CHAPTER

1

# The Budget Outlook

After declining for several years, federal budget deficits are on a path to rise during the next decade, the Congressional Budget Office projects (see Figure 1-1). Those shortfalls are projected to occur mainly because, under current law, growth in revenues would be outpaced by growth in spending for major benefit programs—primarily retirement and health care programs targeted to older people—and for interest on the federal debt.

As required by statute, when constructing its 10-year baseline projections, CBO incorporates the assumption that current laws governing taxes and spending will generally remain unchanged in future years.[1] Under that assumption, in CBO's baseline for the 2017–2027 period:

- Revenues rise by about 4 percent a year, on average, increasing from 17.8 percent of gross domestic product (GDP) in 2017 to 18.4 percent in 2027—about a percentage point above their average over the 50-year period from 1967 to 2016 (see Figure 1-2).

- Outlays rise faster than revenues—by about 5 percent a year, on average—increasing from 20.7 percent of GDP in 2017 to 23.4 percent in 2027, approximately 3 percentage points above their 50-year average. Relative to the size of the economy, the increase in mandatory spending—specifically, for Social Security and Medicare—and payments for interest on the government's debt would more than offset a significant projected decline in discretionary outlays, which are already more than 2 percentage points below their 50-year average.

- The deficit falls over the next two years—in large part because of shifts in the timing of some payments that affected outlays in 2016 and will do so again in 2017 and 2018—reaching a low of $487 billion in 2018. However, the deficit increases over the remainder of the projection period, reaching $1.4 trillion or 5.0 percent of GDP in 2027 (see Table 1-1 on page 10). Over the past 50 years, the annual deficit has averaged 2.8 percent of GDP.

Such a pattern over the next 10 years would cause debt held by the public to increase from 77 percent of GDP at the end of both 2017 and 2018 to 89 percent at the end of 2027. Such high and rising debt would have significant consequences, both for the economy and for the federal budget. In particular:

- Federal spending on interest payments would increase substantially as a result of rising interest rates, such as those projected to occur over the next few years.

- Because federal borrowing reduces national saving over time, the nation's capital stock ultimately would be smaller, and productivity and income would be lower than would be the case if the debt was smaller.

- Lawmakers would have less flexibility to use tax and spending policies to respond to unexpected challenges, such as significant economic downturns or financial crises.

- The likelihood of a fiscal crisis in the United States would increase. Specifically, the risk that investors would become unwilling to finance the government's borrowing, unless they were compensated with very high interest rates, would increase. If that occurred, interest rates on federal debt would rise suddenly and sharply relative to rates of return on other assets.

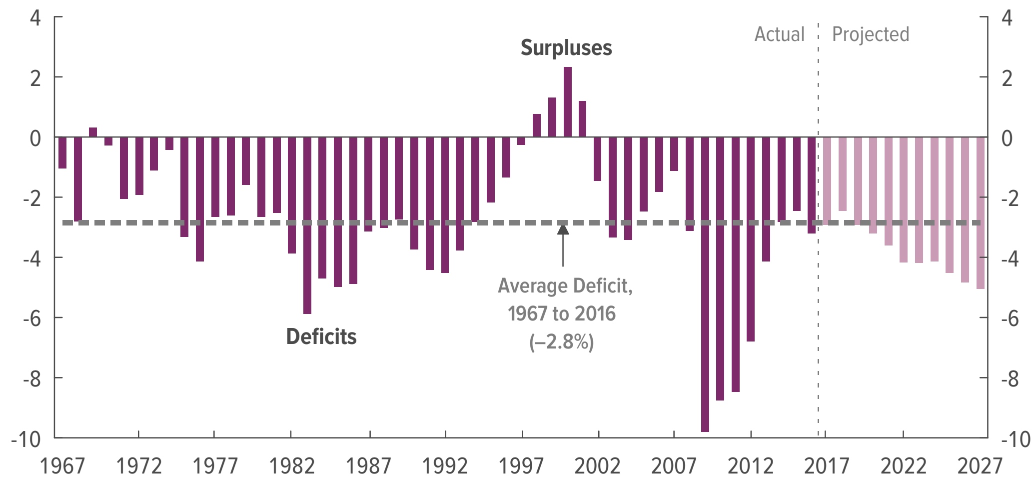
Projected deficits and debt for the coming decade reflect the weighty long-term budgetary challenges

1. CBO constructs its baseline in accordance with provisions set forth in the Balanced Budget and Emergency Deficit Control Act of 1985 (Deficit Control Act, Public Law 99-177) and the Congressional Budget and Impoundment Control Act of 1974 (P.L. 93-344). CBO's baseline is not intended to be a forecast of budgetary outcomes; rather, it is meant to provide a neutral benchmark that policymakers can use to assess the potential effects of policy decisions.

Figure 1-1.

**Total Deficits and Surpluses**

Percentage of Gross Domestic Product




Deficits as a percentage of gross domestic product are projected to exceed their 50-year average for most of the 2017–2027 period as spending for Social Security, Medicare, and interest on the federal debt rises faster than revenues.

Source: Congressional Budget Office.

facing the nation. The aging of the population is already a significant issue: The population age 65 and older is projected to grow by 39 percent through 2027, whereas the population ages 20 to 64 is projected to grow by just 3 percent. In CBO's baseline, projected spending for people age 65 or older in five large programs—Social Security, Medicare, Medicaid, and military and federal civilian retirement—increases from about 37 percent of all federal noninterest spending in 2017 to about 45 percent in 2027. In addition, health care costs per beneficiary (after adjusting for the aging of the population) are projected to grow faster than the economy over the long term, contributing to growth in spending for Medicare and Medicaid in particular. The effects on the federal budget of the aging population and rapidly growing health care costs are already apparent over the 10-year horizon—especially for Social Security and Medicare—and will grow in size beyond the baseline period. Unless laws governing fiscal policy were changed—that is, spending for large benefit programs was reduced, increases in revenues were implemented, or some combination of those approaches was adopted—debt would rise sharply relative to GDP after 2027.[2]

CBO's current projections for the coming decade have changed little since its previous publication of 10-year projections in August 2016.[3] Deficits under current law are now projected to be just $6 billion higher between 2017 and 2026 (the 10-year projection period CBO used last year). Relative to CBO's previous set of projections, deficits are lower in the first half of the period (by a cumulative $131 billion) and higher in the second half (by $136 billion). All told, the cumulative deficit over the 10-year period is projected to total $8.6 trillion, or 3.8 percent of GDP, which is unchanged from August.

## A Review of 2016

In fiscal year 2016, the budget deficit rose for the first time in a number of years, totaling $587 billion—about one-third more than the $438 billion shortfall recorded in 2015. As a percentage of GDP, the deficit increased from 2.4 percent in 2015 to 3.2 percent last year, the first such increase since 2009. Part of the increase in the deficit is attributable to the shifting of certain payments from fiscal year 2017 into fiscal year 2016 (because October 1, 2016, fell on a weekend). Even without that shift of $41 billion in payments, the budget shortfall would have increased in 2016, amounting to $546 billion, or

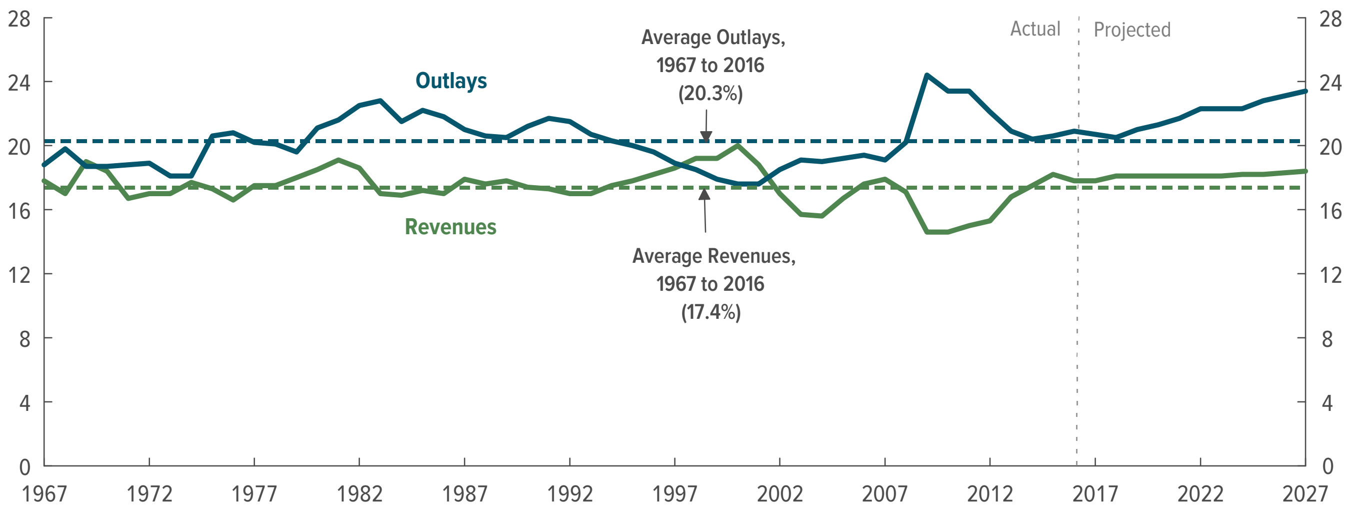
2. For a more detailed discussion of the consequences of elevated debt in particular and a long-term overview for the budget generally, see Congressional Budget Office, *The 2016 Long-Term Budget Outlook* (July 2016), www.cbo.gov/publication/51580.

3. For CBO's previous baseline budget projections, see Congressional Budget Office, *An Update to the Budget and Economic Outlook: 2016 to 2026* (August 2016), www.cbo.gov/publication/51908.

Figure 1-2.

## Total Revenues and Outlays

Percentage of Gross Domestic Product




Source: Congressional Budget Office.

3.0 percent of GDP. Revenues were nearly unchanged, edging up by $17 billion (or 0.5 percent), while outlays (with adjustments to exclude the effects of the timing shifts) rose by $125 billion (or 3.4 percent).

In total, debt held by the public increased by $1.1 trillion in 2016, reaching 77 percent of GDP—about 4 percentage points higher than the amount recorded in 2015, marking the highest ratio since 1950. Debt increased both because of the rise in the budget deficit and for other reasons. For example, about $200 billion of that increase stemmed from payments to the G-Fund of the Thrift Savings Plan, which were made to compensate for amounts that were not invested during the previous debt-ceiling impasse. Another $155 billion stemmed from an increase in the cash balance held by the Treasury.[4]

### Revenues

Total revenues rose by just $17 billion (or 0.5 percent) in 2016, decreasing from 18.2 percent of GDP in 2015 to 17.8 percent. The biggest change was in collections of corporate income taxes: Such receipts decreased by $44 billion (or 13 percent), from 1.9 percent of GDP in 2015 to 1.6 percent in 2016. That was the lowest percentage of GDP since 2012 and below the average of 2.0 percent of GDP over the past 50 years. Part of the decline stemmed from the enactment in December 2015 of the Consolidated Appropriations Act, 2016 (Public Law 114-113), which extended—retroactively and prospectively—certain tax rules, including those that allowed businesses with large amounts of investments in equipment to immediately deduct from their taxable income 50 percent of the costs of those investments. CBO estimates that the retroactive extension of those provisions for tax year 2015, followed by a prospective extension for 2016, resulted in some revenue reductions that normally would have happened in 2015 occurring in 2016 instead. Another part of the decline may reflect taxable profits that were lower in calendar year 2016 than they were during 2015. The reasons for the decline will become clearer as detailed information from corporate income tax returns becomes available over the next two years.

Receipts from individual income taxes, the largest source of revenues, rose by just $5 billion (or less than 1 percent), and therefore fell as a share of the economy, from 8.6 percent of GDP in 2015 to 8.4 percent of GDP in 2016. However, that percentage in 2016 was still higher than in any year since 2001, except for 2015. The slow growth in those receipts in 2016 resulted from the offsetting effects of different types of payments. Receipts

4. During that impasse, which took place between March and November 2015, the Treasury took a number of "extraordinary measures" to borrow additional funds without breaching the debt ceiling, including disinvesting the Thrift Savings Plan's G Fund. Once the debt limit was raised in November 2015, the G Fund was made whole (with interest).

Table 1-1.

