Updated June 26, 2018

Program Spending Outside Social Security and Medicare Historically Low as a Percent of GDP and Projected to Fall Further

By Robert Greenstein, Richard Kogan, and Roderick Taylor

Total federal program spending — that is, spending excluding net interest payments on the debt — is projected to increase as a percent of the economy (gross domestic product or GDP) over the coming decade. This growth is due to the rise in Social Security and Medicare spending resulting from the aging of the population and rising costs in the U.S. health care system. Outside Social Security and Medicare, the picture is very different. The remaining program expenditures, which account for nearly three-fifths of program spending this year and include Medicaid, the Affordable Care Act’s (ACA) coverage expansions, and spending on other low-income programs,¹ are at a historically low level as a percent of GDP and projected to decline further over the coming decade.

CBPP projects, based on Congressional Budget Office forecasts (see the Appendix), that:

- **Federal program spending outside Social Security and Medicare is currently below its 40-year historical average and is projected to decline further under current policies.** Total spending on federal programs outside Social Security and Medicare will equal 11.3 percent of GDP in 2018 — below the 40-year average of 11.9 percent — and is projected to decline further over the next ten years, to 10.0 percent of GDP in 2028. (See Table 1 and Figure 1.)

- **The rise in Social Security and Medicare spending over time reflects an aging population and rising health care costs.** Combined spending for these two programs is projected to rise from 7.9 percent of GDP in 2018 to 9.0 percent of GDP in 2028.

### Table 1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-interest spending</td>
<td>18.4%</td>
<td>19.2%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Excluding Social Security</td>
<td>14.0%</td>
<td>14.3%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Excluding Social Security and Medicare</td>
<td>11.9%</td>
<td>11.3%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

Note: Timing anomalies have been removed from the data; see Appendix. Program spending includes all federal expenditures other than net interest on the debt. Source: Office of Management and Budget for 1978-2017; CBPP analysis of Congressional Budget Office data for 2018-2028.

¹ Spending on low-income programs is decreasing as a percent of GDP and is on a path to continue declining below the historical average over the next decade. For a detailed analysis, see Robert Greenstein, Richard Kogan, and Emily Horton, “Low-Income Programs Not Driving Nation’s Long-Term Fiscal Problem,” CBPP, updated June 26, 2018, [https://www.cbpp.org/research/long-term-fiscal-challenges/low-income-programs-not-driving-nations-long-term-fiscal](https://www.cbpp.org/research/long-term-fiscal-challenges/low-income-programs-not-driving-nations-long-term-fiscal).
2018 to 10.0 percent by 2028, well above the average over the past 40 years of 6.4 percent. The large majority of this growth reflects the aging of the population as the baby-boom generation retires. In addition, growing per-person costs in the nation’s health care system (in both the public and private sectors) — stemming in part from new treatments and medications that improve health and save lives but increase costs — continue to put upward pressure on Medicare costs.

**FIGURE 1**

**Non-Interest Spending Outside Medicare and Social Security Set to Fall in Coming Decade**

Spending as a percent of GDP

Total program spending, including Social Security and Medicare, will be 19.2 percent of GDP in 2018 — below the peak of 23.1 percent in 2009 (during the depth of the Great Recession) but above the 40-year historical average. Total program spending is projected to increase to 20.0 percent of GDP over the decade, reflecting the rise in Social Security and Medicare spending. Total federal spending, *including* interest payments, now equals 20.8 percent of GDP and is expected to increase to 23.0 percent of GDP in 2028, reflecting the projected increase in net interest payments (from 1.6 percent of GDP to 3.0 percent). This increase in interest costs occurs primarily because Treasury interest rates are expected to rise to more normal levels over the decade.

