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Special Commentary

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The Effects of Changing Demographics on the Federal Budget Part II: A Smaller Workforce, Higher Federal Outlays

In Part I of our series on how the changing demographic profile of America will affect the federal budget, we focused on the key issues behind a smaller labor force and its impact on the economy and, in turn, federal revenues. In this, our second of three reports on demographics and the federal budget, we will focus on how federal outlays will be affected by the aging of the population and the resulting smaller labor force.

The baby boomer generation, those born in the U.S. between 1946 and 1964, is beginning to retire at a pace of 10,000 individuals per day.[1] This demographic shift of the baby boomers, which currently account for 16 percent of the population, will cause a long-term trend of a shrinking labor force and will have profound effects on federal revenues due to lower payroll tax collections. In fact, over the next 25 years, the population age 65 or older (those expected to draw entitlement program benefits) will grow by 37.6 million, while those aged 20-64 (the bulk of the typical working-age population, who typically pay payroll taxes to support entitlement programs) will grow by only 20.9 million.

The current path of federal spending for these programs is unsustainable.

The aging of the U.S. population will also play a role in affecting federal spending over the next several years. There are three key areas of federal spending that will be affected the most by an aging population: Social Security, Medicare and Medicaid. These programs combined represent the greatest challenge to federal outlays and, in turn, federal debt growth over the next several years. By 2024, these three programs are expected to account for just over 52 percent of the federal budget according to the latest estimates from the Congressional Budget Office (CBO).[2] With such a large and growing share of the federal budget tied to these programs, the Congressional Budget Office has warned that the current path of federal spending for these programs is unsustainable. To preserve these programs going forward, tax increases, benefit cuts or some combination of the two will be needed. We begin with an in-depth look at the Social Security program and the challenges presented by the aging of the population. We then turn to the two major health care programs – Medicare and Medicaid.

The Expected Rapid Growth of the Social Security Program

The Social Security Act was passed in August 1935, which included old-age benefits for workers, aid for the physically handicapped and blind, and benefits for dependent mothers and children.[3] Since the enactment of the Social Security program, several reforms have been made that affected the appropriate age for retirement, cost of living adjustments (COLAs) and the appropriation of funds in the Social Security trust.[4] The program is funded by a payroll tax based on worker incomes and trust fund asset reserves from the general fund of the Treasury.[5] Since 2012, there

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[1] **Pew Research Center. (2010). "*Baby Boomers Retire*." http://www.pewresearch.org/daily-number/baby-boomers-retire.**
[2] **Congressional Budget Office. (2014). "*An Update to the Budget and Economic Outlook: 2014 to 2024*."**
[3] **Social Security Administration. (2014). "*Social Security History*." http://www.ssa.gov/history/tally.html**
[4] **Social Security Reform Center. (2014). *"History of Social Security."* http://www.socialsecurityreform.org/history/index.cfm.**
[5] **Social Security Administration. (2014). "*A Summary of the 2014 Annual Reports: Social Security and Medicare Boards of Trustees.*"**

has been a deficit as outlays have exceeded payroll tax revenues. The interest earnings from the Social Security fund currently offset the cash flow deficit, but by 2019, costs are projected to rise such that the program will have to dip into the Social Security fund to finance the outlays.

For the purpose of this report, we will focus primarily on the "retired workers and families" aspect of Social Security. Over the next 10 years, the number of retired-worker beneficiaries and the average monthly outlay per beneficiary are expected to rise substantially as the baby boomers begin to claim Social Security (Figure 2). This will prompt the total outlays of the Social Security program to rise substantially; in 2013, Social Security outlays totaled 4.9 percent of GDP but are expected to reach 5.6 percent by 2024. According to the 2014 Annual Report by the Social Security and Medicare board of trustees, the Social Security reserve fund and financing plan does not pass the short-range or long-range test of actuarial balance, indicating that the fund will continue to deplete at an unsustainable rate that will pose a problem for future funding.

The trust fund ratio, or reserves as a percentage of annual costs, peaked in 2003 but has continued to decline since, and remained at 62 percent at the start of 2014. This ratio is expected to decline in the coming years before the fund is depleted in 2037, and following that date, income from payroll taxes are projected to be available to pay only three-quarters of benefits through 2079.