## CBO's Baseline Budget Projections, by Category

| | Actual, 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | Total 2018-2022 | Total 2018-2027 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | In Billions of Dollars | | | | | | | |
| **Revenues** | | | | | | | | | | | | | | |
| Individual income taxes | 1,546 | 1,651 | 1,781 | 1,871 | 1,957 | 2,052 | 2,148 | 2,249 | 2,355 | 2,470 | 2,590 | 2,714 | 9,809 | 22,187 |
| Payroll taxes | 1,115 | 1,150 | 1,190 | 1,230 | 1,265 | 1,312 | 1,364 | 1,417 | 1,468 | 1,525 | 1,583 | 1,640 | 6,361 | 13,993 |
| Corporate income taxes | 300 | 320 | 340 | 352 | 382 | 377 | 381 | 385 | 396 | 408 | 422 | 439 | 1,832 | 3,882 |
| Other | 306 | 283 | 293 | 280 | 274 | 278 | 284 | 295 | 308 | 322 | 336 | 347 | 1,408 | 3,016 |
| **Total** | **3,267** | **3,404** | **3,604** | **3,733** | **3,878** | **4,019** | **4,176** | **4,346** | **4,527** | **4,724** | **4,931** | **5,140** | **19,410** | **43,078** |
| On-budget | 2,457 | 2,566 | 2,734 | 2,834 | 2,951 | 3,060 | 3,183 | 3,318 | 3,462 | 3,622 | 3,789 | 3,958 | 14,760 | 32,911 |
| Off-budget[a] | 810 | 838 | 870 | 899 | 928 | 959 | 993 | 1,028 | 1,064 | 1,102 | 1,142 | 1,182 | 4,649 | 10,168 |
| **Outlays** | | | | | | | | | | | | | | |
| Mandatory | 2,429 | 2,484 | 2,585 | 2,764 | 2,925 | 3,097 | 3,329 | 3,455 | 3,583 | 3,827 | 4,076 | 4,305 | 14,700 | 33,946 |
| Discretionary | 1,184 | 1,209 | 1,210 | 1,238 | 1,257 | 1,284 | 1,315 | 1,340 | 1,367 | 1,405 | 1,439 | 1,475 | 6,304 | 13,330 |
| Net interest | 241 | 270 | 295 | 332 | 380 | 435 | 492 | 550 | 604 | 657 | 714 | 768 | 1,934 | 5,228 |
| **Total** | **3,854** | **3,963** | **4,091** | **4,334** | **4,562** | **4,816** | **5,135** | **5,346** | **5,554** | **5,890** | **6,228** | **6,548** | **22,938** | **52,504** |
| On-budget | 3,078 | 3,157 | 3,227 | 3,409 | 3,575 | 3,761 | 4,008 | 4,143 | 4,271 | 4,524 | 4,774 | 5,000 | 17,980 | 40,692 |
| Off-budget[a] | 776 | 806 | 864 | 925 | 987 | 1,055 | 1,127 | 1,204 | 1,283 | 1,366 | 1,454 | 1,548 | 4,958 | 11,812 |
| **Deficit (-) or Surplus** | **-587** | **-559** | **-487** | **-601** | **-684** | **-797** | **-959** | **-1,000** | **-1,027** | **-1,165** | **-1,297** | **-1,408** | **-3,528** | **-9,426** |
| On-budget | -621 | -591 | -494 | -575 | -624 | -701 | -826 | -825 | -809 | -902 | -985 | -1,042 | -3,219 | -7,781 |
| Off-budget[a] | 34 | 32 | 6 | -26 | -60 | -96 | -134 | -176 | -218 | -264 | -312 | -366 | -309 | -1,645 |
| Debt Held by the Public | 14,168 | 14,838 | 15,416 | 16,092 | 16,845 | 17,704 | 18,721 | 19,776 | 20,858 | 22,078 | 23,430 | 24,893 | n.a. | n.a. |
| **Memorandum:** | | | | | | | | | | | | | | |
| Gross Domestic Product | 18,403 | 19,157 | 19,926 | 20,661 | 21,378 | 22,168 | 23,037 | 23,948 | 24,899 | 25,889 | 26,917 | 27,985 | 107,171 | 236,809 |
| | | | | | | | As a Percentage of Gross Domestic Product | | | | | | | |
| **Revenues** | | | | | | | | | | | | | | |
| Individual income taxes | 8.4 | 8.6 | 8.9 | 9.1 | 9.2 | 9.3 | 9.3 | 9.4 | 9.5 | 9.5 | 9.6 | 9.7 | 9.2 | 9.4 |
| Payroll taxes | 6.1 | 6.0 | 6.0 | 6.0 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 |
| Corporate income taxes | 1.6 | 1.7 | 1.7 | 1.7 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.7 | 1.6 |
| Other | 1.7 | 1.5 | 1.5 | 1.4 | 1.3 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 1.3 |
| **Total** | **17.8** | **17.8** | **18.1** | **18.1** | **18.1** | **18.1** | **18.1** | **18.1** | **18.2** | **18.2** | **18.3** | **18.4** | **18.1** | **18.2** |
| On-budget | 13.3 | 13.4 | 13.7 | 13.7 | 13.8 | 13.8 | 13.8 | 13.9 | 13.9 | 14.0 | 14.1 | 14.1 | 13.8 | 13.9 |
| Off-budget[a] | 4.4 | 4.4 | 4.4 | 4.4 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.2 | 4.2 | 4.3 | 4.3 |
| **Outlays** | | | | | | | | | | | | | | |
| Mandatory | 13.2 | 13.0 | 13.0 | 13.4 | 13.7 | 14.0 | 14.4 | 14.4 | 14.4 | 14.8 | 15.1 | 15.4 | 13.7 | 14.3 |
| Discretionary | 6.4 | 6.3 | 6.1 | 6.0 | 5.9 | 5.8 | 5.7 | 5.6 | 5.5 | 5.4 | 5.3 | 5.3 | 5.9 | 5.6 |
| Net interest | 1.3 | 1.4 | 1.5 | 1.6 | 1.8 | 2.0 | 2.1 | 2.3 | 2.4 | 2.5 | 2.7 | 2.7 | 1.8 | 2.2 |
| **Total** | **20.9** | **20.7** | **20.5** | **21.0** | **21.3** | **21.7** | **22.3** | **22.3** | **22.3** | **22.8** | **23.1** | **23.4** | **21.4** | **22.2** |
| On-budget | 16.7 | 16.5 | 16.2 | 16.5 | 16.7 | 17.0 | 17.4 | 17.3 | 17.2 | 17.5 | 17.7 | 17.9 | 16.8 | 17.2 |
| Off-budget[a] | 4.2 | 4.2 | 4.3 | 4.5 | 4.6 | 4.8 | 4.9 | 5.0 | 5.2 | 5.3 | 5.4 | 5.5 | 4.6 | 5.0 |
| **Deficit (-) or Surplus** | **-3.2** | **-2.9** | **-2.4** | **-2.9** | **-3.2** | **-3.6** | **-4.2** | **-4.2** | **-4.1** | **-4.5** | **-4.8** | **-5.0** | **-3.3** | **-4.0** |
| On-budget | -3.4 | -3.1 | -2.5 | -2.8 | -2.9 | -3.2 | -3.6 | -3.4 | -3.2 | -3.5 | -3.7 | -3.7 | -3.0 | -3.3 |
| Off-budget[a] | 0.2 | 0.2 | * | -0.1 | -0.3 | -0.4 | -0.6 | -0.7 | -0.9 | -1.0 | -1.2 | -1.3 | -0.3 | -0.7 |
| Debt Held by the Public | 77.0 | 77.5 | 77.4 | 77.9 | 78.8 | 79.9 | 81.3 | 82.6 | 83.8 | 85.3 | 87.0 | 88.9 | n.a. | n.a. |

Source: Congressional Budget Office.

n.a. = not applicable; * = between zero and 0.05 percent.

a. The revenues and outlays of the Social Security trust funds and the net cash flow of the Postal Service are classified as off-budget.

from amounts withheld from paychecks rose by $26 billion (or 2 percent), which was less than the growth rate of the economy and the growth rate of wages and salaries over the same period.[5] The increase in withheld taxes was largely offset by a $20 billion decline in nonwithheld payments of income taxes, net of refunds. The reasons for that decline will become clearer as data from tax returns become available; but the decrease may, in part, reflect weakness in nonwage income in 2015, which would have reduced taxes paid in 2016.

Receipts from both payroll taxes and remittances from the Federal Reserve grew faster than the economy, offsetting some of the decline in corporate and individual income tax revenues relative to GDP.[6] Receipts recorded from payroll taxes, the second-largest source of revenues, rose by $50 billion (or 5 percent), exceeding the rate of growth of wages and salaries. They increased from 5.9 percent of GDP in 2015 to 6.1 percent in 2016. Remittances to the Treasury from the Federal Reserve rose by $19 billion, from 0.5 percent of GDP in 2015 to 0.6 percent of GDP in 2016—the highest level ever recorded for that source. The increase in such payments occurred largely because the Fixing America's Surface Transportation Act (P.L. 114-94) required the Federal Reserve to remit most of its surplus account to the Treasury. The central bank remitted the required additional amount, $19 billion, in late December 2015.

## Outlays

Federal spending in 2016 rose to $3.9 trillion (or 20.9 percent of GDP) compared with $3.7 trillion (or 20.6 percent) in 2015. By comparison, outlays over the past 50 years have averaged 20.3 percent of GDP. The growth in outlays in 2016 occurred because of the following changes, which reflect adjustments to exclude the effects of shifts in the timing of payments:

- Mandatory spending rose by 4 percent, increasing to 13.0 percent of GDP (compared with 12.8 percent in 2015).[7]

- Discretionary spending increased by 1 percent but fell to 6.4 percent of GDP (compared with 6.5 percent in 2015).[8]

- Net interest spending increased by 8 percent, rising to 1.3 percent of GDP (compared with 1.2 percent in 2015).

**Mandatory Spending.** Outlays for mandatory programs totaled $2.4 trillion in 2016, $133 billion more than the amount recorded in 2015. Without the shift in the timing of payments, which totaled $37 billion, mandatory spending would have grown by $96 billion. The largest increases in net outlays, compared with spending in 2015, are attributable to growth in Social Security, Medicare, and Medicaid, as well as a decrease in receipts from the auction of licenses to use the electromagnetic spectrum (the proceeds of which are recorded as reductions in mandatory outlays). Those increases in outlays were partially offset by lower amounts recorded for credit programs related to higher education and housing.

*Social Security.* Spending for Social Security totaled $910 billion in 2016, $28 billion—or about 3 percent—more than in 2015. That increase was about 1 percentage point below the rate of growth in 2015, primarily because beneficiaries did not receive a cost-of-living adjustment (COLA) in January 2016. (The COLA was 1.7 percent in 2015).

*Medicare.* In total, Medicare outlays—net of premiums and other offsetting receipts—grew by $48 billion (or 9 percent) in 2016. That amount overstates underlying growth in spending for the program, however, because it reflects a $22 billion shift in the timing of certain payments from 2017 to 2016. In the absence of that shift in payments, Medicare spending would have risen by $26 billion (or 5 percent) last year, largely because of increased spending per person, particularly for

5. The amounts currently reported for individual income and payroll taxes in 2016 reflect allocations of total withholding on the basis of estimates by the Department of the Treasury. When actual data from 2016 tax returns become available, the department may reallocate the 2016 receipts from those two sources by adjusting the amounts recorded for 2017 (or some subsequent year).

6. The income produced by the various activities of the Federal Reserve System, minus the cost of generating that income and the cost of the system's operations, is remitted to the Treasury and counted as revenues in the budget.

7. Mandatory spending is governed by statutory criteria and is not normally controlled by the annual appropriation process.

8. Discretionary spending is controlled by annual appropriation acts that specify the amounts that are to be provided for a broad array of government activities, including, for example, defense, law enforcement, and transportation.

prescription drugs. Spending for such drugs increased by roughly 15 percent last year, after adjustments for timing shifts and reconciliation payments.[9] Much of that increase stemmed from spending for people whose out-of-pocket costs for prescription drugs exceeded the catastrophic limit on such spending.

*Medicaid.* Spending for Medicaid grew by $19 billion (or 5 percent) last year—about one-third the rate of growth recorded in 2015. The slower growth in 2016 occurred in part because the optional expansion of coverage authorized by the Affordable Care Act (ACA) has been in place for two years and the rapid growth in enrollment that occurred during the initial stage of the expansion has begun to moderate. CBO estimates that total enrollment in Medicaid was 0.4 percent higher in 2016 than in the previous year.

*Spectrum Auctions.* The Federal Communications Commission occasionally auctions licenses for commercial use of the electromagnetic spectrum. Receipts from such auctions are recorded in the budget as reductions in mandatory outlays. Net receipts from the auction held in 2015 totaled $30 billion that year and $8 billion in 2016. The lower receipts in 2016 had the effect of boosting outlays by $22 billion that year relative to the total in the previous year.

*Higher Education.* Mandatory outlays for higher education, which equaled $22 billion in 2015, fell to $8 billion in 2016. Those outlays include the subsidy costs for federal student loans issued in the current year, revisions to the subsidy costs of loans made in past years, and mandatory spending for the Federal Pell Grant Program. The Department of Education recorded a revision to the subsidy costs for past loans that resulted in a $7 billion increase in outlays in 2016; the revision in 2015 was larger, increasing outlays by $18 billion.[10] That difference accounted for most of the drop in mandatory outlays for higher education last year. In addition, mandatory outlays for Pell grants fell by nearly $4 billion.[11]

*Federal Housing Administration's Credit Programs.* The Department of Housing and Urban Development recorded revisions to the subsidy costs for past mortgage guarantees that resulted in a net $10 billion reduction in outlays in 2016. In 2015, the department increased its earlier estimates of such costs by $4 billion. As a result, outlays in 2016 were, on net, $14 billion lower than in 2015.

**Discretionary Spending.** In total, discretionary outlays increased in 2016 by $15 billion (or 1 percent). Defense outlays inched up by $0.4 billion (or 0.1 percent) to $584 billion last year, the first increase in nominal terms since 2011. If not for the shift in the payment date for military compensation, however, outlays would have declined again in 2016—to $580 billion. That reduction stemmed from a drop in spending for overseas contingency operations (primarily for activities in Afghanistan and related missions), which fell by roughly $5 billion, CBO estimates; other defense spending rose slightly. Measured as a share of GDP, outlays for defense totaled 3.2 percent in 2016. By comparison, as recently as 2010—when spending for overseas contingency operations was roughly $95 billion above last year's level of about $70 billion—defense outlays totaled 4.7 percent of GDP.

Nondefense discretionary outlays rose to $600 billion in 2016, an increase of $15 billion (or 3 percent). Roughly a quarter of that increase is the result of a lower negative subsidy rate for mortgage guarantees by the Federal Housing Administration. (A negative subsidy indicates that the transactions are recorded as generating net income for the government.) Because such receipts are recorded as reductions in discretionary outlays, the decline in receipts caused overall spending for nondefense programs to rise. The remaining growth in nondefense discretionary spending was the result of a number of

9. Reconciliation payments are adjustments to payments to prescription drug plans on the basis of actual expenditures. They typically occur two years after the initial disbursements were made.

10. Under the Federal Credit Reform Act of 1990, a program's subsidy costs are calculated by subtracting the present value of the government's projected receipts from the present value of its projected payments. The estimated subsidy costs can be increased or decreased in subsequent years to reflect updated assessments of the payments and receipts associated with the program. Present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) at a specific time. The present value depends on the rate of interest (the discount rate) that is used to translate future cash flows into current dollars.

11. Most of the Pell grant program is funded through discretionary appropriations; such outlays rose by $2 billion in 2016. All told, spending for Pell grants dipped by $2 billion in 2016, primarily because of a drop in the number of students receiving such grants.

relatively small increases in outlays for various programs. Such spending measured 3.3 percent of GDP in 2016, unchanged from the percentage recorded in 2015.

**Net Interest.** Outlays in this category consist of the government's interest payments on debt held by the public minus interest income the government receives. In 2016, such outlays totaled $241 billion, $18 billion (or 8 percent) more than the amount recorded in 2015. That increase resulted primarily from adjustments to the principal of inflation-protected securities.[12] (Those adjustments are made monthly to account for inflation, using the consumer price index for all urban consumers, and are recorded as interest outlays.) The continued accumulation of debt also contributed to the increase in outlays for interest.

## The Budget Outlook for 2017

If the laws governing taxes and spending generally remain unchanged in fiscal year 2017, CBO projects, the budget deficit will decrease by $29 billion to $559 billion. That drop in the deficit, however, is attributable to shifts in the timing of some payments, which boosted the deficit significantly in 2016 but will have a much smaller net effect this year.[13] Without those shifts, CBO estimates, the deficit would total $555 billion this year, slightly larger than the $546 billion deficit that would have been recorded without the shifts in 2016. Measured relative to the size of the economy, this year's deficit is projected to total 2.9 percent, CBO estimates, slightly below last year's level.

CBO estimates that, under current law, both revenues and outlays (adjusted for shifts in timing) would increase by about 4 percent in 2017, compared with increases of 0.5 percent and 3.4 percent, respectively, in 2016. A number of factors are responsible for those changes. Although total revenues are expected to grow roughly in line with GDP in 2017, some sources of revenue grow more quickly and some more slowly in CBO's baseline projections. Most notably, receipts from individual income taxes, which barely grew in 2016, are expected to increase by about 7 percent in 2017, while Federal Reserve remittances, which were boosted significantly in 2016 by a one-time transfer to the Treasury, drop back down in CBO's projection for 2017.

In terms of outlays, net interest payments are anticipated to increase by 12 percent in 2017 (after growing by 8 percent last year), primarily because of higher interest rates. Adjusted for the effects of timing shifts, mandatory spending is projected to increase by 3.6 percent in 2017, about half a percentage point less than in 2016, in part because spending for Medicare (net of premiums) is projected to grow more slowly. In addition, adjusted discretionary outlays are projected to increase by 2.5 percent in 2017, a faster pace than in 2016, in part because appropriations not constrained by the caps on discretionary funding (established by the Budget Control Act of 2011, P.L. 112-25) are greater so far this year.

### Revenues

CBO projects that if current laws remain unchanged, revenues will increase by $137 billion in 2017, reaching $3.4 trillion. Because revenues in CBO's baseline projections rise at about the same rate in 2017 as the agency expects GDP to increase, they are estimated to remain at 17.8 percent of GDP, the same percentage as in 2016, and above the average of 17.4 percent of GDP recorded over the past 50 years.

The relative stability in revenues as a percentage of GDP in 2017 reflects movements in the following components:

- Individual income tax receipts are projected to rise by about $105 billion, from 8.4 percent of GDP to 8.6 percent. The most significant source of the increase is continued economic growth, which will cause people's income this year, in the aggregate, to rise faster than the rate of inflation. The inflation rate from the previous year is used to adjust the tax brackets each January, and when income rises faster than inflation, more of that income is pushed into higher tax brackets (the phenomenon known as real bracket creep).

