MERCATUS CENTER
George Mason University

POLICY BRIEF

More Immigration Needed to Offset COVID-19 and America's Demographic Decline

Daniel Griswold

December 2020

As it has in so many areas of American life, the COVID-19 pandemic has accelerated certain demographic trends that were already heading in a worrisome direction. The pandemic has coincided with a drop in the US birth rate, a further rise in the death rate, and a sharp decline of net immigration, all combining to slow the growth of the US population and workforce. Unless addressed by policymakers, the resulting decline in population growth will have serious and lasting ramifications for America's prosperity, fiscal sustainability, and influence in the world.

America's population growth has slowed dramatically in recent years, and recent projections indicate the nation's total population may peak as soon as 2062.[1] In 2019, according to the Census Bureau, the US population grew by 1.5 million from the year before to 328.2 million, or 0.47 percent. That compares to an average annual growth of 2.69 million, or 0.91 percent, in 2001–2010 and 3.23 million, or 1.21 percent, in 1991–2000. The change in the population of the United States from 2018 to 2019 was the smallest since 1945, and it was the smallest percentage change since the Spanish Flu year of 1918.[2] Because of fallout from the current coronavirus pandemic, population growth will likely slow even further in 2020.

Three factors determine the change in any nation's population over a given time: births, deaths, and net international migration. Behind the sharp decline in the US population growth rate in the past two decades has been a steady rise in deaths per year, a falling number of births owing to an even steeper decline in the birth rate, and declining levels of net international migration, a trend even more pronounced recently in large part because of executive actions by the Trump administration.

Although population numbers for 2020 have yet to be determined, the COVID-19 pandemic is expected to accelerate all three of those demographic factors in the direction of even slower population growth. Directly, COVID-19 could claim nearly 300,000 lives by the end of 2020, according to forecasts from the Centers for Disease Control and Prevention, which all else being equal would represent a 10 percent increase in the pre-COVID trend in deaths for the year.[3] As for births, the pandemic could reduce the number of expected deliveries in 2021 by a one-time total of 300,000 to 500,000, with further negative impact in the future.[4] And the Trump administration, citing health and economic concerns tied to the pandemic, has issued executive orders dramatically reducing the number of immigrants and temporary foreign-born workers that have been allowed to enter the United States.

In its annual economic and budget forecast released in September, the Congressional Budget Office (CBO) cited all three demographic drivers when it significantly lowered its projection for US population in 2050 from 389 million to 378 million. CBO specifically cited the pandemic in its decision to lower short-term estimates for the total fertility rate (TFR)—that is, the number of children the average woman can be expected to bear in her lifetime—and to increase estimates of the mortality rate. As the CBO report explains,

> Additional deaths include fatalities directly attributable to the coronavirus as well as increased fatalities attributable to heart disease, diabetes, pneumonia, and other respiratory illnesses. Additional deaths from causes other than the coronavirus may result from individuals delaying or not seeking treatment during the pandemic, or they may be directly attributable to the coronavirus but misclassified because of other underlying conditions.[5]

And CBO also expects net immigration to fall "because of travel restrictions and reduced visa-processing capabilities related to the pandemic."[6]

