

# The Budget Outlook

## Overview

The Congressional Budget Office now estimates that, if no further legislation is enacted this year that affects revenues or outlays, the total federal budget deficit for fiscal year 2019 will be \$960 billion, or 4.5 percent of gross domestic product (GDP). According to CBO's projections, the deficit would generally increase in nominal terms through 2029 and would remain a considerably larger share of GDP than its average over the past 50 years (see Figure 1-1). Such increases in deficits would lead to growth in debt held by the public: Under current law, the federal government is projected to borrow an additional \$13.6 trillion from the end of 2018 through 2029, boosting debt held by the public to \$29.3 trillion, or 95 percent of GDP, in that year—up from 79 percent now. Relative to the projections CBO published earlier this year, the agency's estimate of the deficit for 2019 is now \$63 billion more—and its projection of the cumulative deficit over the 2020–2029 period, \$809 billion more—than it was in May 2019 (see Appendix A).<sup>1</sup>

CBO's projections are created in accordance with provisions set forth in the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177, referred to here as the Deficit Control Act), and the Congressional Budget and Impoundment Control Act of 1974 (P.L. 93-344). Those laws require CBO to construct its baseline under the assumption that current laws will generally remain unchanged. Thus, CBO's baseline is not intended to provide a forecast of future budgetary outcomes; rather, it is meant to provide a benchmark that policymakers can use to assess the potential effects of future policy decisions. Future legislative action could lead to markedly different outcomes—but even if federal laws remained unaltered for the next decade, actual budgetary outcomes would probably differ from CBO's baseline, not only because of unanticipated economic conditions, but also as a result of the many other factors that affect federal revenues and outlays.

## The Budget Outlook for 2019

In CBO's baseline projections, the 2019 budget deficit is \$960 billion, which is \$181 billion more than the shortfall recorded last year (see Table 1-1). That increase would be smaller if not for a shift in the timing of certain payments. The 2018 deficit was reduced by \$44 billion because certain payments that would ordinarily have been made on October 1, 2017 (the first day of fiscal year 2018), were instead made in fiscal year 2017 because October 1 fell on a weekend. If not for that shift, last year's shortfall would have been \$823 billion, and the estimated increase in the deficit in 2019 would be \$137 billion, or 17 percent (see Table 1-2). (The discussion of CBO's projections in this chapter reflects adjustments to remove the effects of those timing shifts.)

Relative to the size of the economy, this year's deficit, at 4.5 percent of GDP, is also expected to exceed last year's shortfall of 4.1 percent. Estimated debt held by the public has also increased, to 78.9 percent of GDP from 77.8 percent in 2018. Outlays are estimated to rise as a percentage of GDP, from 20.5 percent in 2018 to 20.8 percent this year. In contrast, revenues are expected to fall slightly below their 2018 level relative to GDP, from 16.5 percent in that year to 16.3 percent in 2019.

## Outlays

In CBO's projections, total federal outlays increase by \$258 billion (or 6 percent) in 2019, to a total of \$4.4 trillion. More than half of that growth is attributable to mandatory outlays, which are projected to rise by \$144 billion, or 6 percent. Discretionary outlays are projected to increase from last year's amount—\$1.3 trillion—by \$67 billion, or 5 percent. The government's net interest costs are also anticipated to grow in 2019, increasing by \$47 billion (or 14 percent), to \$372 billion.

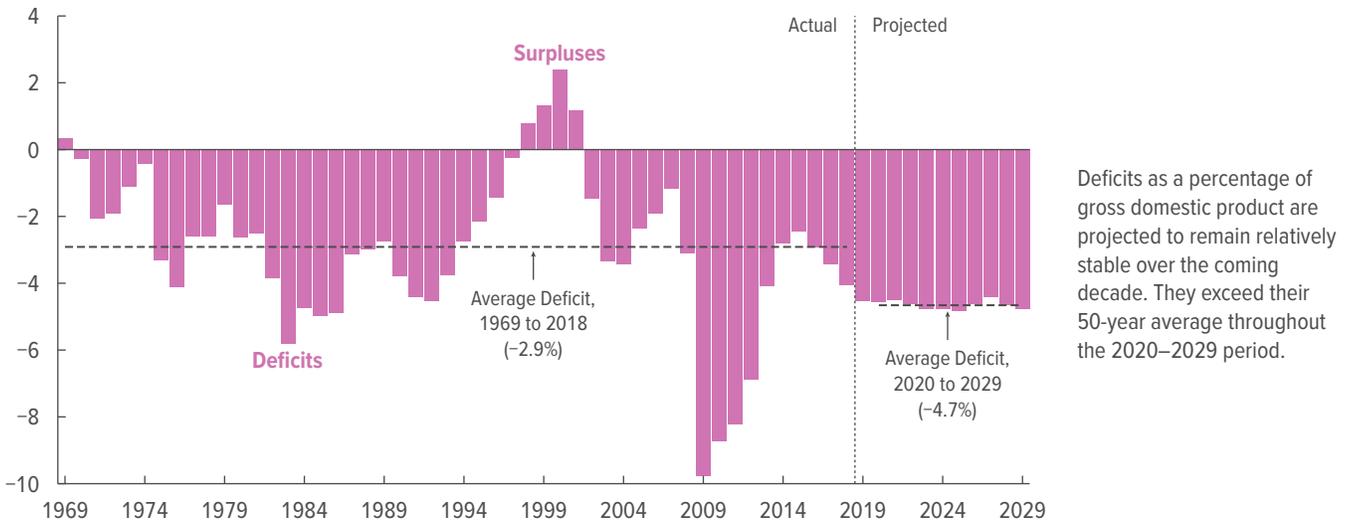
Federal outlays in 2019 are projected to be 0.5 percentage points of GDP above their 50-year average of 20.3 percent. That increase over historical amounts is

1. See Congressional Budget Office, *Updated Budget Projections: 2019 to 2029* (May 2019), [www.cbo.gov/publication/55151](http://www.cbo.gov/publication/55151).

Figure 1-1.

**Total Deficits and Surpluses**

Percentage of Gross Domestic Product



Deficits as a percentage of gross domestic product are projected to remain relatively stable over the coming decade. They exceed their 50-year average throughout the 2020–2029 period.

Source: Congressional Budget Office.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. All projections presented here have been adjusted to exclude the effects of those timing shifts. Historical amounts have been adjusted as far back as the available data will allow.

largely attributable to significant growth in mandatory spending (net of the offsetting receipts that are credited against such outlays), which is expected to equal 12.8 percent of GDP in 2019, compared with its 9.9 percent average over the 1969–2018 period. As a share of GDP, the other major components of federal spending are estimated to fall below their 50-year averages: Discretionary outlays are projected to equal 6.3 percent of GDP this year, compared with their average of 8.4 percent over the past 50 years, and net outlays for interest are expected to equal 1.8 percent of GDP, compared with their 50-year average of 2.0 percent.

**Mandatory Spending.** Mandatory, or direct, spending includes outlays for some federal benefit programs and for certain other payments to people, businesses, non-profit institutions, and state and local governments. Such outlays are generally governed by statutory criteria and are not normally constrained by the annual appropriation process.<sup>2</sup> Certain types of payments that federal

agencies receive from the public and from other government agencies are classified as offsetting receipts and are accounted for in the budget as reductions in mandatory spending.

The Deficit Control Act requires CBO to construct baseline projections for most mandatory spending under the assumption that current laws continue unchanged.<sup>3</sup>

for Coast Guard retirees and annuitants, are considered mandatory but require benefits to be paid from amounts provided in appropriation acts. Section 257 of the Deficit Control Act requires CBO to project outlays for those programs as if they were fully funded, regardless of the amounts actually appropriated.

2. Each year, some mandatory programs are modified by provisions in annual appropriation acts. Such changes may increase or decrease spending for the affected programs for one or more years. In addition, some mandatory programs, such as Medicaid, the Supplemental Nutrition Assistance Program, and benefits

3. Section 257 of the Deficit Control Act also requires CBO to assume that certain mandatory programs will continue beyond their scheduled expiration and that entitlement programs, including Social Security and Medicare, will be fully funded and thus will be able to make all scheduled payments even if the trust funds associated with those programs do not contain the funding to make full payments. Other rules that govern the construction of CBO's baseline have been developed by the agency in consultation with the House and Senate Committees on the Budget. For further details, see Congressional Budget Office, *How CBO Prepares Baseline Budget Projections* (February 2018), [www.cbo.gov/publication/53532](http://www.cbo.gov/publication/53532).

Table 1-1.

