The number of births in America is set to plunge by at least 8 percent in 2021, dragging the U.S. total fertility rate down to European levels. While this pandemic-related “baby bust” is gaining a lot of media attention, what is more worrisome is that U.S. birthrates were already in a protracted decline long before the pandemic hit. Why have birthrates been falling? Are they likely to rise again? And if they don’t, what does it mean for the budget, the economy, and the position of the United States in the world order?
About Critical Issues

Critical Issues, jointly published by The Terry Group and the Global Aging Institute (GAI), is an occasional series of issue briefs on the demographic and economic trends reshaping America and the world, and in particular the future environment for retirement and health care. Some of the issues in the series explore broad macro-level developments, while others focus on specific developments in the retirement and health-care space.

While the series is primarily U.S. focused, it often places U.S. experience in an international context and sometimes turns the spotlight on other countries. The Terry Group and GAI hope that the series will help inform policymakers, business leaders, and strategic planners as they prepare for a rapidly changing future.

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The End of U.S. Demographic Exceptionalism

The pandemic has exacted a huge toll on America’s health and economy whose full extent will not be known for years. If there is any silver lining to the catastrophe, it is that it has cast a spotlight on a number of serious social and economic problems, from health disparities to job insecurity and income inequality, and by so doing may have made it more likely that public policy will begin to address them.

One such problem is declining birthrates. With forecasts suggesting that we will see a pandemic-related plunge in births of at least 8 percent in 2021, the news is suddenly filled with stories about a new “baby bust.” In fact, the baby bust began more than a decade ago. In 2007, just before the Great Recession, the U.S. total fertility rate, a measure of the average number of births that each woman can be expected to have over her lifetime, was 2.12. By 2019, the latest year for which national data are available, it had fallen to 1.71, an all-time historical low. Now the pandemic is set to drive it even lower—perhaps to around 1.5, which is less than the recent average in Europe.

This represents a seismic demographic shift with far-reaching implications for America’s future. Before the decline in birthrates began, America enjoyed a considerable demographic advantage over other developed countries, almost all of which were due to age much more than we were. In just a little over a decade, that advantage has evaporated. The long-term consequences will include larger fiscal burdens, slower economic growth, and, perhaps, diminished geopolitical stature.

Although America may experience a post-pandemic bounce in birthrates, it is doubtful that all or even most of the decline can be reversed. Enacting pronatal policies that mitigate the costs of childrearing and help young adults to balance job and family responsibilities may help. But the spotty track record of such polices suggests that it would be prudent for America to prepare for a future of permanently lower birthrates.

FALLING BIRTHRATES

Until recently, the United States was a demographic outlier among its developed world peers. Following the postwar baby boom, the total fertility rate (TFR) fell steeply in the

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1 Unless otherwise noted, fertility data for the United States come from the National Vital Statistics System of the Centers for Disease Control and Prevention (CDC), and are available at https://www.cdc.gov/nchs/nvss/births.htm. Fertility data for other countries come from the UN Population Division’s World Population Prospects: The 2019 Revision (New York: UN Population Division, 2019), except for 2020 data for South Korea, which come from Statistics Korea.
United States, just as it did in most developed countries. But after dipping well beneath the 2.1 replacement rate needed to maintain a stable population from one generation to the next during the 1970s, it partially recovered as late-birthing Boomers finally got around to starting families. Between 1990 and 2010, the TFR averaged 2.03, higher than the average for any other developed country except Iceland, Israel, and New Zealand. Together with substantial net immigration, America’s relatively high fertility rate seemed to ensure that it would remain the youngest of the major developed countries for the foreseeable future. It also seemed to ensure that America would still have a growing workforce, even as those in other developed countries stagnated or declined.

To be sure, the United States was projected to age significantly, and this aging was due to be given an extra kick by the passage of its unusually large baby boom generation into old age starting around 2010. But the outlook for the United States was so strikingly different from that in the rest of the developed world that the eminent demographer Nicholas Eberstadt coined the term “demographic exceptionalism” to describe it.²

Over the past decade, America has begun to look much more like a typical developed country. U.S. birthrates began falling again in 2008 and, except for a minor uptick in 2014, have fallen every year since then. In 2018, the TFR slipped beneath the previous record low of 1.74 set in 1976. As of 2019, the most recent year for which national data are available, it stood at just 1.71.

Figure 1

U.S. Total Fertility Rate, 1940–2019

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic White</td>
<td>1.91</td>
<td>1.64</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>2.14</td>
<td>1.79</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.84</td>
<td>1.96</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2.12</td>
<td>1.73</td>
</tr>
</tbody>
</table>

2019 TFR = 1.71

Source: National Vital Statistics System (CDC, various years)

The decline, moreover, has occurred among women of all races and ethnicities, though it has been steeper among Hispanics than among Blacks or Whites. (See figure 1.)

