



**THE 2024 JOINT ECONOMIC REPORT**

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**R E P O R T**

OF THE

**JOINT ECONOMIC COMMITTEE  
CONGRESS OF THE UNITED STATES**

ON THE

**2024 ECONOMIC REPORT  
OF THE PRESIDENT**

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**CHAPTER 2 OF THE  
REPUBLICAN RESPONSE**

**Demographics and the Deficit**

**JUNE 17, 2024**

**Joint Economic Committee Republicans  
Vice Chairman David Schweikert**

## CHAPTER 2: DEMOGRAPHICS AND THE DEFICIT

Last year's *Response* overviewed the importance and increasingly difficult challenge of improving the United States' fiscal health.<sup>1</sup> JEC Republicans concluded that the growth of the Federal debt is "on an unsustainable and potentially ruinous path" and that this growth in debt is driven largely by spending on mandatory programs.<sup>2</sup> Since that *Response* was written a year ago, the situation has only grown more dire. As of May 2024, the debt-to-GDP ratio exceeds 97 percent and total debt held by the public is more than \$27 trillion.<sup>3</sup> Given the current growth rate of the debt, this is projected to be greater than \$30 trillion by May of next year.<sup>4</sup> Our debt crisis can only be solved by understanding the factors that are driving our debt and crafting policies that can contend with them. This Chapter is intended to make clear that demographic changes, such as an older population, a declining fertility rate, and a reduction in male prime-age (25-54) labor force participation are the primary forces driving increases in our mandatory spending and deficit.

### *Social Security*

Ensuring the solvency of Social Security is critical to maintaining financial well-being among seniors. As of the 2024 Social Security Trustees Report, the combined Social Security trust funds, which pay out benefits, are expected to be depleted by 2035. This would

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<sup>1</sup> Joint Economic Committee (JEC) Republicans, *Republican Response to the Economic Report of the President* (U.S. Congress Joint Economic Committee, 2023): 2, <https://sen.gov/LVQYY>.

<sup>2</sup> JEC Republicans, *Response*, 24.

<sup>3</sup> Congressional Budget Office (CBO), *The Budget and Economic Outlook: 2024 to 2034* (February 2024); JEC Republicans, "Congressman David Schweikert's Daily Debt Monitor," accessed May 9, 2024.

<sup>4</sup> \$30 trillion figure is derived by taking the current daily growth of the debt and adding it to the current debt level as of May 9th. CBO, "10 Year Budget Projections;" JEC Republicans, "Daily Debt Monitor."

result in an automatic 21 percent cut to all individuals' benefits.<sup>5</sup> It is estimated that the senior poverty rate would subsequently more than double, from 1.5 to 3.3 percent.<sup>6</sup> Social Security's solvency becomes even more sensitive to employment and wage growth as the depletion of the combined trust funds necessitates increased revenues. Understanding Social Security and the drivers of its rising costs is necessary to ensure its solvency and protect the financial stability of its beneficiaries.

In 1935, President Roosevelt signed the Social Security Act into law which provided retirement insurance to approximately 222,000 beneficiaries.<sup>7</sup> Originally only providing payments to retired workers in certain industries, Social Security has since been expanded dramatically both in coverage and overall fiscal cost. In 1939, the program was expanded to include the families of retired workers, and, since then, there have been more than 20 expansions or reforms to the entitlements and number of covered beneficiaries.<sup>8</sup> While there has not been a major expansion to Social Security in over 20 years, costs continue to grow. Social Security spending as a share of GDP was 3.1 percent in 1970, but now stands at 5.2 percent and is expected to rise to nearly 6 percent

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<sup>5</sup> Social Security Administration, *2024 OASDI Trustees Report* (May 6, 2024), <https://www.ssa.gov/oact/TR/2024/index.html>; Peter G. Peterson Foundation, "Social Security and Medicare Trust Funds Could Soon Be Depleted," <https://www.pgpf.org/blog/2024/05/social-security-and-medicare-are-facing-serious-shortfalls>.

<sup>6</sup> Social Security Administration, "The Distributional Consequences of a 'No-Action' Scenario: Updated Results," July 2005, <https://www.ssa.gov/policy/docs/policybriefs/pb2005-01.html>.

<sup>7</sup> Note that the 222,000 figure is from the first available data from 1940. Martha A. McSteen, "Fifty Years of Social Security," Social Security Administration, <https://www.ssa.gov/history/50mm2.html>.

<sup>8</sup> Geoffrey Kollmann, "Social Security: Summary of Major Changes in the Cash Benefits Program," Social Security Administration, <https://www.ssa.gov/history/reports/crsleghist2.html>.

by 2035.<sup>9</sup> The increases in spending result from a growing number of beneficiaries in response to an aging population.

Social Security benefits are funded by current workers' taxes, which are deposited into the two Social Security trust funds, the Old-Age and Survivors Insurance Trust Fund (OASI) and the Disability Insurance Trust Fund (DI).<sup>10</sup> These funds are obligated to invest in special U.S. Treasury securities, which pay a rate that is determined by a formula established in Section 201(d) of the Social Security Act.<sup>11</sup> The program operates as a "pay as you go system," which means that current workers pay into the trusts to fund the benefits for current retirees.<sup>12</sup> For nearly 30 years, the Social Security Administration (SSA) received more in tax revenue than it paid out in benefits. The excess funds were deposited into the trusts, which receive interest on deposits by investing in securities from the Treasury.<sup>13</sup> Starting in 2021, however, trust fund reserves began to fall because the benefits paid out exceeded the income received from payroll taxes.<sup>14</sup> Short-term increases in Social Security payments can be driven by greater than anticipated cost-of-living adjustments (COLA), but long-run risks to the depletion of the trust funds are due to demographic changes. Putting Social Security on a sustainable path requires

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<sup>9</sup> Social Security Administration, *2024 OASDI Trustees Report* (May 6, 2024), Table VI.G4, <https://www.ssa.gov/OACT/TR/2024/index.html>.