**CBO's Baseline Budget Projections, by Category**

	Actual, 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
													2020– 2024	2020– 2029
<b>In Billions of Dollars</b>														
<b>Revenues</b>														
Individual income taxes	1,684	1,698	1,800	1,895	1,981	2,076	2,171	2,272	2,501	2,731	2,838	2,962	9,923	23,227
Payroll taxes	1,171	1,247	1,281	1,332	1,385	1,442	1,505	1,567	1,629	1,692	1,759	1,828	6,945	15,420
Corporate income taxes	205	228	245	268	298	335	371	400	409	398	407	415	1,517	3,547
Other	271	278	293	298	307	309	345	345	361	385	386	415	1,552	3,443
<b>Total</b>	<b>3,330</b>	<b>3,451</b>	<b>3,620</b>	<b>3,792</b>	<b>3,971</b>	<b>4,163</b>	<b>4,392</b>	<b>4,585</b>	<b>4,900</b>	<b>5,206</b>	<b>5,390</b>	<b>5,619</b>	<b>19,937</b>	<b>45,637</b>
On-budget	2,475	2,532	2,677	2,811	2,951	3,104	3,292	3,443	3,714	3,974	4,111	4,291	14,835	34,368
Off-budget <sup>a</sup>	855	919	943	981	1,020	1,059	1,100	1,142	1,186	1,231	1,279	1,328	5,103	11,269
<b>Outlays</b>														
Mandatory	2,523	2,707	2,838	2,962	3,192	3,326	3,446	3,682	3,900	4,101	4,405	4,454	15,764	36,306
Discretionary	1,262	1,332	1,400	1,446	1,481	1,513	1,543	1,584	1,622	1,661	1,706	1,736	7,382	15,690
Net interest	325	372	390	418	456	506	554	602	653	704	758	807	2,325	5,848
<b>Total</b>	<b>4,109</b>	<b>4,411</b>	<b>4,628</b>	<b>4,826</b>	<b>5,130</b>	<b>5,344</b>	<b>5,543</b>	<b>5,869</b>	<b>6,174</b>	<b>6,466</b>	<b>6,868</b>	<b>6,997</b>	<b>25,470</b>	<b>57,845</b>
On-budget **	3,261	3,505	3,661	3,794	4,027	4,166	4,287	4,533	4,763	4,969	5,277	5,309	19,935	44,785
Off-budget <sup>a</sup> **	849	906	967	1,032	1,102	1,179	1,256	1,336	1,412	1,497	1,591	1,689	5,536	13,059
<b>Deficit (-) or Surplus</b>	<b>-779</b>	<b>-960</b>	<b>-1,008</b>	<b>-1,034</b>	<b>-1,159</b>	<b>-1,181</b>	<b>-1,151</b>	<b>-1,284</b>	<b>-1,274</b>	<b>-1,260</b>	<b>-1,479</b>	<b>-1,378</b>	<b>-5,533</b>	<b>-12,208</b>
On-budget **	-785	-972	-984	-983	-1,076	-1,062	-995	-1,090	-1,048	-995	-1,167	-1,017	-5,100	-10,417
Off-budget <sup>a</sup> **	6	12	-24	-51	-83	-120	-156	-194	-226	-266	-312	-361	-433	-1,791
Debt Held by the Public	15,750	16,685	17,755	18,841	20,042	21,264	22,457	23,784	25,102	26,407	27,917	29,322	n.a.	n.a.
<b>Memorandum:</b>														
Gross Domestic Product	20,236	21,157	22,013	22,870	23,727	24,611	25,529	26,514	27,518	28,582	29,699	30,847	118,750	261,911
<b>As a Percentage of Gross Domestic Product</b>														
<b>Revenues</b>														
Individual income taxes	8.3	8.0	8.2	8.3	8.4	8.4	8.5	8.6	9.1	9.6	9.6	9.6	8.4	8.9
Payroll taxes	5.8	5.9	5.8	5.8	5.8	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.8	5.9
Corporate income taxes	1.0	1.1	1.1	1.2	1.3	1.4	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.4
Other	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3
<b>Total</b>	<b>16.5</b>	<b>16.3</b>	<b>16.4</b>	<b>16.6</b>	<b>16.7</b>	<b>16.9</b>	<b>17.2</b>	<b>17.3</b>	<b>17.8</b>	<b>18.2</b>	<b>18.1</b>	<b>18.2</b>	<b>16.8</b>	<b>17.4</b>
On-budget	12.2	12.0	12.2	12.3	12.4	12.6	12.9	13.0	13.5	13.9	13.8	13.9	12.5	13.1
Off-budget <sup>a</sup>	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
<b>Outlays</b>														
Mandatory	12.5	12.8	12.9	13.0	13.5	13.5	13.5	13.9	14.2	14.3	14.8	14.4	13.3	13.9
Discretionary	6.2	6.3	6.4	6.3	6.2	6.1	6.0	6.0	5.9	5.8	5.7	5.6	6.2	6.0
Net interest	1.6	1.8	1.8	1.8	1.9	2.1	2.2	2.3	2.4	2.5	2.6	2.6	2.0	2.2
<b>Total</b>	<b>20.3</b>	<b>20.8</b>	<b>21.0</b>	<b>21.1</b>	<b>21.6</b>	<b>21.7</b>	<b>21.7</b>	<b>22.1</b>	<b>22.4</b>	<b>22.6</b>	<b>23.1</b>	<b>22.7</b>	<b>21.4</b>	<b>22.1</b>
On-budget	16.1	16.6	16.6	16.6	17.0	16.9	16.8	17.1	17.3	17.4	17.8	17.2	16.8	17.1
Off-budget <sup>a</sup>	4.2	4.3	4.4	4.5	4.6	4.8	4.9	5.0	5.1	5.2	5.4	5.5	4.7	5.0
<b>Deficit (-) or Surplus</b>	<b>-3.9</b>	<b>-4.5</b>	<b>-4.6</b>	<b>-4.5</b>	<b>-4.9</b>	<b>-4.8</b>	<b>-4.5</b>	<b>-4.8</b>	<b>-4.6</b>	<b>-4.4</b>	<b>-5.0</b>	<b>-4.5</b>	<b>-4.7</b>	<b>-4.7</b>
On-budget	-3.9	-4.6	-4.5	-4.3	-4.5	-4.3	-3.9	-4.1	-3.8	-3.5	-3.9	-3.3	-4.3	-4.0
Off-budget <sup>a</sup>	*	0.1	-0.1	-0.2	-0.3	-0.5	-0.6	-0.7	-0.8	-0.9	-1.1	-1.2	-0.4	-0.7
Debt Held by the Public	77.8	78.9	80.7	82.4	84.5	86.4	88.0	89.7	91.2	92.4	94.0	95.1	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.

[\*\* Values corrected on September 24, 2019]

Table 1-2.

**CBO's Baseline Projections of Outlays and Deficits, Adjusted to Exclude the Effects of Timing Shifts**

	Actual, 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>In Billions of Dollars</b>												
Payments That Are Shifted in CBO's Baseline <sup>a</sup>	-44	0	0	0	62	5	-68	0	0	0	94	-93
Outlays Adjusted for Timing Shifts												
Mandatory	2,563	2,707	2,838	2,962	3,135	3,321	3,509	3,682	3,900	4,101	4,317	4,542
Discretionary	1,266	1,332	1,400	1,446	1,476	1,512	1,548	1,584	1,622	1,661	1,700	1,742
Net interest	325	372	390	418	456	506	554	602	653	704	758	807
<b>Total</b>	<b>4,153</b>	<b>4,411</b>	<b>4,628</b>	<b>4,826</b>	<b>5,067</b>	<b>5,339</b>	<b>5,610</b>	<b>5,869</b>	<b>6,174</b>	<b>6,466</b>	<b>6,775</b>	<b>7,090</b>
<b>Deficit Adjusted for Timing Shifts</b>	<b>-823</b>	<b>-960</b>	<b>-1,008</b>	<b>-1,034</b>	<b>-1,097</b>	<b>-1,176</b>	<b>-1,219</b>	<b>-1,284</b>	<b>-1,274</b>	<b>-1,260</b>	<b>-1,385</b>	<b>-1,471</b>
<b>As a Percentage of Gross Domestic Product</b>												
Outlays Adjusted for Timing Shifts												
Mandatory	12.7	12.8	12.9	13.0	13.2	13.5	13.7	13.9	14.2	14.3	14.5	14.7
Discretionary	6.3	6.3	6.4	6.3	6.2	6.1	6.1	6.0	5.9	5.8	5.7	5.6
Net interest	1.6	1.8	1.8	1.8	1.9	2.1	2.2	2.3	2.4	2.5	2.6	2.6
<b>Total</b>	<b>20.5</b>	<b>20.8</b>	<b>21.0</b>	<b>21.1</b>	<b>21.4</b>	<b>21.7</b>	<b>22.0</b>	<b>22.1</b>	<b>22.4</b>	<b>22.6</b>	<b>22.8</b>	<b>23.0</b>
<b>Deficit Adjusted for Timing Shifts</b>	<b>-4.1</b>	<b>-4.5</b>	<b>-4.6</b>	<b>-4.5</b>	<b>-4.6</b>	<b>-4.8</b>	<b>-4.8</b>	<b>-4.8</b>	<b>-4.6</b>	<b>-4.4</b>	<b>-4.7</b>	<b>-4.8</b>
<b>Memorandum:</b>												
Baseline Deficit, Unadjusted												
In billions of dollars	-779	-960	-1,008	-1,034	-1,159	-1,181	-1,151	-1,284	-1,274	-1,260	-1,479	-1,378
As a percentage of GDP	-3.9	-4.5	-4.6	-4.5	-4.9	-4.8	-4.5	-4.8	-4.6	-4.4	-5.0	-4.5

Source: Congressional Budget Office.

GDP = gross domestic product.

a. When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. Those shifts primarily affect mandatory outlays; discretionary outlays are also affected, but to a much lesser degree. Net interest outlays are not affected. (For the 2018–2029 period, revenues are not affected by timing shifts.)

Therefore, CBO's baseline projections for mandatory spending reflect the estimated effects of economic influences, growth in the number of beneficiaries for certain mandatory programs, and other factors related to the costs of those programs, even for those that are set to expire under current law. The projections also incorporate a set of across-the-board reductions in budgetary resources (known as sequestration) that are required under current law for some mandatory programs.

In 2019, CBO estimates, total mandatory outlays (net of offsetting receipts) will amount to \$2.7 trillion, up from \$2.6 trillion in 2018. Most of that \$144 billion increase is attributable to greater outlays for Social Security, Medicare, and higher education, moderated by an increase in offsetting receipts from Fannie Mae and

Freddie Mac (among other, smaller and largely offsetting, changes):

- Social Security outlays will rise by \$56 billion (or 6 percent) relative to those outlays in 2018, CBO estimates, reaching \$1.0 trillion this year, or 4.9 percent of GDP. That increase stems from growth both in the number of beneficiaries and in the average benefit payment.
- Outlays for Medicare (net of offsetting receipts) will rise from \$605 billion in 2018 to \$636 billion in 2019, remaining at 3.0 percent of GDP. That increase results from growth both in the number of beneficiaries and in the amount and cost of services.

- Federal outlays for higher education will increase by \$41 billion this year, primarily because the Department of Education made an upward revision to the estimated net subsidy costs of loans and loan guarantees issued in prior years.
- In the other direction, payments from Fannie Mae and Freddie Mac are estimated to increase by \$15 billion in 2019. (Such receipts are recorded in the federal budget as offsetting receipts, which are reductions in outlays.)

**Discretionary Spending.** Discretionary spending encompasses an array of federal activities that are funded or controlled through annual appropriations. Such spending includes most outlays for national defense, elementary and secondary education, housing assistance, international affairs, and the administration of justice, as well as outlays for highways and other programs. In any year, some discretionary outlays arise from budget authority provided in the same year, and some arise from appropriations made in previous years.<sup>4</sup>

CBO's baseline incorporates all appropriations for 2019, which amount to \$1.4 trillion, including both regular and supplemental appropriations.<sup>5</sup> CBO anticipates that, if no further appropriations are provided this year, discretionary outlays will total \$1.3 trillion in 2019—\$67 billion (or 5 percent) more than last year's amount.

Discretionary funding for defense for 2019 totals \$719 billion, including \$69 billion for overseas contingency operations (OCO) and \$3 billion for activities designated as emergency requirements. Defense outlays, which amounted to \$627 billion in 2018, will increase by \$44 billion (or 7 percent), to \$670 billion, according to CBO's estimates. Outlays are projected to increase by \$16 billion (or 6 percent) for operation and maintenance, \$10 billion (or 9 percent) for procurement, \$5 billion (or 4 percent) for military personnel, and \$11 billion (or 15 percent) for research and development.

4. Budget authority is the funding provided by law to incur financial obligations that will result in immediate or future outlays of federal government funds. Outlays are the amount of money spent each year.

5. That amount does not include changes in mandatory programs included in supplemental appropriation acts.

For 2019, nondefense discretionary funding totals \$658 billion. That amount includes \$44 billion that is not limited by the caps on discretionary funding: \$22 billion for activities designated as emergency requirements, \$12 billion for disaster relief, \$8 billion for OCO, \$2 billion for program integrity initiatives, and \$1 billion for programs authorized by the 21st Century Cures Act (P.L. 114-255).<sup>6</sup> CBO expects that nondefense discretionary outlays will increase by \$23 billion (or 4 percent) in 2019, to \$662 billion. Higher spending on veterans' benefits and services accounts for \$6 billion of that increase in outlays. In addition, discretionary outlays for various health programs will increase by \$5 billion, and outlays for federal law enforcement activities by \$3 billion, CBO estimates.<sup>7</sup> The remaining growth in nondefense discretionary outlays is the result of a number of smaller increases in spending for various programs.

**Net Interest.** In 2019, net outlays for interest will rise to \$372 billion (or 1.8 percent of GDP), from \$325 billion last year, CBO estimates, primarily because interest rates on short-term debt have been higher in 2019 than in 2018 and because the amount of federal debt is larger than it was a year ago.

### Revenues

On the basis of receipts through June 2019, CBO expects federal revenues to total \$3.5 trillion this fiscal year, \$121 billion (or 3.6 percent) more than in 2018. Because CBO anticipates that nominal GDP will grow at a faster rate (4.6 percent), revenues are projected to decrease relative to GDP.

**Individual Income Taxes.** CBO estimates that collections of individual income taxes will increase by \$15 billion (or 1 percent) in 2019. That increase reflects income growth that is offset in part by the effects of changes in tax law and in part by reallocations the Treasury makes between income and payroll taxes.

Although wages and salaries are projected to grow by about 4 percent in 2019, individual income taxes

6. Budgetary resources for 2019 include \$60 billion in limitations on obligation authority for certain transportation programs.

