



An Update to the Budget Outlook: 2020 to 2030

Overview

Since the Congressional Budget Office last issued its baseline projections, in March, the outlook for the 2020 budget deficit has deteriorated significantly.¹ The economic disruption caused by the 2020 coronavirus pandemic and the enactment of legislation in response have led CBO to increase its projection of the deficit for this year by \$2.2 trillion. As a result, CBO now anticipates that, if current policies remain the same and no further legislation affecting revenues or spending is enacted, the deficit in 2020 will total \$3.3 trillion rather than the \$1.1 trillion it projected in March. Measured relative to the size of the economy, the deficit would total 16.0 percent of gross domestic product (GDP), the largest deficit since 1945.²

According to CBO's projections, under current law, the deficit would shrink after 2020, and by 2023, it would be roughly the same nominal amount that CBO projected in March of this year—before the pandemic. Nevertheless, deficits throughout the next decade would be larger as a percentage of GDP than their average over the past 50 years (see Figure 1).

Those large deficits would lead to a sharp increase in debt held by the public, which would reach 98 percent of GDP by the end of 2020, exceed 100 percent in 2021, and then reach 109 percent by the end of 2030 (compared with 79 percent at the end of 2019 and 35 percent

at the end of 2007, before the start of the previous recession). Starting in 2023, federal debt as a percentage of GDP would surpass the previous peak, which occurred in 1946, following the large deficits incurred during World War II.

Deficits and Debt

CBO constructs its baseline 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 governing revenues and spending will generally stay the same and that discretionary appropriations in future years will match current funding, with adjustments for inflation. In consultation with the House and Senate Committees on the Budget, however, CBO deviated from those standard procedures when constructing its current baseline for discretionary spending. Because of the unusual size and nature of the emergency funding provided in legislation enacted in response to the coronavirus pandemic, the agency did not extrapolate \$471 billion in discretionary budget authority that was provided for those purposes since March 6, 2020.³

CBO's baseline is meant to provide a benchmark that policymakers can use to assess the potential effects of future policy; it is not intended to provide a forecast of future budgetary outcomes. 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.

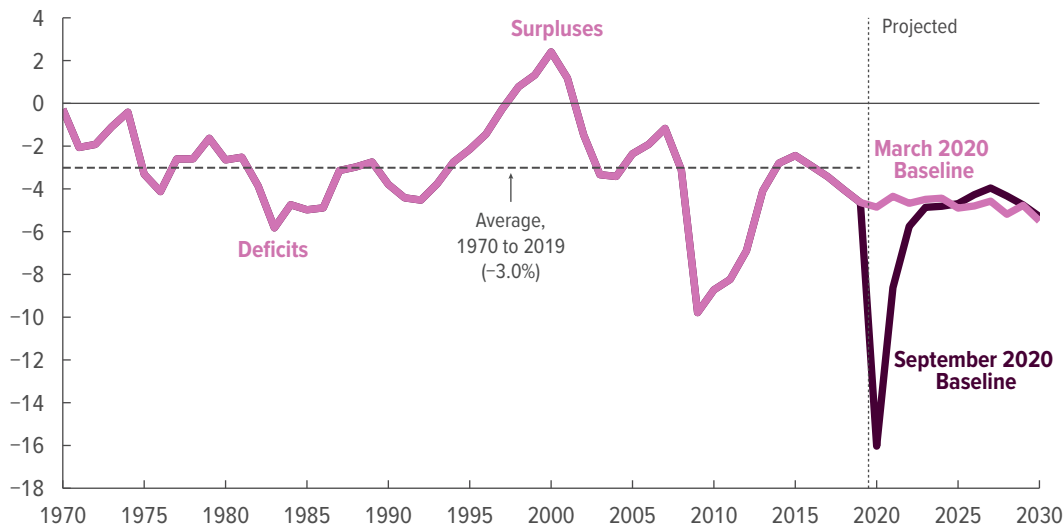
1. See Congressional Budget Office, *Baseline Budget Projections as of March 6, 2020* (March 2020), www.cbo.gov/publication/56268. On April 24, 2020, CBO released a preliminary assessment of deficits in 2020 and 2021 that anticipated a budget shortfall of \$3.7 trillion in 2020. That analysis was based on a rough assessment of the overall changes in federal spending and revenues that had occurred since March but—unlike this report—was not a comprehensive update of the agency's baseline projections.
2. The baseline projections described in this report incorporate the effects of legislation enacted through August 4, 2020. The projections do not reflect the budgetary effects of tariffs the United States reimposed on imports of aluminum from Canada beginning on August 6, 2020, nor do they account for the four administrative actions announced by the President on August 8, 2020.

3. Discretionary funding in CBO's March 2020 baseline projections followed the typical treatment: Funding for activities designated as emergency requirements was projected to continue in the future, with increases for inflation in each year after 2020.

Figure 1.

Deficits in CBO's September 2020 Baseline Versus Its March 2020 Baseline

Percentage of Gross Domestic Product



The deficit in 2020 will be the largest since 1945 as a percentage of GDP. Under current law, it is projected to shrink over the following few years, eventually returning to levels similar to those CBO projected before the coronavirus pandemic. Nevertheless, annual deficits would exceed their 50-year average throughout the 2021–2030 period.

Source: Congressional Budget Office.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would ordinarily have 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.

GDP = gross domestic product.

Deficits

The pandemic and legislation enacted in response to it have caused the deficit to surge in the past few months. It was \$741 billion through the end of March; CBO now anticipates that the deficit in the second half of the fiscal year will be roughly three and a half times that amount. The projected deficit in 2020—\$3.3 trillion—is more than triple the shortfall recorded last year. Outlays, which are projected to increase from 21.0 percent of GDP in 2019 to 32.0 percent in 2020, primarily as a result of legislation enacted since March, account for nearly all of that increase (see the appendix).

In CBO's baseline, the deficit in 2021 is projected to be 8.6 percent of GDP. Between 1946 and 2019, the deficit as a share of GDP has been larger than that only twice. Deficits continue to decline over the next two years, to 4.9 percent in 2023, as spending provided in response to the pandemic wanes and the economy continues to improve. Relative to the size of the economy, deficits generally continue to decline through 2027, although more gradually, before increasing again over the last few

years of the projection period, reaching 5.3 percent of GDP in 2030 (see Table 1).⁴

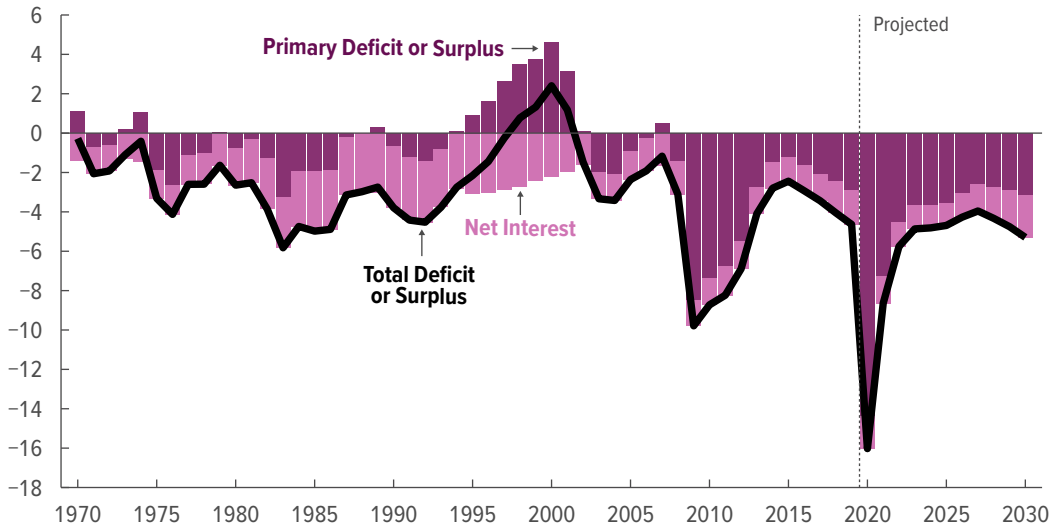
The cumulative deficit between 2021 and 2030 is projected to total \$13.0 trillion (5.0 percent of GDP over that period), about the same as CBO projected in March. Lower projected wages, salaries, and corporate profits, as well as recent legislation and other changes, increase deficits, but that change is more than offset by lower projected interest rates and inflation, which decrease deficits. The average deficit projected over that 10-year period is 2.0 percentage points more than the 3.0 percent of GDP that annual deficits have averaged over the past 50 years. Until recently, deficits tended to be small by historical standards when the economy was relatively strong over a period of several years. For example, between 1969 and

4. Because October 1 will fall on a weekend in 2022, 2023, and 2028, certain payments that are due on those days will be made at the end of September instead, thus shifting them into the previous fiscal year. In CBO's projections, those shifts noticeably boost projected outlays and deficits in fiscal years 2022 and 2028 but reduce them in fiscal years 2024 and 2029. If not for those shifts, the deficit would decline in each year between 2021 and 2027 and would increase in each year between 2028 and 2030.

Figure 2.

Total Deficit, Primary Deficit, and Net Interest

Percentage of Gross Domestic Product



In CBO’s projections, primary deficits increase in 2020 and then decrease over the next several years before increasing again at the end of the projection period. Total deficits increase more rapidly in those final years, however, because of rising interest costs.

Source: Congressional Budget Office.

Primary deficits or surpluses exclude net outlays for interest.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would ordinarily have 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.

2018, the average deficit totaled 1.5 percent of GDP in years when the unemployment rate was below 6 percent. In CBO’s projections, although the unemployment rate falls below 6 percent in the years after 2024, projected deficits average 4.6 percent of GDP in those years.