- Remittances from the Federal Reserve System are projected to decline by $27 billion, from 0.6 percent of

12. At the end of fiscal year 2016, $1.2 trillion in Treasury inflation-protected securities was outstanding.

13. Because October 1, 2016, fell on a weekend, an estimated $41 billion in payments that were due on that day were instead made at the end of September 2016. As a result, outlays in 2016 were boosted (and outlays in 2017 were reduced) by the amount of those payments. Similarly, outlays in 2017 will be boosted by the shift of an estimated $45 billion in payments from fiscal year 2018 to 2017 because October 1, 2017, also falls on a weekend. All told, outlays in 2017 will be $4 billion higher, on net, as a result of those shifts.

GDP to 0.5 percent. That decline largely reflects two factors: First, remittances were unusually high in 2016 because legislation last year required the central bank to remit most of its surplus account to the Treasury. Second, interest rates increased, resulting in more interest paid on reserves (and other instruments) in 2017.

- Changes in other sources of revenues are smaller and mostly offsetting relative to GDP. Receipts from miscellaneous fees rise slightly, largely because penalties on employers who do not provide qualifying health insurance to their employees are scheduled to be collected for the first time. Receipts from corporate income taxes also rise slightly following the temporary reduction in receipts collected in 2016, discussed above, which resulted from legislation enacted in December 2015. Receipts from excise taxes decline slightly, largely as a result of a one-year moratorium in 2017 on a tax imposed on health insurance providers.

## Outlays

In the absence of changes to laws governing federal spending, and assuming that full-year appropriations equal the annualized funding provided in the Further Continuing and Security Assistance Appropriations Act, 2017 (P.L. 114-254, the current continuing resolution), outlays in 2017 will total $4.0 trillion, CBO estimates, $109 billion more than in 2016. Outlays are projected to total 20.7 percent of GDP this year, about 0.3 percentage points less than the share recorded in 2016. If not for the shifts in the timing of certain payments, outlays in 2017 would rise by $146 billion, or 3.8 percent, CBO estimates—more slowly than the 4.1 percent average annual rate of growth recorded between 2005 and 2015.

**Mandatory Spending.** Under current law, spending for mandatory programs (adjusted for timing shifts) will rise by $87 billion in 2017, CBO estimates, to a total of $2.5 trillion (see Table 1-2 on page 16). Such outlays are anticipated to total 12.9 percent of GDP this year, down from the 13.0 percent that would have been recorded in 2016. The largest year-over-year changes are as follows:

*Social Security.* CBO anticipates that, under current law, Social Security outlays will increase by $30 billion (or 3.3 percent) in 2017, a slightly faster rate of increase than that recorded in 2016, primarily because beneficiaries received a 0.3 percent COLA in January 2017 (whereas beneficiaries did not receive a COLA in 2016). The number of Social Security beneficiaries is projected to grow by 1.7 percent this year, about the same as the increase in 2016.

*Medicare.* Medicare outlays (net of premiums and other offsetting receipts and adjusted for shifts in timing) will rise by $23 billion, or 4.1 percent, in 2017, CBO projects. That growth is less than last year's rate of 4.8 percent primarily because of greater receipts from premiums paid by Medicare beneficiaries in 2017. Enrollment is projected to increase by 2.7 percent in 2017, faster than the 2.3 percent rate of increase recorded last year.

*Medicaid.* Spending for Medicaid is expected to increase by $20 billion (or 5.5 percent) in 2017. The projected rate of growth in outlays is about the same as last year's and is well below the average annual rate of growth recorded over the two years before that, primarily because the optional expansion of coverage authorized by the ACA will have been in place for three years and because the rapid growth in enrollment that occurred during the initial stage of the expansion has moderated. CBO projects that, under current law, total enrollment in the program will increase by about 1 percent in 2017, a slightly faster rate of increase than in 2016.

*Health Insurance Subsidies and Related Spending.* Subsidies that help people who meet income and other eligibility criteria to purchase health insurance through marketplaces (sometimes referred to as exchanges) and to meet their cost-sharing requirements, along with related spending, are expected to increase by $9 billion in 2017 (compared with an increase of $4 billion last year), reaching a total of $51 billion. The higher spending reflects an increase in the average subsidy per enrollee. Premiums for individual policies for the second-lowest-cost "silver" plan in the marketplaces—the benchmark for determining marketplace subsidies—rose by about 21 percent, on average, from 2016 to 2017. CBO and the staff of the Joint Committee on Taxation (JCT) estimate that about 9 million people will receive marketplace subsidies, on average, during calendar year 2017, roughly the same number as in 2016 (see Box 1-1).

*Higher Education.* Reflecting the negative subsidy rates estimated for new student loans, CBO projects, mandatory outlays for higher education will total –$6 billion in 2017, compared with $8 billion in 2016. About half of

Box 1-1.

## The Expansion of Medicaid and Nongroup Health Insurance Under the Affordable Care Act

Because of the complexity of the analysis involved, the Congressional Budget Office and the staff of the Joint Committee on Taxation (JCT) generally produce one major update per year to their 10-year projections of health insurance coverage for people under age 65. In preparing the January 2017 baseline, the agencies did not undertake a complete update of those coverage projections, but did update projections of insurance coverage that has the greatest effects on the federal budget and of the associated subsidy costs.[1] CBO's projections were completed before the new Administration took office on January 20, 2017. They do not incorporate any effects of executive orders or other actions taken by that Administration.

### Health Insurance Coverage

The updated projections focus on the coverage stemming from the expansion of eligibility for Medicaid under the Affordable Care Act (ACA) and the nongroup coverage purchased through the health insurance marketplaces (sometimes referred to as exchanges).

**Medicaid.** By CBO's estimates, an average of 12 million noninstitutionalized residents of the United States under age 65 will have health insurance in any given month in calendar year 2017 because they were made eligible for Medicaid under the ACA. That expanded eligibility for Medicaid applies principally to adults whose income is up to 138 percent of the federal poverty guidelines; the federal government pays nearly all of the costs of expanding Medicaid coverage to those new enrollees. On average, 17 million people are projected to have such coverage in 2027, if current laws remained in place.

**Nongroup Coverage.** In addition, CBO and JCT estimate that, in calendar year 2017, 9 million people per month, on average, will receive subsidies for nongroup coverage purchased through the health insurance marketplaces established under the ACA. Subsidized health insurance is now available to many individuals and families with income between 100 percent and 400 percent of the federal poverty guidelines who meet certain other conditions; they can purchase coverage through designated marketplaces and receive tax credits that subsidize their insurance premiums, as well as cost-sharing subsidies. That number is projected to be 11 million in 2027 under current law.

Overall, including people who do not receive subsidies for their insurance, CBO and JCT expect that 10 million people per month, on average, will have insurance purchased through the marketplaces in 2017; that number is projected to grow to 13 million by 2027. Not all nongroup coverage is purchased through the marketplaces. In total, CBO and JCT estimate that 18 million people will have nongroup coverage in 2017 and that 20 million people would have such coverage in 2027. From 2017 through 2027, under current law, the number of uninsured people under age 65 would remain around 27 million or 28 million.

### Federal Subsidies

CBO and JCT currently estimate that federal spending for people made eligible for Medicaid by the ACA will be $70 billion, or 0.4 percent of gross domestic product (GDP), in fiscal year 2017. Such spending is projected to rise at an average annual rate of about 7 percent, reaching $142 billion (or 0.5 percent of GDP) in 2027. For the 2018–2027 period, such spending is projected to total $998 billion if current laws remained in place.

The agencies also estimate net federal subsidies for coverage obtained through the marketplaces to be $49 billion, or 0.3 percent of GDP, in fiscal year 2017. Those subsidy amounts are projected to rise at an average annual rate of about 9 percent, reaching $110 billion (or 0.4 percent of GDP) in 2027. For the 2018–2027 period, the net subsidy is projected to total $919 billion under current law.

1. For more information, see Congressional Budget Office, "Federal Subsidies for Health Insurance (Includes Effects of the Affordable Care Act )" (January 2017), www.cbo.gov/publication/51298.

Table 1-2.

## Mandatory Outlays Projected in CBO's Baseline

Billions of Dollars

| | Actual, 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | Total 2018-2022 | Total 2018-2027 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Social Security** | | | | | | | | | | | | | | |
| Old-Age and Survivors Insurance | 767 | 797 | 847 | 903 | 963 | 1,025 | 1,090 | 1,158 | 1,230 | 1,306 | 1,383 | 1,465 | 4,826 | 11,368 |
| Disability Insurance | 144 | 144 | 148 | 154 | 159 | 167 | 174 | 182 | 190 | 198 | 207 | 217 | 801 | 1,795 |
| Subtotal | 910 | 940 | 995 | 1,056 | 1,121 | 1,191 | 1,264 | 1,340 | 1,420 | 1,504 | 1,590 | 1,681 | 5,628 | 13,164 |
| **Major Health Care Programs** | | | | | | | | | | | | | | |
| Medicare[a] | 692 | 705 | 716 | 791 | 849 | 912 | 1,019 | 1,052 | 1,085 | 1,200 | 1,303 | 1,402 | 4,288 | 10,330 |
| Medicaid | 368 | 389 | 408 | 428 | 450 | 474 | 499 | 525 | 554 | 584 | 616 | 650 | 2,259 | 5,189 |
| Health insurance subsidies and related spending[b] | 42 | 51 | 61 | 70 | 80 | 85 | 90 | 93 | 98 | 101 | 104 | 106 | 385 | 887 |
| Children's Health Insurance Program | 14 | 15 | 11 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 34 | 62 |
| Subtotal[a] | 1,116 | 1,159 | 1,196 | 1,295 | 1,385 | 1,477 | 1,613 | 1,676 | 1,742 | 1,891 | 2,029 | 2,165 | 6,966 | 16,468 |
| **Income Security Programs** | | | | | | | | | | | | | | |
| Earned income, child, and other tax credits[c] | 85 | 87 | 86 | 88 | 88 | 88 | 90 | 92 | 93 | 95 | 97 | 98 | 441 | 915 |
| Supplemental Nutrition Assistance Program | 73 | 71 | 69 | 67 | 67 | 67 | 66 | 66 | 66 | 67 | 68 | 69 | 335 | 672 |
| Supplemental Security Income | 59 | 55 | 52 | 58 | 60 | 62 | 68 | 66 | 62 | 70 | 72 | 74 | 300 | 645 |
| Unemployment compensation | 33 | 32 | 33 | 35 | 41 | 45 | 47 | 49 | 51 | 54 | 56 | 59 | 202 | 472 |
| Family support and foster care[d] | 31 | 31 | 32 | 33 | 33 | 33 | 33 | 34 | 34 | 34 | 35 | 35 | 164 | 336 |
| Child nutrition | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 31 | 32 | 33 | 35 | 36 | 135 | 302 |
| Subtotal | 304 | 299 | 297 | 307 | 315 | 323 | 335 | 337 | 340 | 353 | 362 | 372 | 1,577 | 3,341 |
| **Federal Civilian and Military Retirement** | | | | | | | | | | | | | | |
| Civilian[e] | 99 | 100 | 103 | 107 | 110 | 114 | 118 | 122 | 126 | 130 | 135 | 139 | 552 | 1,204 |
| Military | 62 | 58 | 55 | 62 | 64 | 66 | 73 | 70 | 66 | 73 | 75 | 77 | 320 | 682 |
| Other | 3 | 3 | 3 | 2 | 2 | 3 | 4 | 6 | 6 | 2 | 9 | 9 | 15 | 47 |
| Subtotal | 164 | 161 | 162 | 170 | 176 | 183 | 195 | 197 | 198 | 206 | 219 | 225 | 887 | 1,932 |
| **Veterans' Programs** | | | | | | | | | | | | | | |
| Income security[f] | 87 | 85 | 82 | 94 | 97 | 101 | 113 | 108 | 103 | 116 | 120 | 125 | 488 | 1,061 |
| Other[g] | 20 | 21 | 19 | 18 | 18 | 19 | 20 | 20 | 20 | 22 | 23 | 24 | 95 | 205 |
| Subtotal | 107 | 106 | 101 | 112 | 116 | 120 | 134 | 129 | 123 | 139 | 143 | 149 | 582 | 1,266 |
| **Other Programs** | | | | | | | | | | | | | | |
| Agriculture | 13 | 12 | 17 | 14 | 14 | 15 | 14 | 14 | 14 | 15 | 15 | 15 | 74 | 147 |
| MERHCF | 10 | 10 | 11 | 11 | 12 | 13 | 13 | 14 | 15 | 15 | 16 | 17 | 60 | 137 |
| Deposit insurance | -13 | -14 | -13 | -7 | -6 | -6 | -8 | -8 | -8 | -9 | -9 | -9 | -39 | -82 |
| Fannie Mae and Freddie Mac[h] | 0 | 0 | 2 | 1 | 1 | * | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 16 |
| Higher education | 8 | -6 | -3 | -2 | -1 | * | 1 | 1 | 1 | 1 | 1 | 1 | -6 | -1 |
| Other | 48 | 66 | 70 | 70 | 67 | 69 | 68 | 66 | 65 | 65 | 68 | 67 | 343 | 674 |
| Subtotal | 66 | 68 | 84 | 87 | 87 | 90 | 90 | 89 | 88 | 90 | 94 | 93 | 438 | 892 |

Continued

Table 1-2. Continued

## Mandatory Outlays Projected in CBO's Baseline

Billions of Dollars

| | Actual, 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | Total 2018-2022 | Total 2018-2027 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsetting Receipts | | | | | | | | | | | | | | |
| Medicare[i] | -104 | -113 | -126 | -137 | -148 | -157 | -170 | -178 | -189 | -205 | -223 | -237 | -737 | -1,768 |
| Federal share of federal employees' retirement | | | | | | | | | | | | | | |
| Social Security | -17 | -17 | -17 | -18 | -18 | -19 | -20 | -20 | -21 | -22 | -22 | -23 | -92 | -200 |
| Military retirement | -19 | -18 | -18 | -18 | -19 | -19 | -19 | -20 | -20 | -20 | -21 | -21 | -93 | -195 |
| Civil service retirement and other | -34 | -37 | -38 | -39 | -39 | -40 | -41 | -42 | -43 | -44 | -45 | -46 | -197 | -416 |
| Subtotal | -70 | -72 | -73 | -75 | -76 | -78 | -80 | -82 | -84 | -86 | -88 | -90 | -382 | -811 |
| Receipts related to natural resources | -8 | -9 | -12 | -12 | -11 | -11 | -11 | -12 | -13 | -13 | -14 | -14 | -58 | -124 |
| MERHCF | -7 | -7 | -8 | -9 | -9 | -10 | -10 | -11 | -12 | -12 | -13 | -14 | -47 | -109 |
| Fannie Mae and Freddie Mac[h] | -14 | -15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | -34 | -34 | -30 | -32 | -31 | -31 | -31 | -31 | -32 | -39 | -24 | -24 | -154 | -305 |
| Subtotal | -237 | -250 | -249 | -264 | -276 | -287 | -302 | -314 | -329 | -355 | -362 | -380 | -1,378 | -3,117 |
| **Total Mandatory Outlays** | **2,429** | **2,484** | **2,585** | **2,764** | **2,925** | **3,097** | **3,329** | **3,455** | **3,583** | **3,827** | **4,076** | **4,305** | **14,700** | **33,946** |
| **Memorandum:** | | | | | | | | | | | | | | |
| Mandatory Spending Excluding the Effects of Offsetting Receipts | 2,666 | 2,734 | 2,834 | 3,028 | 3,201 | 3,384 | 3,631 | 3,769 | 3,912 | 4,182 | 4,437 | 4,685 | 16,078 | 37,063 |
| Spending for Medicare Net of Offsetting Receipts | 588 | 592 | 590 | 654 | 701 | 755 | 849 | 874 | 897 | 995 | 1,080 | 1,165 | 3,550 | 8,562 |
| Spending for Major Health Care Programs Net of Offsetting Receipts[j] | 1,012 | 1,046 | 1,070 | 1,158 | 1,237 | 1,320 | 1,444 | 1,498 | 1,554 | 1,686 | 1,806 | 1,927 | 6,229 | 14,700 |

Source: Congressional Budget Office.