<sup>10</sup> Social Security Administration, "What are the Trust Funds?," <https://www.ssa.gov/news/press/factsheets/WhatAreTheTrust.htm>.

<sup>11</sup> Social Security Administration, "Interest Rate Formula For Special Issues." <https://www.ssa.gov/oact/progdata/intrateformula.html>.

<sup>12</sup> Stephen C. Goss, "The Future Financial Status of the Social Security Program," Social Security Administration, <https://www.ssa.gov/policy/docs/ssb/v70n3/v70n3p111.html>.

<sup>13</sup> Center on Budget and Policy Priorities, "Policy Basics: Understanding the Social Security Trust Funds," <https://www.cbpp.org/research/policy-basics-understanding-the-social-security-trust-funds>.

<sup>14</sup> Social Security Administration, "A Summary of the 2021 Annual Reports," <https://www.ssa.gov/oact/TRSUM/2021/index.html>.

understanding these demographic changes and implementing policies to contend with them.

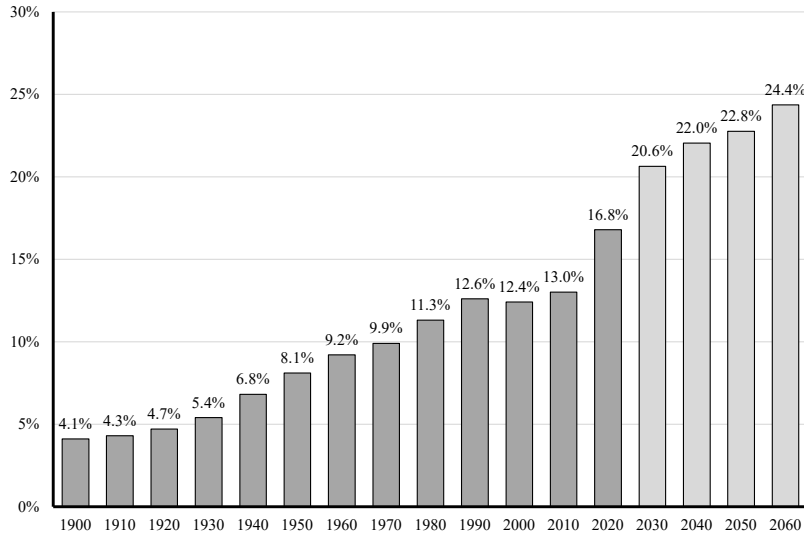
The composition of the U.S. population has changed dramatically since Social Security was first implemented. Americans were younger, having children at higher rates, and there was stronger labor force participation among prime-age men.<sup>15</sup> A critical factor to the cost of the program is that in 1940 the proportion of the population that was 65 or older was 6.8 percent, but, as of 2022, that number has more than doubled to 17.3 percent.<sup>16</sup> Currently, there are approximately 2.9 Americans aged between 25 and 64 for every American aged 65 or older. CBO projects that this ratio will fall to 2.2 by 2054.<sup>17</sup> Because of the way benefits are distributed, the country's age distribution is the most important factor in determining present and future costs for Social Security.

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<sup>15</sup> U.S. Bureau of Labor Statistics, "Labor Force Participation Rate - Men [LNS11300001]," retrieved from FRED, Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/series/LNS11300001>; World Bank, "Fertility Rate, Total for the United States [SPDYNTFRTINUSA]," retrieved from FRED, Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/series/SPDYNTFRTINUSA>.

<sup>16</sup> Zoe Caplan, "U.S. Older Population Grew From 2010 to 2020 at Fastest Rate Since 1880 to 1890," United States Census Bureau, May 25, 2023, <https://www.census.gov/library/stories/2023/05/2020-census-united-states-older-population-grew.html>; United States Census Bureau, "Population 65 Years and over in the United States, 2022," American Community Survey, [https://data.census.gov/table/ACSST1Y2022.S0103?q=S0103:Population 65 Years and Over in the United States](https://data.census.gov/table/ACSST1Y2022.S0103?q=S0103:Population%2065%20Years%20and%20Over%20in%20the%20United%20States).

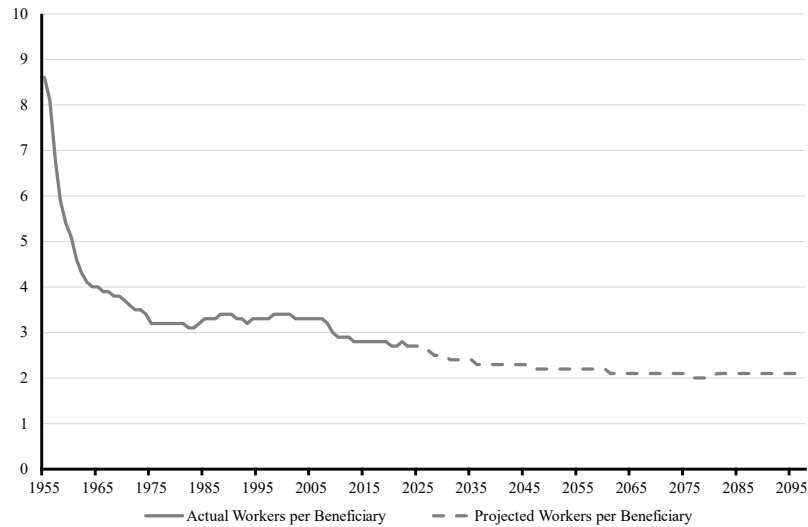
<sup>17</sup> CBO, *The Demographic Outlook: 2024 to 2054*, January 2024, <https://www.cbo.gov/publication/59899>.

**Figure 2-1: Percent of U.S. Population Aged 65 and Older**

Source: Census Bureau (Decennial Census of Population, 1900 to 2020), 2023 National Population Projections

As more people age and become beneficiaries, it is important that there is a sufficient working population to sustain them. The ratio of covered workers to retirees, which measures the number of workers paying taxes into Social Security relative to the number of retirees receiving benefits, was over 40 in 1945. Today, this ratio has shrunk to 2.7.<sup>18</sup> Fewer covered workers places increased financial pressure on existing workers as there are fewer of them to support more retirees.