Primary deficits—that is, deficits excluding net outlays for interest—are projected to reach 14.4 percent of GDP in 2020 and to shrink considerably over the next few years (see Figure 2). Primary deficits would average 3.6 percent of GDP from 2021 through 2030. Net interest outlays would fall from 1.6 percent of GDP this year to a low of 1.1 percent in 2024 and 2025 and then increase over the remainder of the projection period, reaching 2.2 percent of GDP in 2030.

Debt Held by the Public

The deficits projected in CBO’s baseline would boost federal debt held by the public, which consists mostly of securities that the Treasury issues to raise cash to fund the federal government’s activities and pay off its 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. However, several

other factors—collectively labeled “other means of financing” and not directly included in budget totals—also affect the government’s need to borrow from the public. Those factors include changes in the government’s cash balances, as well as cash flows associated with federal credit programs such as student loans and loans to small businesses (because only the subsidy costs of those programs are reflected in the budget deficit).⁵

Specifically, CBO estimates that the Treasury will increase its cash balances by \$600 billion this year, which does not affect the deficit but results in an increase in debt of the same amount.⁶ But the deficit includes some costs for which the cash has not yet been disbursed,

5. For more details on other means of financing in particular and federal debt in general, see Congressional Budget Office, *Federal Debt: A Primer* (March 2020), www.cbo.gov/publication/56165.

6. CBO estimates that the Treasury will maintain a large cash balance, of nearly \$1 trillion, at the end of 2020 to provide it with more flexibility to manage cash flows during the financial uncertainty created by the coronavirus pandemic. See Department of the Treasury, “Report to the Secretary of the Treasury From the Treasury Borrowing Advisory Committee of the Securities Industry and Financial Markets Association” (press release, May 5, 2020), <https://go.usa.gov/xfDQd>.

Table 1.

CBO's Baseline Budget Projections, by Category

	Actual, 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
													2021– 2025	2021– 2030
In Billions of Dollars														
Revenues														
Individual income taxes	1,718	1,533	1,571	1,821	1,913	1,982	2,089	2,334	2,569	2,677	2,792	2,906	9,376	22,654
Payroll taxes	1,243	1,313	1,246	1,335	1,412	1,463	1,507	1,567	1,627	1,689	1,750	1,810	6,963	15,407
Corporate income taxes	230	151	123	234	289	319	347	352	356	368	378	387	1,312	3,152
Other	271	298	316	349	366	382	390	402	400	389	376	354	1,804	3,725
Total	3,463	3,296	3,256	3,739	3,980	4,146	4,334	4,656	4,952	5,123	5,296	5,457	19,455	44,938
On-budget	2,548	2,330	2,358	2,809	2,983	3,105	3,249	3,523	3,770	3,892	4,017	4,132	14,504	33,837
Off-budget ^a	914	965	898	930	997	1,040	1,085	1,133	1,182	1,231	1,278	1,325	4,951	11,101
Outlays														
Mandatory	2,734	4,617	3,184	3,274	3,313	3,411	3,641	3,842	4,014	4,314	4,334	4,652	16,822	37,978
Discretionary	1,338	1,651	1,593	1,528	1,520	1,542	1,580	1,613	1,651	1,693	1,722	1,768	7,762	16,210
Net interest	375	338	290	273	271	274	287	316	367	448	546	664	1,395	3,737
Total	4,447	6,606	5,066	5,075	5,104	5,226	5,507	5,772	6,033	6,456	6,602	7,084	25,979	57,925
On-budget	3,540	5,646	4,045	3,991	3,948	3,992	4,194	4,384	4,567	4,909	4,970	5,363	20,170	44,363
Off-budget ^a	907	960	1,022	1,084	1,156	1,234	1,313	1,388	1,465	1,547	1,632	1,721	5,809	13,562
Deficit (-) or Surplus	-984	-3,311	-1,810	-1,336	-1,124	-1,081	-1,174	-1,116	-1,080	-1,333	-1,306	-1,627	-6,524	-12,987
On-budget	-992	-3,315	-1,687	-1,182	-965	-887	-946	-861	-797	-1,017	-953	-1,231	-5,666	-10,526
Off-budget ^a	8	5	-123	-154	-159	-194	-228	-255	-283	-316	-354	-395	-858	-2,461
Debt Held by the Public	16,801	20,270	21,931	23,320	24,520	25,657	26,818	27,888	28,993	30,396	31,773	33,457	n.a.	n.a.
Memorandum:														
Gross Domestic Product	21,220	20,649	20,997	22,077	22,975	23,956	25,010	26,130	27,287	28,462	29,591	30,732	115,016	257,218

Continued

which reduces the amount of debt the Treasury will add in 2020 by \$441 billion. That adjustment is primarily the result of new loan guarantee programs—the Paycheck Protection Program and the Small Business Administration’s (SBA’s) Debt Relief Program—that add more than \$500 billion to this year’s deficit but whose cash payments are expected to occur mostly in future years.⁷ Including all other means of financing that reconcile the estimated deficit with the Treasury’s borrowing needs, CBO projects that the increase in debt held by the public in 2020 will exceed the deficit by \$159 billion.

In CBO’s baseline, after accounting for all of the government’s borrowing needs, debt held by the public rises from \$16.8 trillion at the end of 2019 to \$33.5 trillion at the end of 2030 (see Table 2). As a percentage of GDP, debt at the end of 2030 would stand at 109 percent, about 30 percentage points above where it stood at the end of 2019 and more than two and a half times the average over the past 50 years (see Figure 3 on page 9).

Another measure of debt excludes the value of the government’s financial assets. Debt net of financial assets reflects the government’s overall financial condition by accounting for government spending that results in the acquisition of financial assets, such as student loans. An additional measure, which also excludes Treasury securities held by the Federal Reserve, better reflects the

7. In accordance with the Federal Credit Reform Act, the costs of such credit programs are recorded in the budget on an accrual basis, incorporating projected future cash flows in an up-front estimate of the net subsidy costs.

Table 1.

Continued

CBO’s Baseline Budget Projections, by Category

	Actual, 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
													2021– 2025	2021– 2030
As a Percentage of Gross Domestic Product														
Revenues														
Individual income taxes	8.1	7.4	7.5	8.2	8.3	8.3	8.4	8.9	9.4	9.4	9.4	9.5	8.2	8.8
Payroll taxes	5.9	6.4	5.9	6.0	6.1	6.1	6.0	6.0	6.0	5.9	5.9	5.9	6.1	6.0
Corporate income taxes	1.1	0.7	0.6	1.1	1.3	1.3	1.4	1.3	1.3	1.3	1.3	1.3	1.1	1.2
Other	1.3	1.4	1.5	1.6	1.6	1.6	1.6	1.5	1.5	1.4	1.3	1.2	1.6	1.4
Total	16.3	16.0	15.5	16.9	17.3	17.3	17.3	17.8	18.1	18.0	17.9	17.8	16.9	17.5
On-budget	12.0	11.3	11.2	12.7	13.0	13.0	13.0	13.5	13.8	13.7	13.6	13.4	12.6	13.2
Off-budget ^a	4.3	4.7	4.3	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Outlays														
Mandatory	12.9	22.4	15.2	14.8	14.4	14.2	14.6	14.7	14.7	15.2	14.6	15.1	14.6	14.8
Discretionary	6.3	8.0	7.6	6.9	6.6	6.4	6.3	6.2	6.1	5.9	5.8	5.8	6.7	6.3
Net interest	1.8	1.6	1.4	1.2	1.2	1.1	1.1	1.2	1.3	1.6	1.8	2.2	1.2	1.5
Total	21.0	32.0	24.1	23.0	22.2	21.8	22.0	22.1	22.1	22.7	22.3	23.0	22.6	22.5
On-budget	16.7	27.3	19.3	18.1	17.2	16.7	16.8	16.8	16.7	17.2	16.8	17.5	17.5	17.2
Off-budget ^a	4.3	4.7	4.9	4.9	5.0	5.2	5.3	5.3	5.4	5.4	5.5	5.6	5.1	5.3
Deficit (-) or Surplus														
Total	-4.6	-16.0	-8.6	-6.1	-4.9	-4.5	-4.7	-4.3	-4.0	-4.7	-4.4	-5.3	-5.7	-5.0
On-budget	-4.7	-16.1	-8.0	-5.4	-4.2	-3.7	-3.8	-3.3	-2.9	-3.6	-3.2	-4.0	-4.9	-4.1
Off-budget ^a	*	*	-0.6	-0.7	-0.7	-0.8	-0.9	-1.0	-1.0	-1.1	-1.2	-1.3	-0.7	-1.0
Debt Held by the Public	79.2	98.2	104.4	105.6	106.7	107.1	107.2	106.7	106.3	106.8	107.4	108.9	n.a.	n.a.

Source: Congressional Budget Office.

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

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

government’s overall effect on credit markets. In CBO’s baseline projections, debt net of financial assets and holdings of the Federal Reserve increases from \$12.9 trillion (or 61 percent of GDP) at the end of 2019 to \$24.6 trillion (or 80 percent of GDP) at the end of 2030.

The Budget Outlook for 2020

Compared with last year’s outlays and revenues, outlays have risen sharply in 2020, and revenues have fallen. As a result, CBO estimates that the deficit for this year will total 16.0 percent of GDP. Before this year, by comparison, the largest deficit recorded since the end of World War II occurred in 2009, when the deficit totaled 9.8 percent of GDP.

This year’s deficit is projected to be 11 percentage points larger than last year’s shortfall. Most of the increase

stems from the budgetary effects of legislation enacted in response to the ongoing coronavirus pandemic:

- The Coronavirus Preparedness and Response Supplemental Appropriations Act (P.L. 116-123, enacted on March 6, 2020),
- The Families First Coronavirus Response Act (FFCRA, P.L. 116-127, enacted on March 18, 2020),
- The Coronavirus Aid, Relief, and Economic Security Act (CARES Act, P.L. 116-136, enacted on March 27, 2020), and
- The Paycheck Protection Program and Health Care Enhancement Act (P.L. 116-139, enacted on April 24, 2020).