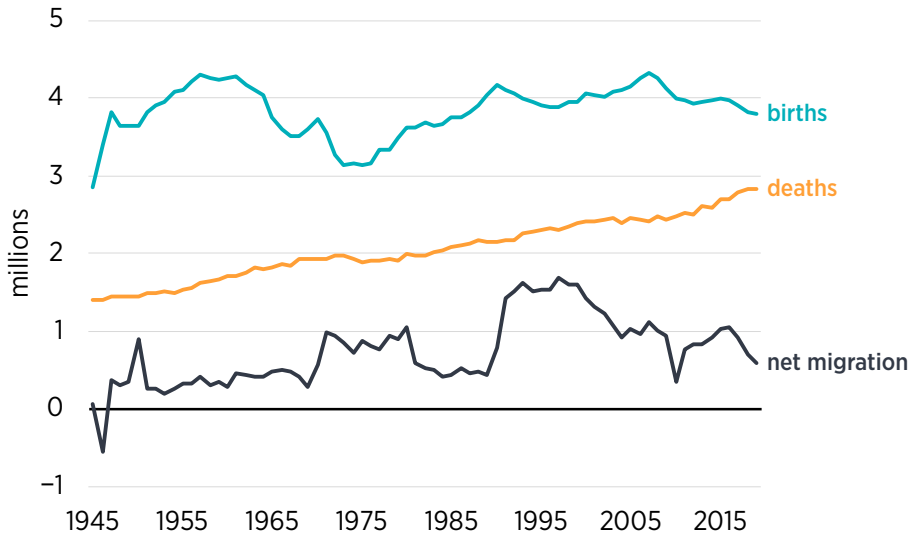
A slowing growth in population is normal for an advanced economy, but the sharp and largely unanticipated downturn in America's demographic momentum in recent years raises worrisome implications for the nation's future prosperity and influence in the world. An aging and potentially declining population may prove to be less economically dynamic and innovative than a younger, growing population. A slower-growing or shrinking workforce will be less able to support the faster-growing cohort of retirees. A shrinking population will also mean a smaller economy and tax base relative to other economic powers, including geopolitical rivals such as China. Modifying a nation's birth rate or death rate is a difficult challenge for public policy, and immigration policy is the most obvious tool for policymakers who want to reverse what may prove to be a downward demographic spiral.

BEHIND THE SHARP DECLINE IN US POPULATION GROWTH

Of the three components of population growth, the most predictable has been the number of deaths each year. As figure 1 shows, the number has been rising steadily for most of the past half century. Although the death *rate* has generally fallen in recent decades—driven lower by medical advances, wider availability of healthcare services, and improved sanitation and nutrition—the total number of deaths has climbed because the population base has grown in number and average age. And as more and more baby boomers enter retirement and live out their normal life spans, the actual number of deaths per year will steadily and predictably increase.

At the other end of the life span, the number and rate of births each year have been trending downward. This trend reflects both the number of women of childbearing age and their propensity to give birth to children. While the population of women in that age group has continued to grow along with the general population, the birth rate has been in general decline since the peak of the baby boom in the late 1950s. The TFR has declined in the United States from 3.5 births per woman at its peak in the 1950s to a record low of 1.71 in 2019.[7] For all but a handful of years since the 1960s, the TFR has been below the 2.1 level necessary to maintain a stable population over the long term. This is a challenging development for the health of the economy and society in the United States and for other advanced economies undergoing the same demographic changes.

Figure 1. US Births, Deaths, and Net Migration, 1945–2015



Source: Census Bureau, "National Intercensal Tables: 1900-1990," last updated November 30, 2016, https://www.census.gov/data/tables/time-series/demo/popest/pre-1980-national.html; Census Bureau, "National Intercensal Datasets: 1990-2000," last updated December 2, 2016, https://www.census.gov/data/datasets/time-series/demo/popest/intercensal-1990-2000-national.html; Census Bureau, "National Intercensal Tables: 2000-2010," last updated November 30, 2016, https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-national.html; Census Bureau, "National Population Totals and Components of Change: 2010-2019," last updated December 30, 2019, https://www.census.gov/data/datasets/time-series/demo/popest/2010s-national-total.html.