Figure 1

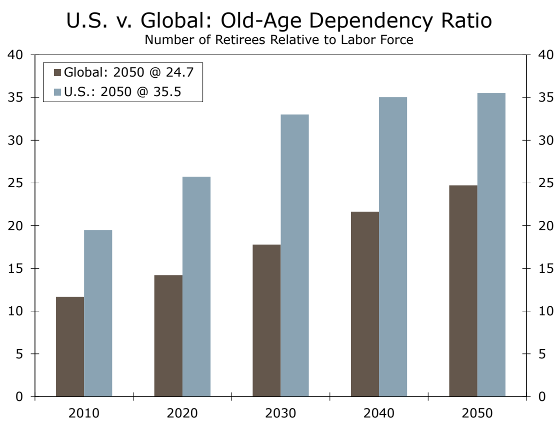
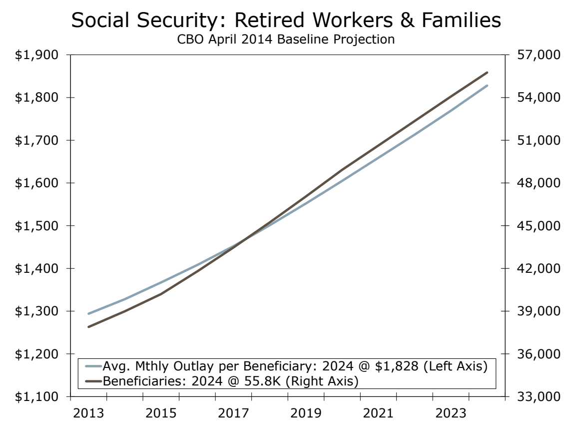


Figure 2



Source: United Nations Statistics Division, CBO and Wells Fargo Securities, LLC

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The issue is the imbalance between the working age population and the retiree population. This imbalance can be measured by an increase in the dependency ratio. The dependency ratio, which measures the number of retirees relative to the working age population, has steadily increased in the United States in the past several years and is expected to reach 35.5 by 2050 (Figure 1). In other words, by 2050 there will be just over 35 retirees per 100 individuals working, a far cry from the 12.8 back in 1950.[6] As we mentioned in Part I of our paper series, the aging of the population is not specific to just the U.S. The global dependency ratio has also increased but is expected to remain below the U.S. ratio through 2050 (Figure 1). While there are challenges for the Social Security program in the years ahead, there are even greater concerns over the future of the federal health care programs, especially in light of the recent expansion of the Medicaid program under the Affordable Care Act.

The Effects of Demographic Changes on Federal Health Care Programs

Beyond the Social Security benefits, as the U.S. population ages, more and more individuals also become eligible for federal health care benefits either from Medicaid, or more broadly from Medicare. The Medicaid program is a health care program jointly funded by the federal government and states which pays for health care services for low-income individuals. Medicare

[6] **Social Security Administration. (2014). Table V.A2.—Social Security Area Population on July 1 and Dependency Ratios, Calendar Years 1945-2090. Social Security Online. http://www.socialsecurity.gov/OACT/TR/2014/V_A_demo.html#271410.**

is a federal-based program that provides federal health insurance to people who are elderly or disabled. While both of these programs are affected by demographic factors, the more direct effects will be on the Medicare program through an increased number of eligible individuals whereas Medicaid (from a federal spending perspective) will primarily see indirect effects of higher health care costs due to demand factors related to the expansion of coverage under the Affordable Care Act and an older population in need of health care services.

Medicare will grow rapidly due to increased caseloads as baby boomers retire and increased per-beneficiary costs.

According to the latest estimates by the Congressional Budget Office, the two major health care programs of Medicare and Medicaid are estimated for the current federal fiscal year to make up approximately 24 percent of the total federal outlays. This share is expected to grow to around 27 percent by 2024. To better isolate the effects of an aging U.S. population, we will focus primarily on the Medicare program. The Medicare program currently accounts for about 14 percent of the federal budget and is expected to grow to around 15 percent over the next decade. More striking is the growth in outlays, which is expected to jump 68 percent by 2024.[7] The CBO cites two main factors related to the rapid growth of the Medicare program—increased caseloads as baby boomers retire and increased per-beneficiary costs. Both of these effects are roughly equal in terms of their contribution to outlay growth over the next 10 years.