Some have portrayed the growth in program expenditures as an alarming trend, though it simply reflects the fact that more people will receive Social Security and Medicare as the population ages, and that Medicare (and other health programs) will cost more due to factors like the aging of the baby boomers and improvements in medical technology. Outside of those demographic and health cost factors, the cost of government is projected to shrink relative to the economy under current policies. Policymakers would be wise to understand that given these factors and rising national needs, total expenditures will likely need to exceed their historical average in coming decades. For the budget to be on a sustainable path, and to avoid damaging program cuts, higher levels of
revenue will also be needed. These realities are reflected in a series of reports from bipartisan panels over the past decade, including a panel of the National Academy of Sciences and National Academy of Public Administration and a Bipartisan Policy Center panel chaired by former Senator Pete Domenici and former Congressional Budget Office (CBO) and Office of Management and Budget director Alice Rivlin, as well as in a report issued several years ago by analysts at the American Enterprise Institute.

Demographics, Health Costs Drive Modest Rise in Total Program Spending

Federal program spending is expected to rise from 19.2 percent of GDP in 2018 to 20.0 percent in 2028. While these levels exceed the 18.4 percent average over the past 40 years (1978-2017), the higher levels reflect two key factors:

- **The aging of the population as the baby boomers continue retiring.** The share of the population aged 65 and over rose from 10.8 percent in 1978 to an estimated 15.5 percent in 2018, which helps explain why total government spending today exceeds the four-decade average. The elderly population is still growing and will reach 19.3 percent of the U.S. population in 2028. Based on CBO estimates, we calculate that the aging of the population alone will account for about five-sixths of the total increase in Social Security and Medicare spending as a percent of GDP between 2018 and 2028. Indeed, if the population were not aging, total program spending as a percent of GDP would fall over the next decade.

- **Rising per-person costs throughout the U.S. health care system.** Health care costs per person are much higher today than in earlier decades and are expected to continue rising faster than GDP. While health care cost growth remains a major budget challenge, it has slowed noticeably in recent years. Overall costs for federal health spending — **including** the costs of the

---


4 Based on population assumptions in the 2018 Social Security Trustees Report.

5 Population aging will raise Social Security and Medicare spending by roughly 1.7 percentage points of GDP over the next decade. This estimate assumes that all of the growth in Social Security spending as a percent of GDP from 2018 to 2028 and two-thirds of the growth in Medicare spending as a percent of GDP from 2018 to 2028 are due to the aging of the population. The Medicare figure constitutes all growth except that caused by “excess health care costs growth,” which CBO defines as the extent to which the growth rate of nominal health care spending per capita — adjusted for the demographic characteristics of the Medicare population — exceeds the growth rate of potential GDP per capita; CBO estimates it to be about 1.1 percent per year over the decade. See pages 11 and 46 of CBO’s 2017 long-term budget outlook, https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/52480-lrbo.pdf. Our division of all Social Security and Medicare cost growth as a percent of GDP closely follows the approach taken by CBO, as portrayed on page 17 of its 2017 long-term budget outlook.

ACA’s coverage expansions — are now significantly lower than CBO had earlier projected they would be without the ACA expansions.7

The projected growth in Social Security and Medicare does not reflect increases in the generosity of benefits, and benefits for both programs are generally modest. The average Social Security retirement benefit is $1,364 a month, or $16,932 a year, and benefits will replace a smaller portion of pre-retirement earnings in the future as Social Security’s “full retirement age” increases to 67.8 With respect to Medicare, beneficiary households spend more than $5,000 a year on out-of-pocket health care costs, on average, which represents 14 percent of their budgets — over twice the share of their budgets that non-Medicare households spend for health care, on average.9

Spending Outside Social Security and Medicare on Downward Path

The general spending picture changes substantially once one looks beyond Social Security and Medicare. At 11.3 percent of GDP, program spending outside Social Security and Medicare is already below its 40-year average of 11.9 percent and is projected to fall to 10.0 percent of GDP in 2028. (See Table 1 and Figure 1.)

This decline reflects a substantial drop in annually appropriated, or “discretionary,” programs. These programs encompass almost all of national defense and a wide variety of other federal activities, including most federal support for transportation, education, natural resources, veterans’ health care, law enforcement, general government, and international programs. Expenditures for these programs are expected to fall from 6.4 percent of GDP in 2018 to 5.1 percent in 2028. In 2020 these programs are slated to reach their lowest level on record as a percent of GDP, with data going back to 1962, and they will continue dropping each year thereafter.