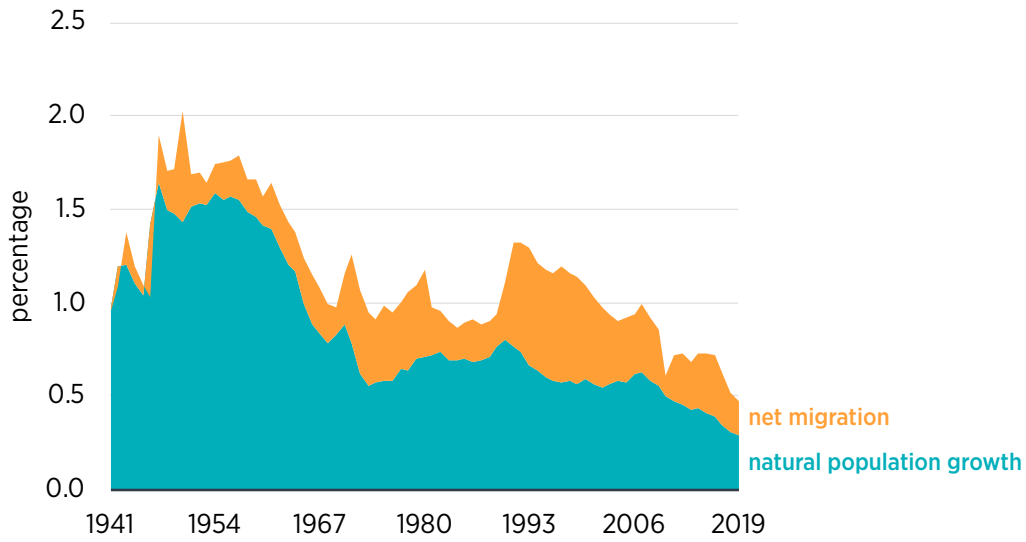
With a TFR well below 2.1, it is only a matter of time, absent net inward migration, until a population begins to shrink. This is already happening in a growing number of countries. According to the Population Division of the United Nations (UN) Department of Economic and Social Affairs, 27 countries or areas have already experienced population declines since 2010, most notably Japan. That number will increase to an estimated 55 by 2050, including China.[8] Australia, Canada, and the United States have avoided that fate so far thanks to relatively robust rates of inward migration, but that appears to be changing for the United States.

In the past three decades, US population growth has suffered from the triple whammy of rising deaths, falling births, and shrinking net international migration. Figure 2 shows that from a peak in 1990, the annual growth rate of the US population has dropped steadily from 1.4 percent per year to 0.5 percent, and that decline appears to be accelerating. The most intractable factor contributing to the demographic decline is the falling birth rate.

Falling birth rate is usually associated with higher per capita income. High-income economies, in general, provide women with greater access to education and birth control. This increases the opportunity cost of bearing children, leading to smaller family sizes.

As a result of this dynamic, birth rates have been in broad decline in the United States and around the world for a half century or more. Although the birth rate is higher in the United States than in many other advanced economies, it remains far below the replacement rate of 2.1. And it is also below the rate that US government agencies assume when making forecasts. The Board of Trust-

Figure 2. Components of US Population Growth, 1941–2019



Source: Census Bureau, "National Intercensal Tables: 1900-1990"; Census Bureau, "National Intercensal Datasets: 1990-2000"; Census Bureau, "National Intercensal Tables: 2000-2010"; Census Bureau, "National Population Totals and Components of Change: 2010-2019."

ees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance (OASDI) Trust Funds, in its annual report issued in April 2020, assumes a TFR of 1.95 for its intermediate projection through 2095, 2.15 for the low-cost projection, and 1.75 for the high-cost projection.[9] A lower TFR portends a larger imbalance of cash flows in the US pay-as-you-go Social Security system because payments to retirees (outflows) grow while taxes from active workers (inflows) decline. The trustees adjusted all three assumptions downward from last year's report, yet even their lowest TFR assumption is above the current US birth rate, and that rate is seen as unlikely to rise in future years but likely instead to fall further.

A major new study published in the *Lancet* projects that the TFR will continue to fall in virtually all nations around the world and that it will stay far below the replacement rate in most advanced economies, including the United States. The authors project that the intermediate, "reference scenario" birth rate in the United States for the rest of this century will be 1.53, far below the assumptions of the OASDI trustees, the Census Bureau, CBO, or the Population Division. The lower-range TFR estimate by the authors for the Population Division is 1.40 births per woman, a rate already breached on the downside by such major economies as Germany, Italy, Japan, South Korea, Spain, and Taiwan.[10]

The *Lancet* study suggests that birth rates in the United States and worldwide will be lower than even the lower-bound estimates of US agencies and the Population Division and that such rates are likely to remain low permanently. According to the study, more than 80 percent of a nation's TFR is explained by two variables: the average education level of women and women's access to birth control. Absent any unlikely reversal of those two variables in most countries, birth rates will continue to fall well below replacement levels and remain low. The authors conclude, "Our findings suggest that, because of progress in female educational attainment and access to contraception contributing to declining fertility rates, continued global population growth through the century is no longer the most likely trajectory for the world's population. By contrast, world population might peak just after mid-century and substantially decline by 2100."[11]

The result of plunging birth rates is slower population growth and then population decline as the number of women of childbearing age itself contracts. The *Lancet* study predicts that the US population will peak at 363.8 million in 2062 (the 2019 population was 328 million). It will then begin to decline to 335 million by 2100, or down to 285.6 million under its lower-bound assumption for TFR. Under the *Lancet* authors' mid-range assumption, the US share of global population would decline from 4.3 percent in 2017 to 3.7 percent in 2062–2064 and 3.8 percent in 2100 (or 4.5 under the lower-bound assumption for birth rates).