Table 2.

CBO's Baseline Projections of Federal Debt

Billions of Dollars

	Actual, 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Debt Held by the Public at the Beginning of the Year	15,750	16,801	20,270	21,931	23,320	24,520	25,657	26,818	27,888	28,993	30,396	31,773
Changes in Debt Held by the Public												
Deficit	984	3,311	1,810	1,336	1,124	1,081	1,174	1,116	1,080	1,333	1,306	1,627
Other means of financing ^a	67	159	-150	53	76	56	-13	-46	25	69	71	57
Total	1,051	3,470	1,661	1,389	1,200	1,137	1,161	1,070	1,105	1,402	1,378	1,683
Debt Held by the Public at the End of the Year												
In Billions of Dollars	16,801	20,270	21,931	23,320	24,520	25,657	26,818	27,888	28,993	30,396	31,773	33,457
As a Percentage of GDP	79.2	98.2	104.4	105.6	106.7	107.1	107.2	106.7	106.3	106.8	107.4	108.9
Memorandum:												
Debt Held by the Public Minus Financial Assets ^b												
In billions of dollars	14,959	18,269	20,079	21,415	22,539	23,619	24,793	25,909	26,990	28,323	29,629	31,256
As a percentage of GDP	70.5	88.5	95.6	97.0	98.1	98.6	99.1	99.2	98.9	99.5	100.1	101.7
Debt Net of Financial Assets and Treasury Securities Held by the Federal Reserve												
In billions of dollars	12,864	13,421	14,267	14,906	15,782	16,613	17,605	18,705	19,777	21,102	22,627	24,644
As a percentage of GDP	60.6	65.0	67.9	67.5	68.7	69.3	70.4	71.6	72.5	74.1	76.5	80.2
Gross Federal Debt ^c	22,669	26,105	27,774	29,130	30,258	31,358	32,448	33,447	34,350	35,482	36,632	37,982
Debt Subject to Limit ^d	22,687	26,123	27,793	29,148	30,278	31,378	32,470	33,470	34,373	35,505	36,657	38,007
Average Interest Rate on Debt Held by the Public (Percent)	2.5	2.0	1.5	1.4	1.3	1.2	1.2	1.3	1.4	1.6	1.9	2.1

Source: Congressional Budget Office.

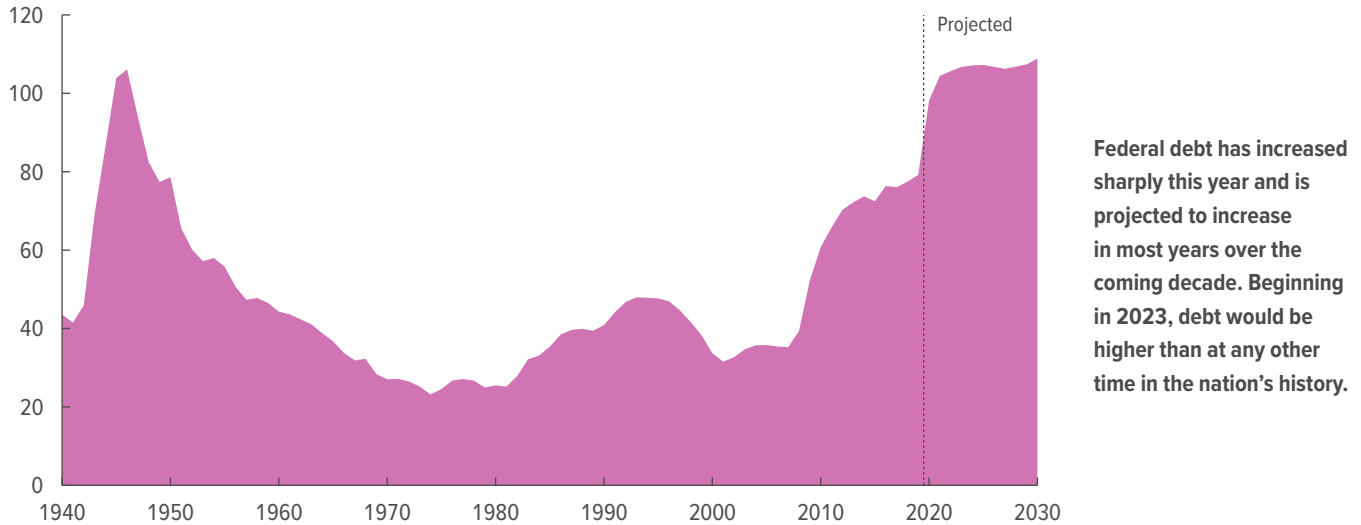
GDP = gross domestic product.

- Factors not included in budget totals that affect the government's need to borrow from the public. Those factors include changes in the government's cash balances, as well as 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).
- 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. That measure of debt excludes debt issued by the Federal Financing Bank and reflects certain other adjustments that are excluded from gross federal 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 details, see Congressional Budget Office, *Federal Debt and the Statutory Limit, February 2019* (February 2019), www.cbo.gov/publication/54987.

Figure 3.

Federal Debt Held by the Public

Percentage of Gross Domestic Product



Federal debt has increased sharply this year and is projected to increase in most years over the coming decade. Beginning in 2023, debt would be higher than at any other time in the nation’s history.

Source: Congressional Budget Office.

Outlays

In CBO’s projections, federal outlays in 2020 total \$6.6 trillion—\$2.2 trillion (or about 50 percent) more than the amount recorded in 2019. Most of that growth is attributable to mandatory outlays. Relative to the size of the economy, outlays are projected to equal 32.0 percent of GDP, the highest percentage since 1945 and about 12 percentage points above their 50-year average of 20.4 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.⁸ 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.⁹ Therefore, CBO’s baseline projections of mandatory spending reflect the estimated effects of economic influences, growth in the number of beneficiaries of certain mandatory programs, and other factors related to the costs of those programs. The projections also incorporate a set of across-the-board reductions in budgetary

8. 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 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.

9. Section 257 of the Deficit Control Act also requires CBO to project spending for certain mandatory programs beyond their scheduled expiration and to project spending for entitlement programs, including Social Security and Medicare, under the assumption that they 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 have sufficient resources 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.

resources (known as sequestration) that are required under current law for some mandatory programs.

In 2020, CBO estimates, total mandatory outlays (net of offsetting receipts) will amount to \$4.6 trillion, nearly 70 percent (or \$1.9 trillion) more than they were in 2019 (see Table 3). As a share of GDP, those outlays are projected to equal 22.4 percent, the largest percentage recorded since at least 1962 (the earliest year for which such data have been reported). A number of programs account for that increase.

Small Business Administration Loans and Guarantees.

Mandatory outlays for the SBA will total \$577 billion this year, CBO estimates, compared with -\$1 billion in 2019. The Paycheck Protection Program accounts for \$541 billion of that increase. Under that program, the SBA guarantees loans—which may be forgiven if certain employment retention and compensation preservation criteria are met—to small businesses and other entities primarily to maintain existing payrolls over a 24-week period following disbursement.¹⁰ (CBO anticipates that most of those loans will ultimately be forgiven.) Recently enacted legislation also provided additional funding for the SBA to make advances to small businesses that suffered economic injury as a result of the coronavirus pandemic and gave the SBA authority to temporarily modify certain loans. Those provisions increase estimated outlays in 2020 by \$20 billion and \$17 billion, respectively.

Unemployment Compensation. Outlays for unemployment compensation are expected to soar in 2020, from \$28 billion in 2019 to \$557 billion, reflecting a legislative expansion of benefits and a sharp increase in the number of claims. Roughly 70 percent of that increase stems from recently enacted legislation that enhanced the weekly benefit amount, increased the number of weeks a person can claim benefits, and expanded eligibility to people who might not otherwise qualify for benefits. In addition, the widespread economic disruption caused by the pandemic resulted in an unprecedented surge in claims for unemployment compensation. The unemployment rate, which averaged 3.7 percent during fiscal year 2019, spiked to 14.7 percent in April, the highest level since the Great Depression. In March, CBO estimated

that about 5 million initial claims for regular unemployment insurance would be made in fiscal year 2020; CBO now expects roughly 33 million such claims for regular unemployment insurance and an additional 12 million initial claims for pandemic unemployment assistance.

Recovery Rebates for Individuals. The CARES Act provided a refundable tax credit of \$1,200 per person (or \$2,400 for joint filers), plus \$500 for each dependent child under the age of 17. The credit phases out for taxpayers whose adjusted gross income exceeds certain thresholds. Those tax credits are estimated to increase mandatory outlays by \$272 billion in 2020.¹¹

Coronavirus Relief Fund. The sharp economic contraction brought on by the coronavirus pandemic has caused the fiscal outlook for state, local, tribal, and territorial governments to deteriorate significantly. In response, the CARES Act provided direct assistance for those entities, which will increase outlays by \$150 billion in 2020, CBO estimates.

Medicare. Outlays for Medicare (net of offsetting receipts) will rise by 12 percent in 2020, from \$644 billion in 2019 to \$721 billion, CBO projects. That increase results in part from payments made to providers in 2020 in advance of expected health care claims. CBO expects that those payments will be recouped from providers in 2020 and 2021. On net, those payments will increase mandatory outlays by \$64 billion in 2020.

Medicaid. The coronavirus pandemic and legislation enacted in response to it have also caused spending for Medicaid to rise rapidly in 2020. Outlays for the program will total \$466 billion this year, CBO estimates, an increase of \$57 billion (or 14 percent) relative to spending in 2019. The deterioration in the economy has caused enrollment in the program to rise. In addition, legislation has raised the portion of costs the federal government must cover and required that states maintain coverage for all Medicaid enrollees during the public health emergency regardless of any changes in their income or circumstances that would otherwise have caused them to become ineligible for the program.