The TFR is what demographers call a “period measure,” and as such it can sometimes give a misleading picture of the long-term trend in fertility. The best measure of this trend is completed cohort fertility, but that of course is unknowable until the cohort of women in question has ended their childbearing years. As a substitute, demographers look at the TFR, which is calculated by summing the age-specific fertility rates of all women of childbearing age in a given year. Implicitly, the TFR thus assumes that fertility behavior at each age will remain unchanged. For example, it assumes that today’s 25-year-old women will, when they turn 35 ten years from now, have children at the same rate that today’s 35-year-old women do. The problem is that, if the timing of births changes, the TFR can end up understating or overstating ultimate completed cohort fertility. This is what happened in the 1970s and 1980s when Boomers shifted childbirth to older ages, first pulling down the TFR beneath the actual long-term fertility trend, then pushing it back up.

Initially, many demographers assumed that the decline in the TFR that began in 2008 was an artifact of a similar “tempo effect,” and that Millennials were merely postponing family formation rather than deciding to have fewer children. By now, with the oldest Millennials turning 40, this assumption needs to be reevaluated. To be sure, there has been a slight increase in age-specific fertility rates among women in their late thirties and early forties. But women in this age group account for such a small share of all births that even a large increase would only have a small impact on the TFR. If Millennials are to recoup the children they did not have in their twenties, they will have to do so mainly in their early thirties. Yet as of 2019 the age-specific fertility rate of women aged 30 to 34 was still falling.

What hope there may have been that a tempo effect is about to kick in and raise birthrates has been further dimmed by the pandemic. While minor adversities, like blackouts or blizzards, sometimes lead to baby boomlets nine months later, major and prolonged disasters, like wars, plagues, and depressions, almost always result in fewer births. And indeed, this is what we are seeing. Preliminary data from California indicate that births registered huge year-over-year declines in December 2020 and January 2021, nine to ten months after the lockdowns began.3 (See figure 2.) The CDC has not yet published even preliminary national data for 2020, but based on the available data from California and a number of other states it seems likely that total U.S. births

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3 The author is grateful to Neil Howe, who is Sector Head for Demography at Hedgeye and a Senior Associate at GAI, for sharing the California data, as well as for his many invaluable insights into the demographic trends discussed in this issue brief.
fell by 4 to 5 percent last year. According to a forecast by the Brookings Institution, they are likely to fall by at least another 8 percent in 2021. If these estimates are borne out, the TFR this year could easily sink all the way to 1.5, which is substantially less than the 1.6 TFR that Europe averaged over the past five years.

The TFR this year could sink all the way to 1.5, which is less than the recent average in Europe.

To make matters worse, net immigration, which acts much like a higher fertility rate, has also declined. After rising during the 1990s and plateauing in the early 2000s, net immigration fell in the wake of the Great Recession, recovered in the mid-2010s, then fell once more. As of 2019, on the eve of the pandemic, it stood at barely half the level it had been just five years before, and it has surely fallen further since then.

These developments, if not reversed, spell the end of U.S. demographic exceptionalism. Although rising life expectancy may be the force that first leaps to mind when people think of the aging of the population, falling fertility is quantitatively the more important driver. Differences in fertility rates, moreover, explain much more of the variation in the projected degree of population aging across the developed countries than differences in life expectancy do, which is not surprising since the differences are much larger. Absent high levels of immigration, it is the countries with the lowest fertility rates that will age the most over the coming decades. (See figure 3.) It is also the countries with the lowest fertility rates that have or will soon have contracting workforces.

To make matters worse, net immigration has also declined.

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The decline in the U.S. TFR is not large enough to put America on the ruinous demographic trajectory of a Greece, Italy, Spain, or Japan, much less a South Korea, whose TFR sank to 0.84 in 2020, the lowest in the world, and where, by the year 2050, there could be more people turning 90 each year than being born. But unless birthrates rise again, the United States will age considerably more than is suggested by the latest Census Bureau or Social Security Administration projections, which do not fully factor in recent declines. согласно этим прогнозам, доля стареющего населения в США быстро увеличится до 21 или 22 процентов в 2030 году, когда младшие боймеры достигнут 65 лет, а затем увеличится только незначительно благодаря дальнейшим улучшениям в ожидаемой продолжительности жизни. С ТFR в 1.50 до 1.75, доля стареющего населения в популяции будет продолжать быстро увеличиваться, приближаясь или даже превосходя 30 процентов в начале следующего столетия.