<sup>18</sup> Note that the types of individuals covered has expanded since 1945. Since the most recent expansion in 2000, however, the ratio of covered workers to retirees has steadily declined. Social Security Administration, “Ratio of Covered Workers to Beneficiaries,” Social Security History, <https://www.ssa.gov/history/ratios.html>; Social Security Administration, “Fact Sheet – Social Security,” <https://www.ssa.gov/news/press/factsheets/basicfact-alt.pdf>.

**Figure 2-2: Ratio of Covered Workers to Social Security Beneficiaries**

Source: 2024 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, Table IV.B3 (intermediate assumptions)

Even without any major expansions in the past 20 years, Social Security costs are expected to rise substantially over the next decade. CBO projects that annual Social Security spending will grow by over a trillion dollars in the next ten years, increasing from \$1.45 trillion in FY2024 to \$2.47 trillion in FY2034.<sup>19</sup> Social Security, a program which previously generated more income than it paid out in benefits, is now the most expensive individual program in the Federal budget.<sup>20</sup> The primary driver for this growth is the aging population. Without accepting the demographic reality and creating policies that address its implications, it is impossible to meaningfully put the country on a sustainable fiscal path.

<sup>19</sup> CBO, *The Budget and Economic Outlook: 2024 to 2034*, Table 1-4.

<sup>20</sup> Peter G. Peterson Foundation, “The Ratio of Workers to Social Security Beneficiaries is at a Low and Projected to Decline Further.” August 2022, <https://www.pgpf.org/blog/2022/08/the-ratio-of-workers-to-social-security-beneficiaries-is-at-a-low-and-projected-to-decline-further>.

### ***Healthcare Spending***

Reining in healthcare spending is also critical to achieving a sustainable fiscal path. Finding innovative ways to reduce adverse health outcomes will lower per patient costs and lead to a healthier overall population. Much like in Social Security, demographics play a significant role in the overall cost of healthcare. Healthcare costs are closely associated with the age of patients, and the sum of healthcare spending borne by the Federal government increases as more seniors enroll in Medicare. It is estimated that nearly half of an individual's lifetime healthcare expenditures will occur after age 65, and expenditures grow larger after an individual reaches 65.<sup>21</sup> For those who reach age 85, an estimated one-third of their lifetime healthcare expenses will occur after that age.<sup>22</sup> The health profile of seniors and the mean age of the Medicare population can accelerate costs even after accounting for changes in the overall number of enrollees. Policymakers should recognize not only the total number of individuals over the age of 65, but also the average U.S. life expectancy and how these factors might impact Federal spending.<sup>23</sup> As healthcare costs continue to rise, more money must be drawn from current earners to fund existing programs. For example, in the most recent MedPAC Report to Congress, they estimated that the share of all personal and corporate income taxes that are transferred to the Medicare trust fund will rise from 13 percent in 2022 to 22 percent in 2030.<sup>24</sup> Understanding future

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<sup>21</sup> Berhanu Alemayehu and Kenneth E. Warner, "The Lifetime Distribution of Health Care Costs," *Health Services Research* 39, no. 3 (2004): 627-42, <https://doi.org/10.1111/j.1475-6773.2004.00248.x>.

<sup>22</sup> Alemayehu and Warner, "The Lifetime Distribution of Health Care Costs," 637.

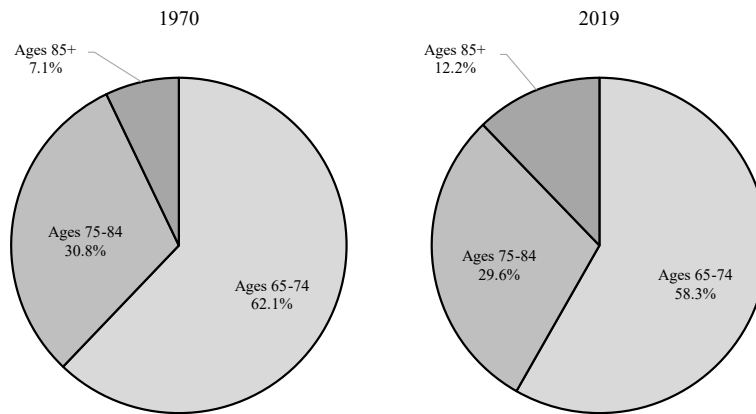
<sup>23</sup> Social Security Administration, "Actuarial Life Table," <https://www.ssa.gov/oact/STATS/table4c6.html>.

<sup>24</sup> Medicare Payment Advisory Commission, *March 2024 Report to the Congress: Medicare Payment Policy* (March 2024): 5, <https://www.medpac.gov/document/march-2024-report-to-the-congress-medicare-payment-policy/>.

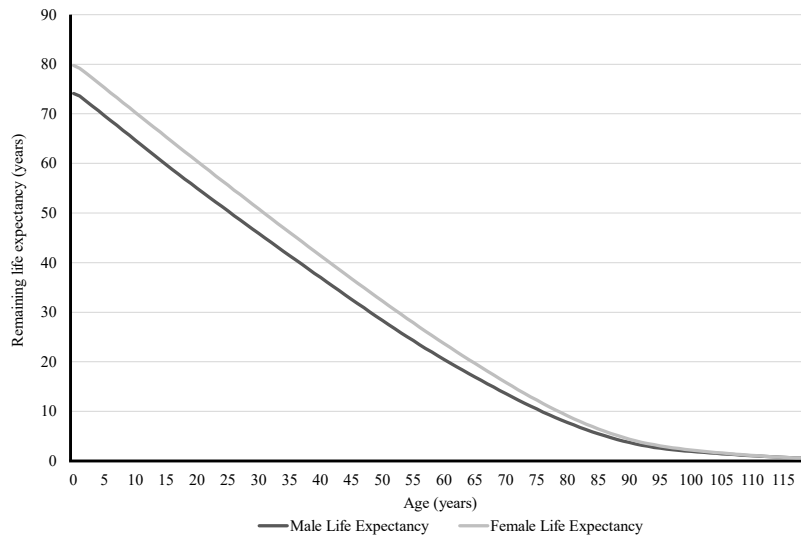


costs is necessary to both protect our existing healthcare programs and ensure economic stability for current workers.