7. Spending for most federal health care programs, such as Medicare and Medicaid, is mandatory. Spending for some health programs is discretionary; the largest recipients of discretionary funding include the Centers for Disease Control and Prevention, the National Cancer Institute, the National Institute of Allergy and Infectious Diseases, and the Indian Health Service.

withheld from paychecks will decrease by \$18 billion (or 1 percent), in CBO's estimation. That decline reflects two factors: First, the Internal Revenue Service issued new withholding tables in January 2018 to reflect changes made by the 2017 tax act (P.L. 115-97). Those new withholding rates were in effect during all of this fiscal year but for only seven-and-a-half months of 2018. Second, withheld taxes classified as individual income taxes were boosted in 2018 and reduced in 2019 by reallocations made between income and payroll taxes. Specifically, the Treasury recategorized about \$21 billion in collections from payroll to individual income taxes during 2018 and about \$7 billion from individual income to payroll taxes so far in 2019. The Treasury does not observe a difference between amounts withheld for payroll and income taxes as they are collected, instead initially allocating withheld taxes to one source or the other on the basis of estimates. As detailed tax-return information becomes available, amounts are reallocated between payroll and income taxes. Even though those revisions amend allocations made in prior years, the reallocations are made in the current fiscal year.

Nonwithheld payments of individual income taxes are expected to rise by \$9 billion (or 1 percent) in 2019. Those payments include both estimated and final payments for the 2018 tax year, as well as estimated payments for the 2019 tax year. Refunds, largely for the 2018 tax year, are expected to be \$23 billion (or 9 percent) lower than last year, further boosting net receipts. The extent to which those changes reflect the effects of the 2017 tax act or other factors will become clearer as detailed tax-return data become available over the next several years. (For a discussion of what CBO has learned from recent data about the effects of the 2017 tax act, see Box 1-1.)

**Payroll Taxes.** CBO expects that receipts from payroll taxes—which primarily fund Social Security and Medicare's Hospital Insurance program—will increase by \$76 billion (or 6 percent) this year. The expected increase in payroll taxes exceeds growth in wages and salaries, largely because of amounts reallocated between income and payroll taxes in 2018 and 2019.

**Corporate Income Taxes.** Income tax payments by corporations, net of refunds, are expected to grow by \$24 billion (or 12 percent) in 2019. Collections in fiscal year 2019 include businesses' final tax payments for the 2018 tax year and their initial payments for 2019.

During the first eight months of 2019, those payments declined by about 9 percent compared with amounts during the same period a year ago. At least some of that initial decline stems from provisions of the 2017 tax act, which lowered the corporate income tax rate to 21 percent from a top rate of 35 percent and expanded the tax rules allowing businesses to immediately deduct the value of qualifying business investments.

The decrease in 2019 may also partly reflect a continuation of unexplained weakness in income tax payments by corporations in recent years—a trend that only reversed in June, the first month in which receipts consisted predominantly of estimated payments for tax year 2019. Receipts in June 2019 rose by 35 percent compared with receipts in June 2018, and stronger payments are expected to persist through the remainder of the fiscal year. The specific reasons for the pattern of corporate receipts will become clearer as detailed information from corporate income tax returns becomes available over the next two years.

**Other Revenues.** CBO expects that other revenues will increase, on net, by \$7 billion (or 2 percent) in 2019. Most of that increase stems from customs duties, which are anticipated to climb by \$29 billion (or 70 percent) owing to new tariffs imposed by the Administration and in effect as of July 25, 2019. Partially offsetting those increases are smaller remittances from the Federal Reserve to the Treasury. Those remittances are expected to decline by \$16 billion this year, because higher short-term interest rates in the early part of the fiscal year led the central bank to pay depository institutions more interest on their reserves. Estate and gift taxes are also expected to decrease this year—by \$7 billion—largely as a result of a provision in the 2017 tax act that temporarily doubles the amount of the exemption. All other receipts are expected to increase by a combined \$1 billion, on net.

## CBO's Baseline Budget Projections for 2020 Through 2029

Although both revenues and outlays are projected to grow faster than GDP over the next 10 years, CBO's baseline projections show a persistent gap between the two. Federal revenues rise, in CBO's projections, from 16.4 percent of GDP in 2020 to 18.2 percent of GDP in 2029. (The projected growth in revenues after 2025 is largely attributable to the scheduled expiration of nearly all of the individual income tax provisions of the

Figure 1-2.

**Total Revenues and Outlays**

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. All projections presented here have been adjusted to exclude the effects of those timing shifts. Historical amounts have been adjusted as far back as the available data will allow.

2017 tax act.) Federal outlays, adjusted to exclude shifts in the timing of certain payments, are projected to climb from 21.0 percent of GDP in 2020 to 23.0 percent in 2029 (see Figure 1-2).

Deficits are projected to average 4.7 percent of GDP over the 2020–2029 period. Over the past 50 years, deficits have averaged 2.9 percent of GDP; and in years when the unemployment rate has been below 6 percent, deficits averaged just 1.5 percent of GDP.

Primary deficits—that is, deficits excluding net outlays for interest—are projected to decrease over time, averaging 2.7 percent of GDP from 2020 through 2024 and 2.2 percent from 2025 through 2029. At the same time, because of projected increases in interest rates and federal borrowing, net interest outlays grow steadily, from 1.8 percent of GDP in 2020 to 2.6 percent in 2029 (see Figure 1-3 on page 14).

Those deficits are projected to boost federal debt held by the public, which consists mostly of the securities that the Treasury issues to raise cash to fund federal activities and pay off the government’s maturing liabilities. The

net amount that the Treasury borrows by issuing those securities (calculated as the amounts that are sold minus the amounts that have matured) is influenced primarily by the annual budget deficit.

Consequently, under current law, debt held by the public would increase in upcoming years. In CBO’s baseline, after accounting for all of the government’s borrowing needs, debt held by the public rises from \$17.8 trillion at the end of 2020 to \$29.3 trillion at the end of 2029 (see Table 1-3 on page 15). As a percentage of GDP, that debt would increase from 79 percent in 2019 to 95 percent by the end of the projection period (see Figure 1-4 on page 16). At that point, such debt would be the largest since 1946 and more than twice the 50-year average.

**Outlays**

Over the coming decade, CBO projects, federal outlays would grow at an average annual rate of 5 percent, reaching \$7.1 trillion in 2029 (adjusted to exclude the effects of timing shifts). Outlays for Social Security, Medicare, and net interest account for about two-thirds of that \$2.7 trillion increase.

## Box 1-1.

**Recent Data About the Effects of the 2017 Tax Act on Revenues**

In December 2017, major tax legislation, originally titled the Tax Cuts and Jobs Act and referred to here as the 2017 tax act, was enacted. The Congressional Budget Office, as part of its regular process of updating its baseline budget projections, has been monitoring the Treasury's implementation of that act and assessing its effects on revenues.

Currently, only limited information is available about tax returns filed this year for income earned in 2018—the first returns that reflect most of the changes made by the tax act. That information does not give a clear indication about whether the act's effects differed from those estimated by CBO and the staff of the Joint Committee on Taxation (JCT) when the Congress was considering the act in December 2017.<sup>1</sup> Even when more information becomes available, assessing the act's effect on receipts may not be possible, because it will be difficult to disentangle changes in revenues caused by the tax act from changes driven by other factors.

**Receipts in 2018 and 2019**

Data about revenues in fiscal year 2018 and the first 10 months of fiscal year 2019 are available, so those amounts can be compared with CBO's projections. CBO and JCT estimated in December 2017 that in fiscal years 2018 and 2019, the tax act would reduce revenues by \$144 billion and \$271 billion, respectively. In April 2018, CBO incorporated those projected reductions into its baseline budget projections, estimating that revenues would total \$3,338 billion in fiscal year 2018 and \$3,490 billion in fiscal year 2019.<sup>2</sup> The April 2018 projections of revenues also incorporated changes to the economic outlook that had taken place between June 2017 and early 2018, some of which reflected the effects of the tax act and some of which were driven by unrelated factors.

Actual revenues in 2018 totaled \$3,330 billion, or \$8 billion less than CBO projected in April 2018. Receipts from individual income taxes were 3 percent higher than CBO had projected,

and receipts from corporate income taxes were 16 percent lower. As for fiscal year 2019, collections so far this year—and especially collections of corporate income taxes—have been lower than CBO expected in April 2018, so the agency now projects that 2019 revenues will total \$3,451 billion, about 1 percent less than the estimate made in April 2018.

One likely reason for the lower-than-expected receipts is that some parts of the economy have been weaker than CBO projected in April 2018—but in CBO's assessment, that difference has not stemmed from errors in projecting the effects of the 2017 tax act on the economy. Some parts of the economy that CBO expected to be boosted by the tax act, such as investment in 2018, have proved consistent with CBO's April 2018 projections. CBO estimated that the tax act would increase the growth of real (inflation-adjusted) business fixed investment in 2018 by 2.1 percentage points. Incorporating that effect, CBO projected that investment would grow by 5.9 percent in 2018, and current data show that it did grow by 5.9 percent. And although investment in 2019 has been weaker so far than CBO had projected, a number of developments other than the tax act appear to have contributed to that weakness, including increases in tariffs, greater uncertainty about trade policy, and slower economic growth in the rest of the world.

**Recent Data About Individual and Corporate Income Taxes**

A full accounting of net individual income taxes that can be attributed to income earned in calendar year 2018 (including withholding in 2018 and payments and refunds in 2019) is consistent with the projections that CBO made in April 2018. Preliminary data related to one of the most significant changes resulting from the 2017 tax act are also consistent with CBO's expectations. CBO projected that itemized deductions would be reduced after the tax law was enacted, and the Internal Revenue Service's tabulations of tax returns filed through May 2019 have borne out that projection.<sup>3</sup> However, those preliminary tabulations do not help CBO assess the total effect of the tax act because they do not include the full population of tax filers; in particular, filers with high income and complicated tax returns are less likely to be included.

Tax receipts from withholding for individual income and payroll taxes in the first half of calendar year 2019 have been lower

1. See Congressional Budget Office, cost estimate for the conference agreement on H.R. 1 (December 15, 2017), [www.cbo.gov/publication/53415](http://www.cbo.gov/publication/53415).

2. For those projections, see Congressional Budget Office, *The Budget and Economic Outlook: 2018 to 2028* (April 2018), [www.cbo.gov/publication/53651](http://www.cbo.gov/publication/53651). For an explanation of the changes made by the 2017 tax act and their effects, see Appendix B of that report. The most significant changes of the 2017 tax act took effect after December 31, 2017, and therefore did not begin to influence receipts until partway through fiscal year 2018. The current fiscal year—fiscal year 2019—is thus the first to be covered largely by the new rules.

3. See Internal Revenue Service, "Filing Season Statistics" (June 28, 2019), [www.irs.gov/statistics/filing-season-statistics](http://www.irs.gov/statistics/filing-season-statistics).

Box 1-1.

Continued

## Recent Data About the Effects of the 2017 Tax Act on Revenues

than CBO projected in April 2018, but they are consistent with the slower growth in income that CBO currently projects. Taxpayers' estimated payments of individual income taxes have similarly been smaller than CBO expected in April 2018, but the degree to which that difference reflects the slower growth in income is not yet known. Another possible explanation is that taxpayers may have chosen to reduce their estimated payment amounts on the basis of information that they learned from filing their 2018 tax returns. For example, taxpayers whose tax liability was lower than expected may have applied part of their refund to future taxes and reduced their estimated payments in 2019.

The lower-than-expected corporate income tax receipts in fiscal year 2018 probably reflect the continuation of a poorly understood weakness in corporate receipts that predates the 2017 tax act. (Recent revisions to data about corporate income may explain some portion of the weakness; for more information, see Box 2-1 on page 30.) Recent data suggest a strengthening of receipts, however. Net corporate tax receipts were 35 percent larger in June 2019 than they were in June 2018. Those June 2019 receipts generally reflect 2019 income, and CBO's current projections of revenues in 2019 reflect that strengthening of receipts. But it is difficult to interpret recent data on corporate receipts, in part because corporations may calculate and pay taxes for a 12-month period other than the calendar year. As a result, provisions of the 2017 tax act became effective for different corporations at different times, so there is variation in when their payments began to fully reflect the changes made by the 2017 tax act.