Discretionary funding is limited by the 2011 Budget Control Act (BCA) caps, as further reduced starting in 2013 under “sequestration,” which was triggered by Congress’ failure to enact the additional deficit reduction that the BCA called for. Policymakers provided partial relief from sequestration from 2014-2017. In 2018, Congress passed a two-year budget deal permitting higher discretionary funding for 2018 and 2019 than in previous years, although still below the 2010 level

---


10 Figures for Social Security and Medicare spending in this analysis do not include administrative costs, which are included as part of “other spending.” Those administrative costs total less than one-tenth of 1 percent of GDP.
adjusted for inflation. But the BCA sequestration-level caps are scheduled to take full effect again in 2020 and 2021, pushing discretionary spending to historically low levels.

Even if policymakers choose to continue the current level of discretionary funding for defense and non-defense programs, growing with inflation, over the next decade — rather than to return to the lower levels required by the BCA caps — program spending outside Social Security and Medicare will still fall as a percent of GDP over the coming decade. Specifically, such expenditures would fall from their current 11.3 percent of GDP to 10.8 percent in 2028. While higher than the 2028 estimate of 10.0 percent shown in Table 1, this is still lower than the current level, which itself is below the 40-year average.

Spending on entitlement programs outside Social Security and Medicare is projected to remain steady over the next decade at 4.9 percent of GDP. Importantly, this spending category includes Medicaid and health care subsidies provided under the ACA. It also includes military and civilian retirement, veterans’ compensation, refundable tax credits such as the Earned Income Tax Credit and Child Tax Credit, and key safety net programs such as SNAP (food stamps). The costs of the three largest means-tested income-support programs — the refundable tax credits, SNAP, and Supplemental Security Income — are each projected to decline over the next decade as a percent of GDP.

**Rising Interest Payments Will Add to Federal Spending**

As noted, net interest payments are projected to rise from 1.6 percent of GDP in 2018 to 3.0 percent in 2028. Some two-thirds of this increase reflects CBO’s assumption that Treasury interest rates on outstanding debt will rise to more normal levels as the Federal Reserve pushes rates up. The rest of the increase stems from a rising debt-to-GDP ratio, reflecting the mismatch between revenues and spending over the coming decade. It is worth remembering that higher deficits and debt result from both tax cuts and program growth.

While policymakers can choose to raise or lower other spending, they cannot choose to pay more or less interest on the debt. Nor can they choose the interest rates Treasury must pay. They can affect interest costs only indirectly, as a byproduct of their decisions changing revenue and program spending levels. For these reasons, this analysis largely focuses on program spending and generally excludes interest payments.

---


Nation Still Faces Long-Term Budget Challenge

The bottom line is that the projected growth in federal program spending over the next decade as a percent of the economy is due to the effects on Social Security and Medicare of an aging population and rising per-person health costs. Outside these two programs, program spending is already below its historical average as a percent of GDP and will continue declining over the coming decade, despite the effect of rising per-person health care costs on Medicaid, veterans’ and military health programs, and federal subsidies to help people afford health insurance coverage. This pattern — Social Security and Medicare growing faster than GDP, more than offsetting the shrinkage of other programs relative to GDP — will continue in subsequent decades. Projected revenue growth is insufficient to cover this net growth in program spending, so federal debt held by the public is also projected to grow more quickly than GDP. This is the long-term budget challenge; such a trend cannot continue forever.

The nation will need to address this fiscal challenge. In doing so, policymakers should accommodate spending and revenue levels somewhat higher than the historical 40-year averages to better reflect the circumstances the country faces in future decades (see box). But the portrait of an oversized federal government that is growing rapidly across the board is not accurate.
Historical Spending and Revenue Levels Not Adequate Guides for Future

This paper uses historical averages to help provide context for the analysis. But this approach should not imply that historical levels of spending — and revenue — should serve as a guide for the future, as some commentators suggest. Neither will be adequate to meet national needs in coming years.

The aging of the population and continuing increases in medical costs will necessitate higher levels of overall federal spending than over the past 40 years, even when programs outside Social Security and Medicare are shrinking relative to the economy. This, in turn, means that higher revenue will be needed to avoid drastic cuts in important programs.

