



How Might Restricting Immigration Affect Social Security's Finances?

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About one in six workers in 2016 was born outside the United States.¹ These immigrants pay a significant share of the Old Age, Survivors, and Disability Insurance (OASDI) payroll taxes that fund Social Security. Restricting immigration would shrink the labor force, reduce the revenue of the OASDI trust funds, and weaken Social Security's long-term financial position.

In August 2017, Senators Tom Cotton (R-AR) and David Perdue (R-GA) introduced a revised version of the Reforming American Immigration for Strong Employment or RAISE Act (originally introduced in February 2017), which would limit future immigration by reducing the number of lawful permanent residency visas (also known as green cards) granted each year and changing the criteria for allocating them. The senators argue that the bill would raise wages for American workers and promote economic growth.² President Trump endorsed the bill,³ but it has not attracted any cosponsors.

This brief analyzes the likely impact of the RAISE Act on Social Security's finances over the next seven decades. We use the Dynamic Simulation of Income Model (DYNASIM4), the Urban Institute's microsimulation tool, to simulate the US workforce, OASDI payroll taxes and benefit payments, and OASDI trust funds under current law and under the proposed bill. The results show that implementing the RAISE Act would worsen the already strained finances of the OASDI trust funds even if newly arriving immigrants were better educated than previous immigrants. Revenues would fall faster than expenditures, raising the present value of Social Security's unfunded future obligations by \$1.5 trillion, or 13 percent, over the next 75 years. Restricting immigration would require additional Social Security benefit cuts or tax increases to balance the system.

Background

Each year, slightly more than 1 million immigrants are granted lawful permanent residency in the United States. In 2015, 661,000 immigrants entered the country as permanent residents, and 390,000 immigrants who were already temporarily in the country adjusted their status to permanent residency (Board of Trustees 2017). Immigrants who arrive in the country temporarily enter as students or temporary workers. In the same year, around 263,000 lawful permanent residents left the country, for a net increase of 788,000 lawful permanent residents. By comparison, about 4 million people were born in the United States and 2.7 million people died in 2015, a net increase in the population (excluding immigration) of 1.3 million.⁴

The US Department of Homeland Security estimates that about 1.2 million other-than-legal immigrants, including temporary immigrants and immigrants who arrive without documentation, entered the country in 2015, and 173,000 left. Excluding the 390,000 people who had previously entered the country temporarily and became lawful permanent residents in 2015 leaves a net increase of 637,000 other-than-legal immigrants that year.⁵

If current policies continue, the growth of the immigrant population is not projected to change much over time. The Board of Trustees (2017) projects that, under its intermediate-cost scenario, the number of lawful permanent residents born outside the country will grow each year by 795,000 (comprising 610,000 new immigrants and 450,000 adjustments to lawful permanent residents, minus 265,000 immigrants who leave the country) even as the US population grows significantly. The number of other-than-legal immigrants is projected to increase by about 450,000 per year (comprising 1.35 million new immigrants, minus 450,000 adjustments to lawful permanent residents and about 450,000 immigrants who leave the country).

The RAISE Act would reduce the number of green cards issued each year granting permanent residency. The act would initially grant 41 percent fewer of these visas than are granted under current law, and the reduction would rise gradually until it reaches 50 percent after 10 years. Much of this reduction would be achieved by cutting the number of visas sponsored by family members, which now account for about two-thirds of all green cards granted each year (Gelatt 2017). The bill would also reduce quotas for refugees and asylum seekers and eliminate the diversity program, also known as the visa lottery, which randomly awards about 50,000 visas to applicants from countries that provide relatively few immigrants to the United States. The quota for employment-based visas would remain at its current level of 140,000, but the bill would likely alter the composition of immigrants by creating a preference for younger and better-educated workers. Applicants with extraordinary achievements or an employment offer would receive preferential treatment, but unlike the current system, an employment-based visa would no longer require an employment offer.

Lowering immigration quotas would likely affect the financial operations of the OASDI trust funds. Social Security is largely funded on a pay-as-you-go basis, which means that taxes paid by current workers finance much of the benefits paid to current retirees, people with disabilities, and their dependents and survivors. As the population has aged, OASDI tax revenues have fallen short of benefit

payments, and the gap has been made up by interest earned on the OASDI trust funds—one for retirement benefits and another for disability benefits—that built up over the past 35 years, when tax revenues exceeded benefit payments. However, the Social Security trustees project that if current policies continue, the trust funds will be depleted by 2034, leaving the system able to pay only about three-quarters of scheduled benefits (Board of Trustees 2017).