**DAUNTING CHALLENGES**

Population aging poses serious challenges, and the greater the degree of aging the more daunting those challenges become. To begin with, there is the rising fiscal burden of old-age benefit spending. Graying means paying more for pensions, more for health

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5 The latest Census Bureau projections, which were published in 2017 and are available at https://www.census.gov/data/datasets/2017/demo/popproj/2017-popproj.html, assume a constant TFR of 1.84 in every future year. The latest Social Security Administration projections, which were published in 2020, assume a V-shaped recovery in the TFR to 1.95 by 2029. See *The 2020 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* (Washington, DC: Social Security Administration, April 2020).
care, and more for long-term care for the frail elderly. Over time, a lower fertility rate translates into a higher old-age dependency ratio of retired beneficiaries to taxpaying workers, and a higher old-age dependency ratio in turn translates into a higher cost rate for pay-as-you-go benefit programs like Social Security and Medicare. Spending on retirement and health benefits is already the driving force behind the federal government’s structural budget deficit, accounting, according to the CBO’s latest long-term budget projections, for all of the growth in noninterest outlays as a share of GDP over the next thirty years. A more rapidly aging population would compound the challenge.

Even as fiscal burdens rise, economic growth will slow. A lower fertility rate not only hollows out the base of the population pyramid, leaving it top-heavy with elders. It also translates into slower growth in the future working-age population, which, all other things being equal, in turn translates into slower growth in employment and slower growth in GDP. By the 2030s and 2040s, the CBO projects that employment growth will be averaging just 0.3 percent per year, an outcome that could easily pull down real GDP growth to between 1.0 and 1.5 percent per year, just one-third to one-half of its postwar average. Longer term, a continuation of recent low birthrates might mean that employment actually contracts across the business cycle, peak to peak and trough to trough. In theory, faster productivity growth could offset slower or negative employment growth. But in fact, productivity growth is more likely to decline than to rise in an aging America, which may have a more slowly growing and aging capital stock and a less mobile and less entrepreneurial workforce. Indeed, this is one reason why the CBO’s long-term projections now assume that the anemic productivity performance that America experienced over the course of the last business cycle was not an aberration, but the new normal.

Then there is the geopolitical challenge. Population size alone does not confer geopolitical stature. But population size and economic size together are potent twin engines of national power. They obviously underpin the hard power of national defense. They may also underpin “soft power,” which depends in part on such things as a country’s global business presence and clout in multilaterals, which in turn depend in part on

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demographic and economic size. History has many examples of demographically small powers that exercised outsized geopolitical sway, from Athens and Venice to Portugal, the Netherlands, and England. But what is often forgotten is that, during their period of growing geopolitical influence, all of these powers were also growing demographically and economically relative to their neighbors and to the rest of the world. History has few if any examples of geopolitically rising powers that were at the same time demographically and economically stagnant or contracting powers.

ROOM ON THE DOWNSIDE
What happens to birthrates thus matters a great deal to America’s future. Will they continue to decline, stabilize, or rise again once the pandemic is past? In approaching this question, a degree of humility is in order. Demographers, it must be said, do not have a terribly good track record when it comes to predicting changes in fertility behavior. The postwar baby boom caught most demographers by surprise when it began in the late 1940s, and most were equally surprised when it abruptly ended in the mid-1960s. That said, there are good reasons to believe that today’s lower birthrates may prove to be enduring. Indeed, the experience of other developed countries, many of which still have a much lower TFR than we do, suggests that there is plenty of room on the downside.

There are many forces which cause family size to decline as societies develop and modernize, including rising educational attainment, the mass entry of women into the labor force, the widespread availability of effective contraception, the high cost of childrearing, and the socialization of old-age security, which has removed what traditionally was the most compelling reason for having children at the same time that the cost of raising them has soared. By historical standards, all developed countries now have low fertility, and this is not about to change. Yet some developed countries nonetheless have higher fertility than others. To understand why U.S. birthrates have fallen and may remain low, it helps to consider the factors that previously helped buoy them up.

One reason for U.S. demographic exceptionalism was Americans’ religiosity. Family size is positively correlated with intensity of religious conviction in all of the world’s major religions, and until recently Americans, by almost any measure, were far more religious than Europeans or Asians. Another reason was Americans’ optimism about the future, and in particular it has been much more difficult for Millennials to launch careers and establish independent households than it was for Boomers or Xers at the same age.
their own and their children’s living standard prospects. A third and critically important reason was the relative ease with which young people could launch careers and establish independent households. All of this is changing. America has become less religious and less optimistic. And it has been much more difficult for Millennials, whose coming of age has been bookended by the Great Recession and COVID-19, to launch careers and establish independent households than it was for Boomers or Xers at the same age.