Higher Education. CBO estimates that outlays for higher education will rise from \$33 billion in 2019 to

10. Borrowers who received Paycheck Protection Program loans before June 5, 2020, have the option to choose an 8-week forgiveness period rather than a 24-week forgiveness period. All such loans borrowed on or after June 5, 2020, include only the 24-week forgiveness period.

11. The Treasury has classified all of the rebates paid this year as outlays rather than as reductions in revenues.

\$94 billion in 2020. Nearly all of that increase will occur because the Administration recorded a large upward revision to the subsidy costs of student loans made in previous years. That revision was made primarily because of newly available data that showed lower income for borrowers with income-driven repayment plans.¹²

Other Mandatory Spending. All other mandatory spending is estimated to rise by \$159 billion (or 10 percent) in 2020. The following programs have the largest projected increases:

- Outlays for Social Security are estimated to increase by \$52 billion (or 5 percent) in 2020, primarily as a result of growth in the number of beneficiaries and the average benefit payment.
- Outlays for the Supplemental Nutrition Assistance Program are projected to rise by \$28 billion (or 45 percent) in 2020. Most of that increase stems from recently enacted legislation that allowed states to provide households with the maximum allowable benefit for their household size and to provide benefits to replace meals that children would otherwise have received at school. The deterioration in economic conditions has boosted enrollment in the program, which has also contributed to the increase in outlays.
- The CARES Act provided \$32 billion in payroll support to air carriers and related contractors to maintain payrolls and avoid job losses in the airline industry. By CBO's estimate, that funding will boost outlays in 2020 by \$28 billion.

Discretionary Spending. Discretionary spending encompasses an array of federal activities that are funded through or controlled by appropriations. That category includes most defense spending, as well as spending for many nondefense activities, such as elementary and secondary education, housing assistance, international affairs, and the administration of justice, along with outlays for highway programs.¹³ In any year, some discretionary outlays arise from budget authority provided in

12. CBO does not estimate those revisions to subsidy costs; rather, those totals reflect the amounts that the Office of Management and Budget recorded in fiscal year 2020.

13. The budget authority for highway programs is provided in authorizing legislation and is considered mandatory.

the same year, and some arise from appropriations made in previous years.¹⁴

CBO's projections of discretionary funding incorporate limits, or caps, that were previously set on discretionary appropriations for 2020 and 2021.¹⁵ Some elements of discretionary funding are not constrained by the caps; for most of those exceptions, the caps are adjusted to accommodate the funding provided. In particular, adjustments to the caps are made for all appropriations designated, in accordance with section 251 of the Deficit Control Act, for emergency requirements and overseas contingency operations (OCO). Subject to certain limits, additional adjustments are made for funding designated for disaster relief activities, some efforts to reduce overpayments in benefit programs, wildfire suppression, and (for this year only) activities related to the 2020 census.

Two types of funding do not count toward the caps and do not result in an adjustment to the caps: a portion of funding—up to amounts specified in law—for certain activities authorized by the 21st Century Cures Act (P.L. 114-255) and a small portion of funding provided for 2020 in division A of the CARES Act.¹⁶

By CBO's estimate, discretionary budget authority for 2020 totals \$1.9 trillion, \$520 billion (or 38 percent) more than the amount provided in 2019. That total for 2020 includes \$593 billion for emergency

14. Budget authority is the funding provided by federal 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.

15. Most discretionary funding is limited by caps on discretionary appropriations that were originally specified in the Budget Control Act of 2011 (P.L. 112-25) and modified by subsequent legislation. For more information on the adjustments to the discretionary funding caps, see Congressional Budget Office, *Sequestration Update Report: August 2020* (August 2020), www.cbo.gov/publication/56498. 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.

16. In its cost estimate for the CARES Act, CBO classified all funding provided in division A as mandatory. After consulting with the Office of Management and Budget, CBO classified nearly \$2 billion of that funding as discretionary in the September baseline.

Table 3.

Mandatory Outlays Projected in CBO's Baseline

Billions of Dollars

	Actual, 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
													2021– 2025	2021– 2030
Social Security														
Old-Age and Survivors Insurance	893	946	993	1,046	1,104	1,169	1,238	1,309	1,381	1,463	1,545	1,629	5,549	12,876
Disability Insurance	145	145	149	156	164	172	179	187	194	196	201	206	820	1,805
Subtotal	1,038	1,091	1,142	1,201	1,268	1,341	1,417	1,496	1,575	1,660	1,746	1,835	6,370	14,681
Major Health Care Programs														
Medicare ^{a,b}	775	862	810	973	1,013	1,036	1,158	1,240	1,328	1,491	1,450	1,611	4,990	12,110
Medicaid	409	466	537	516	495	517	545	575	605	637	671	707	2,611	5,806
Premium tax credits and related spending ^c	56	54	56	55	55	56	57	58	60	64	68	73	278	601
Children's Health Insurance Program	18	17	16	15	15	16	16	17	17	18	19	19	78	168
Subtotal ^a	1,258	1,399	1,419	1,559	1,578	1,625	1,776	1,890	2,011	2,209	2,207	2,411	7,957	18,685
Income Security Programs														
Earned income, child, and other tax credits ^d	99	369	102	100	98	99	99	98	84	84	83	84	497	931
Supplemental Nutrition Assistance Program	63	92	114	94	85	85	85	85	85	83	81	79	463	875
Supplemental Security Income ^b	56	57	58	65	63	60	68	70	72	80	69	77	315	683
Unemployment compensation	28	557	166	67	57	53	49	46	44	42	42	43	392	610
Family support and foster care ^e	32	33	33	33	33	34	34	34	34	35	35	35	168	341
Child nutrition	24	24	25	26	27	28	29	30	31	33	34	35	135	299
Subtotal	303	1,132	499	386	363	358	364	364	351	356	345	353	1,970	3,739
Federal Civilian and Military Retirement														
Civilian ^f	106	109	112	114	117	121	124	127	131	135	138	142	588	1,261
Military ^b	61	62	64	71	67	63	70	72	74	82	72	80	335	715
Other	3	2	4	4	5	5	2	11	7	6	6	6	21	57
Subtotal	170	173	179	189	190	189	197	210	212	223	216	227	944	2,032
Veterans' Programs^b														
Income security ^{b,g}	101	112	115	128	124	117	131	135	139	156	136	153	615	1,335
Other	14	10	16	19	18	17	18	18	19	20	18	21	87	183
Subtotal	115	122	132	147	141	133	149	153	158	176	154	174	702	1,518
Other Programs														
Small Business Administration	-1	577	*	*	0	0	0	0	0	0	0	0	*	*
Coronavirus Relief Fund	0	150	*	0	0	0	0	0	0	0	0	0	*	*
Agriculture	32	30	20	19	19	18	18	18	17	17	17	17	94	179
Deposit insurance	-8	-6	-3	-4	-3	-2	-3	-4	-4	-5	-6	-7	-16	-42
MERHCF	10	11	11	12	12	13	14	14	15	16	17	17	62	141
Fannie Mae and Freddie Mac ^h	0	0	3	5	4	5	5	5	6	6	6	7	22	52
Higher education	33	94	1	1	1	2	2	3	4	5	5	5	8	30
Other	59	115	69	71	70	70	70	71	70	70	70	68	350	698
Subtotal	126	969	100	105	104	105	106	107	107	108	108	107	519	1,058

Continued

Table 3.

Continued

Mandatory Outlays Projected in CBO’s Baseline

Billions of Dollars

	Actual, 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
													2021– 2025	2021– 2030
Mandatory Outlays, Excluding the Effects of Offsetting Receipts^{a,b}	3,010	4,886	3,472	3,587	3,643	3,752	4,008	4,221	4,414	4,732	4,776	5,107	18,463	41,713
Offsetting Receipts														
Medicare ⁱ	-132	-141	-147	-160	-176	-192	-207	-222	-239	-256	-276	-291	-882	-2,166
Federal share of federal employees’ retirement														
Civil service retirement and other	-36	-42	-46	-47	-49	-51	-53	-55	-56	-58	-60	-62	-246	-538
Military retirement	-21	-22	-25	-25	-26	-26	-26	-27	-27	-27	-28	-29	-128	-265
Social Security	-18	-18	-19	-19	-20	-20	-21	-21	-22	-22	-23	-24	-98	-210
Subtotal	-75	-81	-89	-92	-94	-97	-100	-102	-105	-108	-111	-114	-472	-1,013
Receipts related to natural resources	-14	-10	-10	-11	-11	-12	-12	-12	-12	-12	-13	-14	-56	-120
MERHCF	-8	-8	-9	-9	-10	-10	-11	-11	-12	-12	-13	-13	-48	-109
Fannie Mae and Freddie Mac ^h	-19	-4	0	0	0	0	0	0	0	0	0	0	0	0
Other	-28	-25	-33	-41	-40	-31	-39	-32	-31	-29	-29	-22	-184	-327
Subtotal	-276	-269	-288	-313	-330	-341	-368	-379	-400	-418	-442	-455	-1,641	-3,735
Total Mandatory Outlays, Net of Offsetting Receipts^b	2,734	4,617	3,184	3,274	3,313	3,411	3,641	3,842	4,014	4,314	4,334	4,652	16,822	37,978
Memorandum:														
Outlays Net of Offsetting Receipts														
Medicare ^b	644	721	663	813	837	844	951	1,018	1,089	1,234	1,174	1,320	4,109	9,944
Major health care programs ^b	1,127	1,259	1,272	1,399	1,402	1,433	1,569	1,668	1,771	1,953	1,931	2,120	7,076	16,519

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); * = between zero and \$500 million.