**Figure 2-3: Age Distribution of Seniors**



Source: U.S. Census Bureau, Population Division, "National Population Estimates by Age, Sex, Race"

**Figure 2-4: Remaining Life Expectancy by Age**

Source: Social Security Administration (Period Life Table, 2020, as used in the 2023 Trustees Report)

As of the most recently available data from 2021, someone who is age 65 can on average expect to live an additional 17 to 20 years, while someone who is 85 can expect to live an additional 5.7 to 6.7 years.<sup>25</sup> CBO projects, however, that over the next 30 years, life expectancy at birth will rise from 78.7 years to 82.2 years, while life expectancy at age 65 will rise to 21.8 years.<sup>26</sup> Not only will the overall population grow older, but the average age of the population over 65 will also rise. However, actualization of these forecasts is not guaranteed as unforeseen events, such as the COVID-19 pandemic, have caused life expectancy to significantly deviate from prior trends.<sup>27</sup> Unpredictability in life expectancy, in combination with other factors, such as changes in the aggregate

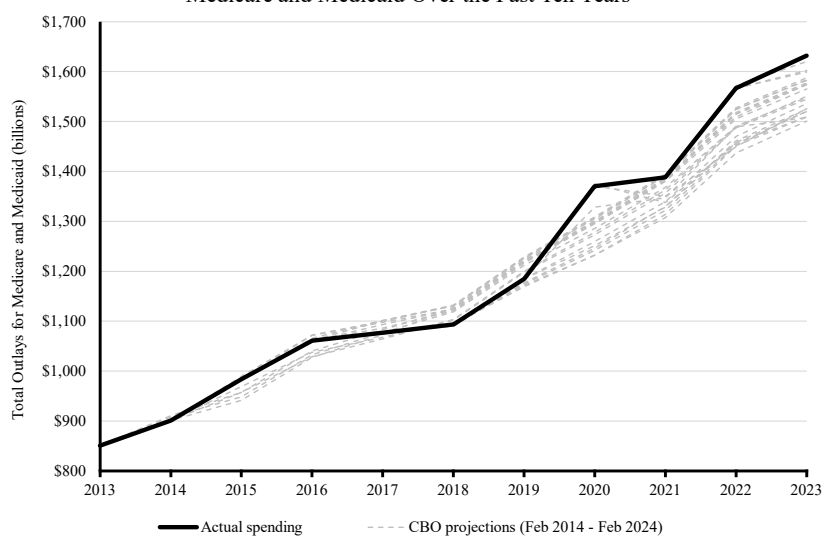
<sup>25</sup> Social Security Administration, “Actuarial Life Table.”

<sup>26</sup> CBO, *The Demographic Outlook: 2024 to 2054*.

<sup>27</sup> Centers for Disease Control and Prevention, “Life Expectancy in the U.S. Dropped for the Second Year in a Row in 2021,” [https://www.cdc.gov/nchs/pressroom/nchs\\_press\\_releases/2022/20220831.htm](https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2022/20220831.htm).

health of our population, make projecting overall healthcare spending much more difficult. This is especially true when compared to projecting Social Security expenditures. Medicare spending contributes directly to the deficit, and its unpredictability risks driving outlays and net interest payments much higher than anticipated.

**Figure 2-5: CBO Projections Compared to Actual Spending on Medicare and Medicaid Over the Past Ten Years**



Source: Congressional Budget Office (CBO, Baseline Estimates 2014 -2024)

Figure 2-5 compares CBO's projections of Medicare and Medicaid spending to actual spending on those programs each year. As expected, outlays for these programs have been above CBO's forecasts for most recent years. CBO models do not explicitly account for or project changes in the aggregate health of the U.S. population. This can cause its projections to substantially deviate from actual spending each year. We urge CBO to instead explicitly account for changes in the aggregate health of the population, such as the rising projected obesity rates outlined in Chapter 4. Healthcare spending will be significantly higher than

CBO anticipates if obesity rates rise at the rate JEC Republicans project due to higher-than-anticipated medical costs. The inherent unpredictability in health and healthcare spending makes it even more prudent to reach a more sustainable fiscal path sooner rather than later. Higher than projected deficit spending would raise net interest costs, further worsening the fiscal trajectory.

### ***Fertility***

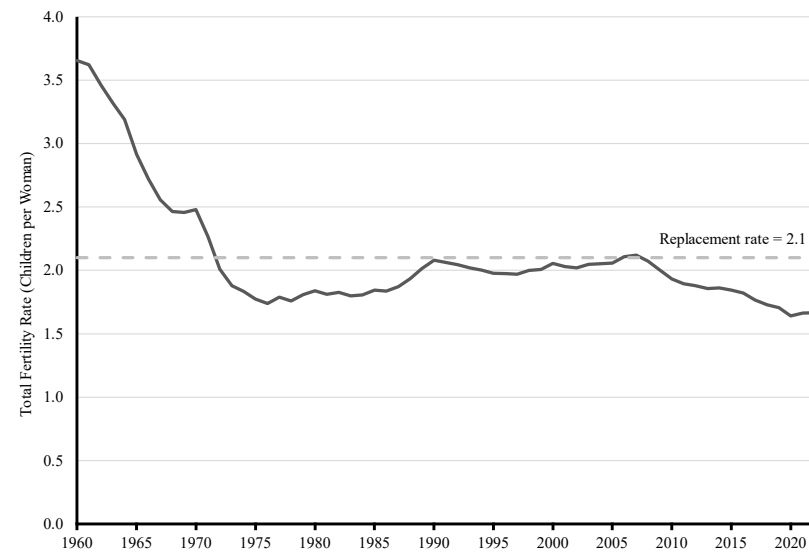
Until 1971, births alone were enough to keep the population growing.<sup>28</sup> The total fertility rate, or the average number of babies born of each woman over the course of her life, was 2.26, above the replacement rate. The replacement rate is the fertility rate needed to keep the population size stable without any net migration. In the U.S. and most of the developed world the necessary rate is 2.1, while globally it is around 2.3 due to higher mortality rates.<sup>29</sup> CBO projects that in 2040, deaths will exceed births and all additional population growth will be exclusively due to immigration.<sup>30</sup>

