level analysis, first generation adults (plus dependents) more costly to state and local governments than 2nd and 3rd+ generations
- Of the three groups, 2nd generation contributes the most to the bottom line of state + local government fiscal balances
- The net burden of immigration to fiscal balance sheets varies tremendously across states

FISCAL IMPACTS: FEDERAL VS STATE LEVEL

 Taken together, findings of National and State level analyses raise questions of equity between the federal government and the states and across states in terms of shares of costs and benefits

We need to know more

- We have learned a lot but with better information available to researchers, we could learn more
- Data needs:
 - Improve data on second-generation immigrants
 - Addition of birthplace of parents to the American Community Survey (ACS) would make a large-sample data set available
 - Improve data on immigrants who enter without authorization
 - We discuss a number of ways to improve data collected on this group

Conclusion

- Economic effects: There are many important benefits of immigration, including on economic growth, innovation, and entrepreneurship, with little to no negative effects on the overall wages or employment of native born workers in the longer term. Where negative wage impacts have been detected, nativeborn high-school dropouts and prior immigrants are most likely to be affected.
- **Fiscal effects**: The fiscal picture suggests negative short-run effects, especially at the state level, when the costs of educating the children of immigrants are included; but the children of immigrants (the second generation) go on to be the most positive fiscal contributors in the population. In the longer term (75 year time horizon), fiscal impact of immigrants are positive at the federal level, though still negative at the state level.

Conclusion

• Recent changes in immigrant patterns: There have been several recent significant changes in immigration patterns. Growth in the unauthorized population has stopped, and immigrant education has risen. Moreover, as US labor force growth has slowed with the aging of the population, immigrants and their children will account for the vast majority of current and future labor force growth.