It is true that Millennial women, when surveyed, say both that they would ideally want and that they expect to have more children than they are actually having. This gap between ideal and expected fertility and realized fertility seems to suggest that an improving economy could help to raise birthrates as America emerges from the pandemic. Yet it is worth recalling that the TFR fell in every year save one during the recent record-breaking economic expansion, and registered an all-time low at its peak in 2019. It may be that the Great Recession left lasting economic and psychological scars that have made Millennials more risk-averse, and hence more hesitant to start families than previous generations were. The gap also suggests that pronatal policies, which might include everything from cash “baby bonuses” to subsidized daycare and paid maternity and paternity leave, could help. This is certainly possible. To be effective, however, the policies must be lasting. One-off incentives may temporarily raise the TFR as couples move up planned births to take advantage of them, but are unlikely to raise completed cohort fertility. Even the track record of well-designed pronatal policies is spotty. While they appear to have raised cohort fertility in some countries, or at least to have kept it from falling further than it otherwise would have, they have had little or no effect in others.

None of this rules out the possibility of a post-pandemic bounce in birthrates. While history teaches that birthrates typically fall during major and prolonged disasters, it also teaches that they often rise once the disaster is past. What it does suggest is that it is doubtful they will rise all or even most of the way back to where they were before the Great Recession.


A NEW DEMOGRAPHIC ERA

With the prospects for higher birthrates at best uncertain, pursuing other policies that can boost long-term economic growth becomes all the more important. One important step would be to increase immigration. It is true that the recent decline in net immigration is in part the result of demographic and economic trends that, like lower birthrates, may prove to be enduring. These trends include slower population growth in many traditional sending countries in Latin America (less immigration “push”) and slower economic growth in the United States (less immigration “pull”). But immigration is nonetheless much more responsive to policy change than fertility is, and policy has become more restrictive. There is considerable room for principled disagreement about the exact shape immigration policy should take. What is not in question is that an aging America would benefit from more immigration. In the past, when we had replacement-level fertility, immigrants were what kept the workforce growing. In the future, they may be all that keeps it from shrinking.

Another important step would be to increase labor-force participation, especially among the elderly, who are not only America’s greatest underutilized human resource, but also the fastest growing segment of the population. Longer work lives would have many benefits. They could substantially offset the demographic drag that slower growth in the population in the traditional working years would otherwise have on economic growth. They could generate extra tax revenue that would help to alleviate the rising burden of old-age benefit spending. A growing literature, moreover, concludes that continued productive engagement has a large positive effect on the physical health, cognitive function, and emotional well-being of older adults. Prior to the pandemic, elderly labor-force participation was rising steadily in the United States. Once the pandemic is behind us, public policy should do whatever it can to encourage this positive development.

Demographic trends are ushering in a new era unlike any other in the nation’s past. Throughout its history, America has always been a demographically growing society. Yet according to preliminary Census Bureau estimates, the U.S. population increased by just 0.35 percent from 2019 to 2020, the slowest growth rate on record. This year the collapse in births, together with excess deaths from COVID-19, could bring U.S. population growth

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to a complete stop for the first time ever. Throughout its history, America has also been defined by its youth. As recently as 1940, there were actually more college-age youth aged 18 to 21 than elderly aged 65 and over. Today there are three times as many elderly as college-age youth and by 2050 there will be at least five times as many.

A much more slowly growing and much older America can still be a prosperous America. But ensuring a positive outcome will test our ability to change, adapt, and evolve. Thankfully, that ability has always been another of America’s defining characteristics.
About the Global Aging Institute

The Global Aging Institute (GAI) is a nonprofit research and educational organization dedicated to improving our understanding of global aging, to informing policymakers and the public about the challenges it poses, and to encouraging timely and constructive reform. GAI’s agenda is broad, encompassing everything from retirement security to national security, and its horizons are global, extending to aging societies worldwide.

GAI was founded in 2014 and is headquartered in Alexandria, Virginia. Although GAI is relatively new, its mission is not. Before launching the institute, Richard Jackson, GAI’s president, directed a research program on global aging at the Center for Strategic and International Studies which, over a span of fifteen years, played a leading role in shaping the debate over what promises to be one of the defining challenges of the twenty-first century. GAI’s Board of Directors is chaired by Tom Terry, who is CEO of The Terry Group and past president of the International Actuarial Association and the American Academy of Actuaries. To learn more about GAI, visit us at www.GlobalAgingInstitute.org.

About The Terry Group

The Terry Group is an actuarial consulting firm whose consultants and researchers help organizations navigate the complexities of health care, pensions, investments, and employee benefits. We are actuaries, clinicians, and experts in capital markets. We build models, analyze data, and provide expert testimony, working in partnership with our clients to help solve challenging problems and achieve their goals. Our deep experience, superior technical expertise, and passion for continuous learning are central to who we are. To learn more about The Terry Group, visit us at www.terrygroup.com.