Data on spending for benefit programs in this table generally exclude administrative costs, which are discretionary.

MERHCF = Department of Defense Medicare-Eligible Retiree Health Care Fund (including TRICARE for Life); * = between zero and $500 million.

a. Gross spending, excluding the effects of Medicare premiums and other offsetting receipts. (Net Medicare spending is included in the memorandum section of the table.)

b. Spending to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and provided through the Basic Health Program and spending to stabilize premiums for health insurance purchased by individuals and small employers.

c. Includes outlays for the American Opportunity Tax Credit and other credits.

d. Includes the Temporary Assistance for Needy Families program, the Child Support Enforcement program, the Child Care Entitlement program, and other programs that benefit children.

e. Includes benefits for retirement programs in the civil service, foreign service, and Coast Guard; benefits for smaller retirement programs; and annuitants' health care benefits.

f. Includes veterans' compensation, pensions, and life insurance programs.

g. Primarily education subsidies. (The costs of veterans' health care are classified as discretionary spending and thus are not shown in this table.)

h. Cash payments from Fannie Mae and Freddie Mac to the Treasury are recorded as offsetting receipts in 2016 and 2017. Beginning in 2018, CBO's estimates reflect the net lifetime costs—that is, the subsidy costs adjusted for market risk—of the guarantees that those entities will issue and of the loans that they will hold. CBO counts those costs as federal outlays in the year of issuance.

i. Includes premium payments, recoveries of overpayments made to providers, and amounts paid by states from savings on Medicaid's prescription drug costs.

j. Consists of spending for Medicare (net of premiums and other offsetting receipts), Medicaid, and the Children's Health Insurance Program as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.

that $14 billion reduction will occur because in 2016 the Department of Education recorded a revision to the subsidy costs for past loans that resulted in a $7 billion increase in outlays. No such revision has yet been recorded in 2017, and CBO has no basis for determining what revision, if any, might be made this year. Moreover, the estimated subsidy rates in 2017 are slightly more negative than those used in 2016 to estimate the costs of new loans.

*Federal Housing Administration's Credit Programs.* CBO does not project any mandatory outlays in 2017 for the Department of Housing and Urban Development's credit programs because no revisions to the subsidy costs for past guarantees have yet been recorded (such revisions reduced outlays by $10 billion in 2016).

**Discretionary Spending.** Almost all agencies are currently operating under a continuing resolution that holds most appropriations at 2016 levels through April 28, 2017. However, on an annualized basis, budget authority enacted so far in 2017 exceeds the amounts provided last year by $17 billion (or 1.4 percent).[14] That increase occurs largely because additional funding was provided for activities that are not constrained by the caps. Specifically, appropriations designated for overseas contingency operations are $11 billion higher; funding for activities designated as emergency requirements or for disaster relief is also slightly higher. All told, discretionary budget authority enacted so far in 2017 totals $1,185 billion, on an annualized basis (see Table 1-3). On that basis, defense funding would increase by $6 billion (or 1.1 percent) this year and budget authority for nondefense discretionary programs would grow by $10 billion (or 1.8 percent).[15]

If appropriations for the entire year turned out to be those assumed in the baseline, discretionary outlays also would rise—by $29 billion (or 2.5 percent) from the 2016 amount. (That rise reflects a downward adjustment of $4 billion in 2016 to exclude the effects of the shifts in payment dates for military compensation.) Outlays for defense programs (adjusted for shifts in timing) would rise by $9 billion (or 1.6 percent). Most categories of defense spending would be largely unchanged from last year's amounts; the major exceptions are increases in procurement ($4 billion, or 3.5 percent) and in research and development ($3 billion, or 4.8 percent). All told, CBO estimates that defense outlays would equal $589 billion in 2017 (3.1 percent of GDP).

In the baseline, outlays for nondefense programs rise by $20 billion (or 3.4 percent) this year, to a total of $620 billion (3.2 percent of GDP). That increase is the result of relatively small increases or decreases in outlays for various programs. The largest is a nearly $4 billion increase in spending for medical care for veterans, reflecting increases in appropriations related to medical facilities and community-care providers.

**Net Interest.** CBO estimates that, under current law, outlays for net interest will rise by $29 billion in 2017, to $270 billion. Although interest rates on securities issued by the Treasury are expected to remain very low by historical standards, CBO expects they will rise over the course of the year. Those higher rates, along with a larger amount of debt, would boost interest payments, which will edge up to 1.4 percent of GDP in 2017, CBO estimates (still well below their 50-year average of 2.0 percent).

## CBO's Baseline Budget Projections for 2018 to 2027

Under the assumption that current laws governing taxes and spending remain in place, the budget deficit is projected to dip to 2.4 percent of GDP in 2018. That drop, however, is largely attributable to shifts in the timing of certain payments from 2018 into 2017.[16] Over the following nine years, the projected deficit increases in most

14. Under the rules that govern its baseline, CBO assumes full-year funding for 2017 on the basis of amounts provided in the Further Continuing and Security Assistance Appropriations Act, 2017.

    Budget authority is the authority provided by federal law to incur financial obligations that will result in immediate or future outlays of federal government funds. Such authority may be provided in an appropriation act or an authorization act.

15. At the time of enactment, CBO estimated that appropriations under the continuing resolution currently in place were $3 billion above the cap on nondefense budget authority for 2017 and $3 billion below the defense cap. Under the provisions of P.L. 114-254, however, the Office of Management and Budget—which has the authority to determine whether the caps have been breached and a sequestration would be necessary—must postpone issuing its report on that subject until 15 days after the expiration of the continuing resolution.

16. Without those shifts, the deficit for 2018 would drop less sharply, to 2.7 percent of GDP. The drop in 2018 results from several factors, including the following: receipts from individual income taxes that rise faster than GDP; a tax on health insurers that is scheduled to be reinstated; and caps on budget authority for discretionary programs that are scheduled to be lower in 2018 than this year.

Table 1-3.

## Discretionary Spending Projected in CBO's Baseline

Billions of Dollars

| | Actual, 2016[a] | 2017[a] | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | Total 2018-2022 | Total 2018-2027 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Budget Authority | | | | | | | | | | | | | | |
| Defense | 607 | 613 | 615 | 630 | 645 | 660 | 677 | 693 | 710 | 728 | 746 | 764 | 3,227 | 6,868 |
| Nondefense | 561 | 571 | 548 | 561 | 575 | 588 | 603 | 618 | 633 | 649 | 665 | 681 | 2,874 | 6,120 |
| **Total** | **1,168** | **1,185** | **1,163** | **1,191** | **1,220** | **1,248** | **1,279** | **1,311** | **1,343** | **1,376** | **1,410** | **1,445** | **6,102** | **12,988** |
| Outlays | | | | | | | | | | | | | | |
| Defense | 584 | 589 | 595 | 613 | 628 | 642 | 662 | 673 | 685 | 706 | 724 | 741 | 3,140 | 6,668 |
| Nondefense | 600 | 620 | 616 | 625 | 629 | 641 | 653 | 667 | 683 | 699 | 715 | 733 | 3,164 | 6,662 |
| **Total** | **1,184** | **1,209** | **1,210** | **1,238** | **1,257** | **1,284** | **1,315** | **1,340** | **1,367** | **1,405** | **1,439** | **1,475** | **6,304** | **13,330** |
| **Memorandum:** | | | | | | | | | | | | | | |
| Caps in the Budget Control Act (As Amended), Including Automatic Reductions to the Caps | | | | | | | | | | | | | | |
| Defense | 548 | 551 | 549 | 562 | 576 | 590 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Nondefense | 518 | 519 | 516 | 529 | 542 | 555 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Total | 1,067 | 1,070 | 1,065 | 1,091 | 1,118 | 1,145 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Adjustments to the Caps[b] | | | | | | | | | | | | | | |
| Defense | 59 | 65 | 66 | 68 | 69 | 70 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Nondefense* | 26 | 32 | 32 | 32 | 33 | 33 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Total* | 84 | 98 | 99 | 99 | 102 | 104 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |

Source: Congressional Budget Office.

CBO's baseline projections incorporate the assumption that the caps on discretionary budget authority and the automatic enforcement procedures specified in the Budget Control Act of 2011 (as amended) remain in effect through 2021. CBO assumes full-year funding for 2017 on the basis of amounts provided in the Further Continuing and Security Assistance Appropriations Act, 2017.

Nondefense discretionary outlays are usually higher than budget authority because of spending from the Highway Trust Fund and the Airport and Airway Trust Fund that is subject to obligation limitations set in appropriation acts. The budget authority for such programs is provided in authorizing legislation and is not considered discretionary.

n.a. = not applicable.

a. The amount of budget authority for 2016 and for 2017 in CBO's baseline does not match the sum of the spending caps plus adjustments to the caps mostly because changes to mandatory programs included in the appropriation acts for those years were credited against the caps. Those changes (which reduced mandatory budget authority in both years) appear in their normal mandatory accounts.

b. Funding for overseas contingency operations, emergencies, disaster relief, certain program integrity initiatives (which identify and reduce overpayments in some benefit programs), and programs designated in the 21st Century Cures Act is not constrained by the statutory caps established by the Budget Control Act. [*Values for 2017 through 2021 corrected on January 25, 2017]

years relative to the size of the economy, reaching 5.0 percent of GDP by 2027.[17] Although revenues are projected to increase as a share of GDP from 18.1 percent in 2018 to 18.4 percent in 2027, outlays (excluding the effects of shifts in timing) are projected to increase faster each year, driven by the aging of the population, the rising costs of health care, and escalating interest payments.

### Revenues

In CBO's baseline, total revenues rise from 17.8 percent of GDP this year to 18.4 percent in 2027. That growth

17. October 1 will also fall on a weekend in both 2022 and 2023, causing certain payments that are due on those days to be made instead at the end of September, thus shifting them into the previous fiscal year. If not for those shifts (which noticeably boost the projected deficit in fiscal year 2022 and reduce it in fiscal year 2024), the deficit would rise in each year between 2019 and 2027.

Figure 1-3.

## Major Changes in Projected Revenues From 2017 to 2027

| | Revenues as a Percentage of GDP 2017 | Revenues as a Percentage of GDP 2027 | Percentage-Point Change | Major Reasons for Change |
|---|---|---|---|---|
| Individual Income Taxes | 8.6 | 9.7 | 1.1 | • Real bracket creep[a] • Increased distributions from retirement accounts, relative to GDP • Rising wage inequality |
| Payroll Taxes | 6.0 | 5.9 | –0.1 | Rising wage inequality |
| Corporate Income Taxes | 1.7 | 1.6 | –0.1 | Net effect of four different changes |
| Federal Reserve Remittances | 0.5 | 0.3 | –0.2 | Return to historical averages |

Source: Congressional Budget Office.

GDP = gross domestic product.

a. Real bracket creep occurs when more income is pushed into higher tax brackets because people's income is rising faster than inflation.

mainly reflects an increase, relative to GDP, in revenues from individual income taxes that is partially offset by decreases in remittances from the Federal Reserve and, to a lesser extent, by decreases in payroll and corporate income tax receipts relative to GDP (see Figure 1-3). The most significant movements over the next decade in sources of revenues are the following:

- Individual income tax receipts are projected to increase relative to GDP in each year from 2018 to 2027 because of real bracket creep (the process in which, as income rises faster than prices, an ever-larger proportion becomes subject to higher tax rates); rising distributions from tax-deferred retirement accounts; an expected increase in the share of wages and salaries received by high earners; and other factors.

- Payroll tax receipts are projected to decrease slightly relative to GDP, primarily as a result of an expected continued increase in the share of wages and salaries received by high earners, which will cause a greater share of earnings to be above the maximum amount subject to Social Security payroll taxes. (That amount, which is indexed to growth in average earnings for all workers, is $127,200 in calendar year 2017.) The resulting reduction in payroll taxes relative to GDP offsets roughly three-quarters of the expected increase in individual income tax receipts that is projected to occur for the same reason.

- Corporate income tax receipts are projected to both rise and fall slightly as a share of GDP over the course of the decade—rising slightly through 2020 and then declining by slightly more through 2027.

- Remittances to the Treasury from the Federal Reserve—which have been unusually large since 2010 because of changes in the size and composition of the central bank's portfolio—are projected to decline to more typical levels.

All told, CBO estimates, under current law revenues would grow over the 2017–2027 period by $1.7 trillion—an average annual increase of about 4 percent. That is slower by roughly 1 percentage point than the average rate of increase CBO projects for outlays.

**Individual Income Taxes.** If current laws remain generally unchanged, receipts from individual income taxes are expected to rise markedly relative to GDP over the next 10 years—from 8.6 percent in 2017 to 9.7 percent by 2027, which would be a greater share of GDP than has been recorded in all but one of the past 50 years. That increase relative to the size of the economy would result mainly from the following factors:

*Real Bracket Creep.* The most significant factor pushing up taxes relative to income is real bracket creep. That phenomenon occurs because the income tax brackets and exemptions under both the regular income tax and the alternative minimum tax are indexed only to inflation.[18] If income grows faster than inflation, as generally occurs when the economy is growing, more income is pushed into higher tax brackets. That factor causes projected revenues, measured as a percentage of GDP, to rise in CBO's baseline by 0.4 percentage points from 2017 to 2027.

*Retirement Income.* As the population ages, taxable distributions from tax-deferred retirement accounts (including individual retirement accounts, 401(k) plans, and traditional defined benefit pension plans) will tend to grow more rapidly than GDP. CBO expects the retirement of members of the baby-boom generation to cause a gradual increase in distributions from tax-deferred retirement accounts relative to GDP. Under current law, CBO projects, those growing taxable distributions would boost revenues relative to GDP by 0.3 percentage points over the next decade.

*Relatively Faster Growth in Earnings of Higher-Income Taxpayers.* In CBO's baseline projections, earnings from wages and salaries are expected to increase faster for higher-earning taxpayers than for others during the next decade—as has generally been the case for the past several decades—causing a larger share of income to be subject to higher income tax rates. Over the next 10 years, CBO projects, faster growth in earnings for higher-earning taxpayers would boost individual income tax revenues relative to GDP by about 0.2 percentage points. That increase would be partially offset by a projected decrease in payroll tax receipts (as explained below).

*Other Factors.* CBO anticipates that over the next decade, other factors would further boost individual income tax revenues by 0.2 percentage points. The most significant of those remaining factors is the expectation that the unexplained weakness in recent receipts, which is beyond what can be accounted for in current economic data, would gradually dissipate over the next several years. Specifically, taxable income as a share of GDP and effective tax rates (total taxes as a percentage of total income) fluctuate from year to year, but CBO expects them to return to levels more consistent with those seen in history—taking into account changes in the structure of tax law and longer-term trends in income and demographics.

**Payroll Taxes.** In CBO's baseline projections, receipts from payroll taxes remain roughly stable, declining from 6.0 percent of GDP this year to 5.9 percent in 2020 and continuing at that level through 2027. The main reason for the small decline is that earnings from wages and salaries are expected to increase faster for higher-earning taxpayers than for others, which will push an increasing share of such earnings above the maximum amount per taxpayer that is subject to Social Security taxes.

**Corporate Income Taxes.** Under current law, CBO projects, corporate income tax receipts would rise from 1.7 percent of GDP in 2017 to 1.8 percent of GDP in 2020 and then gradually decline to 1.6 percent of GDP by 2027. That pattern over the next decade is the net effect of four main factors:

- A temporary increase in receipts between 2017 and 2020 that results from a phaseout between 2018 and 2020 of provisions allowing firms with large amounts of investment in equipment (and certain other property) to immediately deduct from their taxable income 50 percent of the costs of those investments in 2017.