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<sup>28</sup> World Bank, “Fertility Rate, Total for the United States.”

<sup>29</sup> World Bank, “Fertility Rate, Total (Births per Woman),” 2022, <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN>.<sup>3</sup> Institute for Health Metrics and Evaluation, “The Lancet: Dramatic Declines in Global Fertility Set to Transform Global Population Patterns by 2100.” March 2024, <https://www.healthdata.org/news-events/newsroom/news-releases/lancet-dramatic-declines-global-fertility-rates-set-transform>.

<sup>30</sup> CBO, *The Demographic Outlook: 2024 to 2054*.

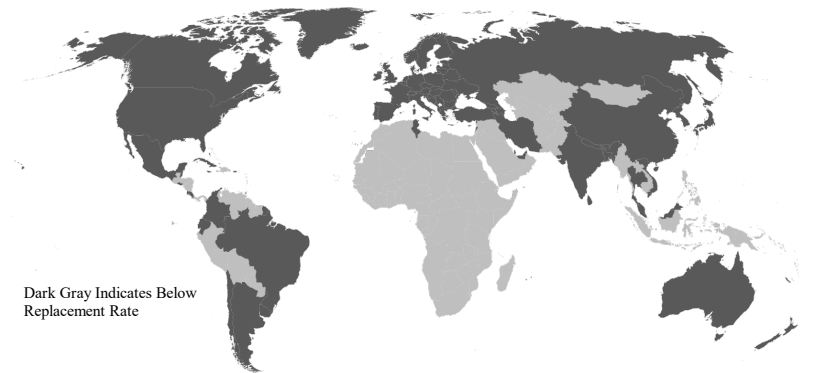
**Figure 2-6: Declining Fertility Rate in the United States**

Source: World Bank (Fertility Rate, Total for the United States [9SPDYNTFRINUSA])

The U.S. fertility rate has fluctuated since the mid-1970s but has generally remained below replacement level. The fertility rate reached an all-time low of 1.62 in 2023 and has not rebounded to pre-pandemic levels.<sup>31</sup> The fertility crisis in the United States is not unique, however, and has been observed throughout the industrialized world.

<sup>31</sup> Brady E. Hamilton, Joyce A. Martin, and Michelle J.K. Osterman, “Births: Provisional Data for 2023,” CDC Vital Statistics Rapid Release, no. 35 (April 2024), <https://dx.doi.org/10.15620/cdc/151797>.

**Figure 2-7: Countries with a Total Fertility Rate Below the Replacement Rate**



Source: United Nations (Population Division, World Population Prospects 2022, GEN/01/REV1)  
Note: Replacement Rate = 2.1

Very few developed countries have a fertility rate above replacement, and the global fertility rate has been on the decline for several years.<sup>32</sup> The fertility rate is important to the economy and fiscal situation for several reasons. Declining fertility rates and a shrinking ratio of workers to retirees has a significant impact on economic growth and government finances. John Fernald and Huiyu Li at the Federal Reserve Bank of San Francisco find that the new normal rate of economic growth in the U.S. is at historically low levels, largely due to demographic changes and a shrinking labor force from low fertility rates.<sup>33</sup> As outlined in last year's *Response*, a smaller real growth rate of the economy means

<sup>32</sup> James Gallagher, "Fertility Rate: 'Jaw-dropping' Global Crash in Children Being Born," *BBC*, <https://www.bbc.com/news/health-53409521>.

<sup>33</sup> John Fernald and Huiyu Li, "Is Slow Still the New Normal for GDP Growth?", Federal Reserve Bank of San Francisco Economic Letter, June 24, 2019, <https://www.frbsf.org/research-and-insights/publications/economic-letter/2019/06/is-slow-still-new-normal-for-gdp-growth/>.

there is a narrower path to stabilize the debt-to-GDP ratio. Slower growth requires a significantly lower primary deficit and a smaller real interest rate on the debt.

In addition, low fertility rates create significant headwinds to financing mandatory spending programs. Earnings from current workers are used to pay for the benefits paid out to older Americans today. Programs like Social Security are built on the assumption that there will be a large enough younger working population to financially support the older population. If fertility rates continue to decline, the working population will shrink too small relative to the older population. Additionally, reduced tax revenues from a smaller working population means there is a weakened ability to fund social services. A greater number of older Americans also means that more younger Americans may need to exit the labor force to care for them. It is critical to understand the implications of lower fertility rates combined with an aging population and the financial challenges that result.

### *Fertility Policy*

There has not been a proven solution to improve fertility rates. Many countries have explicitly set target fertility rates and implemented robust social programs to achieve them. Despite this, only one country, Belarus, was able to meet their fertility target, albeit only temporarily.<sup>34</sup> Spending an additional \$250 billion per year on childcare spending in the U.S., or 1 percent of GDP, is

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<sup>34</sup> Fertility in Belarus fell 25 percent in the two years following achieving target fertility. Cash transfers were the primary method of incentivizing births, and the subsequent decline implies that the transfers may have just shifted the timing of births rather than created new births that otherwise would not have occurred. Vanessa Brown Calder and Chelsea Follett, "Freeing American Families," Cato Institute Policy Analysis, August 10, 2023, <https://www.cato.org/policy-analysis/freeing-american-families>.

estimated to only result in raising the total fertility rate by 0.2 children per woman.<sup>35</sup> This would still be approximately 0.3 children per woman below the replacement rate.