- a. 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.)
- b. When October 1 (the first day of the fiscal year) falls on a weekend, as it will in calendar years 2022, 2023, and 2028, certain payments that would ordinarily have been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year.
- c. Premium tax credits are federal subsidies for health insurance purchased through the marketplaces established under the Affordable Care Act. Related spending consists almost entirely of payments for risk adjustment and the Basic Health Program.
- d. Includes outlays for recovery rebates for individuals, 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 2019 and 2020. Beginning in 2021, 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.

requirements, OCO, and other activities not constrained by the caps (see Table 4).¹⁷ CBO anticipates that, if no further appropriations are provided this year, outlays from appropriations will total \$1.7 trillion in 2020—\$314 billion (or 23 percent) more than last year's amount. The significant increase in budget authority and outlays for 2020 mostly stems from \$487 billion in additional funding for activities that have been designated as emergency requirements in accordance with the Deficit Control Act. Almost all of that emergency funding was provided in legislation enacted in response to the ongoing coronavirus pandemic.

Discretionary funding for defense totals \$757 billion in 2020, CBO estimates, including \$72 billion for OCO and \$19 billion for activities designated as emergency requirements (including \$11 billion related to pandemic response). Defense outlays, which amounted to \$676 billion in 2019, will increase by \$39 billion (or 6 percent), to \$715 billion, according to CBO's estimates. Outlays are projected to increase by \$15 billion (or 12 percent) for procurement, \$11 billion (or 4 percent) for operation and maintenance, \$7 billion (or 8 percent) for research and development, and \$4 billion (or 3 percent) for military personnel.

For 2020, nondefense discretionary funding in CBO's baseline totals \$1,139 billion. That amount includes \$503 billion that is not limited by the caps on discretionary funding. Of that total, \$500 billion will result in cap adjustments, CBO estimates, including \$468 billion for activities designated as emergency requirements (nearly all of which are related to pandemic response), \$18 billion for disaster relief, \$8 billion for OCO, \$2.5 billion for activities related to the 2020 census, \$2 billion for efforts to reduce overpayments in benefit programs, and \$2 billion for wildfire suppression. The remaining

amount—nearly \$2 billion in appropriations stemming from division A of the CARES Act and \$1 billion for 21st Century Cures Act programs—is not subject to the caps and does not result in cap adjustments.

CBO expects that nondefense discretionary outlays will increase by \$275 billion (or 42 percent) in 2020, to \$936 billion. Nearly half of that increase (\$135 billion) is for the Public Health and Social Services Emergency Fund of the Department of Health and Human Services. In addition, discretionary outlays will increase by \$41 billion for community and regional development, \$26 billion for transportation, and \$14 billion for education, CBO estimates. Spending related to the pandemic response accounts for at least three-quarters of each of those increases in outlays in 2020. The remaining growth in nondefense discretionary spending is the result of smaller increases in spending for various programs.

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 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.

Although debt held by the public is set to increase by more than 20 percent relative to 2019, net outlays for interest in 2020 are projected to fall to \$338 billion (or 1.6 percent of GDP), compared with \$375 billion last year. That drop occurs primarily because interest rates have been much lower in 2020 than they were in 2019. In addition, inflation has been lower in 2020, resulting in smaller increases in the principal of inflation-protected securities. Those increases are recorded as interest outlays, so less inflation lowers net outlays for interest.

Revenues

On the basis of receipts through July 2020, CBO expects federal revenues to total \$3.3 trillion this fiscal year, \$167 billion (or about 5 percent) less than in 2019. That decline stems largely from lower collections of individual and corporate income taxes in the second half of the year. Receipts for 2020 reflect income and activity from before and after the onset of the economic disruption caused by the coronavirus pandemic and the federal government's response, including the enactment of

17. The amount that is constrained by the caps—\$1,303 billion—is \$15 billion more than the overall limit on discretionary funding for this year; that excess occurs because appropriation acts for 2020 included provisions that, on net, were estimated to reduce budget authority for mandatory programs. When appropriation acts include changes that reduce mandatory funding, the estimated savings are credited against the discretionary funding provided by those acts when assessing whether the appropriation acts comply with the caps. Once those acts become law, however, any such savings are incorporated into CBO's baseline projections for mandatory spending.

Table 4.

CBO’s Baseline Projections of Discretionary Spending

Billions of Dollars

	Actual, 2019 ^a	2020 ^a	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
													2021– 2025	2021– 2030
Budget Authority														
Defense	719	757	752	765	781	798	817	836	856	876	897	919	3,913	8,296
Nondefense	658	1,139	668	680	695	711	728	746	764	781	800	819	3,482	7,392
Total	1,376	1,896	1,419	1,445	1,476	1,510	1,545	1,582	1,620	1,657	1,696	1,738	7,396	15,688
Outlays														
Defense	676	715	733	750	759	770	792	809	828	853	862	888	3,803	8,044
Nondefense	661	936	860	778	761	772	788	804	823	841	860	880	3,959	8,166
Total	1,338	1,651	1,593	1,528	1,520	1,542	1,580	1,613	1,651	1,693	1,722	1,768	7,762	16,210
Memorandum:														
Caps on Budget Authority Specified in the Budget Control Act (As Amended), Including Automatic Reductions to the Caps														
Defense	647	667	672	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nondefense	597	622	627	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total	1,244	1,288	1,298	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Funding Not Constrained by the Caps ^b														
Defense	72	90	80	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nondefense	44	503	41	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total	116	593	121	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	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.

- a. The amount of budget authority for 2019 and 2020 in CBO’s baseline does not match the sum of the caps on funding plus adjustments to the caps. That occurs mostly because net reductions in mandatory budget authority stemming from provisions in appropriation acts for those years were credited as offsets to new discretionary budget authority in judging the acts’ compliance with the caps. In the baseline, those changes to mandatory budget authority appear in their normal mandatory accounts.
- b. Discretionary funding for certain 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 2020; if that occurred, the caps would be adjusted accordingly. (However, because of the unusual size and nature of the emergency funding provided in recently enacted legislation in response to the coronavirus pandemic, CBO, in consultation with the budget committees, did not extrapolate the new discretionary budget authority that was designated as an emergency requirement.)

For four other activities—disaster relief, wildfire suppression, activities related to the 2020 census (for this year only), 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. Two additional exceptions do not count toward the caps but do not result in an adjustment to the caps: a portion of funding—up to amounts specified in law—for certain activities authorized by the 21st Century Cures Act (Public Law 114-255) and a small portion of funding provided by division A of the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136) that was originally classified as mandatory spending.

legislation. Revenues in the first six months of the fiscal year—October 2019 through March 2020—were 6 percent higher than in the previous fiscal year. CBO projects that revenues in the second half of the fiscal year—April 2020 through September 2020—will be 13 percent lower than over the same period last year.

Individual Income Taxes. CBO estimates that collections of individual income taxes will decline by \$185 billion (or 11 percent) in 2020. That decline reflects changes in taxable income, as well as administrative and legislative changes implemented in response to the pandemic.

Taxes withheld from paychecks that are classified as individual income taxes will decrease by 10 percent, in CBO's estimation. Wages and salaries are projected to decline in 2020 by about 1 percent, on net, because increases observed during the first half of the fiscal year will be more than offset by declines in the second half. CBO expects withheld income taxes to fall more than wages fall, largely because it anticipates that the Treasury will record the effects of some economic and legislative factors that would normally be expected to reduce payroll taxes in 2020 as reductions in income taxes.

Why will the Treasury record the effects that way? When it receives payments of withheld taxes, it does not initially observe a difference between payroll taxes and withheld individual income taxes. Instead, it first allocates withheld taxes to one source or the other on the basis of estimates made in advance of actual collections. As additional information becomes available, including detailed tax return information, the Treasury makes periodic reallocations to revise past allocations. CBO anticipates that payroll taxes recorded for 2020 will not reflect the declines in wages and salaries that occurred as a result of the pandemic, the effects of which began after the Treasury made those estimates. Those declines in payments to the Treasury will instead be recorded as reductions in individual income taxes.

Recently enacted legislation is also expected to reduce withheld taxes. The CARES Act allows most employers to defer payment of their portion of certain payroll taxes. In addition, FFCRA provides refundable credits against payroll taxes to compensate employers for paid sick leave and for family and medical leave, and the CARES Act provides a refundable credit against payroll taxes for employee retention. Although those provisions affect

payroll taxes, they will not change the amounts credited to the Social Security and Railroad Retirement trust funds, and the effects are being recorded in the budget—at least for now—as reductions in individual income tax collections.

Nonwithheld payments of individual income taxes are also expected to decline by 11 percent this year. Those amounts reflect a combination of estimated and final payments for the 2019 tax year, as well as estimated payments for the 2020 tax year. Payments for 2019 tax liabilities reflect activity from before the pandemic and subsequent economic disruption. Payments of 2020 taxes probably reflect declines in economic activity, as well as the effects of recently enacted legislation. The CARES Act included several provisions that are expected to reduce estimated payments of individual income taxes this year, most notably a provision that temporarily allows taxpayers to offset more nonbusiness income with business losses. Refunds, largely for the 2019 tax year, are expected to be \$17 billion (or 7 percent) lower than last year, boosting net receipts.¹⁸

Payroll Taxes. CBO expects that reported receipts from payroll taxes—which primarily fund Social Security and Medicare's Hospital Insurance program—will increase by \$70 billion (or 6 percent) this year, despite the projected decline in wages and salaries. As described in more detail above, amounts recorded by the Treasury as payroll taxes for 2020 were largely determined before the onset of the pandemic. The effects of subsequent declines in wages and enacted legislation are being recorded as lower individual income tax receipts in 2020. CBO anticipates that the Treasury will make reallocations between payroll and individual income taxes in future years to correct for allocations made in 2020, which will reduce payroll taxes recorded in future years.