From 2014 to 2024, CBO estimates that caseloads for the Medicare program will grow around 3 percent per year as more and more baby boomers begin to retire and collect benefits. There are a couple of effects this has on the program as a whole. First, the average age of Medicare recipients will begin to decline initially as more baby boomers enter the program. Beyond the current 10-year window as this cohort ages, the average age rises and, in turn, the demand for care jumps as well. This is one of the reasons why the near-term (next 10 years) Medicare program does not look as concerning as the Social Security program.

The longer-term picture, however, is more dire as we will describe later. Second, the CBO cites that health care costs have slowed in recent years which has led them to reduce their estimated costs per beneficiary over the next few years (Figures 3 and 4). In our study of health care costs, we find evidence that cyclical factors following the great recession may be more of a factor weighing on health care costs and may not signal a structural shift in the rate of health care cost growth.[8] In addition, the type of health care that will be needed by the aging population will also change, which has implications for the federal budget. As the population ages and Americans live longer, the demand for long-term care is expected to rise. This increased demand for long-term care falls primarily on state and federal governments as nearly three quarters of long-term care expenses are funded by public programs, including the most common program, the joint federal- and state-run Medicaid program.[9]

[7] Congressional Budget Office. (2014). "*The 2014 Long-Term Budget Outlook*." Note that references to healthcare programs are net of offsetting receipts.
[8] Bryson, J. H. and Brown, M.A. (2013). "*Health Care Inflation and the Federal Budget*." Wells Fargo Economics. Available by request.
[9] Shrestha, L.B. and Heisler, E.J. (2011). "*The Changing Demographic Profile of the United States*." Congressional Research Service, RL32701.

Figure 3

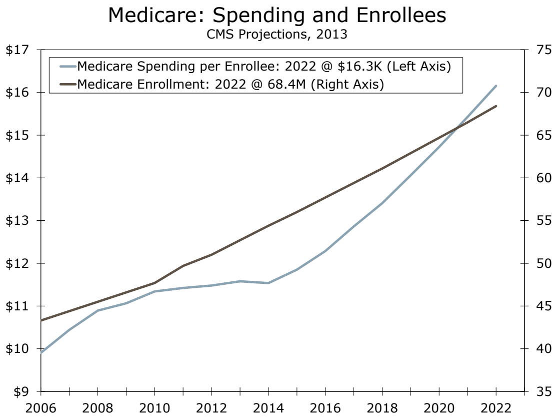
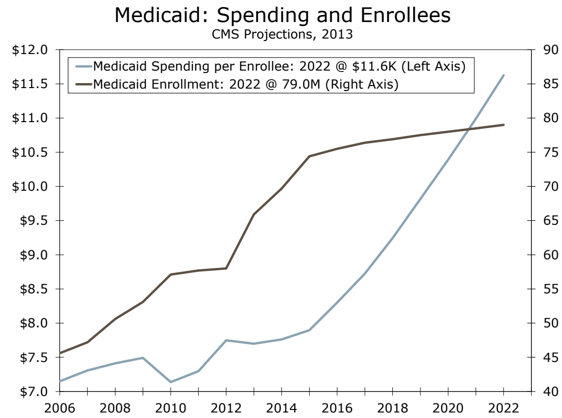


Figure 4



Source: Center for Medicare and Medicaid Services and Wells Fargo Securities, LLC

Under current law without any intervention from Congress, there would be little choice but to delay or reduce benefit payments.

From the perspective of the Federal Budget, the large influx of baby boomers into the Medicare system also creates another issue, the depletion of the Medicare Trust Fund. The Medicare Trust Fund is the vehicle that collects taxes, premiums and other income into the Medicare program, which is then used to pay out benefits. According to the latest Social Security and Medicare Boards of Trustees Report, the Medicare program is expected to experience growth in expenditures per beneficiary exceeding the growth in per capita GDP. The result of this rapid growth in outlays is the exhaustion of the Hospital Insurance component of the Medicare Trust Fund by 2030.[10] Furthermore, the revenues into the Medicare program continue to decline (Figure 5). Under current law, without any intervention from Congress or the administration, there would be little choice but to delay or reduce benefit payments since the program would be required to operate on the revenues received through payroll withholding alone. Thus, there is a clear need for Congressional action before the Trust Fund becomes exhausted. Furthermore, the longer lawmakers wait to enact reforms, the more adverse effects are likely to be felt on the program and the economy as a whole as the size of the changes that would need to be made will grow over time with enrollment in the program.

