The Economic and Fiscal Consequences of Immigration

More than 40 million people living in the United States were born in other countries, and almost an equal number have at least one foreign-born parent. Together, immigrants and their children comprise almost one in four Americans. As employees, to what extent are immigrants complementing or displacing native-born workers? As workers, entrepreneurs, and innovators, to what extent are they contributing to economic growth? And what impacts are they having on federal, state, and local budgets?

The National Academies of Sciences, Engineering, and Medicine appointed a panel of economists, sociologists, demographers, and public policy experts to examine the evidence and to answer these questions. The study panel’s findings are presented in its report, *The Economic and Fiscal Consequences of Immigration* (2016).

AMONG THE REPORT’S KEY FINDINGS AND CONCLUSIONS:

- When measured over a period of 10 years or more, the impact of immigration on the wages of native-born workers overall is very small. To the extent that negative impacts occur, they are most likely to be found for prior immigrants or native-born workers who have not completed high school—who are often the closest substitutes for immigrant workers with low skills.

- There is little evidence that immigration significantly affects the overall employment levels of native-born workers. As with wage impacts, there is some evidence that recent immigrants reduce the employment rate of prior immigrants. In addition, recent research finds that immigration reduces the number of hours worked by native-born teens (but not their employment levels).

- Some evidence on inflows of skilled immigrants suggests that there may be positive wage effects for some subgroups of native-born workers, and other benefits to the economy more broadly.

- Immigration has an overall positive impact on long-run economic growth in the United States.

- In terms of fiscal impacts, first-generation immigrants are more costly to governments, mainly at the state and local levels, than are the native-born, in large part due to the costs of educating their children. However, as adults,
the children of immigrants (the second generation) are among the strongest economic and fiscal contributors in the U.S. population, contributing more in taxes than either their parents or the rest of the native-born population.

- Over the long term, the impacts of immigrants on government budgets are generally positive at the federal level but remain negative at the state and local level—but these generalizations are subject to a number of important assumptions. Immigration’s fiscal effects vary tremendously across states.

**TRENDS IN IMMIGRATION**

The panel examined key developments and trends in immigration over the past two decades.

**Legal immigration.** Annual flows of lawful permanent residents into the United States have increased in recent decades. During the 1980s, just under 600,000 immigrants were admitted legally (received green cards) each year. After the 1990 Immigration Act took effect, legal admissions increased to just under 800,000 per year. Since 2001, legal admissions have averaged just over 1 million per year.

**Unauthorized immigration.** The estimated number of unauthorized immigrants in the United States roughly doubled from about 5.7 million in 1995 to about 11.1 million in 2014. Since 2009, the unauthorized immigrant population has remained stable, with about 300,000 to 400,000 new unauthorized immigrants arriving each year and about the same number leaving. The number of unauthorized immigrants arriving in the United States reached more than 800,000 annually by the first 5 years of the 21st century but decreased dramatically after 2007; partly as a result, the unauthorized immigrant population shrank by about 1 million over the next 2 years.

**Education.** Educational attainment has increased steadily over the past few decades for both recent immigrants and the native born, although the former still have about 0.8 years less of schooling on average than do the latter. The foreign-born are over-represented in both the population with less than a high school education and the population with more than a 4-year college education, particularly among computer, science, and engineering workers with advanced degrees.

**Labor force.** The portion of the labor force that is foreign-born has risen from about 11 percent to just over 16 percent in the last 20 years. Immigrants and their children will account for the vast majority of current and future workforce growth—which, at less than 1 percent annually, is slow by historical standards.

**IMPACTS ON EMPLOYMENT, WAGES, AND THE ECONOMY**

The panel examined the available evidence on how immigration affects the U.S. labor market and economy.

**Effects on wages.** When measured over a period of 10 years or more, the impact of immigration on the wages of native workers overall is very small. To the extent that negative wage effects are found, prior immigrants—who are often the closest substitutes for new immigrants—are most likely to experience them, followed by native-born high school dropouts, who share job qualifications similar to the large share of low-skilled workers among immigrants to the United States.

**Effects on employment levels.** There is little evidence that immigration significantly affects the overall employment levels of native-born workers. Recent research finds that immigration reduces the number of hours worked by native-born teens (but not their employment rate). As with wage impacts, there is some evidence that low-skilled immigrants reduce the employment rate of prior immigrants—again suggesting a higher degree of substitutability between new and prior immigrants than between new immigrants and native-born workers.

**Effects of high-skilled immigrants.** Until recently, the impact of high-skilled immigrants on native wages and employment received less attention than that of their low-skilled counterparts; but as the number of high-skilled immigrant workers has grown, so too has interest in studying their role in the economy. Several studies have found a positive impact of skilled immigration on the wages and employment of both college- and non college-educated natives. Such findings are consistent with the view that skilled immigrants are often complementary to native-born workers, that spillovers of wage-enhancing knowledge and skills occur as a result of interactions among workers, and that skilled immigrants innovate sufficiently to raise overall productivity.