The United States will be able to maintain its share of the world's population of about 4 percent only because of the third determining factor of population growth, net international migration. Without net inward migration, the US population would shrink even more rapidly, creating a whole new set of challenges for the economy, the government's fiscal health, and the standing of the United States in the world.

THE CHALLENGE OF DEMOGRAPHIC DECLINE

A more slowly growing or declining population will pose a unique challenge to America's global economic leadership. A downward demographic shift would plausibly weaken US economic growth and innovation, the already shaky finances of the main US retirement programs such as Social Security and Medicare, and the relative weight and influence of the United States in the world.

Demographic decline delivers a double challenge to economic growth and prosperity. Population growth, over the long run, expands the aggregate demand that in turn expands the productive capacity of the economy. A demographic contraction, in turn, translates into fewer workers and less output for the economy, even if productivity remains unchanged. A smaller economy means a smaller domestic market to support small businesses, entrepreneurs, high-tech startup companies, and niche service providers. A declining working-age population means fewer homebuyers and thus downward pressure on home prices and less spending on prime consumer goods such as motor vehicles, furniture, and appliances.

Even more important, demographic decline means a less dynamic and innovative economy. Younger workers are more likely to generate new ideas and take risks on launching new enterprises, and thus a shrinking and aging workforce can be less able to produce the knowledge that spurs innovation and productivity growth, resulting in a slowing or stagnating of living standards.[12] Falling labor force growth may be a major reason behind the recent decline in firm entry and dynamism in the United States, as recent studies suggest.[13]

A declining workforce also strains public finances, especially programs designed to support retirees. A declining labor force means fewer taxpayers relative to the total population, which means a heavier burden per taxpayer to finance such public goods as national defense and the national debt. But the fiscal impact will be especially acute on US retirement programs such as Social Security and Medicare.

In the OASDI trustees report of April 2020, the downward adjustment in the birth rate assumptions leads to a larger future funding deficit in the OASDI programs, which are already headed for a funding shortfall in 15 years. According to the trustees, projected payments to beneficiaries will increase more rapidly than projected revenue from payroll taxes "primarily because the retirement of the baby-boom generation will increase the number of beneficiaries much faster than the number of covered workers increases, as subsequent lower-birth-rate generations replace the baby-boom generation at working ages."[14]

Without any changes in the law or demographic trends, the main Social Security trust fund (old-age and survivors insurance) is projected to be depleted by 2034, which by law would require an estimated 24 percent average reduction in benefits paid out to keep the program financially stable until roughly the end of the century.[15] Social Security finances can be fixed by a combination of tax

increases or benefit cuts, which will become more significant the longer any reform is delayed. The economic and political pain of such changes can be partially mitigated by an improvement in the underlying demographic trends, as discussed later.

If the current demographic decline continues in the United States, the economic and fiscal fallout could intertwine in a downward spiral. According to the OASDI trustees report, every two-tenths of a percentage point (0.2 percent) decline in the TFR will require a 0.4 percentage point increase in the Social Security tax to maintain the benefit level.[16] As the *Lancet* authors note, "In countries with slower economic growth and with rising shares of the population who are retired compared with those who are still working, the fiscal sustainability of national health insurance and social security programs will be challenged. . . . Taxation rates required to sustain national health insurance and social security programs might be so large as to further reduce economic growth and investment."[17]

A third negative consequence of the demographic decline is the weakening of American influence in the world. America's weight in the global economy and broader global affairs depends to a large degree on its unique combination of an advanced economy and its large population. If the US working-age population grows more slowly or even begins to decline in size, US influence in the world as the leading free-market democracy in the 21st century will diminish.

