

Immigration and Changes in Labor Force Demographics

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Recent shifts in immigration flows have lowered the estimates of net international migration into the United States. New data indicate that net migration will be close to half a million people in 2025, down from 2.2 million in 2024. Estimates based on these data and on past trends for the U.S.-born population suggest that this could lead to a decrease in the working-age population and slower growth in the prime-age labor force. Continued low levels of immigration would lead to decreases in the total prime-age labor force.

Demographics in the United States have changed substantially over the past two decades, reflecting the aging of the U.S.-born population and, more recently, large swings in net international migration (NIM). This *Economic Letter* shows that, without new immigration, the U.S. working-age population ages 16 to 64 would have started to decline in 2012. Furthermore, we estimate that NIM fell sharply in 2025 to 515,000 people. Our estimates show that this is below the level of net migration necessary to sustain positive growth in the working-age population this year. The implied decline in 2025 raises concerns that declines in the working-age population may be persistent and could lead to low or even negative labor force growth in the coming years.

To assess the importance of immigration for future total labor force growth, we use birth and mortality data to estimate the size of the native-born prime-age labor force, ages 25 to 54; we focus on this group rather than the broader working-age population due to data availability constraints on the latter group. This allows us to project future native-born labor force growth with a high degree of accuracy. We show that, without immigration, prime-age labor force growth will likely continue to slow and turn negative around 2042. Accounting for immigration and adjusting our 2025 NIM projections by 285,000 deportations, we estimate that foreign-born workers will add 0.1 percentage point to prime-age labor force growth in 2025. This results in 0.8 percentage point lower growth of the prime-age labor force compared with January projections by the Congressional Budget Office (CBO).

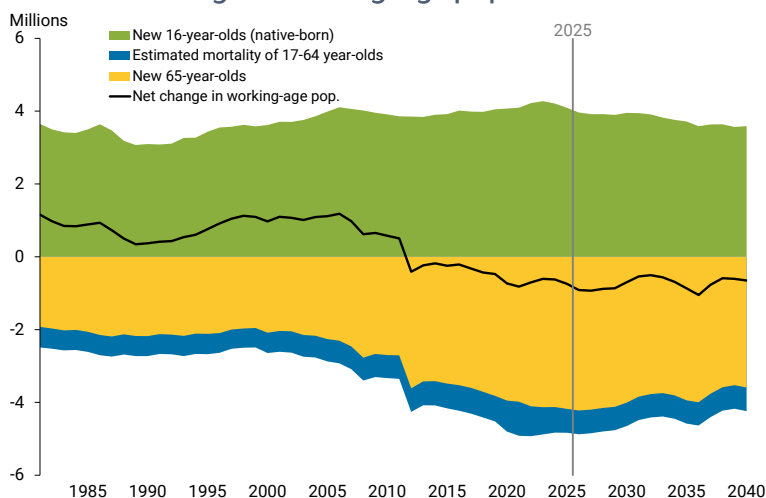
Dynamics of the native-born working-age population

To gauge the importance immigration plays in supporting U.S. labor force growth, we estimate the number of immigrants needed to prevent a decline in the working-age population. We start by estimating annual changes in the U.S. working-age population. We distinguish between native-born and foreign-born flows by calculating how many native-born people join and how many U.S. residents leave the working-age population each year.

Figure 1 presents changes in the working-age population without recent immigration. The green area in Figure 1 shows the estimated number of individuals turning age 16 based on U.S. birth and mortality data from the National Center for Health Statistics. These numbers are calculated using births 16 years earlier, net of age-specific and sex-specific youth mortality rates.

The estimated native-born population of 16-year-olds peaked in 2023 and is expected to decline through at least 2040 based on current and past birth data. Specifically, we project that the annual inflow of native-born 16-year-olds into the working-age population will decline from 4.2 million to 3.6 million by 2040.

Figure 1
Estimated change in working-age population



Note: Changes exclude inflows from recent immigrants.

Source: National Center for Health Statistics, Census Bureau via Haver, and authors' calculations.

Figure 1 also shows the estimated outflows from the working-age population due to aging, including workers turning 65 (gold area) and deaths (blue area). The former is based on iterating population-by-age forward each year, while the latter is based on age-specific mortality rates for ages 17 to 64. The outflow due to individuals turning 65 increased after the 2000s and became especially pronounced after 2012, when the first baby boomers—individuals born between 1946 and 1964—started to age out of the working-age population.