Corporate Income Taxes. Income tax payments by corporations, net of refunds, are expected to decline by \$79 billion (or 34 percent) in 2020. Collections in fiscal year 2020 include most businesses' final tax payments for the 2019 tax year and their initial payments for 2020. The decline reflects reductions in business activity and taxable income as well as legislation enacted in response to the pandemic. Most significantly, the CARES Act

18. Although individuals received nearly \$300 billion in refundable tax credits for recovery payments in 2020, the Treasury has classified that amount entirely as an outlay.

changed the way businesses can use net operating losses (NOLs) to offset taxable income. The act temporarily increases the portion of taxable income that can be offset by NOLs from 80 percent to 100 percent during the three-year period from 2018 through 2020. It also allows corporations to use recently incurred NOLs from that three-year period to reduce tax liabilities for the prior five years and to receive refunds of taxes previously paid for those years.

Other Revenues. CBO expects that other revenues will increase, on net, by \$26 billion (or 10 percent) in 2020. Remittances from the Federal Reserve to the Treasury are expected to rise by \$30 billion this year for two reasons. First, lower short-term interest rates led the central bank to pay depository institutions less interest on their reserves. Second, as part of its efforts to carry out monetary policy in response to the pandemic, the Federal Reserve has significantly increased its holdings of assets, which tends to further increase remittances from the income received on those assets.

Excise taxes are projected to decline by \$9 billion in 2020, in part because the CARES Act suspended the collection of certain aviation excise taxes for the rest of the calendar year. A general reduction in economic activity has also contributed to the decline, particularly for excise taxes levied on gasoline and other fuels. Declines in excise taxes for those reasons will be partially offset by the final payment of a tax on health insurance providers, which will be collected in 2020 but was not collected in 2019.

All other receipts are expected to increase by a combined \$6 billion, on net.

CBO's Projections of Outlays and Revenues for 2021 Through 2030

In CBO's baseline projections, deficits as a percentage of GDP generally decrease over much of the projection period, falling from 8.6 percent of GDP in 2021 to a low of 4.0 percent of GDP in 2027. They increase at the end of the period, reaching 5.3 percent of GDP in 2030. In nominal terms, federal outlays change little from 2021 through 2023 and then grow at an average annual rate of almost 5 percent over the remainder of the projection period, about the same rate of growth that CBO projected in March 2020 before the current public health emergency. Revenues fall in 2021, jump up in 2022, and then increase by just under 5 percent per year, on

average, through 2030, similar to the rate of growth that CBO projected in March. Projected revenues are bolstered by the scheduled expiration, at the end of 2025, of income tax cuts enacted in 2017.

Outlays

In CBO's baseline projections, federal outlays fall from \$6.6 trillion this year to \$5.1 trillion in 2021 and remain near that amount in 2022 and 2023. Outlays rise thereafter, reaching \$7.1 trillion in 2030.

Relative to the size of the economy, federal outlays fall from 32.0 percent of GDP in 2020 to a low of 21.8 percent in 2024, nearly 1 percentage point higher than the amount recorded in 2019 (see Figure 4). All three major categories of spending—mandatory, discretionary, and net interest—decline over that time relative to GDP, as spending related to the pandemic falls and sharply lower interest rates reduce net interest outlays. After 2024, outlays generally increase—a result of underlying trends involving the aging of the population and the rising cost of health care, as well as rising interest rates—and reach 23.0 percent of GDP in 2030 (see Figure 5).

Mandatory Spending. In CBO's baseline projections, outlays for mandatory programs (net of offsetting receipts) are projected to fall from 15.2 percent of GDP in 2021 to 14.2 percent in 2024 and then to rise in most years thereafter, reaching 15.1 percent of GDP by 2030 (compared with an average of 10.1 percent over the 1970–2019 period). That pattern mostly results from falling spending related to the pandemic over the next few years and the budgetary effects of two underlying factors that put upward pressure on mandatory outlays: the aging of the population, which causes the number of participants in Social Security and Medicare to grow faster than the overall population, and growth in federal health care costs per beneficiary that exceeds the growth in GDP per capita. As a result, CBO expects outlays for those two programs to increase relative to GDP between 2021 and 2030 (see Table 5 on page 20). The effects of those two trends on federal spending will persist beyond the projection period.

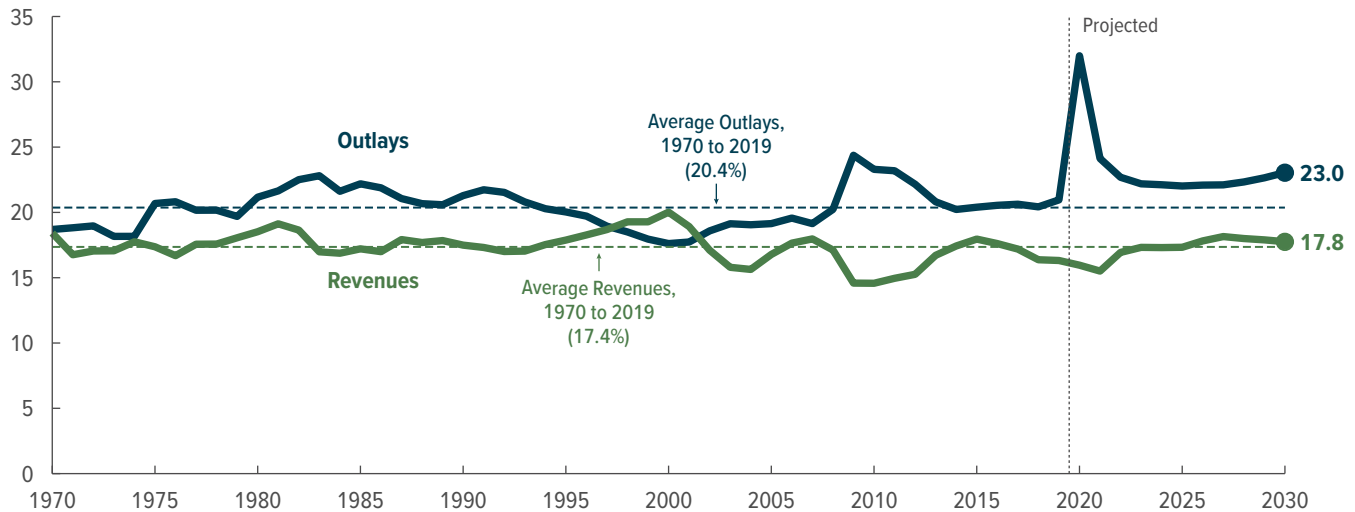
Social Security and the Major Health Care Programs.

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), net of offsetting

Figure 4.

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 ordinarily have 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.

receipts, are projected to increase from 11.5 percent of GDP in 2021 to 12.9 percent in 2030.¹⁹

Specifically, in CBO's current baseline:

- Outlays for Social Security total 5.4 percent of GDP in 2021 and then rise steadily thereafter, reaching 6.0 percent of GDP in 2030.
- Outlays for Medicare, which equal 3.2 percent of GDP in 2021, rise to 4.3 percent of GDP in 2030.
- Federal outlays for Medicaid remain 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 2030.

Other Mandatory Programs. Aside from spending on Social Security and the major health care programs, all other mandatory spending is projected to drop to 3.7 percent of GDP in 2021, a 7.3 percentage-point decline from this year's amount, as the effects of spending related to the coronavirus pandemic dissipate. (All other mandatory spending stood at 2.7 percent of GDP in 2019.) 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.

In CBO's baseline projections, other mandatory spending declines more gradually as a share of GDP after 2021, falling to 2.3 percent in 2030. The projected decline 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 less than the rate of growth in nominal GDP.²⁰

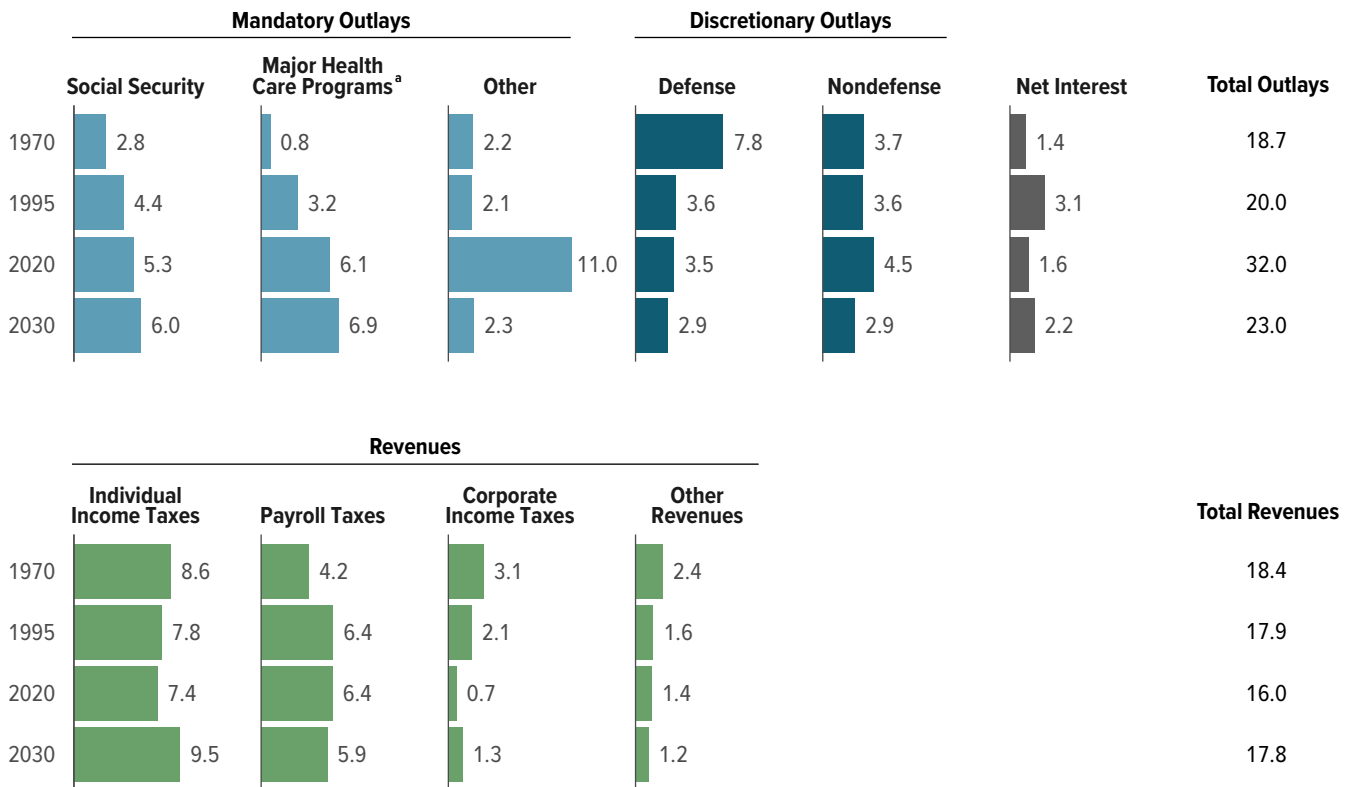
19. Offsetting receipts primarily include payments of premiums, recoveries of overpayments made to providers, and amounts paid by states from savings on Medicaid's prescription drug costs.