### Other Sources of Data

One provision of the 2017 tax act that affected some tax returns for 2017 was a onetime tax on previously untaxed foreign profits. Some corporations had to submit information to the Treasury about their total liability for that tax, along with the first installment of the tax, with their 2017 return. However, the information collected by the Treasury may not be complete—which would make it difficult to interpret the information in the 2017 returns.<sup>4</sup> Furthermore, other corporations did not have to

submit information about their liability and their first installment until they filed their 2018 returns, so until information about those returns becomes available, it will not be possible to estimate the total amount of liability for the onetime tax.

Corporations' financial reports also provide some information about how the 2017 tax act affected them. The reports suggest that many corporations experienced a reduction in their effective tax rate—as calculated for financial reporting purposes—after the tax act was enacted.<sup>5</sup> Such reductions would be consistent with the effects of the act that CBO projected in April 2018, but because they are based on financial accounting rules rather than tax rules, they cannot be used to calculate the precise change in a company's federal tax payments. Companies also provide some information in their financial reports about how specific provisions affected their taxes, but for many reasons, that information cannot be used to estimate the effect of a provision on federal tax revenues.<sup>6</sup>

### Considerations for the Future

CBO will be able to better assess the effects of the 2017 tax act as the Treasury continues to issue guidance and regulations and as more information about 2018 returns becomes available. The earliest that detailed information about those returns will be available to CBO is late 2020.

However, even as more data become available, challenges will remain. For example, how taxpayers responded to the new law in filing their 2018 tax returns may not accurately indicate how they will respond in 2019 and beyond. Also, part of the way in which the 2017 tax act affects the federal budget is through its effects on the economy. But the performance of the economy reflects not just the economic effects of the tax act but also the effects of other changes. As time passes, additional policy changes and unexpected economic developments that are unrelated to the tax act will occur, making it increasingly difficult to estimate the effects of the tax act on the economy.

4. See Treasury Inspector General for Tax Administration, *Implementation of the Tax Cuts and Jobs Act Deemed Repatriation Tax Presented Significant Challenges*, 2019-34-033 (May 2019), <https://go.usa.gov/xytRA> (PDF, 1.6 MB).

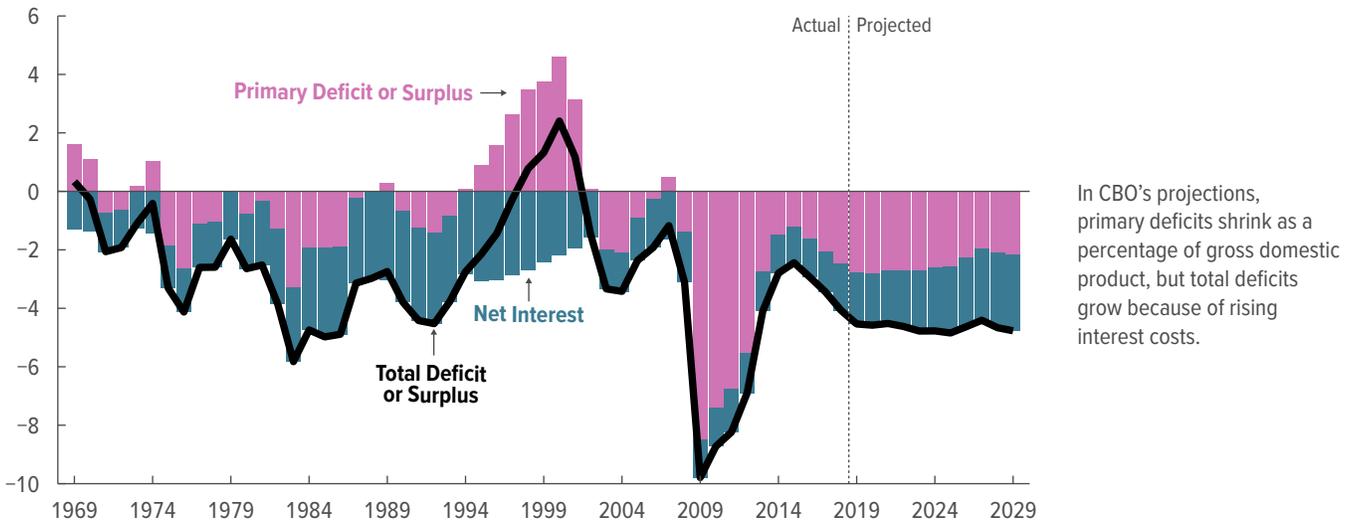
5. See, for example, Theo Francis and Richard Rubin, "After U.S. Tax Overhaul, Corporate Rates Fall but Unevenly," *Wall Street Journal* (July 21, 2019), <https://tinyurl.com/yycvtwj>.

6. One important reason is that it accounts for only the effects directly attributed to that provision, not the resulting change in a company's total tax payments (for example, if actions taken by the company to reduce its liability under that provision wind up increasing its liability under other provisions).

Figure 1-3.

**Total Deficit, Primary Deficit, and Net Interest**

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. All projections presented here have been adjusted to exclude the effects of those timing shifts. Historical amounts have been adjusted as far back as the available data will allow.

Primary deficits or surpluses exclude outlays for net interest.

Relative to the size of the economy, federal outlays over the 2020–2029 period are projected to average 22.1 percent of GDP, higher than their 50-year average of 20.3 percent. That increase over the historical average is largely attributable to growth in mandatory spending; that spending (net of offsetting receipts) is expected to equal 12.9 percent of GDP in 2020 and grow to 14.7 percent of GDP by 2029 (compared with an average of 9.9 percent over the 1969–2018 period). In contrast, from 2020 to 2029, discretionary outlays are projected to decline from 6.4 percent of GDP to 5.6 percent, compared with an average of 8.4 percent over the previous 50 years. In CBO’s projections, net outlays for interest in 2020 are equal to 1.8 percent of GDP, below their 50-year average of 2.0 percent, but they grow over the next decade, reaching 2.6 percent of GDP in 2029 (see Figure 1-5 on page 17).

**Mandatory Spending.** From 2020 to 2029, outlays for mandatory programs (net of offsetting receipts) are projected to rise by an average of about 5 percent per year, reaching \$4.5 trillion by the end of the period (see Table 1-4 on page 18).

Much of the projected growth in mandatory spending over the coming decade is attributable to two factors. First, the share of the U.S. population that is age 65 or older, which has more than doubled over the past 50 years, is expected to expand by about one-third by 2029.

Second, although growth in the costs of health care (per person, adjusted to account for the aging of the population) has slowed in recent years, that growth is faster than projected growth in the economy over the long term. The reasons for that slowdown are not clear. In CBO’s projections, per-enrollee spending in federal health care programs grows more rapidly over the coming decade, although it does not return to the higher rates of growth that were experienced previously.

The effects of those two long-term trends on federal spending are already apparent over the 10-year baseline period—especially for Social Security and Medicare—and will persist beyond that period (see Figure 1-6 on page 20).

Table 1-3.

**CBO's Baseline Projections of Federal Debt**

Billions of Dollars

	Actual, 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Debt Held by the Public at the Beginning of the Year	14,665	15,750	16,685	17,755	18,841	20,042	21,264	22,457	23,784	25,102	26,407	27,917
Changes in Debt Held by the Public												
Deficit	785	960	1,008	1,034	1,159	1,181	1,151	1,284	1,274	1,260	1,479	1,378
Other means of financing <sup>a</sup>	299	-25	63	52	42	41	41	43	44	44	32	27
Total	1,084	935	1,070	1,086	1,201	1,222	1,193	1,328	1,318	1,305	1,510	1,405
<b>Debt Held by the Public at the End of the Year</b>												
<b>In billions of dollars</b>	<b>15,750</b>	<b>16,685</b>	<b>17,755</b>	<b>18,841</b>	<b>20,042</b>	<b>21,264</b>	<b>22,457</b>	<b>23,784</b>	<b>25,102</b>	<b>26,407</b>	<b>27,917</b>	<b>29,322</b>
<b>As a percentage of GDP</b>	<b>77.8</b>	<b>78.9</b>	<b>80.7</b>	<b>82.4</b>	<b>84.5</b>	<b>86.4</b>	<b>88.0</b>	<b>89.7</b>	<b>91.2</b>	<b>92.4</b>	<b>94.0</b>	<b>95.1</b>
<b>Memorandum:</b>												
Debt Held by the Public Minus Financial Assets <sup>b</sup>												
In billions of dollars	13,975	14,934	15,942	16,976	18,135	19,316	20,467	21,752	23,026	24,286	25,765	27,143
As a percentage of GDP	69.1	70.6	72.4	74.2	76.4	78.5	80.2	82.0	83.7	85.0	86.8	88.0
Gross Federal Debt <sup>c</sup>	21,462	22,525	23,688	24,833	26,023	27,249	28,436	29,681	30,937	32,054	33,280	34,415
Debt Subject to Limit <sup>d</sup>	21,475	22,540	23,703	24,849	26,040	27,267	28,455	29,701	30,958	32,076	33,302	34,438
Average Interest Rate on Debt Held by the Public (Percent)	2.3	2.5	2.5	2.5	2.5	2.6	2.7	2.8	2.8	2.9	2.9	3.0

Source: Congressional Budget Office.

GDP = gross domestic product.

- Factors not included in budget totals that also affect the government's need to borrow from the public. Those factors include cash flows associated with federal credit programs such as student loans (because only the subsidy costs of those programs are reflected in the budget deficit), as well as changes in the government's cash balances.
- Debt held by the public minus the value of outstanding student loans and other credit transactions, cash balances, and various financial instruments.
- Federal debt held by the public plus Treasury securities held by federal trust funds and other government accounts.
- 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 in that it excludes debt issued by the Federal Financing Bank and includes certain other adjustments that are excluded from gross debt. The debt limit was most recently set at \$22.0 trillion but has been suspended through July 31, 2021. On August 1, 2021, the debt limit will be raised to its previous level plus the amount of federal borrowing that occurred while the limit was suspended. For more on the debt limit, see Congressional Budget Office, *Federal Debt and the Statutory Limit, February 2019* (February 2019), [www.cbo.gov/publication/54987](http://www.cbo.gov/publication/54987).