The literature on the effectiveness of pro-natalist policies has been mixed at best, suggesting that government spending is a poor method to improve fertility rates.<sup>36</sup> With few exceptions, as countries have become richer, fertility rates have declined.<sup>37</sup> It does not necessarily follow that providing families with more money would reverse fertility trends. Declining fertility rates may instead be a product of cultural changes, such as falling marriage rates and parents choosing to delay having children.<sup>38</sup>

Nevertheless, there is still room for the Federal government to incentivize family formation. Instead of spending additional dollars on programs that have shown limited results, Congress should focus on removing financial barriers for would be parents to give them more flexibility. Reforms such as Vice Chairman Schweikert’s bill to reform the tax code to allow deductions for

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<sup>35</sup> Melissa S. Kearney and Phillip B. Levine, “The Causes and Consequences of Declining U.S. Fertility” in *Economic Policy in a More Uncertain World*, Aspen Economic Strategy Group, 2023, [https://www.economicstrategygroup.org/wp-content/uploads/2022/08/Kearney\\_Levine\\_081222.pdf](https://www.economicstrategygroup.org/wp-content/uploads/2022/08/Kearney_Levine_081222.pdf).

<sup>36</sup> Calder and Follet, “Freeing American Families.”

<sup>37</sup> Matthias Doepke, Anne Hannusch, Fabian Kinderman, and Michèle Tertilt, “The New Economics of Fertility,” International Monetary Fund, September 2022, <https://www.imf.org/en/Publications/fandd/issues/Series/Analytical-Series/new-economics-of-fertility-doecke-hannusch-kindermann-tertilt>.

<sup>38</sup> Pew Research, “The Long-Term Decline in Fertility—and What It Means for State Budgets,” December 5, 2022, <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2022/12/the-long-term-decline-in-fertility-and-what-it-means-for-state-budgets>.



newborn expenses would reduce the tax burden on families.<sup>39</sup> Additionally, policies that remove barriers to building new homes can reduce housing costs for potential families and reduce the financial burden of having children. Research suggests that home prices are the largest component in the cost of raising a child and that home prices play a significant role in family formation.<sup>40</sup>

Although the academic literature suggests that “rising costs for housing and childcare, while certainly having an impact on families, cannot account for the decline in fertility rates in the United States,” reducing costs to family formation through tax and regulatory reform can at least marginally reduce the costs associated with having children.<sup>41</sup>

### ***Talent-Based Migration***

One of the U.S.’ most valuable resources is its ability to attract high-skilled individuals from other countries to come work and study here. The economic literature suggests that skilled immigrants have an outsized impact on the U.S. economy and that their contributions result in positive wage and employment outcomes for native-born Americans.<sup>42</sup> For example, for every 100 foreign-born workers who receive an advanced degree in a STEM field in the U.S., it is estimated that 262 jobs are created for

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<sup>39</sup> To Amend the Internal Revenue Code of 1986 to Provide a Deduction for Certain Newborn Expenses, H.R. 7425, 118th Cong. (2024).

<sup>40</sup> Lisa J. Dettling and Melissa Schettini Kearney, “House Prices and Birth Rates: The Impact of the Real Estate Market on the Decision to Have a Baby,” NBER Working Paper no. 17485 (October 2011), <https://doi.org/10.3386/w17485>.

<sup>41</sup> CEA, *Economic Report of the President* (The White House, 2024): 114-16, <https://www.whitehouse.gov/wp-content/uploads/2024/03/ERP-2024.pdf>.

<sup>42</sup> Madeline Zavodny, “Immigration and American Jobs,” American Enterprise Institute, December 15, 2011, <https://www.aei.org/research-products/working-paper/immigration-and-american-jobs/>.

native-born Americans.<sup>43</sup> Additionally, due to the outsized economic output of their contributions, granting permanent residency to immigrants with advanced STEM degrees is projected to reduce the deficit by \$129 billion over the next ten years.<sup>44</sup> While research suggests that immigration, especially low-skilled immigration, is an ineffective tool for addressing labor shortages and an aging population in the long run, there is strong evidence that high-skilled immigrants contribute positively to economic growth that is also realized by native-born Americans.<sup>45</sup> Increasing the real growth rate of the economy can help stabilize debt-to-GDP and relieve some of the strains caused by the deterioration of the demographic situation.

High-skilled immigrants contribute disproportionately to technological innovation and this leads to improved economic outcomes for all Americans. As technology improves, more jobs are created, workers become more productive, and firms can produce more goods at lower unit costs. A 2003 survey found that foreign-born individuals with a college degree are twice as likely to have a patent as native-born college graduates.<sup>46</sup> An analysis of

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<sup>43</sup> Zavodny, “Immigration and American Jobs.”

<sup>44</sup> Alex Arnon, Vidisha Chowdhury, Duncan Haystead, Brendan Novak, and Youran Wu, “Budgetary Effects of Granting Green Cards to Immigrants with Advanced STEM Degrees,” Penn Wharton Budget Model, January 18, 2024, <https://budgetmodel.wharton.upenn.edu/issues/2024/1/18/budgetary-effects-of-stem-green-cards>.

<sup>45</sup> Steven A. Camarota, “Immigration and the Aging Society,” *National Affairs*, no. 59 (2024), <https://nationalaffairs.com/publications/detail/immigration-and-the-aging-society>.