Because most newly arriving immigrants are working age and join the labor force, reducing immigration would shrink the labor force and the number of workers paying payroll taxes, immediately reducing trust fund revenue. However, the number of retirees and total benefits paid to them would not change in the short run. Relative to current law, therefore, the RAISE Act would likely reduce trust fund balances. In the longer run, as the smaller cohorts of immigrants allowed into the country under the RAISE Act begin claiming Social Security, the number of retirees would also fall relative to current law and reduce fund expenditures, but that reduction would not be enough to fully offset the loss of past revenue. Limiting immigration would also reduce the number of children that will be born in the United States, further shrinking the future labor force over the long run. Adult children of immigrants have made significant contributions to the economy (Blau and Mackie 2017).

Methods

To examine the potential impact of limiting immigration on Social Security’s finances, we used DYNASIM4 to simulate how OASDI payroll tax revenues and benefit payments would likely evolve if the RAISE Act became law and compared those projections with simulated outcomes under current law. DYNASIM4 starts with a representative sample of individuals and families and ages them year by year, simulating key demographic, economic, and health events. For example, DYNASIM4 projects that each year, some people in the sample get married, have a child, or find a job. The model projects that other people become divorced or widowed, stop working, begin collecting Social Security, become disabled, or die. These transitions are based on probabilities generated by carefully calibrated equations estimated from nationally representative household survey data. The equations take into account important differences in how likely various experiences are depending on gender, education, earnings, and other characteristics. Other equations in DYNASIM4 project such outcomes as annual earnings, savings, and household wealth.

The model combines program rules with projections of annual and lifetime earnings, disability status, and death to project OASDI tax payments and benefits for each person. DYNASIM4 aggregates individual tax payments and benefit receipt to simulate trust fund revenues, benefit payments, and balances. For more information about DYNASIM4, see Urban Institute (2015) and Favreault, Smith, and Johnson (2015).

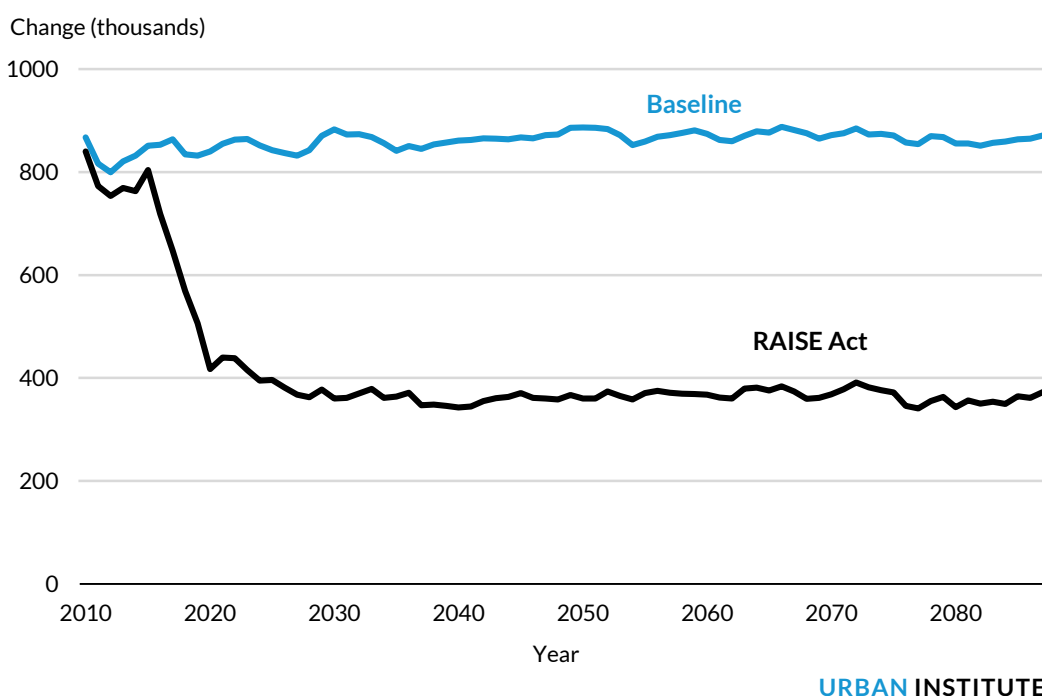
We used the Board of Trustees’ (2017) immigration projections to simulate outcomes under the baseline simulation (or current law), and we adopted the bill sponsors’ targets about changes in the number of lawful permanent residents to simulate outcomes under the RAISE Act simulation. We assumed that the RAISE Act would not change the inflow or outflow of other-than-legal immigrants. The