20. For more details about CBO's most recent economic forecast, see Congressional Budget Office, *An Update to the Economic Outlook: 2020 to 2030* (July 2020), www.cbo.gov/publication/56442.

Figure 5.

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.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would ordinarily have been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. That happened in 1994 and 1995, so values for 1995 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, the Children’s Health Insurance Program, subsidies for health insurance purchased through the marketplaces established under the Affordable Care Act, and related spending.

Discretionary Spending. In accordance with section 257 of the Deficit Control Act, CBO bases its projections of discretionary spending for individual accounts on the most recent appropriations and applies the appropriate inflation rate to project funding for future years.²¹ After account-level projections are made, the total amount of budget authority is adjusted to comply with the caps on discretionary funding in 2021, when the caps expire. All budget authority after that year is assumed to grow

with inflation for the duration of the baseline projection period. In CBO’s baseline, discretionary budget authority constrained by the caps for 2021 equals the combined defense and nondefense limits of \$1,298 billion.

For activities not constrained by the caps, CBO projects funding of \$121 billion in 2021, largely related to OCO (\$80 billion), emergency requirements (\$19 billion), and disaster relief activities (\$18 billion). For activities not constrained by the caps, funding is generally assumed to grow with inflation from the amounts provided in 2020 or to adhere to specified limits for those activities while the caps are in place.

21. The Deficit Control Act specifies which measures of inflation CBO should use: Discretionary funding related to federal personnel is adjusted by using the employment cost index for wages and salaries of workers in private industry; other discretionary funding is adjusted by using the gross domestic product price index.

Table 5.

Key Projections in CBO's Baseline

Percentage of Gross Domestic Product

	2020	2021	Projected Annual Average	
			2022–2025	2026–2030
Revenues				
Individual income taxes	7.4	7.5	8.3	9.3
Payroll taxes	6.4	5.9	6.1	5.9
Corporate income taxes	0.7	0.6	1.3	1.3
Other	1.4	1.5	1.6	1.4
Total Revenues	16.0	15.5	17.2	17.9
Outlays				
Mandatory				
Social Security	5.3	5.4	5.6	5.8
Major health care programs ^a	6.1	6.1	6.2	6.6
Other	11.0	3.7	2.8	2.4
Subtotal	22.4	15.2	14.5	14.9
Discretionary	8.0	7.6	6.6	5.9
Net interest	1.6	1.4	1.2	1.6
Total Outlays	32.0	24.1	22.2	22.5
Deficit	-16.0	-8.6	-5.0	-4.5
Debt Held by the Public at the End of the Period	98	104	107	109
Memorandum:				
Social Security				
Revenues ^b	4.9	4.5	4.5	4.6
Outlays ^c	5.3	5.4	5.6	5.8
Contribution to the federal deficit ^d	-0.4	-1.0	-1.0	-1.3
Medicare				
Revenues ^b	1.5	1.4	1.5	1.5
Outlays ^c	4.2	3.9	4.4	5.0
Offsetting receipts	-0.7	-0.7	-0.8	-0.9
Contribution to the federal deficit ^d	-2.0	-1.7	-2.2	-2.6
Gross Domestic Product at the End of the Period (Trillions of dollars)	20.6	21.0	25.0	30.7

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, the Children's Health Insurance Program, subsidies for 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 the 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 the administration of the program.

The projected funding for emergency requirements in 2021, \$19 billion, is a sharp reduction from the \$487 billion of such funding provided for 2020. Because of the unusual size and nature of the emergency funding provided in recently enacted legislation in response to the coronavirus pandemic, CBO, in consultation with the budget committees, deviated from the standard procedures for constructing its baseline and did not extrapolate the discretionary budget authority provided by the three new laws responding to the pandemic that were enacted after March 6, 2020.²²

In CBO's projections for the 2021–2030 period, total discretionary budget authority rises by about 2.3 percent a year, on average. Total discretionary outlays, however, decline from \$1.6 trillion in 2021 to \$1.5 trillion in 2023, as spending of the pandemic-related funding provided in 2020 declines over those years. After 2023, outlays begin to rise again, reaching \$1.8 trillion in 2030. Measured as a share of GDP, discretionary outlays decrease steadily, from 7.6 percent in 2021 to 5.8 percent in 2030. That 2030 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 8.3 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 \$752 billion in 2021, a drop of \$5 billion (or 0.7 percent) from amounts provided for 2020. (Defense funding in 2020 included \$11 billion for emergency pandemic response that was not extrapolated in CBO's baseline.) After 2021, defense funding is projected to grow by 2.3 percent a year, on average, reaching \$919 billion in 2030. Outlays for defense programs are projected to be \$733 billion in 2021 and then grow at a rate similar to that of budget authority, rising to \$888 billion in 2030. Despite that growth, discretionary defense outlays as a percentage of GDP are projected to

fall from 3.5 percent in 2021 to 2.9 percent in 2030—at which point they would match the lowest percentage of GDP such spending has measured since 1962.

Nondefense. Despite an increase in the cap on non-defense discretionary funding from 2020 to 2021, total budget authority for such programs is projected to drop significantly over those two years, from \$1,139 billion to \$668 billion, primarily because \$461 billion in non-defense emergency funding for pandemic response provided in 2020—stemming from legislation enacted after March 6, 2020—is not extrapolated in CBO's baseline. After 2021, funding is projected to grow by 2.3 percent a year, on average, reaching \$819 billion in 2030.

As outlays associated with the pandemic response decline, discretionary outlays for nondefense programs are projected to decrease from \$860 billion in 2021 to \$761 billion in 2023. (CBO estimates that, by 2023, about 90 percent of the \$469 billion in nondefense funding for pandemic response will have been spent—with nearly 50 percent of the total outlays occurring in 2020 alone.) After 2023, nondefense outlays begin to rise again in CBO's projections, reaching \$880 billion in 2030. Relative to the size of the economy, outlays for nondefense discretionary programs are projected to fall from 4.1 percent of GDP in 2021 to 2.9 percent of GDP in 2030—lower than in any year since 1962.

Net Interest. The main 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.²³ In CBO's projections, debt held by the public roughly doubles over the next 11 years (in nominal terms), but interest rates, which have declined in recent months, remain very low in the next few years before rising in the second half of the projection period. In 2019, the average interest rate on debt held by the public was 2.5 percent; that rate is estimated to fall to 1.2 percent by the middle of the decade.

Initially, the effects of those lower rates more than offset the effects of the projected increase in federal debt. As a result, net outlays for interest in CBO's baseline decline

22. About \$8 billion in emergency funding provided by the first law enacted in response to the coronavirus pandemic, the Coronavirus Preparedness and Response Supplemental Appropriations Act, was incorporated into CBO's previous baseline and is included in this baseline in the usual way: The associated budget authority is projected into the future and increased for inflation in each year after 2020. The other 2020 emergency funding projected in the baseline stems from appropriations contained in regular funding bills and was mostly for defense.

23. Inflation rates also affect net outlays for interest, mostly for Treasury inflation-protected securities, which differ from other securities in that their principal amounts are adjusted to account for inflation.

from 1.6 percent of GDP in 2020 to 1.1 percent in 2024 and 2025. Thereafter, the average interest rate on federal debt rises, reaching 2.1 percent in 2030. Those rising rates (along with the projected increases in federal debt) cause net outlays for interest to double as a share of GDP in the second half of the projection period, reaching 2.2 percent of GDP in 2030. That amount is 0.1 percentage point higher than the 50-year average as a share of economic output.

Revenues

Following declines in both 2020 and 2021, revenues under current law are projected to grow for the remainder of the decade. As a share of GDP, after declining from 16.3 percent in 2019 to 16.0 percent this year, total revenues are projected to reach 17.8 percent in 2030. The growth in revenues relative to GDP mainly reflects an increase in revenues from individual income taxes and, to a lesser extent, from corporate income taxes.

The largest movements over the next decade are as follows:

- Individual income tax receipts are projected to rise from 2021 to 2030 because of the expiration of temporary provisions enacted in response to the pandemic, scheduled increases in taxes after 2025 resulting from the 2017 tax act, real bracket creep, and other factors.
- Corporate income tax receipts are projected to decline further relative to GDP in 2021 and then increase relative to GDP in each year from 2021 to 2025 before gradually declining through 2030. In addition to the expiration of temporary provisions enacted in response to the pandemic, those receipts are boosted over the next decade by scheduled changes in tax rules enacted by the 2017 tax act. 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 relative to GDP after 2026, as the provision in the 2017 tax act that doubled the exemption amount expires.
- Remittances from the Federal Reserve, which began to rise in 2020, will continue to grow over the next

several years as a result of significant increases in the central bank's asset holdings, which boost its earnings, and because of lower short-term interest rates, which reduce the amounts it must pay to depository institutions on their reserves. CBO expects the Federal Reserve's asset holdings to begin to slowly shrink as a share of GDP beginning in 2023.