<sup>46</sup> Shai Bernstein, Rebecca Diamond, Abhisit Jiranaphawiboon, Timothy James McQuade, and Beatriz Pousada, “The Contribution of High-Skilled Immigrants to Innovation in the United States,” Stanford Graduate School of Business Working Paper 3748, December 2022, <https://www.gsb.stanford.edu/faculty-research/working->

patent data from 1976 to 2022 found that immigrants are responsible for 30 percent of all U.S. innovation since 1976, despite only composing 16 percent of U.S. inventors over that span.<sup>47</sup> This is due to the large economic impact of their patents and because of the spillover effects that their innovation has on native-born inventors. The intellectual capital gained from the new inventions spurs further innovation. Foreign-born inventors are also more likely to import knowledge from other countries, which exposes native-born inventors to information they may not have otherwise encountered.<sup>48</sup> Skilled immigrants both innovate at a rate greater than the native population and bolster the work of native-born inventors, which results in improved economic outcomes for all.

### *Skilled Immigration and Growth*

At a time where the U.S.' debt-to-GDP ratio is skyrocketing, it is imperative that policymakers pursue policies to increase economic growth.<sup>49</sup> High-skilled immigrants contribute substantially to the U.S. economy and their contributions have led to increased economic activity. Almost half of Fortune 500 companies were founded by immigrants or the children of immigrants which includes companies such as IBM, AT&T, and Bank of America, who as a whole employ 14.8 million people and have combined annual revenue of over \$8 trillion.<sup>50</sup> Additional research suggests that immigrants start business at a rate that is 80 percent higher

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papers/contribution-high-skilled-immigrants-innovation-united-states.

<sup>47</sup> Bernstein et al., "The Contribution of High-Skilled Immigrants."

<sup>48</sup> Bernstein et al., "The Contribution of High-Skilled Immigrants."

<sup>49</sup> JEC Republicans, "Daily Debt Monitor."

<sup>50</sup> American Immigration Council, "New American Fortune 500 in 2023," August 29, 2023, <https://www.americanimmigrationcouncil.org/research/new-american-fortune-500-2023>.

than native-born Americans.<sup>51</sup> This held true even for businesses of large sizes, suggesting that this business creation was not exclusive to smaller firms.<sup>52</sup> The accelerated creation of new firms will drive up demand for labor, increasing employment and wages for native-born workers. Increasing the real growth rate of the economy is a critical tool in stabilizing the debt-to-GDP ratio, and high-skilled immigrants offer a pragmatic path to do so.

### *Employment*

Despite fears that immigrants take jobs away from native-born Americans, there is overwhelming evidence to the contrary for those that are high-skilled. On net, high-skilled immigration leads to increased employment for native-born Americans.<sup>53</sup> For every 100 immigrant workers who receive advanced STEM degrees in the United States, an additional 262 jobs are created for native-born Americans.<sup>54</sup> This analysis is derived by comparing employment in states that have a low number of skilled immigrants to states that have a high number. The author controls for differences in the foreign-born population by state that are the result of differing employment opportunities (i.e., high-skilled workers choosing to work in a state with more jobs) to estimate the net employment impact on native-born Americans. Even in the case of temporary residents, the employment effect is strong. The authors estimate that a 10 percent increase in the number of high-skilled H-1B visa workers results in a 0.11 percent increase in the employment rate for native-born Americans, which translates to

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<sup>51</sup> Pierre Azoulay, Benjamin F. Jones, J. Daniel Kim, and Javier Miranda, "Immigration and Entrepreneurship in the United States," NBER Working Paper no. 27778 (September 2020), <https://doi.org/10.3386/w27778>.

<sup>52</sup> Azoulay et al., "Immigration and Entrepreneurship in the United States."

<sup>53</sup> Azoulay et al., "Immigration and Entrepreneurship in the United States."

<sup>54</sup> Zavadny, "Immigration and American Jobs."

an additional 183 jobs for every 100 additional H-1B workers.<sup>55</sup> Across the board, evidence suggests that there is a strong positive relationship between H-1B visas and employment opportunities for native-born Americans.<sup>56</sup>

### *Budgetary Impact*

A common concern regarding immigration is that there will be a resulting increase in outlays. In the case of high-skilled immigration the opposite is true. Unlike for low-skilled immigration, high-skilled immigrants reduce the deficit because they earn higher-than-average wages.<sup>57</sup> The current net fiscal impact of all high-skilled immigrants with at least a college degree is estimated to be a surplus of \$13 trillion over the course of their lives.<sup>58</sup> In the short-term, the Penn Wharton Budget Model estimates that granting permanent residency to immigrants with advanced STEM degrees would reduce the deficit by \$129 billion between 2025 and 2034 and \$634 billion between 2035 and 2044.<sup>59</sup> For the 2025–2034 period, high-skilled immigrants would generate an additional \$133 billion in tax receipts while only increasing outlays by approximately \$4 billion. Using Penn Wharton’s estimates of the change in population that would arise from granting permanent residency to immigrants with advanced degrees, each immigrant would reduce the deficit by

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<sup>55</sup> Zavodny, “Immigration and American Jobs.”

<sup>56</sup> William R. Kerr, “The Gift of Global Talent: Innovation, Policy, and the Economy,” NBER Working Paper no. 25875 (May 2019), <https://doi.org/10.3386/w25875>.

<sup>57</sup> *The Net Fiscal Costs of Low-skilled and Illegal Immigration for the U.S. Taxpayer; Testimony Before the U.S. Senate Committee on the Budget*, 118th Cong. (September 13, 2023) (statement of Robert Rector), [https://www.budget.senate.gov/imo/media/doc/rector\\_testimony\\_913.pdf](https://www.budget.senate.gov/imo/media/doc/rector_testimony_913.pdf).

<sup>58</sup> Rector, testimony before the U.S. Senate.

<sup>59</sup> Arnon et al., “Budgetary Effects of Granting Green Cards.”

approximately \$150,000 over the next ten years. The economic literature on the net impact of high-skilled immigrants on the budget is overwhelmingly positive, and more growth can be expected as the intellectual capital gained from skilled immigration compounds over time.