*Social Security and the Major Health Care Programs.*

Outlays for Social Security and the major health care programs (Medicare, Medicaid, subsidies offered through the health insurance marketplaces established under the Affordable Care Act and related spending, and the Children's Health Insurance Program) account for more than 90 percent of the projected growth in nominal mandatory spending through 2029. Under current law,

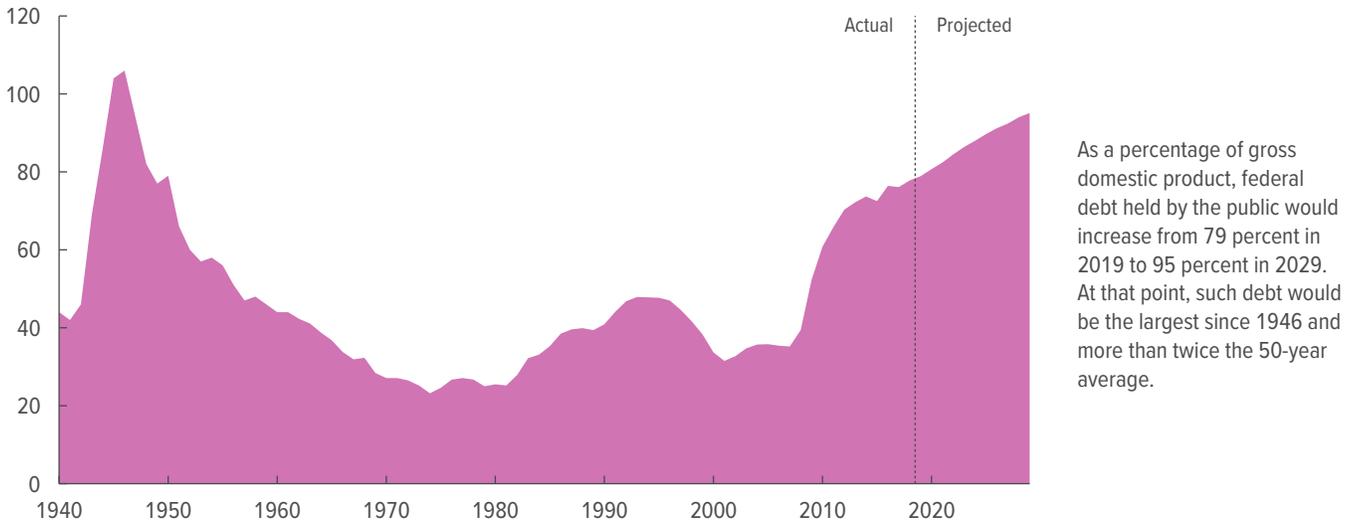
spending for those programs, net of offsetting receipts, would grow at an average annual rate of 6 percent over the coming decade, CBO estimates, increasing from 10.3 percent of GDP in 2020 to 12.5 percent in 2029.<sup>8</sup>

8. Offsetting receipts primarily include payments of premiums, recoveries of overpayments made to providers, and amounts paid by states from savings on Medicaid's prescription drug costs.

Figure 1-4.

**Federal Debt Held by the Public**

Percentage of Gross Domestic Product



As a percentage of gross domestic product, federal debt held by the public would increase from 79 percent in 2019 to 95 percent in 2029. At that point, such debt would be the largest since 1946 and more than twice the 50-year average.

Source: Congressional Budget Office.

Specifically, in CBO's current baseline:

- Outlays for Social Security total 5.0 percent of GDP in 2020 and then rise steadily thereafter, reaching 5.9 percent of GDP in 2029.
- Outlays for Medicare remain close to 3.0 percent of GDP through 2020 and then grow in each year through 2029, when they total 4.0 percent.
- Federal outlays for Medicaid are relatively stable as a percentage of GDP over the coming decade, averaging about 2 percent each year.
- Outlays for subsidies for health insurance purchased through the marketplaces and related spending are projected to average 0.2 percent of GDP per year through 2029.

*Other Mandatory Programs.* Aside from spending on Social Security and the major health care programs, all other mandatory spending is projected to decline as a share of GDP, falling from 2.6 percent in 2020 to 2.3 percent in 2029. That category includes spending on income support programs (such as unemployment compensation and the Supplemental Nutrition Assistance Program), military and civilian retirement programs,

most veterans' benefits, and major agriculture programs. The projected decline in spending occurs in part because benefit amounts for many of those programs are adjusted for inflation each year, and inflation in CBO's economic forecast is estimated to be below the rate of growth in nominal GDP. (For more details about CBO's economic forecast, see Chapter 2.)

**Discretionary Spending.** Projections of discretionary spending for the 2020–2029 period are based on funding provided in 2019 (adjusted for inflation), taking into account limits on such funding required by law. The recently enacted Bipartisan Budget Act of 2019 (P.L. 116-37) raised the limits (or caps) on discretionary appropriations by a total of \$171 billion for 2020 and by \$153 billion for 2021.<sup>9</sup> CBO's baseline projections for

9. Most discretionary funding is limited by caps on annual discretionary appropriations that were originally specified in the Budget Control Act of 2011 (P.L. 112-25) and modified by subsequent legislation. Under current law, separate caps exist for defense and nondefense funding through 2021. If the total amount of discretionary funding provided in appropriation acts for a given year exceeds the cap for either category, the President must sequester—or cancel—a sufficient amount of budgetary resources (following procedures specified in the Budget Control Act) to eliminate the breach. See Congressional Budget Office, *CBO Estimate for the Bipartisan Budget Act of 2019* (July 2019), [www.cbo.gov/publication/55478](http://www.cbo.gov/publication/55478).

Figure 1-5.

**Changes in Projected Outlays From 2019 to 2029**

Percentage of Gross Domestic Product

	Outlays		Change (Percentage points)	Major Reasons for Change
	2019	2029		
Social Security	4.9	5.9	1.0	Aging of the population
Major Health Care Programs <sup>a</sup>	5.3	6.6	1.3	Aging of the population; rising costs of health care
Other Mandatory Spending	2.6	2.3	-0.4	Inflation rate is less than nominal GDP growth
Discretionary Spending	6.3	5.6	-0.7	Caps on funding; inflation rate is less than nominal GDP growth
Net Interest	1.8	2.6	0.9	Accumulating debt; rising interest rates

Source: Congressional Budget Office.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. Outlays have been adjusted to exclude the effects of those shifts.

GDP = gross domestic product.

a. Consists of outlays 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.

those two years incorporate the new limits, and funding for those two years is projected to be at or slightly below those new caps (see Table 1-5 on page 21). For 2022 and later years, those projections reflect the assumption that funding constrained by the caps keeps pace with inflation. Some elements of discretionary funding are not constrained by the caps—in particular, appropriations designated for OCO, activities designated as emergency requirements, and some or all funding for disaster relief and some efforts to reduce overpayments in benefit programs.<sup>10</sup> In addition, in accordance with the 21st Century Cures Act, a portion of funding for certain authorized activities—up to amounts specified in law—is exempt from the caps. For those elements, funding

is generally assumed to grow with inflation from the amounts provided in 2019.<sup>11</sup>

The Bipartisan Budget Act of 2019 raised the caps on discretionary appropriations subject to the limits to \$1,288 billion in 2020. Discretionary funding is projected to grow at the rate of inflation, unless constrained by the caps; and between 2019 and 2020, projected inflation for defense funding is less than the rate of growth of the cap on such funding. Thus, in CBO's baseline, discretionary budget authority constrained by the caps is just below that amount, at \$1,286 billion in 2020. By 2021, in CBO's baseline, discretionary budget authority constrained by the caps equals the combined defense and nondefense limits of \$1,298 billion. The caps expire in 2021, so all budget authority after that

10. The caps are adjusted to accommodate funding for those activities. Beginning in 2020, funding for wildfire suppression and activities related to the 2020 census also will lead to an increase in the nondefense cap, subject to specified limits.

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

Table 1-4.

**Mandatory Outlays Projected in CBO's Baseline, Adjusted to Exclude the Effects of Timing Shifts**

Billions of Dollars

	Actual,												Total	
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020–2024	2020–2029
<b>Social Security</b>														
Old-Age and Survivors Insurance	838	893	950	1,008	1,072	1,139	1,209	1,282	1,356	1,435	1,522	1,610	5,377	12,583
Disability Insurance	144	145	147	152	158	165	173	180	189	198	203	210	795	1,774
Subtotal	982	1,038	1,097	1,160	1,230	1,304	1,381	1,462	1,545	1,633	1,725	1,820	6,172	14,356
<b>Major Health Care Programs</b>														
Medicare <sup>a,b</sup>	728	768	815	872	937	1,007	1,083	1,161	1,244	1,343	1,424	1,514	4,713	11,399
Medicaid	389	404	418	436	462	490	519	549	582	616	652	691	2,325	5,415
Health insurance subsidies and related spending <sup>c</sup>	49	57	55	56	58	61	63	67	70	71	72	75	293	647
Children's Health Insurance Program	17	18	16	14	14	15	16	16	17	18	18	19	76	164
Subtotal <sup>b</sup>	1,184	1,247	1,304	1,378	1,471	1,573	1,680	1,794	1,913	2,048	2,167	2,299	7,406	17,626
<b>Income Security Programs</b>														
Earned income, child, and other tax credits <sup>d</sup>	81	98	95	94	93	93	94	94	95	82	82	82	468	902
Supplemental Nutrition Assistance Program	68	63	63	62	63	64	65	65	66	67	69	71	317	656
Supplemental Security Income <sup>a</sup>	55	56	57	58	60	61	63	65	67	70	72	74	299	648
Unemployment compensation	29	28	29	33	38	46	50	50	52	54	56	58	196	465
Family support and foster care <sup>e</sup>	32	32	33	33	33	34	34	34	34	35	35	35	166	339
Child nutrition	24	24	26	27	28	29	30	31	33	34	36	37	139	310
Subtotal	290	301	302	306	314	327	335	340	347	341	349	357	1,585	3,320
<b>Federal Civilian and Military Retirement</b>														
Civilian <sup>f</sup>	103	106	109	114	118	122	126	129	133	137	141	145	587	1,273
Military <sup>a</sup>	59	61	63	65	67	68	70	72	74	76	78	79	332	711
Other	6	4	5	6	7	8	9	5	10	7	7	7	35	71
Subtotal	168	170	177	184	191	198	205	206	217	220	226	231	955	2,055
<b>Veterans' Programs</b>														
Income security <sup>a,g</sup>	93	100	104	107	109	114	120	123	127	131	135	141	553	1,210
Other	16	15	19	17	18	17	17	18	19	20	21	20	88	187
Subtotal	109	116	123	123	127	131	137	141	146	151	156	162	641	1,397
<b>Other Programs</b>														
Agriculture	16	23	29	16	15	16	16	16	16	16	17	16	91	172
Deposit insurance	-16	-9	-6	-6	-6	-6	-6	-7	-7	-8	-8	-8	-29	-67
MERHCF	10	10	11	11	12	13	13	14	15	15	16	17	60	137
Fannie Mae and Freddie Mac <sup>h</sup>	4	0	2	2	3	3	3	4	4	4	4	4	13	33
Higher education	-6	35	3	4	5	6	6	6	6	6	6	6	23	53
Other	82	57	70	70	72	71	69	69	68	68	68	69	352	694
Subtotal	90	116	108	97	101	102	101	101	101	101	103	105	510	1,021
<b>Mandatory Outlays, Excluding the Effects of Offsetting Receipts<sup>a</sup></b>														
	<b>2,822</b>	<b>2,988</b>	<b>3,110</b>	<b>3,249</b>	<b>3,435</b>	<b>3,635</b>	<b>3,839</b>	<b>4,045</b>	<b>4,269</b>	<b>4,494</b>	<b>4,725</b>	<b>4,973</b>	<b>17,269</b>	<b>39,775</b>

Continued

Source: Congressional Budget Office.

Data on outlays 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); n.a. = not applicable;

\* = between -\$500 million and \$500 million.

Table 1-4.