Demographics will play an important role in determining the strength of the United States relative to its two chief geopolitical rivals, Russia and China. Both are nuclear-armed regional powers with authoritarian governments that are not allied with the United States on most foreign-policy matters. One advantage the United States currently retains over both nations is a healthier demographic outlook, driven by a comparatively higher birth rate and—at least until the Trump administration took office—a much greater ability to attract immigrants. The TFR in the United States, although at a record low and well below the replacement mark of 2.1, is still above the rate of 1.6 in Russia and 1.5 in China.[18] And the United States until recently was attracting more than 1 million immigrants per year, far more than either China or Russia as a share of the population.

For both Russia and China, a declining workforce will be a liability in the decades ahead. For all the reasons outlined so far, both rival powers will face a relative loss of economic dynamism, the growing fiscal burden of retirees, and the erosion of the tax base to support the military and foreign policy initiatives. The United States can maintain its relative edge in all those areas, as well as it soft power influence in global affairs, by maintaining a growing population and workforce. In their book *Empty Planet*, Darrell Bricker and John Ibbitson conclude, "Of the three global nuclear superpowers, only America will be growing its population during the present century, provided it continues to take in newcomers."[19]

IMMIGRATION IS KEY TO GROWING AMERICA'S WORKFORCE

To reverse the sharp slowing of population growth and to maintain a growing workforce through the 21st century, the United States will need to improve the death rate, the birth rate, the net migration rate, or some combination of the three.

The most impervious to policy changes are the birth rate and the death rate, which together determine the underlying natural population growth rate. The death rate can improve over time, as it has in recent decades, through better healthcare and other measures. But an aging population means a lower death rate applies to a growing cohort of elderly Americans, resulting in a steady increase in the number of deaths each year. And even a dramatic improvement in healthcare for the elderly would have no impact on the growth of the working-age population.

Increasing the birth rate, or more specifically the TFR, has been the target of government policy around the world, with modest to mixed success.[20] But even when such programs have a positive effect, they do not raise the TFR anywhere near the 2.1 replacement level. They only tend to partially offset the long-term downward decline in the TFR. Pronatal maternity policies (such as subsidized childcare) have not proven able to offset the downward pressure on birth rates from greater access to education and birth control.

For all those reasons, the natural rate of population growth is unlikely to increase in the United States and is much more likely to continue its decline toward zero and then, within a few decades, into negative territory. The only variable of population growth that can stem the ongoing demographic decline in the United States is an increase in net migration.

A more open policy toward immigration would be the single most effective step the US government could take to avoid the problems outlined earlier of a declining population and workforce. Unfortunately for the nation's demographic health, the Trump administration has taken steps to make it more difficult for immigrant workers to enter the United States. Both before and after the COVID-19 outbreak, the administration issued executive orders that have reduced student and temporary worker visas and have suspended the processing of most permanent legal resident visas, or green cards. The result has been a dramatic fall in net migration to the United States in 2019 and 2020.

An important policy objective for the new Congress and administration in 2021 should be to restore immigration to the United States to its levels in recent years before the COVID-19 outbreak and the Trump administration restrictions. The government may maintain temporary public health precautions, but these should be the least stringent possible. Then Congress and the president should work together to increase immigration in a way that maximizes the economic and social benefits thereof.

One goal should be to raise the annual net migration rate to more closely match the higher rates in Australia and Canada, two other advanced economies that have benefited from immigration and

have thus been able to slow their own declines in population growth. According to a study from the Mercatus Center at George Mason University, Australia and Canada admit more than twice as many immigrants per year relative to their populations as the United States does. In other words, the United States could double its annual net migration from its recent average of 1 million to 2 million and it would still not match the relative openness to immigration of Australia and Canada.[21]

An increase in immigration would have an immediate and positive effect on the size of America's productive workforce. Compared with the native-born population, immigrants are more likely to be of working age and to join the labor force. According to the Census Bureau, as recently as 2016, 78 percent of the foreign-born population in the United States was of working age (18 to 64 years old) compared to 59 percent of the native-born population. Foreign-born individuals are less likely to be either minors or elderly than native-born individuals.[22] Among foreign-born men in the United States in 2019, the labor force participation rate was 78 percent, compared to 67 percent among native-born men.[23]