- An increase in receipts between 2017 and 2020 that results because the weakness in tax collections in 2016 and early in this fiscal year (beyond that which can be explained by currently available data on business activity) is not expected to be permanent. CBO anticipates that the factors that are responsible (which will not become apparent until information from tax returns becomes available over the next two years) will gradually dissipate.

- A reduction in receipts relative to GDP over the next several years that reflects a projected decline in domestic economic profits relative to GDP. Total nonlabor income, of which economic profits are a part, is projected to grow less rapidly than output—

18. The alternative minimum tax is similar to the regular income tax but its calculation includes fewer exemptions, deductions, and rates. People who file individual income tax returns must calculate the tax owed under each system and pay the larger of the two amounts.

reversing a trend since 2000. Economic profits, in particular, are held down by an increase in the growth of labor compensation and rising interest payments on businesses' debt (see Chapter 2).

- An expected increase in the use of certain strategies that many businesses and investors employ to reduce their tax liabilities. One such strategy is for firms to organize their business activity in a way that reduces income that is subject to the corporate income tax. For example, a business may split its business activity in such a way that reduces the share of its income that is subject to the corporate income tax, or a new business may choose to organize as an entity that is subject only to the individual income tax.[19] Another strategy is to increase the amount of corporate income that is shifted out of the United States through a combination of methods such as setting more aggressive transfer prices, increasing the use of intercompany loans, undertaking corporate inversions, and using other techniques.[20]

**Receipts From Other Sources.** The federal government also collects revenues in the form of remittances from the Federal Reserve System, excise taxes, estate and gift taxes, customs duties, and miscellaneous fees and fines. CBO projects that, under current law, revenues from all of those sources would decline from 1.5 percent of GDP this year to 1.2 percent in 2027.

Most of that decline reflects projected remittances from the Federal Reserve, which CBO anticipates will fall from 0.5 percent of GDP this year to 0.3 percent of GDP by 2027, just above the average over the 2001–2008 period. Since 2008, the central bank has significantly expanded and changed the composition of its asset holdings, boosting its earnings and subsequent remittances to the Treasury to far above typical amounts. CBO expects that the size of the Federal Reserve's portfolio, along with its remittances, will gradually decline as the central bank phases out its current policy of reinvesting maturing Treasury and other securities that it holds. CBO estimates that the Federal Reserve's balance sheet will return to a more typical size, relative to the stock of currency that it issues, by 2023. Further contributing to the reduction in remittances over the next several years, rising interest rates will increase the amount of interest the Federal Reserve pays on reserves, CBO projects.

Receipts from excise taxes are projected to remain relatively flat as a share of GDP over the next decade. About 80 percent of excise tax receipts over the coming decade will come from taxes related to highways, tobacco, aviation, and health insurance.[21] Overall, excise taxes are projected to rise slightly from 0.4 percent of GDP in 2017 to 0.5 percent in 2018 following the end of a moratorium on the tax on health insurance providers. After 2018, excise taxes in CBO's baseline gradually fall back to 0.4 percent of GDP, in part reflecting improvements in vehicles' fuel economy (mainly, CBO projects, because of increases in the government's fuel economy standards) that reduce gasoline consumption and the associated tax revenues. Taxes on tobacco products are also expected to decline, continuing trends in consumption that have been occurring for many years. Taxes on aviation, including airline tickets, aviation fuels, and various aviation-related transactions, are projected to remain unchanged as a share of GDP over the next decade.

In addition, under current law, receipts from estate and gift taxes, customs duties, and miscellaneous fees and fines are projected to remain nearly unchanged as a percentage of GDP over the next 10 years.

**Tax Expenditures.** CBO's revenue projections reflect current tax law, which includes an array of exclusions,

19. For a detailed analysis of the taxation of business income through the individual income tax, see Congressional Budget Office, *Taxing Businesses Through the Individual Income Tax* (December 2012), www.cbo.gov/publication/43750.

20. To allocate profits among U.S. and foreign affiliates, transactions between those affiliates must be assigned a price, known as the transfer price. By strategically setting transfer prices, a corporation can reduce the share of total profits that it reports on U.S. tax returns. A corporate inversion refers to a process through which a U.S. corporation changes its country of tax residence, often by merging with a foreign company. Inversions reduce U.S. corporate tax revenues both because the inverted U.S. corporation no longer must pay U.S. taxes on earnings in other countries and because a corporation can shift additional income out of the United States through the use of intercompany loans and the resulting interest expenses.

21. Under current law, most aviation taxes are scheduled to expire on September 30, 2017, and most highway taxes on September 30, 2022. In general, CBO's baseline incorporates the assumption that expiring tax provisions will follow the schedules set forth in current law. However, the Balanced Budget and Emergency Deficit Control Act of 1985 requires that CBO's baseline incorporate the assumption that expiring excise taxes dedicated to trust funds (including most highway and aviation taxes) will be extended.

deductions, preferential rates, and credits that reduce revenues for any given level of tax rates in the individual, payroll, and corporate income tax systems. Some of those provisions are called tax expenditures because, like government spending programs, they provide financial assistance for particular activities as well as to certain entities or groups of people.[22]

Like conventional federal spending, tax expenditures contribute to the federal budget deficit. They also influence people's choices about working, saving, and investing, and they affect the distribution of income. Tax expenditures are more similar to the largest benefit programs than they are to discretionary spending programs: They are not subject to annual appropriations, and any person or entity that meets the legal requirements can receive the benefits. Because of their budgetary treatment, however, tax expenditures are much less transparent than spending on benefit programs.[23]

The tax expenditures with the largest effects on revenues are the following:

- The exclusion from workers' taxable income of employers' contributions for health care, health insurance premiums, and premiums for long-term care insurance;
- The exclusion of contributions to and the earnings of pension funds (minus pension benefits that are included in taxable income);
- Preferential tax rates on dividends and long-term capital gains;
- The deductions for state and local taxes (on non-business income, sales, real estate, and personal property); and
- The deferral for profits earned abroad, which certain corporations may exclude from their taxable income until those profits are returned to the United States.

Tax expenditures have a substantial effect on federal revenues. On the basis of estimates prepared by JCT, CBO expects that those and other tax expenditures will total over 8 percent of GDP in 2017—equal to nearly half of all federal revenues projected for the year (see Figure 1-4).

However, the total amount of tax expenditures does not represent the increases in revenues that would occur if tax expenditures were eliminated, because repealing a tax provision would change incentives and lead taxpayers to modify their behavior in ways that would diminish the impact of the repeal on revenues. For example, if preferential tax rates on realizations of capital gains were eliminated and those gains were instead taxed as ordinary income, taxpayers would reduce the amount of capital gains they realized. As a result, the amount of additional revenues that would be produced by eliminating the preferential rates would be smaller than the estimated size of the tax expenditure.

## Outlays

Under current law, total outlays in CBO's baseline are projected to hover around 21 percent of GDP through 2020, rise to 22 percent the following year, and then remain at that level for several years before reaching 23 percent at the end of the projection period. In nominal terms, outlays would grow, on net, by $2.6 trillion between 2017 and 2027, CBO estimates—an average annual increase of about 5 percent. Social Security, Medicare, and net interest on federal debt account for 70 percent of the total increase in outlays (see Figure 1-5).

**Mandatory Spending.** The Deficit Control Act requires CBO's projections for most mandatory programs to be made in keeping with the assumption that current laws continue unchanged. Thus, CBO's baseline projections for mandatory spending reflect the estimated effects of economic factors, caseload growth, and other factors that affect the cost of those programs. The projections also incorporate a set of across-the-board reductions (known as sequestration) that are required under current law for spending on certain mandatory programs.

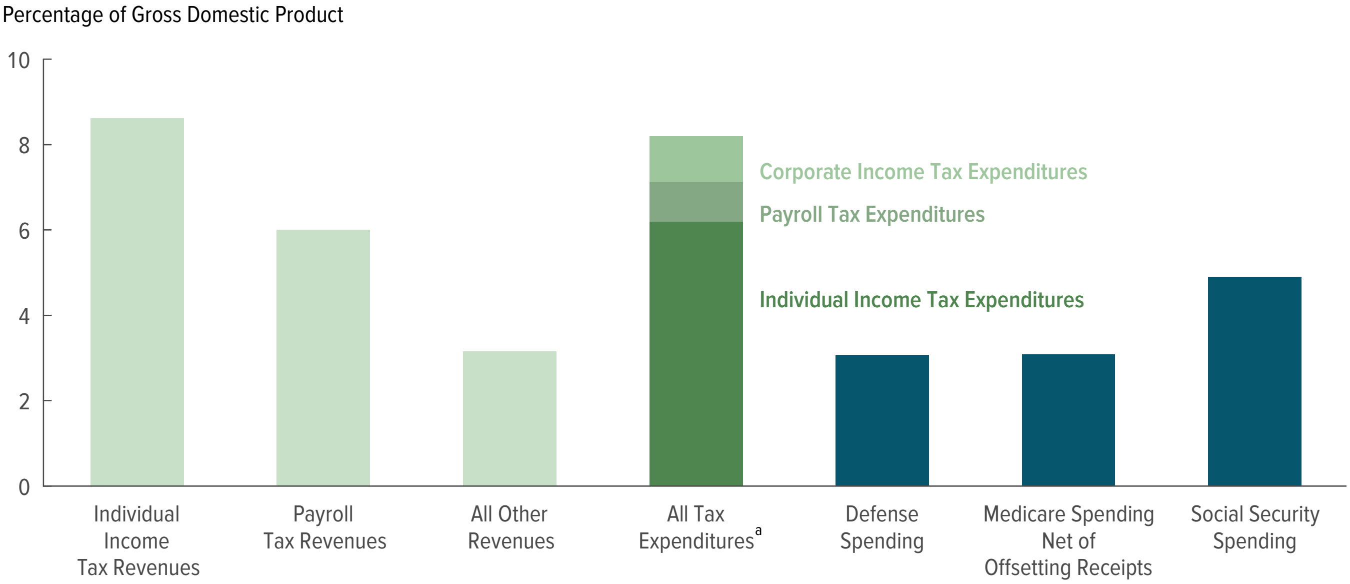
22. The Congressional Budget and Impoundment Control Act of 1974 defines tax expenditures as "those revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability."

23. For a more thorough discussion of tax expenditures, see Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2015–2019*, JCX-141R-15 (December 2015), http://go.usa.gov/cVM89; and Congressional Budget Office, *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/publication/43768.

Figure 1-4.

## Revenues, Tax Expenditures, and Selected Components of Spending in 2017

Tax expenditures, projected to total more than $1.5 trillion in 2017, cause revenues to be lower than they would be otherwise and, like spending programs, contribute to the deficit.




Source: Congressional Budget Office, using estimates by the staff of the Joint Committee on Taxation. For more information, see Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2015–2019*, JCX-141R-15 (December 2015), http://go.usa.gov/cUK2G. Those estimates were prepared before the enactment of the Consolidated Appropriations Act, 2016, and do not include the effects of that law.

a. This total is the sum of the estimates for all of the separate tax expenditures and does not account for any interactions among them. However, CBO estimates that in 2017, the total of all tax expenditures roughly equals the sum of each considered separately. Furthermore, because estimates of tax expenditures are based on people's behavior with the tax expenditures in place, the estimates do not reflect the amount of revenue that would be raised if those provisions of the tax code were eliminated and taxpayers adjusted their activities in response to the changes. The outlay portions of refundable tax credits are included in tax expenditures. Those payments would be reported in the budget as "other mandatory spending," a category not shown in this figure.

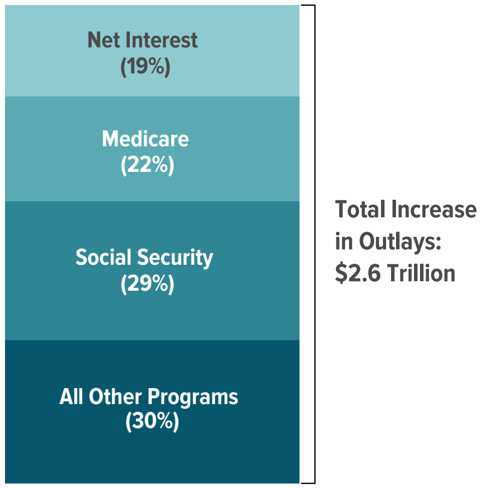
Mandatory outlays (net of offsetting receipts and with adjustments for shifts in the timing of certain payments) are projected to increase from $2.5 trillion in 2017 to $4.3 trillion in 2027, an average yearly increase of 5.7 percent. Those outlays are projected to equal 12.9 percent of GDP in 2017 and then to rise each year through the end of the projection period, reaching 15.4 percent of GDP in 2027. By comparison, the highest percentage for mandatory spending in any year since 1962 (the earliest year for which such data have been reported) was 14.5 percent in 2009; that was the only year such outlays have exceeded 14.0 percent of GDP.

Much of the growth in mandatory spending—particularly for Social Security and Medicare—results from the aging of the population. The number of people age 65 or older is now more than twice what it was 50 years ago. Over the next decade, as members of the baby-boom generation age and as life expectancy continues to increase, that number is expected to rise by more than one-third, boosting the number of beneficiaries of those programs (see Figure 1-6). As a result, projected spending for Social Security and Medicare for people age 65 or older increases from roughly one-third of all federal noninterest spending in 2017 to about 42 percent in 2027. Including Medicaid as well as military and federal civilian retirement boosts projected spending for that population from 37 percent of noninterest outlays in 2017 to 45 percent in 2027.

Growth in health care spending per enrollee also contributes to the increase in mandatory spending. Although health care spending grew more slowly in the past several years than it has historically, CBO projects that spending per enrollee in federal health care programs will grow more rapidly over the coming decade than it has in recent years. For example, spending per enrollee in Medicare is projected to increase at an average annual rate of

Figure 1-5.

**Components of the Total Increase in Outlays in CBO's Baseline Between 2017 and 2027**




Source: Congressional Budget Office.

4.3 percent between 2017 and 2027, about 3 percentage points faster than the average rate recorded over the past five years.

*Social Security and Medicare.* All told, spending for two programs—Social Security and Medicare—drives nearly three-quarters of the growth in mandatory spending. Outlays for Social Security are estimated to total 4.9 percent of GDP (or $940 billion) in 2017 and then are projected to rise steadily, reaching 6.0 percent of GDP (or $1.7 trillion) in 2027 (see Figure 1-7). At $589 billion (adjusted for timing shifts), spending for Medicare remains at 3.1 percent of GDP in CBO's baseline for 2017 and then increases each year, growing to 4.2 percent ($1.2 trillion) in 2027.

*Other Mandatory Programs.* Aside from spending on Social Security and Medicare, all other mandatory spending (adjusted for shifts in timing) is projected to remain relatively steady as a percentage of GDP, increasing from 5.0 percent in 2017 to 5.2 percent in 2027. That category includes spending on other health programs (such as Medicaid and subsidies for health insurance purchased through marketplaces), income support programs (such as unemployment compensation and the Supplemental Nutrition Assistance Program, or SNAP), military and civilian retirement programs, most veterans' benefits, and major agriculture programs. Projected outlays for Medicaid edge up over the period, from 2.0 percent in 2017 to 2.3 percent in 2027, while all other mandatory spending in this category remains near 3.0 percent.

**Assumptions About Expiring Programs.** In keeping with the rules established by the Deficit Control Act, CBO's baseline projections incorporate the assumption that some mandatory programs will be extended when their authorization expires, although the rules provide for different treatment for programs created before and after the Balanced Budget Act of 1997 (P.L. 105-33). All mandatory spending programs that predate that act and have current-year outlays greater than $50 million are assumed to continue in CBO's baseline projections. For programs established after 1997, continuation is assessed program by program, in consultation with the House and Senate Budget Committees.