Continued

**Mandatory Outlays Projected in CBO's Baseline, Adjusted to Exclude the Effects of Timing Shifts**

Billions of Dollars

	Actual,												Total	
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020–2024	2020–2029
Offsetting Receipts														
Medicare <sup>i</sup>	-123	-133	-141	-151	-161	-174	-188	-202	-218	-237	-253	-271	-815	-1,996
Federal share of federal employees' retirement														
Civil service retirement and other	-36	-37	-39	-41	-42	-44	-46	-47	-49	-50	-52	-53	-212	-463
Military retirement	-18	-20	-22	-22	-23	-23	-24	-24	-25	-25	-26	-26	-113	-239
Social Security	-18	-18	-18	-19	-20	-20	-21	-22	-22	-23	-24	-24	-99	-214
Subtotal	-72	-75	-79	-82	-85	-87	-90	-93	-96	-99	-101	-104	-423	-916
Receipts related to natural resources <sup>a</sup>	-11	-14	-12	-12	-13	-12	-12	-13	-13	-13	-13	-14	-61	-126
MERHCF	-8	-8	-8	-9	-9	-10	-10	-11	-11	-12	-12	-13	-45	-104
Fannie Mae and Freddie Mac <sup>h</sup>	-13	-24	0	0	0	0	0	0	0	0	0	0	0	0
Other	-32	-28	-32	-33	-32	-32	-31	-44	-32	-32	-29	-29	-160	-327
Subtotal	-259	-281	-273	-287	-300	-315	-331	-362	-369	-392	-409	-431	-1,505	-3,469
<b>Total Mandatory Outlays, Net of Offsetting Receipts<sup>a</sup></b>	<b>2,563</b>	<b>2,707</b>	<b>2,838</b>	<b>2,962</b>	<b>3,135</b>	<b>3,321</b>	<b>3,509</b>	<b>3,682</b>	<b>3,900</b>	<b>4,101</b>	<b>4,317</b>	<b>4,542</b>	<b>15,764</b>	<b>36,306</b>

**Mandatory Outlays That Are Shifted in CBO's Baseline**

Medicare	-24	0	0	0	38	4	-41	0	0	0	64	-64	n.a.	n.a.
Supplemental Security Income	-4	0	0	0	5	0	-5	0	0	0	5	-5	n.a.	n.a.
Military retirement	-5	0	0	0	5	0	-5	0	0	0	6	-6	n.a.	n.a.
Veterans' income security	-7	0	0	0	10	1	-11	0	0	0	12	-12	n.a.	n.a.
Outer Continental Shelf	*	0	0	0	0	*	*	0	0	0	*	*	n.a.	n.a.
Total	-40	0	0	0	57	5	-63	0	0	0	88	-87	n.a.	n.a.
<b>Total Mandatory Outlays Projected in CBO's Baseline</b>	<b>2,523</b>	<b>2,707</b>	<b>2,838</b>	<b>2,962</b>	<b>3,192</b>	<b>3,326</b>	<b>3,446</b>	<b>3,682</b>	<b>3,900</b>	<b>4,101</b>	<b>4,405</b>	<b>4,454</b>	<b>15,764</b>	<b>36,306</b>

**Memorandum:**

## Outlays Adjusted to Remove the Effects of Timing Shifts, Net of Offsetting Receipts

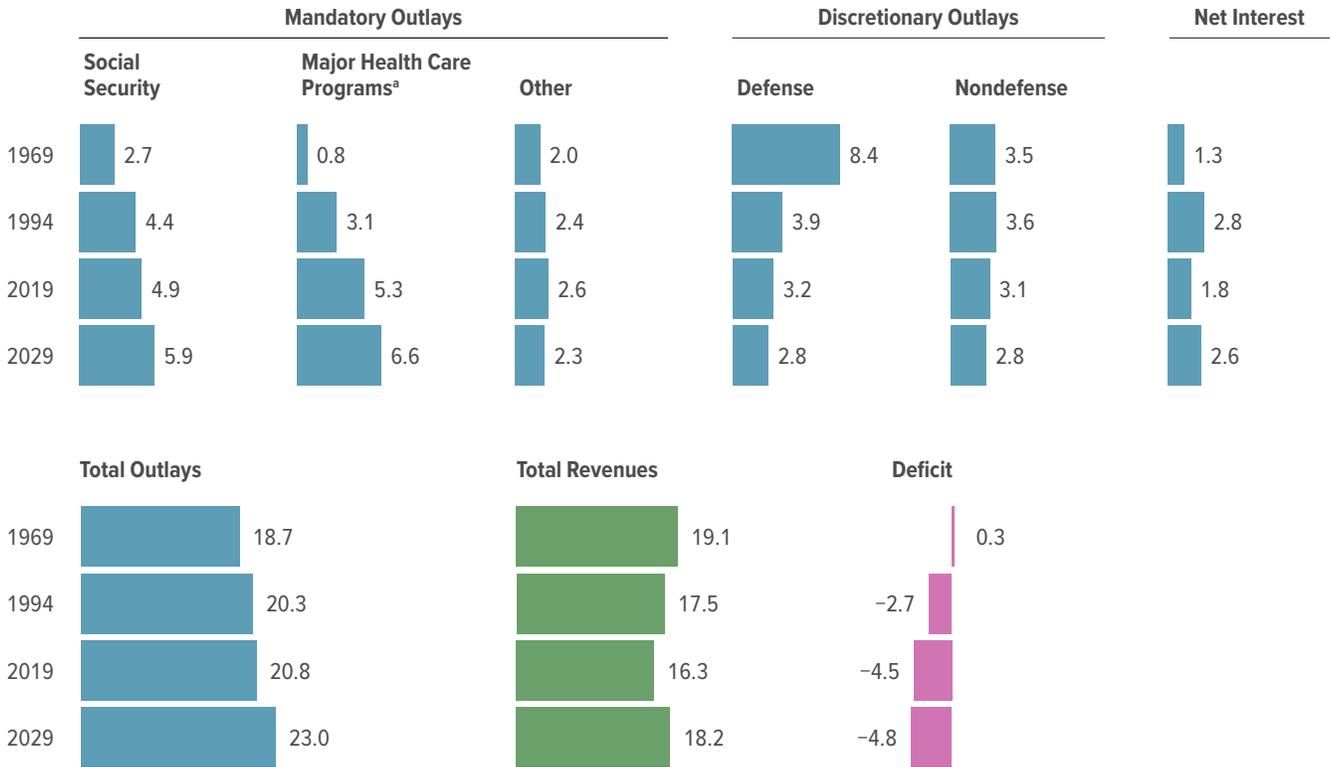
Medicare <sup>a</sup>	605	636	673	721	776	833	895	959	1,026	1,106	1,171	1,243	3,899	9,403
Major health care programs	1,061	1,114	1,163	1,226	1,310	1,399	1,493	1,591	1,695	1,811	1,914	2,028	6,591	15,630

- a. When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. Outlays presented in this table for programs affected by such timing shifts have been adjusted to exclude the effects of those shifts.
- b. Excludes the effects of Medicare premiums and other offsetting receipts. (Net Medicare spending, which includes those offsetting receipts, is shown in the memorandum section of the table.)
- c. Consists of outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and provided through the Basic Health Program, as well as spending to stabilize premiums for health insurance purchased by individuals and small employers.
- d. Includes outlays for the American Opportunity Tax Credit and other credits.
- e. Includes Temporary Assistance for Needy Families, Child Support Enforcement, Child Care Entitlements to States, and other programs that benefit children.
- f. Includes benefits for retirement programs in the civil service, foreign service, and Coast Guard; benefits for smaller retirement programs; and annuitants' health care benefits.
- g. Includes veterans' compensation, pensions, and life insurance programs. (Outlays for veterans' health care are classified as discretionary.)
- h. Cash payments from Fannie Mae and Freddie Mac to the Treasury are recorded as offsetting receipts in 2018 and 2019. Beginning in 2020, 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.

Figure 1-6.

**CBO’s Baseline Projections of Outlays and Revenues, Compared With Actual Values 25 and 50 Years Ago**

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

In 2028, October 1 (the first day of fiscal year 2029) falls on a weekend, so certain payments that are due on that date will instead be made in September, thus boosting outlays in fiscal year 2028 and reducing them in 2029. Such shifts affect projections of outlays for the major health care programs, other mandatory outlays, defense discretionary outlays, total outlays, and the deficit. A similar shift boosted outlays in those categories in 1994. The data presented here have been adjusted to exclude the effects of those timing shifts.

a. Consists of outlays 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.

year is assumed to grow with inflation for the duration of the baseline projection period.

In addition to budget authority constrained by the caps, CBO projects funding of \$121 billion in 2020 and in 2021 for overseas contingency operations and other activities not constrained by the caps. Included in those totals are amounts for emergency requirements—\$25 billion in 2020 and \$26 billion in 2021.<sup>12</sup> Those

amounts are based on the \$25 billion appropriated for emergencies in 2019, which is assumed to grow with inflation for the rest of the projection period. (For comparison, emergency funding averaged \$25 billion per year from 2012 to 2018.)

Between 2020 and 2029, total discretionary budget authority is projected to rise by about 2 percent a year, on average. Measured in dollar terms, total discretionary outlays would climb from \$1.4 trillion in 2020 to \$1.7 trillion in 2029, for an average yearly increase of

12. See Congressional Budget Office, cost estimate for S. 1900, the Emergency Supplemental Appropriations for Humanitarian Assistance and Security at the Southern Border Act, 2019 (June 21, 2019), [www.cbo.gov/publication/55389](http://www.cbo.gov/publication/55389), and cost estimate for Senate Amendment 250 to H.R. 2157, the

Additional Supplemental Appropriations for Disaster Relief Act, 2019 (May 23, 2019), [www.cbo.gov/publication/55289](http://www.cbo.gov/publication/55289).

Table 1-5.

**CBO's Baseline Projections of Discretionary Spending, Adjusted to Exclude the Effects of Timing Shifts**

Billions of Dollars

	Actual, 2018 <sup>a</sup>	2019 <sup>a</sup>	2020 <sup>b</sup>	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
													2020– 2024	2020– 2029
<b>Budget Authority</b>														
Defense	701	719	737	746	764	783	802	822	842	862	883	905	3,833	8,147
Nondefense	722	658	669	672	689	706	724	741	760	779	798	818	3,460	7,356
<b>Total</b>	<b>1,423</b>	<b>1,377</b>	<b>1,407</b>	<b>1,419</b>	<b>1,453</b>	<b>1,489</b>	<b>1,526</b>	<b>1,563</b>	<b>1,602</b>	<b>1,641</b>	<b>1,681</b>	<b>1,722</b>	<b>7,293</b>	<b>15,502</b>
<b>Outlays<sup>c</sup></b>														
Defense	627	670	700	721	740	758	776	795	814	834	854	874	3,695	7,866
Nondefense	639	662	700	724	737	755	771	789	808	827	846	868	3,686	7,825
<b>Total</b>	<b>1,266</b>	<b>1,332</b>	<b>1,400</b>	<b>1,446</b>	<b>1,476</b>	<b>1,512</b>	<b>1,548</b>	<b>1,584</b>	<b>1,622</b>	<b>1,661</b>	<b>1,700</b>	<b>1,742</b>	<b>7,382</b>	<b>15,690</b>
<b>Memorandum:</b>														
Caps in the Budget Control Act of 2011 (As Amended)														
Defense	629	647	667	672	n.a.	n.a.								
Nondefense	579	597	622	627	n.a.	n.a.								
<b>Total</b>	<b>1,208</b>	<b>1,244</b>	<b>1,288</b>	<b>1,298</b>	n.a.	n.a.								
Adjustments to the Caps <sup>d</sup>														
Defense	72	72	73	75	n.a.	n.a.								
Nondefense	125	44	48	46	n.a.	n.a.								
<b>Total</b>	<b>197</b>	<b>116</b>	<b>121</b>	<b>121</b>	n.a.	n.a.								

Source: Congressional Budget Office.

CBO's current 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.

Nondefense discretionary outlays are usually greater 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 considered mandatory.

n.a. = not applicable.