An aging population and higher medical costs have already increased spending levels and will do so beyond the ten-year period this paper describes. The coming increase in the number of elderly people cannot be changed, and health care costs will likely continue to increase, despite continuing efforts to achieve efficiencies. Due to these two factors alone, federal spending will need to be several percentage points higher in the future, relative to GDP, than it has been in the past. Between now and 2047, CBO estimates that the aging of the population alone will increase spending on Social Security and the major health care programs (including Medicare, Medicaid, and subsidies to purchase health coverage) by 3.5 percent of GDP.

In addition, interest payments on government debt are expected to rise in coming years, apart from the impact of any further deficits, as today’s low interest rates approach more typical levels.

It is worth noting that historical levels of revenues were insufficient to match expenditures even when the population was younger and health care costs were lower.

- Between 1978 and 2017, federal revenues averaged 17.4 percent of GDP. Revenues at this level would not have balanced the budget in any of the last 40 years. Total outlays averaged 20.5 percent of GDP over this period.
- As a result of this mismatch between revenues and funding needs, deficits averaged 3.2 percent of GDP between 1978 and 2017, with the result that debt generally grew faster than GDP.

Meeting rising national needs in coming decades while also placing the budget on a sustainable path over the long term will require both expenditures and revenues to be above their historical averages. When considering how to address the nation’s long-term fiscal challenges, policymakers thus should not use historical averages as a benchmark to guide their efforts. Rather, they should establish meaningful principles to ensure, for instance, that deficit-reduction policies are designed in ways that do not increase poverty or inequality, shortchange investments important for future economic growth (such as in infrastructure, basic research, and education and training), reduce health care coverage or quality, or harm the economy.”

Appendix: CBPP Budget Projections

This analysis is based on CBPP spending projections for the coming decade, which we calculate by starting with CBO’s projections and then making the following two changes.

First, we remove certain timing anomalies from CBO’s projection. Some programs — e.g., Medicare Part C; Supplemental Security Income (SSI); and Veterans’ Compensation and Pensions — accelerate their monthly payments by a few days if the payments would otherwise fall on a weekend. And October 1, the start of the federal fiscal year, sometimes falls on a weekend. So in some fiscal years there are 11 or 13 “monthly” payments, distorting the year-to-year path of program expenditures, deficits, and debt. We smooth the path by assuming 12 such payments each year. (See Figure 2.)

Fiscal year 2018 has 11 such “monthly” payments and 2028 has 13, so smoothing also makes the comparison between 2018 and 2028 expenditures, which we show in Table 1, more meaningful.

13 Setting aside the timing shifts that exist under current law is akin to shifting program outlays by only a day or two, and thus does not materially alter the days on which the Treasury borrows to finance the expanding debt. For that reason, smoothing does not alter the payments of interest on the debt.
Without this smoothing, 2018 program expenditures would be artificially low by $44 billion and 2028 program expenditures would be artificially high by $89 billion.

Second, CBO assumes that discretionary funding for natural disasters will grow with inflation for ten years, following formal baseline rules. But fiscal year 2018 disaster funding was quite high because of last summer’s hurricanes. So we reduce projected disaster funding to a level akin to a “statistical likelihood,” using alternative figures supplied by CBO. CBO’s alternative projects that annual emergency non-defense discretionary funding for natural disasters will equal its average annual levels in 2012-2017, all adjusted for inflation. This knocks $657 billion off CBO’s ten-year deficit and debt. It does not affect Social Security or Medicare expenditures, but reduces “other program” expenditures by $577 billion over ten years. (See Figure 3.) It also reduces interest payments by $80 billion.

FIGURE 3

Projected Federal Spending, With and Without Adjusting Emergency Funding

As a percent of GDP

*CBO without timing anomalies
CBPP baseline (with more plausible emergency needs*)

Note: Timing anomalies refer to the fact that some programs accelerate their monthly payments by a few days if the payments would otherwise fall on a weekend, so in some fiscal years there are 11 or 13 “monthly” payments. CBO=Congressional Budget Office. Includes Social Security and Medicare.

Source: CBPP analysis of Congressional Budget Office data