CBO's baseline projections therefore incorporate the assumption that the following programs whose authorizations expire within the current projection period will continue: SNAP, Temporary Assistance for Needy Families, the Children's Health Insurance Program, rehabilitation services, the Child Care Entitlement, trade adjustment assistance for workers, parts of child nutrition, the Promoting Safe and Stable Families program, and most farm subsidies. In addition, the Deficit Control Act directs CBO to assume that a COLA for veterans' compensation, which has routinely been authorized in the past, will continue to be provided each year. In CBO's projections, the assumption that expiring programs will be extended and that COLAs for veterans' compensation will continue accounts for about $1.1 trillion in outlays between 2018 and 2027, roughly half of which is for SNAP. That amount represents about 3 percent of all mandatory spending net of offsetting receipts.[24]

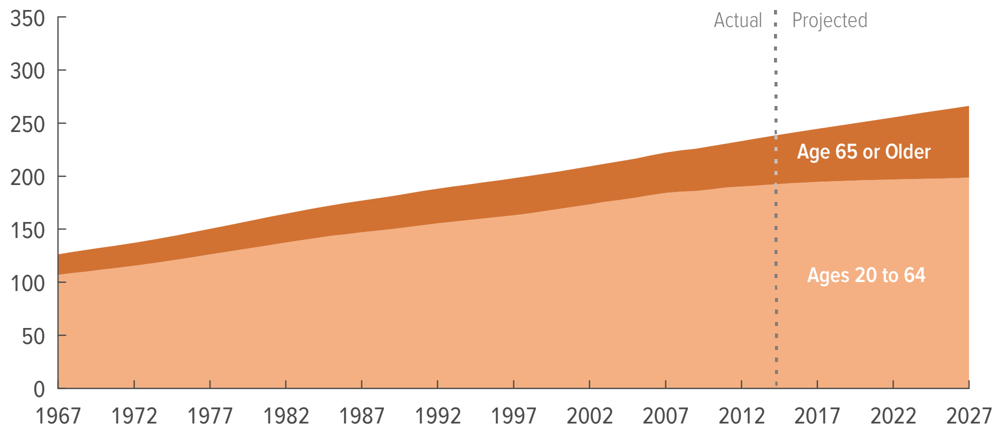
**Discretionary Spending.** An array of federal activities is funded or controlled through annual appropriations. Such discretionary spending includes most spending on national defense as well as outlays for highway programs, elementary and secondary education, housing assistance, international affairs, and the administration of justice, for example. In total, discretionary spending is projected to increase from $1.2 trillion in 2017 to $1.5 trillion in 2027, an average yearly increase of 2.0 percent. Measured as a share of GDP, however, discretionary outlays are projected to drop from 6.3 percent in 2017 to 5.3 percent in 2027, the smallest percentage in any year to date since 1962 (the earliest year for which such data have been reported).

24. For details on these programs, see Congressional Budget Office, "10-Year Budget Projections" (January 2017), Supplemental Table 2, www.cbo.gov/publication/51118.

Figure 1-6.

## Population, by Age Group

Millions of People




The number of people age 65 or older in the United States—now more than twice what it was 50 years ago—is expected to grow by more than one-third over the next 10 years. Thus, enrollment in Social Security's Old-Age and Survivors Insurance program and Medicare will continue to rise.

Source: Congressional Budget Office.

This figure shows actual data through calendar year 2014, the most recent year for which such data are available.

Through 2021, CBO's baseline incorporates the caps on budget authority for discretionary programs that are currently in place; in later years, the baseline reflects the assumption that such funding keeps pace with inflation (consistent with the provisions of Section 257 of the Deficit Control Act). Some elements of discretionary funding are not constrained by the caps and are generally assumed to grow with inflation from the amounts provided in 2017: the appropriations designated for overseas contingency operations; activities designated as emergency requirements; disaster relief (up to certain limits); certain efforts to reduce overpayments in benefit programs; and programs designated in the 21st Century Cures Act (P.L. 114-255), subject to the limits set in that legislation.[25]

For 2018, the caps on discretionary budget authority are $5 billion lower than for 2017—$3 billion lower for nondefense programs and $2 billion lower for defense programs.[26] (That estimate incorporates the automatic reductions required by law and excludes adjustments for overseas contingency operations and other activities not constrained by the caps.) However, the changes in budget authority relative to 2017 incorporated in the baseline differ from the changes in the cap levels for two main reasons:

- Discretionary budget authority for nondefense programs declines by $24 billion in 2018; much of that decline—$17 billion—stems from reductions in mandatory budget authority that are included in the current continuing resolution for 2017 to help keep appropriations within the limit set by the cap on nondefense funding. (When reductions in mandatory programs are included in appropriation acts, the savings are credited against the discretionary funding provided in those acts in judging compliance with the caps.) Over the past six years, such offsets to discretionary budget authority have averaged about $18 billion a year; none have yet been included in CBO's baseline for 2018 because no such changes have been enacted for that year. Without such offsets, discretionary budget authority in 2018 would have to be noticeably lower than the funding in 2017 in order to comply with the caps.

- Budget authority for defense programs is $2 billion greater in 2018 than in 2017 largely because funding for overseas contingency operations is assumed to grow from this year's amount at the rate of inflation.

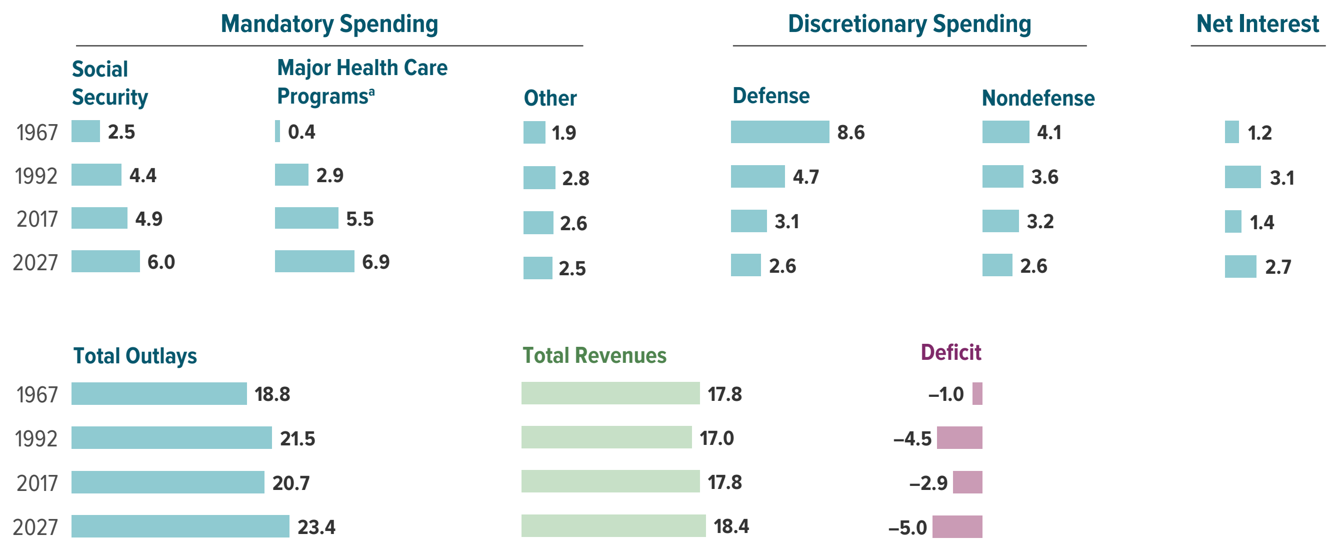
25. Spending for certain transportation programs is controlled by obligation limitations, which also are not constrained by the caps on discretionary spending.

26. The Bipartisan Budget Act of 2015 (P.L. 114-74) canceled the automatic reductions in discretionary spending for 2017 imposed by the Budget Control Act of 2011 and set new caps for that year that are, in total, $30 billion above what the limits would have been if the automatic spending reductions had occurred. (That law also made changes to the caps for 2016.) No adjustments have been made to the caps and automatic reductions in place for 2018 through 2021.

Figure 1-7.

**Spending and Revenues Projected in CBO's Baseline, Compared With Actual Values 25 and 50 Years Ago**

Percentage of Gross Domestic Product




Source: Congressional Budget Office.

a. Consists of spending on Medicare (net of premiums and other offsetting receipts), Medicaid, and the Children's Health Insurance Program as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.

Discretionary budget authority after 2018 would rise by about 2 percent a year, on average, reflecting the rate of increase in the caps pursuant to the Budget Control Act of 2011 and under the assumption that such budget authority grows with inflation after the caps expire in 2021.

Under those assumptions, total discretionary outlays in CBO's baseline are about the same in 2018 as in 2017 and then keep pace with the projected 2 percent annual increase in budget authority, reaching $1.5 trillion, or 5.3 percent of GDP, by the end of the projection period. By comparison, the lowest percentage for discretionary spending in any year since 1962 was 6.0 percent in 1999, and the average over the past 50 years has been 8.6 percent.

**Net Interest.** Rising interest rates and growing federal debt are projected to boost outlays for net interest significantly. In the baseline, they nearly triple in dollar terms, rising from $270 billion (or 1.4 percent of GDP) in 2017 to $768 billion (or 2.7 percent of GDP) in 2027—which would be the largest ratio since 1998.

Most of the projected increase in the government's borrowing costs is attributable to rising interest rates. During the next two years, slack in the economy is expected to continue to diminish, and the Federal Reserve is expected to gradually reduce support for economic growth in response. As a result, CBO anticipates that interest rates on Treasury securities will rise noticeably over the next several years from their current, unusually low, levels. CBO estimates that the interest rate on 3-month Treasury bills will rise from 0.4 percent in the fourth quarter of 2016 to 2.8 percent by the second half of 2021 and will remain there through 2027. The rate on 10-year Treasury notes is projected to rise from 2.1 percent in the fourth quarter of 2016 to 3.6 percent during the first half of 2023 and to remain there through 2027. (For further discussion, see Chapter 2.) The remainder of the increase in net interest costs occurs mainly because of interest payments on the greater amount of debt held by the public that would accrue over the next decade as a result of the projected deficits.

## Federal Debt

Federal debt held by the public consists mostly of the securities that the Treasury issues to raise cash to fund the federal government's activities and to pay off its maturing liabilities.[27] The Treasury borrows money from

27. A small amount of debt held by the public is issued by other agencies, mainly the Tennessee Valley Authority.

the public by selling securities in the capital markets; that debt is purchased by various buyers in the United States, by private investors overseas, and by the central banks of other countries. Of the $14.2 trillion in federal debt held by the public at the end of 2016, 57 percent ($8.0 trillion) was held by domestic investors and 43 percent ($6.2 trillion) was held by foreign investors.[28] Other measures of federal debt are sometimes used for various purposes, such as to provide a more comprehensive picture of the government's financial condition or to account for debt held by federal trust funds.

**Debt Held by the Public.** Under the assumptions that govern CBO's baseline, the federal government is projected to borrow another $10.1 trillion from the end of 2017 through 2027, boosting debt held by the public to 89 percent of GDP by the end of the projection period (see Table 1-4).

That amount of debt relative to the size of the economy would be the greatest since 1947 and more than double the 50-year average of 40 percent. Debt that high relative to historical standards—and heading higher—could have significant negative consequences for the budget and the economy.

The net amount the Treasury borrows by selling securities (the amounts that are sold minus the amounts that have matured) is determined primarily by the annual budget deficit. In addition, several factors—collectively labeled "other means of financing" and not directly included in budget totals—also affect the government's need to borrow from the public. Those factors include changes in the government's investments in the Thrift Savings Plan's G Fund and cash balance, as well as the cash flows associated with federal credit programs (such as student loans) because only the subsidy costs of those programs (calculated on a present-value basis) are reflected in the budget deficit. CBO projects that those other means of financing will add $111 billion to federal borrowing in 2017 and then steadily decrease to about $55 billion in additional borrowing each year from 2022 through 2027.

28. The largest U.S. holders of Treasury debt are the Federal Reserve System (17 percent), individual households (10 percent), and mutual funds (10 percent); investors in China and Japan have the largest foreign holdings of Treasury securities, together accounting for 16 percent of U.S. public debt. For additional information, see Congressional Budget Office, *Federal Debt and Interest Costs* (December 2010), Chapter 1, www.cbo.gov/publication/21960.

**Other Measures of Federal Debt.** Three other measures are sometimes used in reference to federal debt:

- *Debt held by the public minus financial assets* subtracts the value of the government's financial assets, such as student loans, from debt held by the public. That measure provides a more comprehensive picture of the government's financial condition and its overall impact on credit markets than does debt held by the public. Calculating that measure is not straightforward, however, because neither the financial assets to be included nor the methods for evaluating them are well defined. Under CBO's baseline assumptions, that measure is roughly 10 percent smaller than debt held by the public but varies roughly in line with it.

- *Gross federal debt* consists of debt held by the public and debt issued to government accounts (for example, the Social Security trust funds). The latter type of debt does not directly affect the economy and has no net effect on the budget. In CBO's projections, debt held by the public increases by $10.1 trillion between the end of 2017 and the end of 2027, and debt held by government accounts falls by $0.4 trillion, reflecting declines in the balances of many trust funds.[29] As a result, gross federal debt is projected to rise by $9.7 trillion over that period and to total $30.0 trillion at the end of 2027. Nearly one-fifth of that sum would be debt held by government accounts.

- *Debt subject to limit* is the amount of debt that is subject to the statutory limit on federal borrowing; it differs from gross federal debt mainly because most debt issued by agencies other than the Treasury and the Federal Financing Bank is included in gross debt but excluded from the debt limit (the difference between the two measures totals $7 billion in CBO's projections for 2027). Currently, there is no statutory limit on the issuance of new federal debt because the Bipartisan Budget Act of 2015 suspended the debt ceiling from November 2, 2015, through March 15, 2017. In the absence of any legislative action on the debt limit before the suspension ends, the amount of borrowing accumulated during that period will be

29. In keeping with the rules in section 257 of the Deficit Control Act, CBO's baseline incorporates the assumption that scheduled payments will continue to be made in full after the trust fund has been exhausted, even though there is no legal authority to make such payments.

Table 1-4.

**Federal Debt Projected in CBO's Baseline**

Billions of Dollars

| | Actual, 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Debt Held by the Public at the Beginning of the Year | 13,117 | 14,168 | 14,838 | 15,416 | 16,092 | 16,845 | 17,704 | 18,721 | 19,776 | 20,858 | 22,078 | 23,430 |
| Changes in Debt Held by the Public | | | | | | | | | | | | |
| Deficit | 587 | 559 | 487 | 601 | 684 | 797 | 959 | 1,000 | 1,027 | 1,165 | 1,297 | 1,408 |
| Other means of financing | 465 | 111 | 91 | 76 | 69 | 63 | 57 | 55 | 54 | 54 | 55 | 55 |
| Total | 1,052 | 669 | 578 | 677 | 752 | 859 | 1,016 | 1,056 | 1,081 | 1,220 | 1,352 | 1,463 |
| **Debt Held by the Public at the End of the Year** | | | | | | | | | | | | |
| **In billions of dollars** | **14,168** | **14,838** | **15,416** | **16,092** | **16,845** | **17,704** | **18,721** | **19,776** | **20,858** | **22,078** | **23,430** | **24,893** |
| **As a percentage of GDP** | **77.0** | **77.5** | **77.4** | **77.9** | **78.8** | **79.9** | **81.3** | **82.6** | **83.8** | **85.3** | **87.0** | **88.9** |
| **Memorandum:** | | | | | | | | | | | | |
| Debt Held by the Public Minus Financial Assets[a] | | | | | | | | | | | | |
| In billions of dollars | 12,551 | 13,110 | 13,598 | 14,199 | 14,882 | 15,679 | 16,638 | 17,639 | 18,666 | 19,832 | 21,128 | 22,536 |
| As a percentage of GDP | 68.2 | 68.4 | 68.2 | 68.7 | 69.6 | 70.7 | 72.2 | 73.7 | 75.0 | 76.6 | 78.5 | 80.5 |
| Gross Federal Debt[b] | 19,537 | 20,355 | 21,074 | 21,839 | 22,627 | 23,497 | 24,464 | 25,466 | 26,480 | 27,581 | 28,825 | 30,024 |
| Debt Subject to Limit[c] | 19,538 | 20,356 | 21,075 | 21,841 | 22,631 | 23,501 | 24,469 | 25,471 | 26,486 | 27,587 | 28,832 | 30,032 |
| Average Interest Rate on Debt Held by the Public (Percent) | 2.0 | 2.1 | 2.2 | 2.3 | 2.5 | 2.7 | 2.9 | 3.1 | 3.2 | 3.3 | 3.3 | 3.4 |

Source: Congressional Budget Office.