- The amount of budget authority for 2018 and for 2019 in CBO's baseline does not match the sum of the caps on funding plus adjustments to the caps, mostly because changes to mandatory programs included in appropriation acts for those years (including those assumed to be enacted for 2019) are credited against the caps. In the baseline, those changes (which reduce mandatory budget authority in both years) appear in their normal mandatory accounts.
- The amount of budget authority for 2020 in CBO's baseline is less than the sum of the caps on funding plus adjustments to the caps because discretionary funding is projected to grow at the rate of inflation unless constrained by the caps; projected inflation for defense funding between 2019 and 2020 is less than the rate of growth of the cap on such funding.
- When October 1 (the first day of the fiscal year) falls on a weekend, certain payments—mainly for military pay—that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year.
- Some or all of the discretionary funding related to five types of activities is not constrained by the caps; for most of those activities, the caps are adjusted to accommodate such funding, up to certain limits. Specifically, appropriations designated for overseas contingency operations and activities designated as emergency requirements are assumed to grow with inflation after 2019, and the caps are adjusted accordingly. For two other activities—disaster relief and certain efforts to reduce overpayments in benefit programs—the extent to which the caps can be adjusted is subject to annual constraints, as specified in law. (Beginning in 2020, funding for wildfire suppression and the 2020 census also will lead to an increase in the nondefense caps, subject to specified limits.) Finally, CBO follows a similar approach in projecting a portion of funding to carry out the 21st Century Cures Act (Public Law 114-255), which requires that discretionary funding for certain authorized activities—up to amounts specified in law—be excluded from calculations of the caps.

about 2½ percent. Measured as a share of GDP, though, discretionary outlays would drop from 6.4 percent in 2020 to 5.6 percent in 2029. That 2029 percentage would be the smallest in any year since 1962 (the earliest year for which such data have been reported); by comparison, discretionary outlays averaged 8.4 percent of GDP over the past 50 years, although they were as low as 6.0 percent of GDP in 1999.

*Defense.* Budget authority for defense programs—including funding for OCO—is projected to equal \$737 billion in 2020, which is \$19 billion (or 3 percent) greater than it was in 2019.<sup>13</sup> After 2020, funding is estimated to grow by 2 percent a year, on average, reaching \$905 billion in 2029. Outlays for defense programs are projected to be \$670 billion in 2019 and \$700 billion in 2020. They then grow at a rate similar to that of budget authority, rising to \$874 billion in 2029. Despite that growth, discretionary defense outlays as a percentage of GDP are projected to fall from 3.2 percent in 2019 to 2.8 percent in 2029.

*Nondefense.* Budget authority for nondefense programs is also projected to rise in 2020. In CBO’s projections, nondefense discretionary budget authority is \$669 billion in that year, an increase of \$11 billion (or 2 percent) over 2019 amounts. After 2020, funding is projected to grow by 2 percent a year, on average, reaching \$818 billion in 2029. Discretionary outlays for nondefense programs are estimated to total \$662 billion in 2019 and projected to be \$700 billion in 2020; they would then follow the same trajectory as budget authority, increasing to \$868 billion in 2029. Relative to the size of the economy, outlays for nondefense discretionary programs are projected to fall from 3.1 percent of GDP in 2019 to 2.8 percent of GDP in 2029.

**Net Interest.** In the budget, net interest outlays primarily encompass the government’s interest payments on federal debt, offset by interest income that the government receives. Net outlays for interest are dominated by the interest paid to holders of the debt that the Treasury Department issues to the public. The Treasury also pays interest on debt issued to trust funds and other government accounts, but such payments are intragovernmental transactions that have no effect on the budget deficit.

In CBO’s projections, net outlays for interest increase from \$372 billion in 2019 to more than double that amount—\$807 billion—by 2029. As a result, under current law, outlays for net interest are projected to grow from 1.8 percent of GDP in 2019 to an average of 2.5 percent from 2025 to 2029 (see Table 1-6). That amount is 0.5 percentage points higher than their 50-year average as a share of economic output. The primary factors that affect the federal government’s net interest costs are the amount of debt held by the public and interest rates on Treasury securities.

The increase in federal borrowing projected in the baseline is the most significant factor affecting the projected growth in net interest costs. Those costs are also boosted by higher interest rates on federal borrowing as Treasury securities that were issued when interest rates were relatively low mature and are rolled over and as interest rates on Treasury securities rise over the next decade. In 2018, the average interest rate on debt held by the public was 2.3 percent; that rate is estimated to reach 3.0 percent in 2029. As a result, debt held by the public is projected to rise by 86 percent (in nominal terms) over the next 11 years, increasing from \$15.8 trillion, or 78 percent of GDP, at the end of 2018 to \$29.3 trillion, or 95 percent of GDP, in 2029.

## Revenues

Under current law, revenues are projected to grow by \$2.2 trillion over the projection period—an average annual increase of 5 percent, nearly the same rate of increase that CBO projects for outlays through 2029 (after adjusting for the timing of certain payments). As a share of GDP, total revenues are projected to rise from 16.3 percent this year to 18.2 percent in 2029. That growth mainly reflects an increase in revenues relative to GDP from individual income taxes and, to a lesser extent, from corporate income taxes. Other sources of revenues are projected to grow at the same pace as GDP (see Figure 1-7). The largest movements over the next decade are the following:

- Individual income tax receipts are projected to increase relative to GDP in each year from 2019 to 2029 because of the expiration of provisions of the 2017 tax act that have temporarily lowered receipts relative to taxable personal income, because of real bracket creep, and from other factors (explained in more detail, below).

13. If budget authority for defense programs was equal to the cap in 2020 and not slightly below it, funding in that year would be \$21 billion (or 2.9 percent) greater than it was in 2019.

Table 1-6.

**Key Projections in CBO's Baseline**

Percentage of Gross Domestic Product

	2019	2020	Projected Annual Average	
			2021–2024	2025–2029
<b>Revenues</b>				
Individual income taxes	8.0	8.2	8.4	9.3
Payroll taxes	5.9	5.8	5.9	5.9
Corporate income taxes	1.1	1.1	1.3	1.4
Other	1.3	1.3	1.3	1.3
<b>Total Revenues</b>	<b>16.3</b>	<b>16.4</b>	<b>16.9</b>	<b>18.0</b>
<b>Outlays</b>				
<b>Mandatory</b>				
Social Security	4.9	5.0	5.2	5.7
Major health care programs <sup>a</sup>	5.3	5.3	5.6	6.3
Other	2.6	2.6	2.5	2.3
Subtotal	12.8	12.9	13.4	14.3
Discretionary	6.3	6.4	6.2	5.8
Net interest	1.8	1.8	2.0	2.5
<b>Total Outlays</b>	<b>20.8</b>	<b>21.0</b>	<b>21.5</b>	<b>22.6</b>
<b>Deficit</b>	<b>-4.5</b>	<b>-4.6</b>	<b>-4.7</b>	<b>-4.7</b>
<b>Debt Held by the Public at the End of the Period</b>	<b>79</b>	<b>81</b>	<b>88</b>	<b>95</b>
<b>Memorandum:</b>				
<b>Social Security</b>				
Revenues <sup>b</sup>	4.5	4.5	4.5	4.6
Outlays <sup>c</sup>	4.9	5.0	5.2	5.7
Contribution to the Federal Deficit <sup>d</sup>	-0.4	-0.5	-0.8	-1.2
<b>Medicare</b>				
Revenues <sup>b</sup>	1.4	1.4	1.5	1.5
Outlays <sup>c</sup>	3.6	3.7	4.0	4.7
Offsetting receipts	-0.6	-0.6	-0.7	-0.8
Contribution to the Federal Deficit <sup>d</sup>	-1.6	-1.6	-1.9	-2.3
Gross Domestic Product at the End of the Period (Trillions of dollars)	21.2	22.0	25.5	30.8

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.

- a. Consists of outlays 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 on behalf of its employees; those payments are intragovernmental 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 intragovernmental offsetting receipts stemming from the employer's share of payroll taxes paid to the Social Security trust funds by federal agencies on behalf of their employees.
- 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 intragovernmental transactions, interest earned on balances, or outlays related to administration of the program.

Figure 1-7.

**Changes in Projected Revenues From 2019 to 2029**

Percentage of Gross Domestic Product

	Revenues		Change (Percentage points)	Major Reasons for Change
	2019	2029		
Individual Income Taxes	8.0	9.6	1.6	Expiration of temporary tax provisions after 2025; real bracket creep <sup>a</sup>
Payroll Taxes	5.9	5.9	*	Not applicable
Corporate Income Taxes	1.1	1.3	0.3	Scheduled changes in tax rules enacted in the 2017 tax act; dissipation of temporary weakness in recent tax collections
Other Sources of Revenue	1.3	1.3	*	Not applicable

Source: Congressional Budget Office.

\* = between zero and 0.05 percent of 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.

- Corporate income tax receipts are projected to increase relative to GDP in each year from 2019 to 2025 and then gradually decline. Those receipts are boosted over the next decade by scheduled changes in tax rules enacted by the 2017 tax act, as well as the expectation that recent unexplained weakness in collections will slowly dissipate. After 2025, corporate income taxes are projected to shrink as a share of the economy, mostly because of the end of the scheduled payments for a onetime tax on previously untaxed foreign profits.
- Estate and gift tax receipts are projected to increase slightly relative to GDP through 2026 and then increase greatly, as the provision in the 2017 tax act that doubled the exemption amount expires.

**Individual Income Taxes.** If current laws remain generally unchanged, receipts from individual income taxes would rise by 1.6 percentage points as a share of economic output over the next decade—from 8.0 percent in 2019 to 9.6 percent by 2029—CBO estimates.

*Expiration of Temporary Tax Provisions After 2025.* The most significant factor pushing up taxes relative to income is the scheduled expiration, after tax year 2025,

of nearly all the individual income tax law changes made by the 2017 tax act. The provisions that are scheduled to expire include lower statutory tax rates, the higher standard deduction, the repeal of personal exemptions, and the expansion of the child tax credit. Those expirations would cause tax liabilities to rise in calendar year 2026, boosting individual income tax receipts relative to GDP by 0.8 percentage points.

*Real Bracket Creep and Related Factors.* The second most significant factor pushing up taxes relative to income arises from the way certain parameters of the tax system are scheduled to change over time in relation to growth in income, which reflects the effects of both real (inflation-adjusted) economic activity and inflation. The most important component of that effect, real bracket creep, occurs because the income tax brackets are indexed only to inflation. If income grows faster than inflation, as generally occurs when the economy is expanding, more income is pushed into higher tax brackets. Still other parameters of the tax system, including the amount of the child tax credit, are fixed in nominal dollars and are not adjusted for inflation. In CBO's baseline, those factors cause projected revenues measured as a percentage

of GDP to rise by 0.5 percentage points from 2019 to 2029.<sup>14</sup>

*Other Factors.* Over the next decade, other factors would raise projected receipts as a share of GDP by 0.3 percentage points, on net, in CBO's estimation. Several factors would boost individual income tax receipts relative to GDP. According to CBO's projections, taxable personal income, which includes wages and salaries, and taxable distributions from tax-deferred retirement accounts would both grow faster than GDP through 2029. CBO also expects wages and salaries to increase faster for people with higher earnings than for others during the next decade—as has been the case for the past several decades—pushing a larger share of income into higher tax brackets. Finally, in addition to the individual income tax provisions that are scheduled to expire after 2025, rules allowing accelerated depreciation deductions for certain business investments are scheduled to phase out between 2022 and 2027. Partially offsetting those tax increases is a projected decline in realizations of capital gains relative to the size of the economy. Those realizations are projected to gradually return to levels consistent with their historical average share of GDP (after accounting for differences in applicable tax rates) by 2029.

**Corporate Income Taxes.** Under current law, corporate income tax receipts would rise from 1.1 percent of GDP in 2019 to 1.5 percent of GDP in 2025 and then decline to 1.3 percent of GDP by 2029.