The benefits of increased immigration are driven not merely by the number of immigrants but also by immigrant characteristics. In expanding immigrant numbers, Congress can choose to emphasize higher-skilled foreign-born workers, who represent an increase in human capital. Studies show that immigrant workers are more inclined to file patents and to start businesses, stimulating economic growth, higher productivity, and rising real wages for native-born workers.[24] As the authors of *Empty Planet* accurately concluded, "Immigration may be America's greatest competitive advantage in the twenty-first century."[25]

An increase in net migration will also mitigate the looming fiscal reckoning for federal retirement programs. According to the 2020 OASDI trustees report, higher levels of immigration over the next 75 years will have a modestly positive effect on the finances of the retirement system. A change from the low-net-migration assumption of 946,000 a year to the high-net-migration assumption of 1,598,000 a year would shrink the projected actuarial deficit of the system by 13.4 percent over the next 25 years and shrink it by 14.7 percent over the next 75 years. As the report explains, "The [actuarial deficit] decreases with an increase in total net immigration because immigration occurs at relatively young ages, thereby increasing the numbers of covered workers earlier than the numbers of beneficiaries. Increasing average annual total net immigration by 100,000 persons improves the long-range actuarial balance by about 0.08 percent of taxable payroll."[26]

More immigration will not solve the actuarial shortfall in the current Social Security system, but it could move the United States significantly closer to a solution. More immigration will allow Congress to put the Social Security system on a sustainable fiscal path with smaller cuts in future benefits, smaller increases in payroll taxes on current workers, or both.

Congress should act sooner rather than later to increase immigration and counter the nation's downward demographic spiral. With birth rates falling around the world, the pool of potential

immigrants will be shrinking over time. The sooner immigrants arrive, the sooner they can begin to work to produce goods and services, create new products, start new companies, and pay taxes to support the federal budget and retirement programs. Immigrant females also tend to have higher birth rates than their native-born counterparts, at least in the first and second generations, so immigration can also slow the decline in the TFR.

Although a nation's demographic trends can be somewhat predictable, they are not inevitable. Birth rates can fluctuate, as they have in the United States, and labor productivity can also change unexpectedly through new discoveries and advances in automation. Breakthroughs in healthcare could significantly prolong the working lives of Americans. But such advances are not guaranteed or even sufficiently likely to assuage the concerns about current trends.[27]

Maintaining a growing population, even if more slowly than in decades past, will keep the United States more economically vibrant, fiscally intact, and globally influential. In his book on US population growth, *The Next Hundred Million*, Joel Kotkin concludes, "In advanced countries a rapidly aging or decreasing population does not bode well for societal or economic health, whereas a growing one offers the hope of expanding markets, new workers, and entrepreneurial innovation."[28]

Policymakers can leverage the underlying strengths of the US system to attract international young talent. A more open immigration policy is truly an effective tool to brighten the nation's demographic future. By reforming the immigration system to allow more hardworking and educated foreign-born workers to join the American workforce, Congress and the next administration can reverse America's accelerating demographic decline.

ABOUT THE AUTHOR

Daniel Griswold is a senior research fellow at the Mercatus Center at George Mason University and codirector of its Trade and Immigration Project. Griswold is a nationally recognized expert on trade and immigration policy. He is the author of the 2009 book *Mad about Trade: Why Main Street America Should Embrace Globalization*. He has authored numerous studies; testified before congressional committees; commented for CNBC, CSPAN, Fox News, and other TV and radio outlets; and written articles for the *Wall Street Journal*, the *Los Angeles Times*, and other publications. Griswold holds a bachelor's degree in journalism from the University of Wisconsin at Madison and a master's in the politics of the world economy from the London School of Economics and Political Science.