RAISE Act simulation assumed that the bill would become law at the end of 2017. We reduced the number of granted lawful permanent resident visas 41 percent relative to current law in 2018 and gradually raised the percent reduction in subsequent years until reaching 50 percent in 2027; we then maintained it at that level through the end of the simulation. The rate of emigration among lawful permanent immigrants also fell in the RAISE Act simulation, but it fell less than 50 percent. On net, the annual increase in the number of lawful permanent residents born outside the United States is more than 50 percent lower in the RAISE Act simulation than in the baseline (figure 1).

FIGURE 1

Net Increase in the Number of Lawful Permanent Residents Born outside the United States

By scenario



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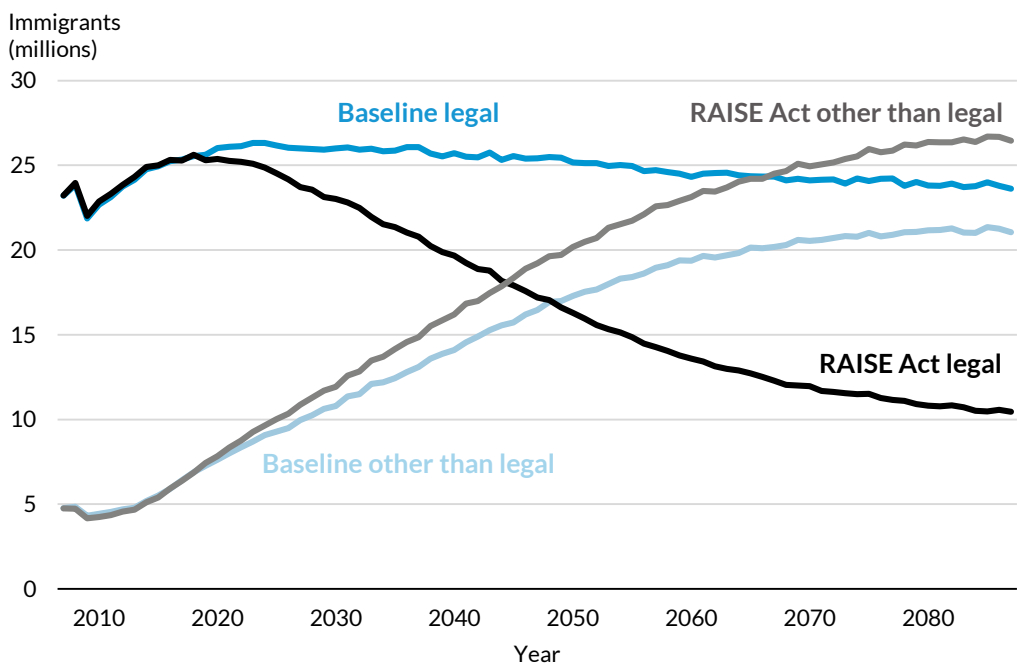
Source: DYNASIM4 ID 949 and 949B.

Lowering immigration quotas would almost certainly affect economic growth and the average wage index used to compute Social Security benefits (Burtless 2009), but the impacts from the RAISE Act are likely to be small. The Penn Wharton Budget Model estimates that the bill would reduce gross domestic product (GDP) relative to current law 0.7 percent in 2027 and 2.0 percent in 2040.⁶ GDP per capita, however, would remain essentially unchanged in the short run and fall only 0.3 percent in 2040 relative to current-law projections. Further, the Penn Wharton Budget Model projects that the impact on wages would be negligible, raising the average wage in 2027 only 0.23 percent and 0.16 percent in 2040. Consequently, our simulations ignored the impact of the proposed policy on both GDP per capita and the average wage index.