*Provisions of the 2017 Tax Act.* A number of provisions of the 2017 tax act will affect corporate taxes over the next decade, raising receipts as a share of GDP by 0.2 percentage points between 2019 and 2029, on net. Most significantly, provisions allowing firms to immediately deduct from their taxable income 100 percent of their investments in equipment are scheduled to phase out between 2023 and 2026. Several other provisions of the tax act will alter how businesses calculate their tax liability over the next decade and, as a result, will boost receipts. Among those provisions is a change in how taxable income is calculated, which results from new limits on the deductibility of interest expenses that take effect in 2022. Also in 2022, firms will be required to capitalize and amortize certain expenditures for research and experimentation as they are incurred over a five-year period,

rather than immediately deducting them. Rules related to the taxation of profits abroad will also change in 2026, increasing revenues in subsequent years. Provisions with such rules include the tax on Global Intangible Low-Taxed Income, the deduction for Foreign-Derived Intangible Income, and the Base Erosion and Anti-Abuse Tax.<sup>15</sup>

Receipts will be further affected over the next decade by the end of the scheduled payments for a onetime tax on previously untaxed foreign profits. Taxes on those earnings, which are based on the value of those profits as of late 2017 (and which are unrelated to future business activity), can be paid in installments over the next eight years. Because the required installments are not equal in size, the effect of those receipts in CBO's baseline varies over the 2019–2026 period. As a result, those payments are projected to boost receipts to varying degrees from 2019 through 2026 but not in subsequent years, thereby contributing to the reduction in receipts in relation to GDP through 2029.

*Temporary Weakness in Recent Tax Collections.* Corporate tax collections in 2018 and early 2019 were weaker than can be explained by the available data on business activity. (After this analysis was completed, the Bureau of Economic Analysis released its annual revisions of historical economic data. Those revisions included significant reductions in estimated corporate profits for 2017 and 2018, which probably explain part of the weakness in observed collections. For a discussion of those revisions, see Box 2-1 on page 30.) The full set of factors responsible for that weakness, and the extent to which they relate to the 2017 tax act or other factors, will not become apparent until detailed information from tax returns becomes available over the next few years. Depending on the source, the effects of those factors on receipts might be expected to persist permanently, end abruptly, or even reverse. In CBO's projections, unexplained weakness is anticipated to continue temporarily and gradually dissipate over the next few years, boosting corporate income tax receipts by 0.1 percent of GDP from 2020 to 2029.

**Estate and Gift Taxes.** As a result of a provision in the 2017 tax act that temporarily doubles the amount of the estate and gift tax exemption through tax year 2025,

14. See Congressional Budget Office, “How Income Growth Affects Tax Revenues in CBO's Long-Term Budget Projections” (presentation, June 2019), [www.cbo.gov/publication/55368](http://www.cbo.gov/publication/55368).

15. For additional explanation of the tax provisions included in the 2017 tax act, see Congressional Budget Office, *The Budget and Economic Outlook: 2018 to 2028* (April 2018), pp. 108–110, [www.cbo.gov/publication/53651](http://www.cbo.gov/publication/53651).

revenues from that source are projected to drop in 2019 to less than 0.1 percent of GDP. In 2027 and later years, projected revenues from estate and gift taxes rise to just above 0.1 percent.

**Receipts From Other Sources.** Receipts from all other sources are expected to remain at about the same share of GDP over the next decade.

- Between 2019 and 2029, receipts from payroll taxes, which fund social insurance programs, are projected to rise only slightly as a share of the economy. Those receipts are expected to remain close to 5.9 percent of GDP throughout the next decade because workers' earnings, which constitute most of the payroll tax base, remain relatively stable as a share of GDP.
- Customs duties, which are assessed on certain imports, are projected to remain between 0.3 percent and 0.4 percent of GDP throughout the next decade. Those duties include tariffs implemented by the Administration during 2018 and 2019.<sup>16</sup> For example, in May 2019, tariffs were raised from 10 percent to 25 percent on \$164 billion of imports from China. CBO's baseline incorporates the assumption that tariffs, along with any subsequent exemptions provided by the Administration, continue throughout the projection period at the rates in effect as of July 25, 2019.<sup>17</sup>
- The federal government also collects revenues in the form of excise taxes, remittances from the Federal

16. The Administration's recent actions on tariffs were taken under authority granted in section 232 of the Trade Expansion Act of 1962 and sections 201 and 301 of the Trade Act of 1974.

17. Specifically, the baseline projections incorporate the assumption that, in cases in which the Administration exercises its broad authority to impose tariffs without legislative action, the tariffs in effect when the analysis was completed would continue permanently without planned or unplanned changes. The tariffs imposed during the past two years include those on imports of solar panels and certain appliances, which took effect on February 7, 2018; on steel and aluminum imports from most countries, which took effect on March 23, 2018; and on a range of products imported from China, the first of which took effect on July 6, 2018. On August 1, 2019, the President announced that tariffs would be imposed on an additional \$300 billion of Chinese imports beginning on September 1, 2019; on August 13, the U.S. Trade Representative announced that those tariffs would be delayed on certain products. Those scheduled changes to tariffs are not included in CBO's current baseline projections.

Reserve, and miscellaneous fees and fines. CBO projects that, under current law, revenues from each of those sources would grow at the same pace as GDP through 2029.

**Tax Expenditures.** The tax rules that form the basis for CBO's projections include an array of exclusions, deductions, preferential rates, and credits. Those provisions reduce revenues for any given level of tax rates in both the individual and corporate income tax systems. Many 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.

Tax expenditures have a major effect on the federal budget. In fiscal year 2019, the value of the more than 200 tax expenditures in the individual and corporate income tax systems will total about \$1.6 trillion—or 7.8 percent of GDP—if their effects on payroll as well as income taxes are included.<sup>18</sup> That amount, which was calculated by CBO on the basis of estimates prepared by the staff of the Joint Committee on Taxation, equals almost half of all federal revenues projected to be collected in 2019 and exceeds all projected discretionary outlays combined.<sup>19</sup>

### Uncertainty in Budget Projections

CBO's baseline budget projections are intended to show what would happen to federal spending, revenues, and deficits and debt if current laws governing spending and taxes generally remained the same. Changes to laws—particularly those affecting fiscal policies—that cause them to differ from the laws underlying CBO's baseline projections could lead to budgetary outcomes that diverge considerably from those in the baseline.

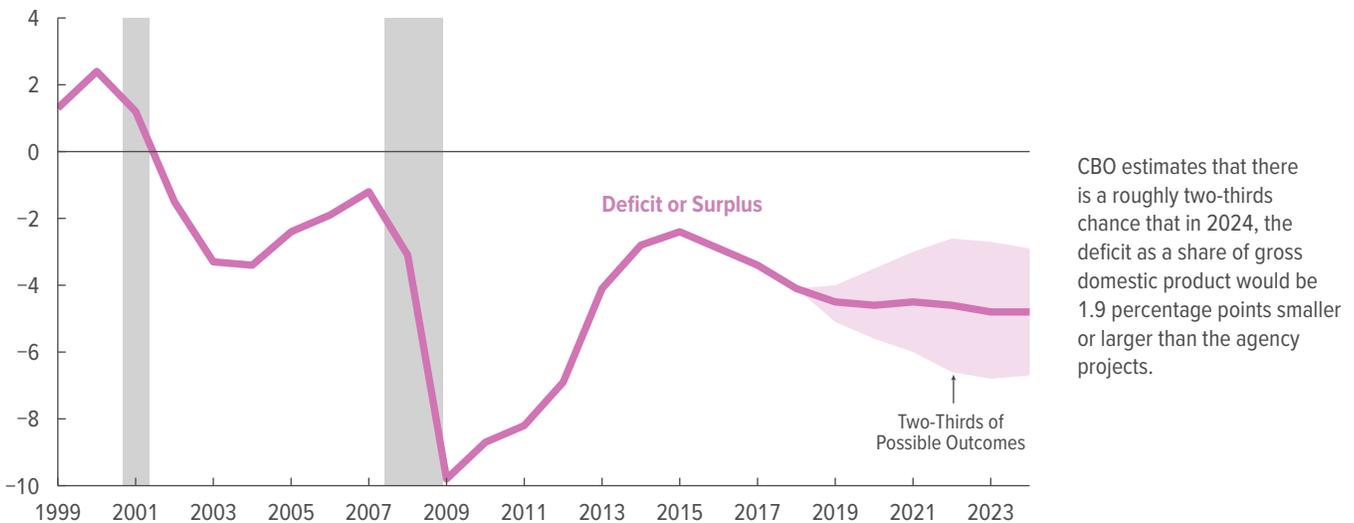
Even if federal laws remained the same for the next decade, actual budgetary outcomes would differ from

18. Most estimates of tax expenditures include only their effects on individual and corporate income taxes. However, tax expenditures can also reduce the amount of income subject to payroll taxes. Tax expenditures that reduce the tax base for payroll taxes will eventually decrease spending for Social Security by reducing the earnings base on which Social Security benefits are calculated.

19. For more information on how that total was determined, as well as estimates of the size of the 10 largest tax expenditures in 2019, see Congressional Budget Office, *The Budget and Economic Outlook: 2019 to 2029* (January 2019), pp. 99–102, [www.cbo.gov/publication/54918](http://www.cbo.gov/publication/54918).

**Figure 1-8.****The Uncertainty of CBO's Baseline Projections of the Budget Deficit**

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. All projections presented here have been adjusted to exclude the effects of those timing shifts. Historical amounts have been adjusted as far back as the available data will allow.

CBO's baseline projections because of unanticipated changes in economic conditions and in other factors that affect federal spending and revenues. CBO's projections of outlays and revenues and, therefore, of deficits and debt depend in part on the agency's economic projections for the coming decade, which include forecasts for such variables as interest rates, inflation, and growth in productivity. Discrepancies between those forecasts and actual economic outcomes can cause significant differences between baseline budget projections and budgetary outcomes. Such differences might also be caused by unanticipated developments, such as new trends in spending on health care or a crisis in the financial sector. CBO 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, and recognizes that actual outcomes will typically differ to some degree from any such projections.

Historical experience gives some indication of the magnitude of the uncertainty of budget projections. On the basis of an analysis of its past projections, CBO estimates that there is approximately a two-thirds chance that in 2020 the deficit under current law would be between

3.5 percent and 5.6 percent of GDP. The range in 2024 would be larger: CBO estimates that, under current law, there is approximately a two-thirds chance that the deficit would be between 2.9 percent and 6.7 percent of GDP in that year (see Figure 1-8).

Errors in the projections of debt tend to compound over time, so the uncertainty surrounding those projections is greater. For example, in CBO's baseline, federal debt held by the public is projected to equal 88 percent of GDP in 2024. After analyzing its past projections, CBO estimates that there is approximately a two-thirds chance that, under current law, federal debt would be between 79 percent and 97 percent of GDP in that year.

**The Long-Term Outlook for the Budget**

Beyond the coming decade, the fiscal outlook is more challenging. 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 outlays significantly relative to GDP after 2029 if current laws generally remained in effect. Outlays would be further boosted by sizably higher interest costs, driven by projected increases in federal

borrowing. Although federal revenues would continue to rise relative to GDP under current law, they would not keep pace with outlays. As a result, CBO estimates, public debt would reach a higher percentage of GDP by 2049 (taking into account the effects of the rising debt on the economy) than has been previously recorded in the United States.<sup>20</sup> Moreover, debt is on track to grow even larger after 2049. If federal debt as a percentage of GDP continues to rise at the pace that CBO projects it would under current law, the economy would be affected in two significant ways:

- That debt path would dampen economic output over time, and
- Rising interest costs associated with that debt would increase interest payments to foreign debt holders and thus reduce the income of U.S. households by increasing amounts.

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20. For more information, see Congressional Budget Office, *The 2019 Long-Term Budget Outlook* (June 2019), [www.cbo.gov/publication/55331](http://www.cbo.gov/publication/55331). CBO will next update its long-term projections in 2020.

That debt path would also pose significant risks to the fiscal and economic outlook, although those risks are not currently apparent in financial markets. In particular, the significant increase in federal borrowing would elevate the risk of a fiscal crisis and would limit lawmakers' ability to adopt deficit-financed fiscal policies to respond to unforeseen events or for other purposes. Negative economic and financial effects that were less abrupt but still significant—such as higher inflation expectations or an increased burden of financing public and private activity in international markets—would also have a greater chance of occurring. Those effects would worsen the consequences associated with high and rising federal debt.

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 below projected amounts, or adopting some combination of those approaches.