Figure 5

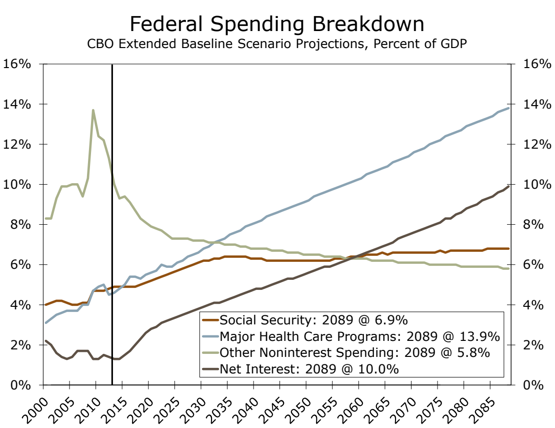
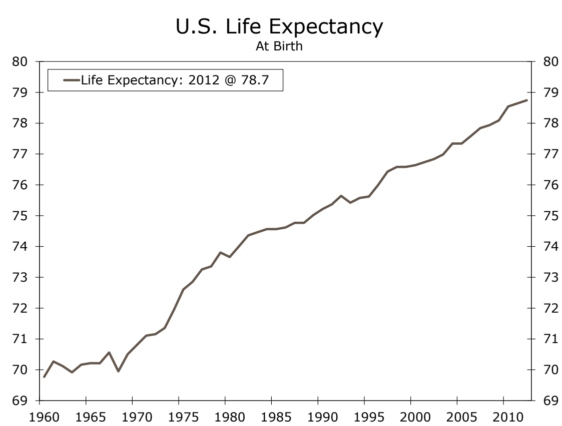


Figure 6



Source: Congressional Budget Office, United Nation Statistics Division and Wells Fargo Securities, LLC

The Interaction of Health Care and Retirement

Beyond the direct effects of aging on Social Security and the federal health care programs, there are also interactions between these programs that create challenges for the federal government.

[10] Social Security and Medicare Boards of Trustees. (2014). "*Status of the Social Security and Medicare Programs: A Summary of the 2014 Annual Report.*"

To begin with, there has been a sharp increase in life expectancy over the past several years (Figure 6). The Congressional Budget Office has attributed these increases to better medical technologies and advances in treatment methods, which have coincidentally helped to put upward pressure on health care costs.[11] The outcomes of longer life expectancy are certainly good news for those in the baby boomer generation; however, it does exacerbate the issues within the Social Security system. Not only is the size of the population relying on the program expected to increase, but this larger cohort is expected to draw benefits for a longer period of time further adding to the pressures on the program. Thus, while one possible outcome is that baby boomers could choose to retire later in life, helping to provide some additional revenue to the Social Security and Medicare Trust Funds as we discussed above, these additional revenues will likely be needed to support these individuals increased life expectancy. This scenario, however, would assume that the funds going into these trust funds would be saved for future purposes. However, both programs are paying out liabilities as they come due, hence one of the key reasons why these funds are facing exhaustion in the first place.

Conclusion: What Is Next?

In the end, we suspect there will be some combination of both tax increases and benefit cuts to these programs to make them more sustainable. These changes, however, would have negative economic consequences and raise concerns over intergenerational equity. First, increasing taxes on the working population would shift some of the cost burden away from the older (retired) generation to the younger, working generation. These changes would reduce the spending power of the working population, which, in turn, would reduce overall economic activity in the short term. Should the retired or soon-to-be-retired population experience a cut to their benefits, this would also adversely affect economic growth in the short term through reduced spending by this segment of the population. One other possibility is that we are able to "grow" our way out of the problem through higher rates of GDP growth and greater productivity. While this could be a possibility, we put this in the unlikely scenario category, given that the smaller workforce has reduced the long-run potential growth of the U.S., a view also expressed by the Congressional Budget Office in the latest Long-Term Budget Outlook.[12]

We suspect there will be some combination of both tax increases and benefit cuts to these programs to make them more sustainable.

Regardless of the policy changes that need to take place in the coming years to preserve these programs, any changes to policy are likely to affect the choices of when individuals retire and raise some issues around intergenerational equity. In Part III of our three-part series on the interaction of changing demographics on the federal budget, we will take a deeper look into the issues facing the retiring baby boomer generation and the equity concerns among the younger working age population, which will have implications for future economic growth.

[11] Congressional Budget Office. (2014). "*The 2014 Long-Term Budget Outlook.*"
[12] Congressional Budget Office. (2014). "*The 2014 Long-Term Budget Outlook.*"

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