The black line shows the difference between the inflow of native-born 16-year-olds and the outflows from death and aging out of the working-age category, which we use to measure the overall change in the working-age population before taking net immigration into account. Before 2012, native births were enough to sustain growth in the working-age population. Since then, however, growth in the working-age population without immigration has fallen below zero, reflecting slowing birth rates and the aging of baby boomers. We project that, without immigration, working-age population growth is likely to be negative through at least 2040, given recent and current birth rates, population aging, and current age-specific mortality rates.

The evolving role of immigration

Immigration provides an additional source of inflows into the working-age population. NIM became especially important after 2012, when the inflow of native-born 16-year-olds was not enough to balance the outflow due to aging out and death.

Historically, NIM estimates adjusted for age average around 1 million individuals per year. This level of immigration was sufficient to keep the working-age population growing in the past. To project what might happen to the changes in the working-age population beyond 2024, we use updated estimates of NIM. Figure

2 shows our baseline estimates from 2023 to 2024 and our projected NIM for 2025. These numbers reflect new estimates of net unauthorized immigration (dark blue bars). We update previous estimates from Duzhak (2024), applying the same approach to new and revised data from the Department of Homeland Security. These changes lead to a downward revision of our previous 2025 estimates (Duzhak and New-Schmidt 2025).

We project baseline 2025 NIM to be close to 500,000, less than one-fourth its size in 2024. This is due to significant declines in the number of undocumented immigrants, which we estimate to be –310,000, much lower than the previously reported +158,000 (Duzhak and New-Schmidt 2025). This revision is driven by a lower inflow of undocumented immigrants and somewhat higher projected emigration rates.

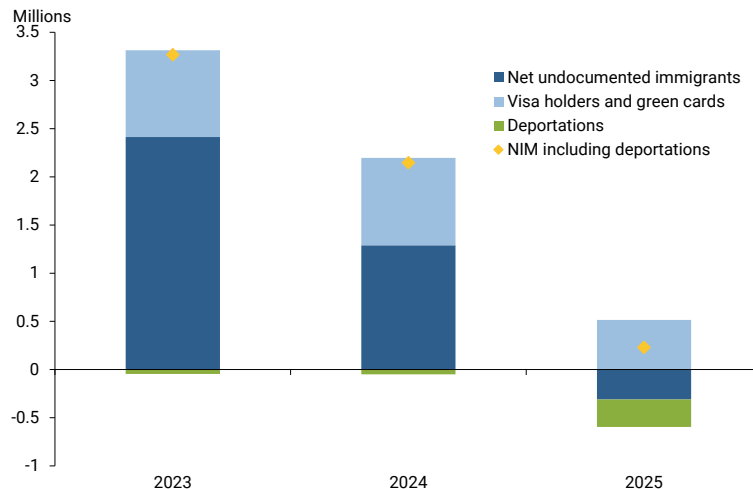
Our baseline NIM estimates do not explicitly account for deportations. Because there are no current official data tracking interior deportations, we use Immigration and Customs Enforcement (ICE) removals obtained in response to a Freedom of Information Act request by the Deportation Data Project. However, the Project cautions about some data inconsistencies in the past. Because of the higher uncertainty in this measurement, we use a separate category for deportations as a component of immigrant outflows.

To assess the potential role of deportations on net immigration, the green bars in Figure 2 show how many immigrants were deported from the U.S. interior; the bar for 2025 points to roughly 285,000 deportations. Note that this number represents ICE arrests, typically occurring inland, and does not include deportations at the border. This is an important distinction, as most immigrants deported from the border are those apprehended during illegal entry to the United States and do not represent a true population outflow.

The black line in Figure 1 shows that the native-born working-age population is estimated to decline by 740,000 between 2024 and 2025. Our NIM estimate for 2025—even without accounting for further reductions from deportations—is not large enough to offset this decline.

The immigration surge in 2023–24, which was predominantly young people, provided a buffer of new working-age population inflows, which will delay the decline in the total working-age population. We expect some additional population growth, as permanent residents come of age, which we estimate to total roughly 50,000 per year. However, in the medium term, this would not prevent a shrinking U.S. working-age population if 2025 NIM levels persist.