Results

Reducing the inflow of lawful permanent immigrants would affect the size and composition of the US labor force. The number of employed lawful permanent residents would be substantially lower under the RAISE Act simulation than under current law. The number of employed other-than-legal immigrants would be somewhat higher, but it would not be high enough to offset the loss in lawful permanent residents (figure 2). Under the assumption that the number of native-born workers is the same under the two simulations, the RAISE Act would reduce the employed labor force by 2 million workers in 2030, 6 million workers in 2050, and nearly 8 million workers in 2070. These reductions are small relative to the baseline total employed labor force, which we project in the baseline simulation will reach 176 million in 2030, 195 million in 2050, and 215 million in 2070. Our simulations, then, indicate that the RAISE Act would reduce the number of employed workers 1.2 percent in 2030, 3.7 percent in 2050, and 5.9 percent in 2070.

FIGURE 2
Number of Employed Immigrants Ages 16 to 64
By scenario



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Source: DYNASIM4 ID 949 and 949B.

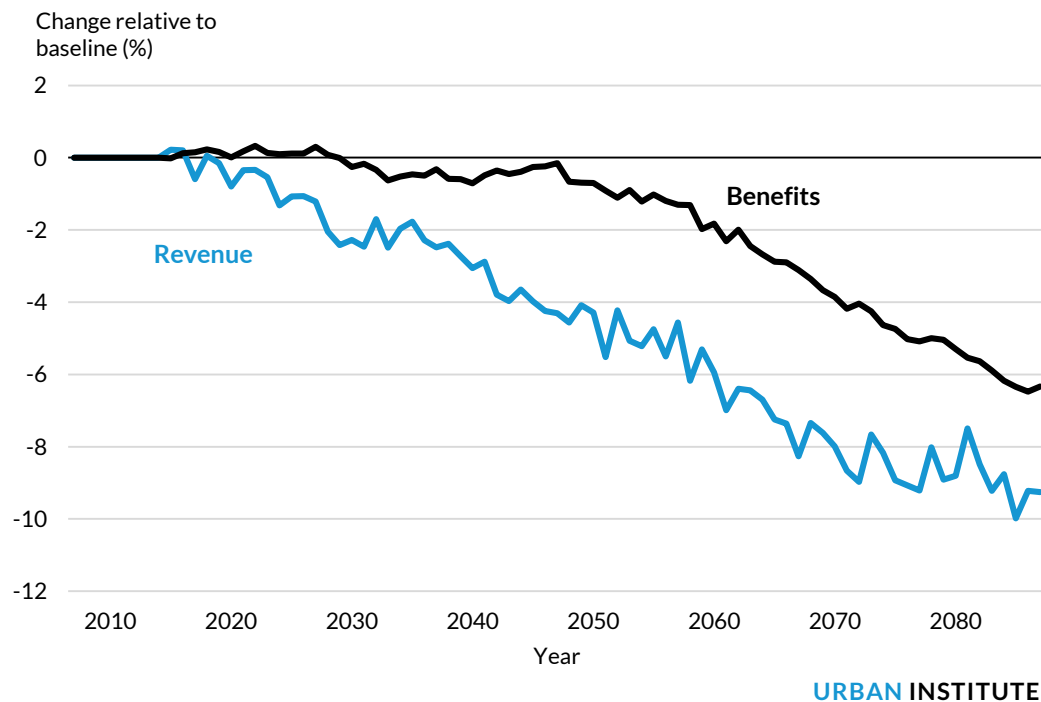
The impact of tighter immigration caps on OASDI payroll tax revenue depends on how average earnings among immigrants change as well as how the number of immigrant workers changes. The growing share of other-than-legal immigrants within the immigrant pool would reduce average

earnings, further limiting payroll tax revenue because other-than legal immigrants tend to have less education and earn less than immigrants with lawful permanent residency. However, the educational preferences in the RAISE Act would likely raise the educational attainment of new immigrants, boosting average earnings and offsetting some of the decline in payroll tax revenue. Our simulations show that the share of newly immigrating lawful permanent residents with a four-year college degree would increase to between 50 and 60 percent if the RAISE Act became law, a substantial gain over the 20 to 30 percent share in the baseline simulation.⁷

The RAISE Act would immediately reduce OASDI trust fund revenues. Compared with the baseline simulation, annual revenues excluding interest on the debt would fall 0.8 percent in 2020, 2.3 percent in 2030, 4.3 percent in 2050, and 8.0 percent in 2070 under the RAISE Act (figure 3). Annual benefit payments would not decline significantly until 2050 and would decline less than revenues throughout the simulation period.

FIGURE 3

Projected Impact of the RAISE Act on the OASDI Funds' Revenue and Benefits Paid



Source: DYNASIM4 ID 949 and 949B.