NOTES

1. Stein Emil Vollset et al., "Fertility, Mortality, Migration, and Population Scenarios for 195 Countries and Territories from 2017 to 2100," *Lancet* 396, no. 10258 (2020): 7.
2. Census Bureau, "National Intercensal Tables: 1900-1990," last updated November 30, 2016, https://www.census.gov/data/tables/time-series/demo/popest/pre-1980-national.html; Census Bureau, "National Intercensal Datasets: 1990-2000," last updated December 2, 2016, https://www.census.gov/data/datasets/time-series/demo/popest/intercensal-1990-2000-national.html; Census Bureau, "National Intercensal Tables: 2000-2010," last updated November 30, 2016, https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-national.html; Census Bureau, "National Population Totals and Components of Change: 2010-2019," last updated December 30, 2019, https://www.census.gov/data/datasets/time-series/demo/popest/2010s-national-total.html.
3. Centers for Disease Control and Prevention, "COVID-19 Forecasts: Deaths," accessed September 30, 2020, https://www.cdc.gov/coronavirus/2019-ncov/covid-data/forecasting-us.html.
4. Melissa S. Kearney and Phillip B. Levine, *Half a Million Fewer Children? The Coming COVID Baby Bust* (Washington, DC: Brookings Institution, 2020).
5. Congressional Budget Office, *The 2020 Long-Term Budget Outlook*, September 2020, 44.
6. Congressional Budget Office, *The 2020 Long-Term Budget Outlook*, 43.
7. Brady E. Hamilton, Joyce A. Martin, and Michelle J. K. Osterman, "Births: Provisional Data for 2019" (Vital Statistics Rapid Release No. 008, Centers for Disease Control and Prevention, Atlanta, GA, May 2020).
8. United Nations, *World Population Prospects 2019: Highlights*, 2019, 12.
9. Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, "The 2020 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds," April 2020, 84.
10. Vollset et al., "Fertility, Mortality, Migration, and Population Scenarios," 6–9.
11. Vollset et al., 2.
12. Charles I. Jones, "The End of Economic Growth? Unintended Consequences of a Declining Population" (NBER Working Paper No. 26651, National Bureau of Economic Research, Cambridge, MA, January 2020), 6.
13. Jones, "The End of Economic Growth?," 3–4; Fatih Karahan, Benjamin Pugsley, and Ayşegül Şahin, "Demographic Origins of the Startup Deficit" (NBER Working Paper No. 25874, National Bureau of Economic Research, Cambridge, MA, May 2019); Michael Peters and Conor Walsh, "Declining Dynamism, Increasing Markups and Missing Growth: The Role of the Labor Force" (2019 Meeting Papers No. 658, Society for Economic Dynamics 2019 Annual Meeting, June 27, 2019).
14. Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, "The 2020 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds," 3.
15. Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, 23.
16. Peter Coy, "Americans Aren't Making Babies, and That's Bad for the Economy," *Bloomberg Businessweek*, July 29, 2020.
17. Vollset et al., "Fertility, Mortality, Migration, and Population Scenarios," 18.
18. Vollset et al., 6, 9.
19. Darrell Bricker and John Ibbitson, *Empty Planet: The Shock of Global Population Decline* (New York: Crown Publishers, 2019), 189.
20. Vollset et al., "Fertility, Mortality, Migration, and Population Scenarios," 18; Anna Raute, "Can Financial Incentives Reduce the Baby Gap? Evidence from a Reform in Maternity Leave Benefits" (NBER Working Paper No. 23793, National Bureau of Economic Research, Cambridge, MA, September 2017).

21. Daniel Griswold, "Reforming the US Immigration System to Promote Growth" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, October 2017), 18–19.

22. Jonathan Vespa, David M. Armstrong, and Lauren Medina, "Demographic Turning Points for the United States: Population Projections for 2020 to 2060," (Report No. P25-1144, Census Bureau, Washington, DC, February 2020), 11.

23. Bureau of Labor Statistics, "Labor Force Characteristics of Foreign-Born Workers," news release no. USDL-20-0922, May 15, 2020, https://www.bls.gov/news.release/forbrn.nr0.htm.

24. Daniel Griswold and Jack Salmon, "Attracting Global Talent to Ensure America Is First in Innovation" (Mercatus Policy Brief, Mercatus Center at George Mason University, Arlington, VA, April 2019).

25. Bricker and Ibbitson, *Empty Planet*, 189.

26. Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, "The 2020 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds," 184.

27. Jones, "The End of Economic Growth?," 30.

28. Joel Kotkin, *The Next Hundred Million: America in 2050* (New York: Penguin Press, 2010), 6.