GDP = gross domestic product.

a. Debt held by the public minus the value of outstanding student loans and other credit transactions, cash balances, and other financial instruments.

b. Federal debt held by the public plus Treasury securities held by federal trust funds and other government accounts.

c. The amount of federal debt that is subject to the overall limit set in law. Debt subject to limit differs from gross federal debt mainly because most debt issued by agencies other than the Treasury and the Federal Financing Bank is excluded from the debt limit. That limit was most recently set at $18.4 trillion but has been suspended through March 15, 2017. On March 16, 2017, the debt limit will be raised to its previous level plus the amount of federal borrowing that occurred while the limit was suspended.

added to the previous debt limit of $18.1 trillion on March 16, 2017. In CBO's baseline projections, the amount of outstanding debt subject to limit increases from $20.4 trillion at the end of 2017 to $30.0 trillion at the end of 2027. (For the purpose of those projections, CBO assumes that increases in the statutory ceiling will occur as necessary.)

## Changes in CBO's Baseline Since August 2016

CBO's current estimate of the cumulative deficit between 2017 and 2026 is just $6 billion (or 0.1 percent) higher than it estimated in August 2016 when the agency last completed a set of baseline projections (see Table 1-5). Deficits are smaller than projected in August (by generally decreasing amounts) in the first half of the 10-year period and larger (by increasing amounts) in the second half. In total, revenues and outlays are both lower by $0.3 trillion. (For additional details about those changes, see Appendix A.)

### Changes for 2017

CBO now estimates that both revenues and outlays in 2017 will be lower than the agency projected in August, by $17 billion (or 0.5 percent) and $52 billion (or 1.3 percent), respectively, resulting in a deficit that is $35 billion smaller. Technical updates to CBO's estimates

Table 1-5.

## Changes in CBO's Baseline Projections of the Deficit Since August 2016

Billions of Dollars

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total 2017-2021 | Total 2017-2026 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Deficit in CBO's August 2016 Baseline | -594 | -520 | -625 | -714 | -806 | -954 | -988 | -1,000 | -1,128 | -1,243 | -3,258 | -8,571 |
| Changes | | | | | | | | | | | | |
| Legislative | | | | | | | | | | | | |
| Revenues | * | * | * | * | * | * | * | * | * | * | * | 1 |
| Outlays | 8 | 9 | 16 | 11 | 13 | 14 | 14 | 14 | 14 | 15 | 57 | 127 |
| Subtotal | -8 | -9 | -16 | -11 | -13 | -13 | -13 | -13 | -14 | -15 | -57 | -127 |
| Economic | | | | | | | | | | | | |
| Revenues | 10 | * | 1 | 5 | 4 | 2 | -2 | -7 | -12 | -17 | 20 | -16 |
| Outlays | 6 | -3 | -16 | -20 | -11 | -3 | 3 | 7 | 13 | 20 | -45 | -4 |
| Subtotal | 4 | 3 | 17 | 25 | 16 | 5 | -5 | -14 | -26 | -36 | 65 | -12 |
| Technical | | | | | | | | | | | | |
| Revenues | -27 | 4 | -13 | -27 | -33 | -39 | -38 | -41 | -43 | -45 | -96 | -300 |
| Outlays | -66 | -35 | -36 | -43 | -40 | -41 | -43 | -41 | -45 | -42 | -220 | -433 |
| Subtotal | 40 | 39 | 23 | 16 | 6 | 3 | 6 | 1 | 3 | -3 | 124 | 133 |
| **Increase (-) or Decrease in the Deficit** | **35** | **32** | **24** | **30** | **9** | **-6** | **-13** | **-27** | **-37** | **-54** | **131** | **-6** |
| Deficit in CBO's January 2017 Baseline | -559 | -487 | -601 | -684 | -797 | -959 | -1,000 | -1,027 | -1,165 | -1,297 | -3,127 | -8,577 |
| **Memorandum:** | | | | | | | | | | | | |
| Changes in Revenues | -17 | 4 | -12 | -22 | -29 | -36 | -40 | -47 | -55 | -61 | -76 | -315 |
| Changes in Outlays | -52 | -28 | -36 | -52 | -38 | -31 | -27 | -20 | -18 | -7 | -207 | -310 |

Source: Congressional Budget Office.

* = between –$500 million and 500 million.

of revenues and outlays—that is, revisions that do not stem from legislation or changes in economic projections—constitute the largest changes, reducing the projected deficit by $40 billion. CBO's revised economic forecast reduced the projected deficit for this year by $4 billion while enacted legislation has increased the deficit for this year by $8 billion.

Revenues in 2017 are $27 billion lower than previously estimated for technical reasons, primarily because collections from corporate income taxes have been lower in recent months than can be explained by currently available economic data.

Technical revisions have resulted in a reduction in estimated outlays of $66 billion for 2017. The bulk of that change stems from lower estimates of mandatory spending. The largest change—a reduction of $17 billion—relates to receipts from Fannie Mae and Freddie Mac, and stems from differences between CBO's budgetary treatment and the Administration's.[30] Other programs for

30. Because the government placed Fannie Mae and Freddie Mac into conservatorship in 2008 and now controls their operations, CBO considers their activities governmental and includes the budgetary effects of their activities in its projections as if they were federal agencies. On that basis, for the 10-year period after the current fiscal year, CBO projects subsidy costs of their new activities using procedures that are similar to those specified in the Federal Credit Reform Act of 1990 for determining the costs of federal credit programs—but with adjustments to reflect the associated market risk. The Administration, in contrast, considers Fannie Mae and Freddie Mac to be outside the federal government for budgetary purposes and records cash transactions between those two entities and the Treasury as federal outlays or receipts. As a result, in its baseline, CBO treats the current fiscal year differently to provide its best estimate of the amount that the Treasury ultimately will report as the federal deficit for 2017. It is that change in methodology for estimating outlays in 2017 that accounts for the $17 billion reduction in projected outlays for 2017 since August.

which CBO has reduced its estimate of outlays for technical reasons include those related to agriculture ($7 billion) and Medicaid ($4 billion).

### Changes for 2017 Through 2026

In total, CBO has reduced its projections of both revenues and outlays over the 10-year projection period—by $315 billion (or 0.8 percent) and $310 billion (0.6 percent), respectively. The largest changes result from technical updates, which lower estimates of both revenues and outlays. A portion of the reduction in outlays for technical reasons is offset by higher projected spending stemming from recent legislation. Adjustments resulting from CBO's revised economic forecast are much smaller.

The 10-year change in revenues is dominated by a $300 billion reduction for technical reasons. The biggest single reason is that CBO has reduced its projections of revenues from individual income taxes, and only partially offset that change by increasing its projection of revenues from payroll taxes, to reflect a lower share of total wages and salaries received by high earners.

Updates attributable to technical factors reduced projected outlays between 2017 and 2026 by $433 billion. Among the largest such changes, projections for Social Security spending are lower by $87 billion (or 0.7 percent), mainly because caseloads are now expected to be smaller than previously projected. Projected spending for Medicare has been reduced by $82 billion (or 1 percent), mostly as result of updated information on actual spending in 2016. Medicaid outlays are projected to be $63 billion (or 1 percent) lower than previously estimated, largely because of a decrease in projected spending for aged and disabled enrollees. Lastly, CBO's estimate of net interest outlays decreased by $62 billion (or 1 percent) over the 10-year period as a result of technical updates, in part reflecting an increase in estimated receipts from the financing accounts associated with the government's credit programs.

Changes to CBO's economic forecast further reduce revenues and outlays in the baseline, but by much smaller amounts—$16 billion and $4 billion, respectively.

The effects on outlays of legislation enacted after CBO prepared its August baseline offset a portion of the technical and economic changes, increasing outlays by $127 billion over the 10-year period. That increase is largely a result of legislation that provided additional funding not constrained by the discretionary caps, primarily funding for overseas contingency operations. Because projections of future appropriations for such operations are based on the assumption that they will equal current appropriations, with an adjustment for inflation, the larger amount provided for 2017 caused CBO to increase its projection of discretionary outlays for the 2017–2026 period by $84 billion. Legislation boosted projected revenues by $1 billion through 2026.

## Uncertainty in Budget Projections

Even if federal laws remained unchanged for the next decade, actual budgetary outcomes would differ from CBO's baseline projections because of unanticipated changes in economic conditions and in a host of other factors that affect federal spending and revenues. The agency aims for its projections to be in the middle of the distribution of possible outcomes, given the baseline assumptions about federal tax and spending policies, while recognizing that there will always be deviations from any such projections.

CBO's projections of outlays depend on the agency's economic projections for the coming decade, which include forecasts for such variables as interest rates, inflation, and the growth in productivity. Discrepancies between those forecasts and actual economic outcomes can cause significant differences between baseline budget projections and budgetary outcomes.

For instance, CBO's current economic forecast anticipates that interest rates on 3-month Treasury bills will increase from 0.4 percent in the fourth quarter of 2016 to 2.8 percent by the second half of 2021 (and will remain there through 2027) and that interest rates on 10-year Treasury notes will rise from 2.1 percent in the fourth quarter of 2016 to 3.6 percent during the first half of 2023 (and remain there through 2027). If interest rates were 1 percentage point higher than projected each year from 2018 through 2027 and if all other economic variables were unchanged, cumulative deficits projected for the 10-year period would be about $1.6 trillion higher, mostly as a result of larger interest payments on debt issued by the Treasury. Conversely, if interest rates are lower than CBO projects, deficits would be lower. (For further discussion of how some key economic projections affect budget projections, see Appendix B.)

Table 1-6.

**Budgetary Effects of Selected Policy Alternatives Not Included in CBO's Baseline**

Billions of Dollars

| | | | | | | | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2018-2022 | 2018-2027 |
| **Policy Alternatives That Affect Discretionary Outlays** | | | | | | | | | | | | | |
| Increase Discretionary Appropriations at the Rate of Inflation After 2017[a] | | | | | | | | | | | | | |
| Increase (-) in the deficit[b] | 0 | -29 | -45 | -52 | -56 | -61 | -63 | -65 | -67 | -68 | -70 | -243 | -577 |
| Debt service | 0 | * | -1 | -2 | -4 | -6 | -9 | -11 | -14 | -16 | -19 | -14 | -82 |
| Freeze Discretionary Appropriations at the 2017 Amount[c] | | | | | | | | | | | | | |
| Increase (-) or decrease in the deficit[b] | 0 | -13 | -3 | 18 | 43 | 71 | 101 | 132 | 165 | 200 | 235 | 117 | 949 |
| Debt service | 0 | * | * | * | 1 | 2 | 5 | 9 | 14 | 20 | 28 | 3 | 79 |
| **Policy Alternative That Affects Both Discretionary and Mandatory Outlays** | | | | | | | | | | | | | |
| Prevent the Automatic Spending Reductions Specified in the Budget Control Act[d] | | | | | | | | | | | | | |
| Increase (-) in the deficit[b] | n.a. | -61 | -88 | -97 | -100 | -104 | -107 | -110 | -121 | -101 | -101 | -450 | -989 |
| Debt service | n.a. | * | -2 | -4 | -8 | -12 | -16 | -20 | -24 | -29 | -33 | -26 | -148 |
| **Policy Alternatives That Affect the Tax Code[e]** | | | | | | | | | | | | | |
| Extend Partial Expensing of Equipment and Property[f] | | | | | | | | | | | | | |
| At 50 percent rate | | | | | | | | | | | | | |
| Increase (-) in the deficit[b] | n.a. | -8 | -19 | -46 | -52 | -37 | -25 | -18 | -15 | -13 | -13 | -162 | -247 |
| Debt service | n.a. | * | * | -1 | -3 | -4 | -5 | -6 | -7 | -8 | -9 | -8 | -44 |
| At 30 percent rate | | | | | | | | | | | | | |
| Increase (-) in the deficit[b] | n.a. | n.a. | n.a. | -27 | -39 | -28 | -18 | -13 | -11 | -9 | -8 | -93 | -152 |
| Debt service | n.a. | n.a. | n.a. | * | -1 | -2 | -3 | -4 | -4 | -5 | -5 | -4 | -26 |
| Extend Other Expiring Tax Provisions[g] | | | | | | | | | | | | | |
| Increase (-) in the deficit[b] | -5 | -12 | -12 | -14 | -16 | -17 | -20 | -23 | -26 | -29 | -31 | -71 | -199 |
| Debt service | * | * | * | -1 | -1 | -2 | -3 | -3 | -4 | -5 | -7 | -5 | -27 |

Continued

Uncertainty also surrounds myriad technical factors that can substantially affect CBO's baseline projections of outlays. For example, spending per enrollee for Medicare and Medicaid is very difficult to predict. If per capita costs in those programs rose 1 percentage point faster or slower per year than CBO has projected for the next decade, total federal outlays for Medicare and Medicaid would be roughly $900 billion higher or lower for that period.

Projections of revenues also are sensitive to a variety of factors. Revenues depend on total amounts of wages and salaries, corporate profits, and other income, all of which are encompassed by CBO's economic projections. For example, if the growth in productivity was 0.1 percentage point lower than projected each year, which translates into annual economic growth that is lower by about 0.1 percentage point than the rates that underlie the agency's baseline budget projections, revenues would be $315 billion lower (and outlays would be $42 billion lower) over the 2018–2027 period.