Streamlining the process for high-skilled immigrants to work and live in the country has the potential to increase growth, reduce the deficit, and improve outcomes for native-born Americans. The current limit in the H-1B program on the number of foreign-born college graduates who can receive permanent residency, which amounts to only 85,000 a year, holds back economic growth.<sup>60</sup> By failing to accommodate the over 1 million highly skilled individuals who are on waitlists to come and work in the country, the United States misses out on a massive economic opportunity and drives potential talent away to countries like China and India.<sup>61</sup> The United States is squandering its comparative advantage of being a desirable place to live, work, and innovate. Facilitating a straightforward pathway for high-skilled foreign-born workers to work and live in the United States will produce strong economic benefits for all Americans and help put the United States on a more sustainable fiscal path.

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<sup>60</sup> U.S. Citizenship and Immigration Services, “H-1B Cap Season,” U.S. Department of Homeland Security, <https://www.uscis.gov/working-in-the-united-states/temporary-workers/h-1b-specialty-occupations-and-fashion-models/h-1b-cap-season>.

<sup>61</sup> David J. Bier, “Backlog for Skilled Immigrants Tops 1 Million: Over 200,000 Indians Could Die of Old Age While Awaiting Green Cards,” Cato Institute Policy Brief, March 30, 2020, <https://www.cato.org/publications/immigration-research-policy-brief/backlog-skilled-immigrants-tops-1-million-over>.

### ***Prime-age Labor Force Participation***

The decline in labor force participation among prime-age men is yet another demographic headwind to stabilizing the debt-to-GDP ratio. As the ratio of workers to retirees has dropped, those who are of prime working age are simultaneously working less. Chapter 5 of last year's *Response* outlined how one in nine men between the ages of 25 and 54 are now out of the labor force, more than triple the rate in the 1950s.<sup>62</sup> JEC Republican economists estimated that if 25 percent of these men were re-integrated into the workforce, it would result in the economy being \$215 billion larger and would generate an additional \$400 billion in Federal government tax receipts over the next ten years. As America ages this problem will worsen. Fewer working hours means lower tax receipts, which places even more pressure on mandatory programs. Additionally, even more workers may exit the labor force to care for their aging parents or family members. As of April 2024, 159,000 individuals that were not in the labor force reported being absent due to family responsibilities.<sup>63</sup> More than 100,000 were of prime working age, and the total figure has risen by 14,000 over the past year.

Several factors have contributed to the decline in male prime-age labor force participation including increased participation in disability programs, institutional barriers like occupational licensing, and decreased social pressure to be employed.<sup>64</sup> Another concerning trend that is affecting the overall workforce is the decline in life expectancy for those who are of prime-working age. Following the drop in average life expectancy in 2020 and

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<sup>62</sup> JEC Republicans, *Response*, 93.

<sup>63</sup> U.S. Bureau of Labor Statistics, "Labor Force Statistics from Current Population Survey," April 2024, <https://www.bls.gov/web/empstat/cpseea38.htm>.

<sup>64</sup> JEC Republicans, *Response*, 93.

2021, there were parallel increases in mortality for those in the 25–54 age bracket.<sup>65</sup>

### *Deaths of Despair*

The two leading causes of death are still heart disease and cancer, but there has been a significant rise in the number of opioid deaths and other deaths of despair.<sup>66</sup> Deaths of despair, or deaths occurring from drug overdose, suicide, and alcoholic liver disease, have been rising for the past two decades. This trend came to a head during the COVID-19 pandemic, when over 178,000 individuals died due to such causes in 2020 alone.<sup>67</sup> Deaths of despair disproportionately affect younger Americans, and because of this, they resulted in a greater number of years of life lost than COVID-19 did in 2020, despite COVID-19 causing nearly double the overall number of deaths.<sup>68</sup> Even in subsequent years, deaths of despair, especially those due to drugs and alcohol, continued to rise, well above the pre-pandemic pace.<sup>69</sup> As outlined in Chapter 3 of last year’s *Response*, improving public health not only improves economic outcomes but also increases the quality of life

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<sup>65</sup> Sara Berg, “What Doctors Wish Patients Knew About Falling U.S. Life Expectancy,” American Medical Association, March 10, 2023, <https://www.ama-assn.org/delivering-care/public-health/what-doctors-wish-patients-knew-about-falling-us-life-expectancy>.

<sup>66</sup> Sara Berg, “What Doctors Wish Patients Knew.”

<sup>67</sup> JEC Republicans, “Long-Term Trends in Deaths of Despair,” September 5, 2019, <https://www.jec.senate.gov/public/index.cfm/republicans/2019/9/long-term-trends-in-deaths-of-despair>; Parker Entrup et al., “Years of life lost due to deaths of despair and COVID-19 in the United States in 2020: patterns of excess mortality by gender, race and ethnicity,” *International Journal for Equity in Health* 22, no. 1 (2023): 161, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10464324/>.

<sup>68</sup> Entrup et al. “Years of Life Lost.”

<sup>69</sup> C. Angus, C. Buckley, A.M. Tilstra, and J.B. Dowd, “Increases in ‘Deaths of Despair’ During the COVID-19 Pandemic in the United States and the United Kingdom,” *Public Health* 218, (2023): 92-96, <https://doi.org/10.1016/j.puhe.2023.02.019>.



for millions of Americans. Addressing rising mortality among younger Americans and improving health should be a priority for policymakers. Doing so would significantly improve the U.S.' fiscal situation.

### ***Summary***

The U.S.' budget crisis is ultimately a product of its ongoing demographic trends. The country is facing a multitude of demographic headwinds largely driven by the aging population, declining fertility rates, and decreased prime-age labor force participation among men. Contending with these demographic trends is essential to solving its budget issues. Policymakers should focus on creating policies to improve demographic outcomes, such as removing barriers to family formation and reconnecting prime-age individuals to work, but also recognize that many demographic problems are due to the nature of social programs. Policy changes can help alleviate some of these demographic problems, but, ultimately, the budget crisis will not be solved without reining in out-of-control spending.