Figure 2
Net international migration and some components



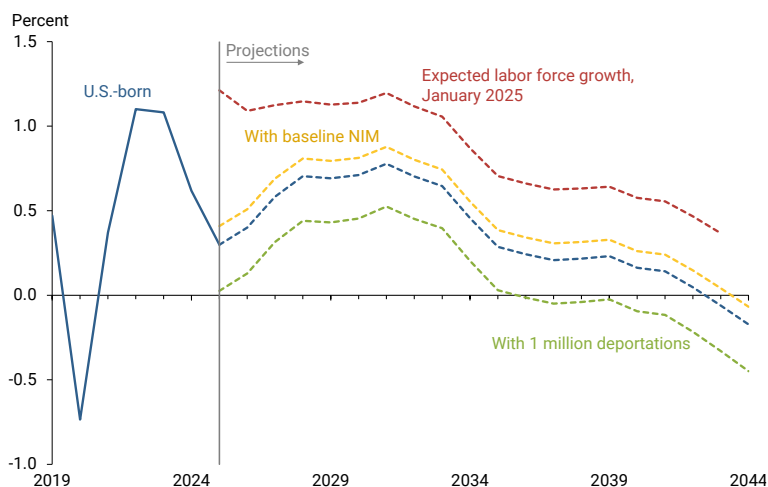
Source: Department of Homeland Security, Congressional Budget Office, and authors' calculations.

Labor force projections and implications for the economy

Combining the recent decline in immigration with the demographic slowing of working-age population growth has important implications for economic growth. On the supply side, it reduces the labor force and hence potential labor supply. On the demand side, it reduces the number of consumers in the economy. This effect is amplified to the extent that immigrants have lower saving rates (Cheremukhin et al., 2024). Lower immigration also could help reduce high core services inflation (Bowman 2024).

To get a better understanding of the impact on the supply side, we use birth, mortality, and historical labor force participation rates by sex to estimate the prime-age U.S.-born labor force, ages 25 to 54. We then use this data to estimate labor force growth of the native prime-age population between 2019 and 2045 (blue line in Figure 3). Our estimated native-born labor force growth is generally very close to the numbers produced by the household survey from the Bureau of Labor Statistics. However, our estimates show higher labor force growth of native-born workers in 2024 and lower growth in 2025. We believe this reflects CPS measurement discrepancies in 2024 and 2025 due to swings in undocumented immigration (see also Kolko 2025).

Figure 3
Estimated contributions to prime-age labor force growth



Note: Expected labor force growth is based on CBO's Demographic Projections published in January 2025 and represent NIM projections before recent changes in immigration policy.
Source: National Center for Health Statistics, CPS, CBO and authors' calculations.

Growth projections with immigration scenarios

Estimates of future labor force expansion are driven by growth in both the native-born and immigrant populations. The dashed lines in Figure 3 show three scenarios for potential prime-age labor force growth in 2025 and beyond, adding our native-born contributions (blue line) to different assumptions for foreign-born contributions. The first scenario assumes zero growth in the immigrant population (blue dashed line). The second uses our baseline NIM estimates and 285,000 deportations (gold line). The third uses 1 million deportations (green line). All three scenarios assume constant foreign-born labor force growth at their respective 2025 levels going forward.

We compare these scenarios to expected prime-age labor force growth as of January 2025, which represents NIM expectations before new immigration policies took effect (red line). This allows us to calculate the change in labor force growth due to lower immigration in 2025 and beyond. For this series, we add the CBO's NIM projections from January 2025 to our projections of native-born labor force population. Our pre-immigration change estimate suggests the prime-age labor force would grow 1.2% in the next few years before gradually slowing but remaining positive through 2043.

Figure 3 shows projected prime-age labor force growth under our first scenario (blue line), where the only source of growth arises from the native-born population, is positive and rising only until 2031; after that it declines, turning negative after 2043. The second scenario (gold line) would result in a small upward shift in the projected prime-age labor force growth by 0.11 percentage point, suggesting negative growth as of year 2044. The third scenario (green line) would represent a large downward shift due to a decrease in the foreign-born labor force. This decline could lead to essentially zero growth in the total prime-age labor force in 2025, and labor force growth turning negative as early as 2035.

To assess the impact of immigration changes on the 2025 labor force, we compare our second immigration scenario to the January 2025 estimate. Our scenario projects a 0.8 percentage point reduction in the prime-age labor force growth in 2025 relative to the January estimate. In terms of monthly employment, current NIM estimates indicate a gain of about 35,000 workers, which is 68,000 workers below the growth suggested in the January projection.

Conclusion

U.S. births in recent decades have been lower than what would be needed to sustain a growing working-age population in the future. Using birth and mortality data to project changes in the working-age population, we show that, without immigration, the working-age population would have started to fall as early as 2012. This *Economic Letter* finds that past immigration has prevented the U.S. working-age population and, in turn, the labor force from declining. In the future, continued reductions in immigration would dampen labor force growth.

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