Even fairly small deviations in revenues and outlays relative to CBO's projections could have a substantial effect on budget deficits. For example, if revenues projected for 2017 were too high or too low by 3 percent (a range that has included about two-thirds of the deviations between actual amounts and CBO's projections in the past), then

Table 1-6. Continued

## Budgetary Effects of Selected Policy Alternatives Not Included in CBO's Baseline

Billions of Dollars

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | Total 2018-2022 | Total 2018-2027 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Policy Alternatives That Affect the Tax Code[e] (Continued)** | | | | | | | | | | | | | |
| Repeal Certain Postponed or Suspended Health Taxes[h] | | | | | | | | | | | | | |
| Increase (-) in the deficit[b] | n.a. | -16 | -17 | -21 | -26 | -29 | -32 | -36 | -40 | -45 | -50 | -108 | -311 |
| Debt service | n.a. | * | * | -1 | -2 | -3 | -4 | -5 | -7 | -8 | -10 | -6 | -40 |
| **Memorandum:** | | | | | | | | | | | | | |
| Deficit in CBO's January 2017 Baseline | -559 | -487 | -601 | -684 | -797 | -959 | -1,000 | -1,027 | -1,165 | -1,297 | -1,408 | -3,528 | -9,426 |

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

n.a. = not applicable; * = between –$500 million and zero.

a. These estimates reflect the assumption that appropriations will not be constrained by caps set by the Budget Control Act of 2011 (as amended) and will instead grow at the rate of inflation from their 2017 level. Discretionary funding related to federal personnel is inflated using the employment cost index for wages and salaries; other discretionary funding is inflated using the gross domestic product price index.

b. Excludes debt service.

c. This option reflects the assumption that appropriations would generally be frozen at the 2017 level through 2027.

d. The Budget Control Act of 2011 specified that if lawmakers did not enact legislation originating from the Joint Select Committee on Deficit Reduction that would reduce projected deficits by at least $1.2 trillion, automatic procedures would go into effect to reduce both discretionary and mandatory spending during the 2013–2021 period. Those procedures are now in effect and take the form of equal cuts (in dollar terms) in funding for defense and nondefense programs. For the 2018–2021 period, the automatic procedures lower the caps on discretionary budget authority specified in the Budget Control Act (caps for 2016 and 2017 were revised by the Bipartisan Budget Act of 2015); for the 2022–2027 period, CBO has extrapolated the reductions estimated for 2021. Nonexempt mandatory programs will be reduced through sequestration; those provisions have been extended through 2025. The budgetary effects of this option cannot be combined with either of the other alternatives that affect discretionary spending.

e. These estimates are from CBO and the staff of the Joint Committee on Taxation and are preliminary.

f. This alternative would extend the provisions that allow businesses with large amounts of investment to expense (immediately deduct from their taxable income) a portion of the cost of their investment in equipment and certain other property. Under current law, the portion that can be expensed is 50 percent through 2017, 40 percent in 2018, and 30 percent in 2019, after which the provisions expire. One option would extend the 50 percent allowance permanently beyond 2017, and the other option would extend the 30 percent allowance permanently beyond 2019. In both cases, the alternative would include provisions that allow businesses to accelerate alternative minimum tax credits in lieu of the partial-expensing provisions, which expire under current law after 2019. Policymakers could choose to extend the partial-expensing provisions at a percentage of either 30 percent or 50 percent, but not both; that is, the options could not be applied together and the separate budgetary estimates added together.

g. This option would extend about 50 tax provisions that expired or are due to expire between December 31, 2016, and December 31, 2027. It does not include an extension of the partial-expensing provisions or a repeal of certain health-related provisions; those effects are shown separately.

h. This option would repeal the health insurance provider tax, the medical device excise tax, and the excise tax on certain health insurance plans with high premiums. All were postponed for either one or two years in the Consolidated Appropriations Act, 2016. The component of the estimate from repealing the high-premium excise tax does not include largely offsetting effects that would result because some people who would otherwise have been enrolled in insurance through Medicaid or the marketplaces established by the Affordable Care Act would instead enroll in employment-based coverage.

they would be about $100 billion higher or lower than in the agency's baseline.[31] Similarly, if outlays projected for 2017 were too high or too low by 3 percent, then they would deviate from CBO's baseline by about $120 billion. Such differences for both revenues and outlays could largely offset each other, thus having little net effect on the deficit, or they could both push the deficit in the same direction, thus compounding the differences.

## Alternative Assumptions About Fiscal Policy

CBO's baseline budget projections are intended to show what would happen to federal spending, revenues, and deficits if current laws generally remained unchanged. Future legislative action, however, could lead to markedly different budgetary outcomes.

To assist policymakers and analysts who may hold differing views about the most useful benchmark against which to consider possible changes to laws, CBO has estimated the effects on budget projections of some alternative assumptions about future policies (see Table 1-6 on page 32). The discussion below focuses on how those policy actions would directly affect revenues and outlays. Such changes also would influence the costs of servicing the federal debt (shown separately in the table).

### Discretionary Spending

Policymakers could vary discretionary funding in many ways from the amounts projected in the baseline. For example, after 2017, if appropriations grew each year through 2027 at the same rate as inflation, rather than being constrained by the caps, discretionary spending would be $577 billion higher over the 2018–2027 period than it is in CBO's baseline. If, by contrast, lawmakers kept appropriations for 2018 through 2027 at the nominal 2017 amount, total discretionary outlays would be $949 billion lower over that period. Under that scenario (sometimes called a freeze in regular appropriations), total discretionary spending would fall from 6.3 percent of GDP in fiscal year 2017 to 4.4 percent in 2027. (In CBO's baseline, such spending is already projected to fall to 5.3 percent of GDP in 2027, reflecting the caps on most new discretionary funding through 2021 and adjustments for inflation thereafter.)

### Automatic Spending Reductions

The Budget Control Act of 2011 put in place automatic procedures to reduce discretionary and mandatory spending through 2021. Those procedures require equal reductions (in dollar terms) in defense and nondefense spending. The Bipartisan Budget Act of 2015 canceled the discretionary reductions for 2016 and 2017 and instead set new caps for those years. That act also extended the required reductions to mandatory spending (through a process called sequestration) through 2025. If lawmakers chose to prevent those automatic cuts each year—starting in 2018—without making other changes that reduced spending, total outlays over the 2018–2027 period would be $989 billion (or nearly 2 percent) higher than the amounts in CBO's baseline. Total discretionary outlays would be $869 billion (or 6.5 percent) higher, and outlays for mandatory programs—most of which are not subject to sequestration—would be $120 billion (or 0.4 percent) higher.[32]

### Revenues

A number of tax provisions have recently expired or are scheduled to expire over the next decade. Most of these provisions have been extended several times. Most recently, the Consolidated Appropriations Act, 2016, made permanent some provisions that had expired or were scheduled to expire and temporarily extended others, in many cases through December 31, 2016. That law also phases out the ability of businesses with large amounts of investment to expense (immediately deduct from their taxable income) qualifying investments in equipment, allowing those companies to expense 50 percent of such investment through 2017, 40 percent in 2018, and 30 percent in 2019, after which the partial-expensing provisions are scheduled to expire. That law also postponed for one or two years certain taxes related to health care.

If the provision allowing for 50 percent expensing became permanent after 2017, it would reduce revenues

31. Projection errors have tended to be larger for longer horizons than for shorter ones. CBO's six-year revenue projections—those that estimate revenues for the fifth fiscal year after the year in which they are released—have, on average, overestimated revenues by 5.3 percent. The mean absolute error of those projections (that is, the average of the errors without regard to direction) is 10.4 percent. See Congressional Budget Office, *CBO's Revenue Forecasting Record* (November 2015), www.cbo.gov/publication/50831.

32. Because of interactions between the effects of different policy options, the estimated budgetary effects of this option cannot be added to the estimated budgetary effects of either of the other alternatives that affect discretionary spending.

Table 1-7.

## Key Projections in CBO's Extended Baseline

Percentage of Gross Domestic Product

| | | | Projected Annual Average | | | |
|---|---|---|---|---|---|---|
| | 2017 | 2018 | 2019-2022 | 2023-2027 | 2028-2037 | 2038-2047 |
| Revenues | | | | | | |
| Individual income taxes | 8.6 | 8.9 | 9.2 | 9.5 | 10.0 | 10.4 |
| Payroll taxes | 6.0 | 6.0 | 5.9 | 5.9 | 5.9 | 5.9 |
| Corporate income taxes | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 | 1.6 |
| Other | 1.5 | 1.5 | 1.3 | 1.2 | 1.3 | 1.4 |
| **Total Revenues** | **17.8** | **18.1** | **18.1** | **18.3** | **18.7** | **19.3** |
| Outlays | | | | | | |
| Mandatory | | | | | | |
| Social Security | 4.9 | 5.0 | 5.3 | 5.8 | 6.2 | 6.3 |
| Major health care programs[a] | 5.5 | 5.4 | 5.9 | 6.5 | 7.6 | 8.8 |
| Other | 2.6 | 2.6 | 2.7 | 2.5 | 2.4 | 2.1 |
| Subtotal | 13.0 | 13.0 | 13.9 | 14.8 | 16.2 | 17.2 |
| Discretionary | 6.3 | 6.1 | 5.8 | 5.4 | 5.3 | 5.4 |
| Net interest | 1.4 | 1.5 | 1.9 | 2.5 | 3.4 | 5.0 |
| **Total Outlays** | **20.7** | **20.5** | **21.6** | **22.8** | **24.9** | **27.6** |
| **Deficit** | **-2.9** | **-2.4** | **-3.5** | **-4.5** | **-6.2** | **-8.2** |
| **Debt Held by the Public at the End of the Period** | **77** | **77** | **81** | **89** | **113** | **145** |
| **Memorandum:** | | | | | | |
| Social Security | | | | | | |
| Revenues[b] | 4.6 | 4.6 | 4.6 | 4.5 | 4.5 | 4.5 |
| Outlays[c] | 4.9 | 5.0 | 5.3 | 5.8 | 6.2 | 6.3 |
| Contribution to the Federal Deficit[d] | -0.3 | -0.4 | -0.8 | -1.3 | -1.7 | -1.8 |
| Medicare | | | | | | |
| Revenues[b] | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.4 |
| Outlays[c] | 3.7 | 3.6 | 4.1 | 4.7 | 5.8 | 6.9 |
| Offsetting receipts | -0.6 | -0.6 | -0.7 | -0.8 | -1.0 | -1.2 |
| Contribution to the Federal Deficit[d] | -1.6 | -1.5 | -1.9 | -2.3 | -3.3 | -4.2 |
| Gross Domestic Product at the End of the Period (Trillions of dollars) | 19.2 | 19.9 | 23.0 | 28.0 | 41.9 | 63.0 |

Source: Congressional Budget Office.

This table satisfies a requirement specified in section 3111 of S. Con. Res. 11, the Concurrent Resolution on the Budget for Fiscal Year 2016.

The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2027 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

a. Consists of spending for Medicare (net of premiums and other offsetting receipts), Medicaid, and the Children's Health Insurance Program as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.

b. Includes payroll taxes other than those paid by the federal government (which are intergovernmental transactions). Also includes income taxes paid on Social Security benefits, which are credited to the trust funds.

c. Does not include outlays related to administration of the program, which are discretionary. For Social Security, outlays do not include intergovernmental offsetting receipts stemming from payroll taxes paid by federal government employers to the Social Security trust funds.

d. The net increase in the deficit shown in this table differs from the change in the trust fund balance for the associated program. It does not include intergovernmental transactions, interest earned on balances, and outlays related to administration of the program.

by about $247 billion over the 2018–2027 period, JCT estimates. If instead the provision allowing for 30 percent expensing became permanent after 2019, it would reduce revenues by about $152 billion from 2020 through 2027. If all other tax provisions that either expired at the end of last month or are scheduled to expire before 2027 were permanently extended, CBO and JCT estimate, revenues would be lower by a total of $199 billion over the 2018–2027 period.

Deficits also would increase if delays in the implementation of certain taxes established by the ACA were extended or made permanent. The Consolidated Appropriations Act, 2016, suspended for 2016 and 2017 the medical device tax that took effect in 2013, placed a moratorium for 2017 on the health insurance provider tax that took effect in 2014, and postponed for two years (to 2020) the start of the tax on high-premium health insurance plans. Permanently repealing those taxes would reduce revenues by a total of $311 billion over the 2018–2027 period.

## The Long-Term Budget Outlook

Beyond the coming decade, the fiscal outlook is significantly more daunting. In CBO's most recent long-term projections—which extend through 2047—budget deficits rise steadily. Those long-term projections follow CBO's 10-year baseline projections for the first decade and then extend the baseline concept for subsequent years (see Table 1-7 on page 35).[33] Although long-term budget projections are highly uncertain, the aging of the population and growth in per capita spending on health care would almost certainly boost federal spending significantly relative to GDP after 2027 if current laws generally remained in effect. Federal revenues also would continue to increase relative to GDP under current law, but they would not keep pace with outlays. As a result, CBO estimates, public debt would reach 145 percent of GDP by 2047 (taking into account the effects on the economy of the rising debt), higher than any percentage previously recorded in the United States (see Figure 1-8).

Moreover, debt would still be on an upward path relative to the size of the economy in 2047, a trend that would ultimately be unsustainable. To avoid the negative consequences of high and rising federal debt and to put debt on a sustainable path, lawmakers will have to make significant changes to tax and spending policies—increasing revenues more than they would under current law, reducing spending for large benefit programs below the projected amounts, or adopting some combination of those approaches.

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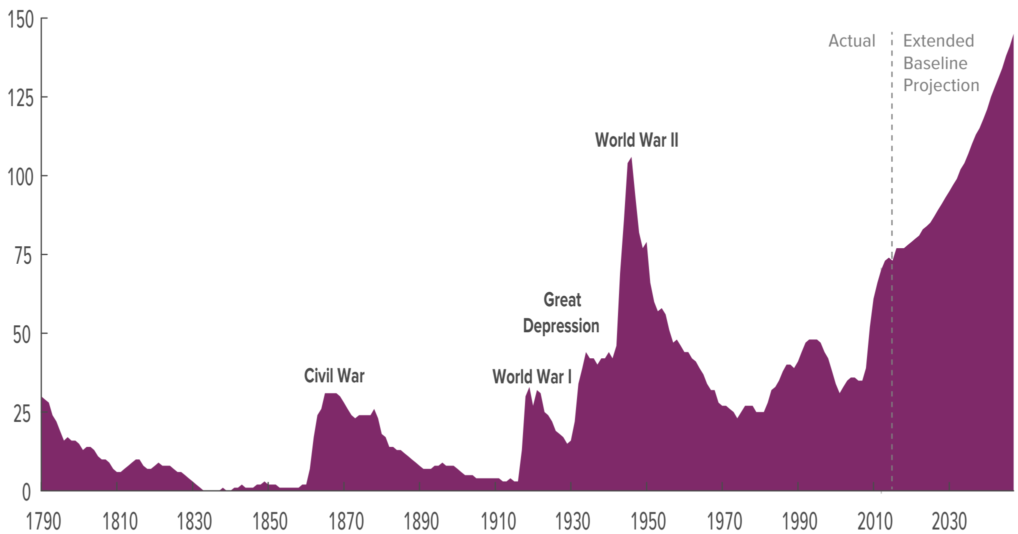
33. The long-term projections reported here incorporate the current baseline for the first 10 years. For subsequent periods, CBO has not fully updated all of the projections that it reported in its most recent long-term budget outlook, but the agency has updated its long-term economic projections on an interim basis and applied them to estimates for Social Security spending and net interest. For other components of the budget, CBO adopted the simplified approach that it has regularly used between full updates—in this case, by incorporating the growth rates for such components from the extended baseline in CBO's July 2016 report (its most recent full update).

    Details on the interim long-term economic and budgetary projections presented here are included with the supplemental data for this report, available online at www.cbo.gov/publication/52370. For the most recent full update from July 2016, see Congressional Budget Office, *The 2016 Long-Term Budget Outlook* (July 2016), www.cbo.gov/publication/51580. For additional information about the simplified approach used here for spending and revenues projections unrelated to Social Security and net interest, see Congressional Budget Office, *Budgetary and Economic Outcomes Under Paths for Federal Revenues and Noninterest Spending Specified by Chairman Price, March 2016* (March 2016), pp. 13–14, www.cbo.gov/publication/51260. CBO expects to publish its next complete update of its long-term economic and budgetary projections in the spring of 2017.

Figure 1-8.

## Federal Debt Held by the Public

Percentage of Gross Domestic Product




High and rising federal debt would reduce national saving and income in the long term; increase the government's interest payments, thereby putting more pressure on the rest of the budget; limit lawmakers' ability to respond to unforeseen events; and increase the likelihood of a fiscal crisis.

Source: Congressional Budget Office. For details about the sources of data used for past debt held by the public, see Congressional Budget Office, *Historical Data on Federal Debt Held by the Public* (July 2010), www.cbo.gov/publication/21728.

The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2027 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period (in this case, through 2047).