**The role of immigrants in consumer demand.** Immigrants’ contributions to the labor force reduce the prices of some goods and services, which benefit consumers in a range of sectors, including child care, food preparation, house cleaning and repair, and construction. Moreover, new arrivals and their descendants are a source of demand in key sectors such as housing, which benefits residential real estate markets.

**Impacts on economic growth.** Immigration is integral to the nation’s economic growth. The inflow of
labor supply has helped the United States avoid the problems facing other economies that have stagnated as a result of unfavorable demographics, particularly the effects of an aging workforce and reduced consumption by older residents. In addition, the infusion of human capital by high-skilled immigrants has boosted the nation’s capacity for innovation, entrepreneurship, and technological change. Research suggests, for example, that immigrants raise patenting per capita, which ultimately contributes to productivity growth. The prospects for long-run economic growth in the United States would be considerably dimmed without the contributions of high-skilled immigrants.

**IMPACTS ON FEDERAL, STATE, AND LOCAL BUDGETS**

Beyond wage and employment considerations, policy makers and the general public are interested in the impact that immigration has on public finances and the sustainability of government programs. All parts of the U.S. population contribute to government finances by paying taxes and add to expenditures by consuming public services—but the levels differ. The panel conducted several analyses estimating the fiscal contributions and costs of first-generation immigrants, the second generation (native-born individuals with at least one parent who is an immigrant), and the rest of the native-born U.S. population (referred to in the report as the third-plus generation).

Over the period 1994-2013, the net fiscal contribution (federal, state, and local combined) of first-generation immigrants was, on average, consistently less favorable than that of native-born generations. Annual cross-sectional data reveal that, compared to the native-born, first-generation immigrants contributed less in taxes during working ages because they were, on average, less educated and earned less. However, this pattern reverses at around age 60, when the native-born (except for the children of immigrants) were consistently more expensive to government on a per capita basis because of their greater use of social security benefits.

During the same 1994-2013 time period, second-generation adults—the children of immigrants—had, on average, a more favorable net fiscal impact for all government levels combined than either first-generation immigrants or the rest of the native-born population. Reflecting their slightly higher educational achievement, as well as their higher wages and salaries, the second generation contributed more in taxes on a per capita basis during working ages than did their parents or other native-born Americans.

Results from these cross-sectional analyses are significantly influenced by the age structures (distribution across age categories) of the different generational groups, which in turn influence the percentage of each group in schooling, in the workforce, and in retirement. These age structures vary significantly from one historical period to another. Results are also driven to a large extent by the assumptions underlying each analysis, especially about the allocation of government expenditures on public goods such as national defense. For example, for scenarios in which military spending is assumed not to increase with additional immigrants, and in which a cost of zero is assigned to them for this benefit, the net fiscal impact of individuals in the first-generation group becomes more positive than that of individuals in the two native-born groups.

In addition to conducting historical analyses, the panel also modeled the impact that adding an immigrant (with characteristics based on an average of recent immigrants) to the U.S. population would have on future public budgets, in order to estimate the future fiscal impacts of immigration. **Projected over a future time horizon of 75 years, this analysis found that the fiscal impacts of immigrants are generally positive at the federal level and generally negative at the state and local level.** State and local governments bear the burden of providing education benefits to children, including those in immigrant households, but their methods of taxation recoup relatively little of the later contributions from the resulting educated taxpayers. Federal benefits, in contrast, are largely provided to the elderly, so the relative youthfulness of arriving immigrants, who are often working and paying taxes, means that they tend to be beneficial to federal finances.

The panel’s analysis of state- and local-level data indicates that the net impact of immigration on fiscal balance sheets varies tremendously across jurisdictions. Consistent with findings in the national-level analyses, first-generation adults (and their dependents) tend to be more costly to state and local governments on a per capita basis than adults (and their dependents) in the second generation or in other native-born generations. In general, second-generation adults contribute the most of any generation to the bottom line of state balance sheets.

The analysis also reveals that an immigrant and a native-born person with similar characteristics will likely have about the same fiscal impact. Persons with higher levels of education contribute more positively to government finances, regardless of whether they are an immigrant or are native-born.
For More Information . . . This report highlights was prepared by the Committee on National Statistics (CNSTAT) based on the report, *The Economic and Fiscal Consequences of Immigration* (2016). The study was sponsored by the John D. and Catherine T. MacArthur Foundation, with additional support from the National Academy of Sciences Independent Fund, the National Academy of Engineering Independent Fund, and the National Academy of Medicine Independent Fund. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of any organization or agency that provided support for the project. Copies of the report are available from the National Academies Press, (800) 624-6242; http://www.nap.edu or via the CNSTAT page at http://nas.edu/immigration.