Notes: The figure shows the percentage difference in revenue and benefits paid between the RAISE Act and baseline scenarios. Revenue does not include interest on fund assets.

The RAISE Act would significantly increase the present value of OASDI unfunded obligations, which equals the present value of the funds' future costs over the 75-year projection window minus the sum of fund assets in 2017 and the present value of the funds' future income, excluding interest. Under the

baseline simulation, the present value of unfunded obligations over the next 75 years is \$11.6 trillion in 2017, or 2.41 percent of the present value of future taxable payroll (table 1). Under the RAISE Act simulation, the present value of unfunded obligations would grow \$1.5 trillion (or 13 percent), to \$13.1 trillion—or 2.85 percent of the present value of the future taxable payroll. If policymakers were to close Social Security’s financing gap solely by raising the payroll tax rate, they would need to collect an additional 44 cents on every \$100 of taxable payroll if they restricted immigration by passing the RAISE Act.

TABLE 1

Present Value of OASDI Funds’ Future Income, Cost, and Unfunded Obligation

By scenario

	Income (trillions of 2017 dollars)	Cost (trillions of 2017 dollars)	Unfunded Obligation	
			Trillions of 2017 dollars	Percentage of taxable payroll
Baseline	62.74	77.23	11.65	2.41
RAISE Act	59.83	75.81	13.14	2.85
Change (%)	-4.65	-1.85	12.77	18.26

Source: DYNASIM4 ID 949 and 949B.

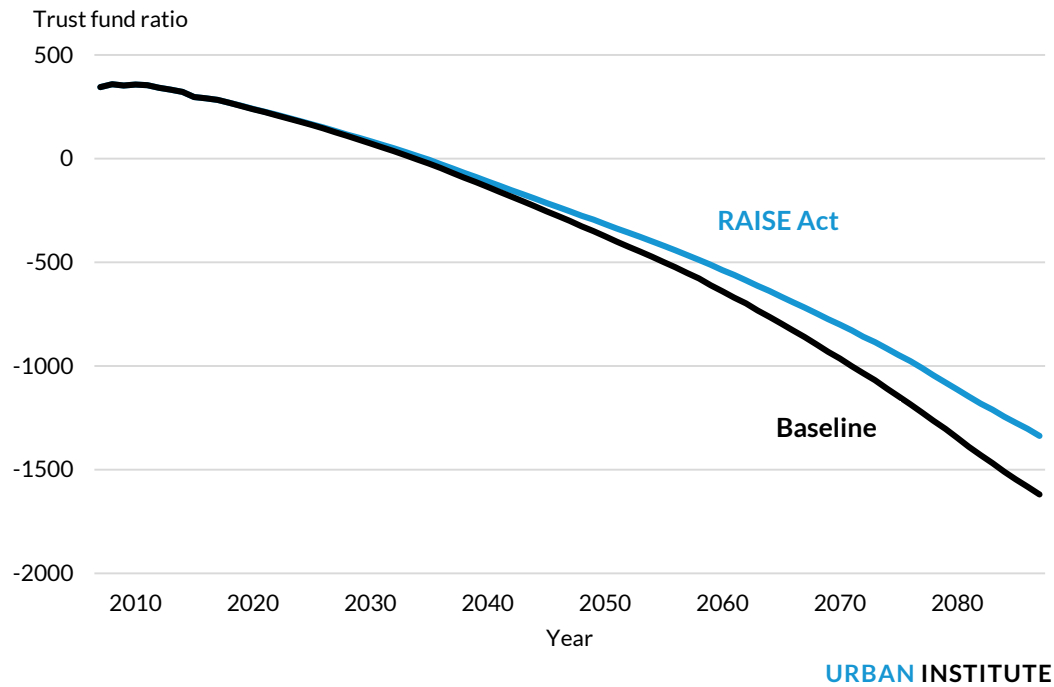
Notes: Trust fund income excludes interest on trust fund assets. The present value of unfunded obligations is defined as the difference between the present values of future costs and future income, plus the value of the 2017 funds’ assets, which is \$2.84 trillion under both scenarios. Future values were discounted by the effective trust funds’ interest rate, as projected by the Social Security trustees (Board of Trustees 2017).

The RAISE Act would also reduce the so-called OASDI trust funds ratio, another measure of the funds’ financial health. It is measured as assets available at the beginning of a year divided by projected expenses over the course of that year. A trust fund ratio of 100 or more indicates strong financial health, and a negative ratio means that the funds have been exhausted. A critical year is the last year before the ratio becomes negative, which is the first year when the funds are unable to cover the full benefits scheduled under current law.

Under the baseline simulation, the funds will first become depleted in 2034, the same year projected by the Board of Trustees (2017). Implementing the RAISE Act would move this date forward only one year, to 2033. However, immigration restrictions would cause the trust fund ratio to decline further over time (figure 4). Under the RAISE Act simulation, the trust fund ratio would fall below -1000 in 2071, six years earlier than under current law.

FIGURE 4

Projected OASDI Trust Fund Ratio by Scenario



Source: DYNASIM4 ID 949 and 949B.

Conclusions

Although immigration remains a controversial policy issue, most economists agree that it promotes economic growth (Blau and Mackie 2017; Furchtgott-Roth 2013; Orrenius 2016). Immigrants increase the productive capacity of the economy and raise GDP. They tend to flow into industries that need workers, preventing labor shortages that could curtail productivity gains. Without immigration, the US labor force would likely stagnate as the population ages, slowing economic growth. The Pew Research Center finds that immigrants will account for much of the increase in the nation's working-age population over the next two decades.⁸ Immigrants are, of course, quite diverse, and their educational and employment experiences vary widely (Favreault and Nichols 2011). High-skilled immigration, especially, boosts innovation, entrepreneurship, and technological change (Blau and Mackie 2017), so preferences for well-educated immigrants could benefit the economy. Restricting overall immigration, however, would likely impede economic growth.

Restricting immigration would also worsen Social Security's already strained finances. Our analysis shows that the RAISE Act would significantly reduce the number of lawful permanent residents and shrink the labor force. Although its sponsors aim to stimulate economic growth and raise wages, analysis by the Penn Wharton Budget Model team shows that it would reduce GDP growth and leave GDP per capita and average wages essentially unchanged. Adopting these assumptions, our simulations

show that the bill would magnify Social Security's long-term financial problems by reducing payroll tax revenue for the OASDI trust funds. The revenue reductions would push up the trust funds' projected depletion date by only one year, to 2033, but their cumulative impact would grow over time. Over a 75-year projection period, the immigration cutbacks envisioned in the RAISE Act would boost Social Security's unfunded obligations by \$1.5 trillion, or 13 percent. With policymakers already struggling to find ways to cut benefits or raise taxes to address Social Security's long-term financial problems, they should carefully consider the implications of immigration policies that make the problem worse.

Notes

1. US Bureau of Labor Statistics, "Foreign-Born Workers: Labor Force Characteristics Summary," last updated May 18, 2017, <https://www.bls.gov/news.release/forbrn.nr0.htm>.
2. Tom Cotton, "Cotton and Perdue Introduce the Reforming American Immigration for a Strong Economy Act," press release, August 2, 2017, https://www.cotton.senate.gov/?p=press_release&id=765.
3. Peter Baker, "Trump Supports Plan to Cut Legal Immigration by Half," *New York Times*, August 2, 2017, <https://www.nytimes.com/2017/08/02/us/politics/trump-immigration.html>.
4. National Center for Health Statistics, "Birth Data," last updated September 27, 2017, <https://www.cdc.gov/nchs/nvss/births.htm>; National center for National Center for Health Statistics, "Mortality Data," last updated November 27, 2017, <https://www.cdc.gov/nchs/nvss/deaths.htm>.
5. The US Department of Homeland Security counts refugees and asylum seekers as temporary other-than-legal immigrants who later adjust their status, but we followed the Board of Trustees' definition and counted them as lawful permanent immigrants.
6. Penn Wharton Budget Model, "The RAISE Act: Effect on Economic Growth and Jobs," last updated August 14, 2017, <http://budgetmodel.wharton.upenn.edu/issues/2017/8/8/the-raise-act-effect-on-economic-growth-and-jobs>.
7. The Penn Wharton Budget Model projects that college graduates could account for 75 percent of new lawful permanent immigrants after passage of the RAISE Act.
8. Jeffrey S. Passel and D'Vera Cohn, "Immigration Projected to Drive Growth in US Working-Age Population through at least 2035," Pew Research Center, last updated March 8, 2017, <http://www.pewresearch.org/fact-tank/2017/03/08/immigration-projected-to-drive-growth-in-u-s-working-age-population-through-at-least-2035/>.

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