- Excise taxes are projected to continue to decline as a share of GDP in each year after 2020, along with the tax bases on which many excise taxes are levied.

Individual Income Taxes. If current laws generally remained unchanged, receipts from individual income taxes would rise by 2.0 percentage points as a share of economic output over the next decade—from 7.4 percent in 2020 to 9.5 percent by 2030, CBO estimates.

Expiration of Temporary Tax Provisions Enacted in Response to the Pandemic. Temporary tax provisions enacted in response to the pandemic and economic disruption are expected to significantly reduce receipts in 2020 and 2021. Altogether, the end of those temporary provisions will boost receipts, measured as a share of GDP, by 0.9 percentage points between 2020 and 2030, CBO estimates.²⁴

Provisions reducing individual income tax receipts include allowing noncorporate taxpayers to use the full amount of their business losses to offset nonbusiness taxes for tax years 2018 through 2020, the waiver of required minimum distribution rules for certain retirement accounts in calendar year 2020, and the relaxation of certain limits on the amount that taxable income may be reduced by deductions for charitable contributions in calendar year 2020. Some of the anticipated reduction in receipts stemming from those provisions in 2020 and 2021 will be recovered in future years.

Recently enacted legislation also included provisions that affect payroll taxes but, at least initially, those effects are being recorded in the budget as reductions in individual

24. The CARES Act provided a refundable tax credit, the recovery rebate for individuals, which is estimated to increase the deficit in 2020 by \$272 billion. The Treasury has classified all of the rebates paid this year as outlays rather than reductions in revenues. For further information, see Congressional Budget Office, cost estimate for H.R. 748, the CARES Act, Public Law 116-136 (April 16, 2020, revised April 27, 2020), www.cbo.gov/publication/56334.

income tax collections. The CARES Act allows most employers to defer payment of their portion of certain payroll taxes this year. In addition, the Families First Coronavirus Response Act and the CARES Act provide employers refundable credits against payroll taxes for paid sick leave, family and medical leave, and employee retention.²⁵

Scheduled Increases in Taxes After 2025. The second most significant factor pushing up taxes relative to economic output 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 0.9 percentage points from 2020 to 2030.

Real Bracket Creep and Related Factors. The third most significant factor pushing up taxes relative to economic output 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. 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 boost projected revenues measured as a percentage of GDP by 0.5 percentage points from 2020 to 2030.²⁶

Other Factors. Over the next decade, other factors would reduce projected receipts as a share of GDP by 0.2 percentage points, on net, in CBO's estimation. Several factors contribute to that decline. First, CBO projects a

decline in realizations of capital gains relative to the size of the economy. Those realizations have been larger in the past several years than their historical average share of GDP (after accounting for differences in applicable tax rates). CBO projects that such realizations will decline in 2021 and continue to gradually return to levels consistent with their historical average by 2030. Second, large payments of taxable unemployment insurance benefits in calendar year 2020 are expected to boost receipts in fiscal years 2020 and 2021, but payments are projected to decline thereafter as pandemic-related benefits expire and as the economy recovers, reducing receipts over the next decade.

Those declines are offset in part by reallocations between payroll and income taxes. As discussed above, amounts recorded by the Treasury as payroll taxes for 2020 reflect estimates made before the onset of the pandemic. The effects of the subsequent declines in wages on payroll taxes were recorded as reductions in individual income taxes in 2020. CBO anticipates that those circumstances will not reoccur in 2021 and that the Treasury will make reallocations between payroll and individual income taxes to correct for misallocations made in 2020, further boosting income tax receipts recorded in 2021 and 2022. In addition, receipts will increase as rules allowing accelerated depreciation deductions for certain business investments are scheduled to phase out between 2022 and 2027.

Corporate Income Taxes. Following sharp declines in 2020 and 2021, CBO projects that, under current law, corporate income tax receipts would rise through 2025, reaching 1.4 percent of GDP, up from 0.6 percent in 2021. After 2025, receipts would begin to decline, falling to 1.3 percent of GDP in 2030. That pattern reflects the expiration of temporary tax provisions enacted in response to the pandemic, provisions of the 2017 tax act, and other factors.

Expiration of Temporary Tax Provisions Enacted in Response to the Pandemic. The CARES Act made several changes to business taxation that CBO anticipates will reduce receipts by more in 2020 and 2021 than in future years. Most notably, the act temporarily modifies the way businesses can use net operating losses to offset taxable income. Some of the revenue reductions in 2020 and 2021 will reflect losses that would otherwise have been available to deduct in future years. Altogether, CBO expects the expiration of the temporary NOL rules and

25. For further information, see Congressional Budget Office, cost estimate for H.R. 748, the CARES Act, Public Law 116-136 (April 16, 2020, revised April 27, 2020), www.cbo.gov/publication/56334, and cost estimate for H.R. 6201, the Families First Coronavirus Response Act, Public Law 116-127 (April 2, 2020), www.cbo.gov/publication/56316.

26. 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.

other provisions included in the CARES Act to boost corporate income tax receipts as a share of GDP by 0.4 percentage points by 2030.

Provisions of the 2017 Tax Act. Some provisions of the 2017 tax act include scheduled changes over the next decade that will increase corporate taxes by reducing allowable deductions or increasing tax rates on certain types of income. Those changes contribute 0.1 percentage point to the increase in receipts as a share of GDP between 2020 and 2030.

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. Additionally, in 2022, a stricter limit on the deductibility of interest expenses will take effect, and 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, including the end of the scheduled payments for a onetime tax on certain foreign profits, will also change in 2026.²⁷

Other Factors. Over the next decade, other factors raise projected receipts as a share of GDP by 0.1 percentage point. In CBO's projections, taxable corporate profits increase slightly relative to GDP over the next decade. That anticipated increase in profits causes corporate tax receipts to rise as a share of the economy. In addition, a number of tax provisions that were extended temporarily by the Further Consolidated Appropriations Act, 2020, are scheduled to expire after 2020, which also boosts projected receipts over the next several years.

Estate and Gift Taxes. Revenues from estate and gift taxes are projected to rise from just below 0.1 percent of GDP in 2020 to just above 0.1 percent in 2027 and subsequent years, after a provision of the 2017 tax act that doubled the amount of the estate and gift tax exemption expires at the end of calendar year 2025.

Payroll Taxes. Receipts from payroll taxes, which fund social insurance programs—primarily Social Security and Medicare—typically remain stable as a share of wages because workers' earnings constitute most of the payroll tax base. However, CBO expects those receipts to decline sharply from 6.4 percent of GDP in 2020 to 5.9 percent in 2021. As discussed above, amounts recorded by the Treasury as payroll taxes for 2020 reflected estimates made before the onset of the pandemic. The effects of subsequent declines in wages are expected to first become evident in 2021. CBO also anticipates that the Treasury will make reallocations between payroll and individual income taxes to correct for allocations made in 2020, further reducing the amount of payroll taxes recorded in 2021 and 2022. CBO expects payroll taxes to rise between 2021 and 2024 as states make larger deposits of revenues from unemployment insurance taxes, before returning to more typical levels by 2030. By that year, receipts from payroll taxes would equal 5.9 percent of GDP, about the same as in 2021.

Remittances From the Federal Reserve. After rising to 0.4 percent of GDP in 2020, remittances from the Federal Reserve are projected to continue to rise along with growth in its asset holdings, totaling 0.6 percent of GDP for 2022 through 2026, before declining to 0.2 percent of GDP by 2030, the same share as in 2019, before the onset of the pandemic. That decline after 2026 occurs because of rising short-term interest rates, which increase the interest the Federal Reserve pays on reserves, and because CBO forecasts that the central bank's asset holdings will decline as a share of GDP.

Receipts From Other Sources. Receipts from all other sources are expected to remain at about the same share of GDP over the next decade. 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 imposed by the Administration beginning in 2018 that have increased customs duties by roughly 0.2 percent of GDP.²⁸ CBO's baseline incorporates the assumption that tariffs, along with any subsequent exemptions provided by the Administration, continue throughout

27. 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.

28. 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.

the projection period at the rates in effect as of June 26, 2020, when the agency completed its economic forecast.²⁹

The federal government also collects revenues in the form of miscellaneous fees and fines. CBO projects that, under current law, revenues from those sources would grow at about the same pace as GDP through 2030.

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. For example, CBO's deficit estimate for 2020 has increased by more than \$2 trillion since March, largely as a result of laws that have been enacted since those projections were published.

Even if federal laws remained the same for the next decade, actual budgetary outcomes would differ from CBO's baseline projections because of unanticipated changes in economic conditions and in other factors

29. Specifically, CBO's 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 on June 26, 2020, 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 6, 2020, the United States reimposed tariffs on imports of aluminum from Canada at a rate of 10 percent. Those imports had previously been exempted, as of May 19, 2019, from the aluminum tariffs imposed on most other countries. Those tariffs, which were imposed after this analysis was completed, are not included in CBO's current baseline projections.

that affect federal spending and revenues. Because of the ongoing coronavirus pandemic, the current projections are subject to an unusually high degree of uncertainty. That uncertainty stems from many sources, including incomplete knowledge about how the pandemic will unfold, how effective monetary and fiscal policy will be, and how global financial markets will respond to the substantial increases in government deficits and debt. CBO aims for its projections to be in the middle of the distribution of possible outcomes, given the baseline assumptions about policies governing federal taxes and spending, and recognizes that actual outcomes will typically differ from any such projections.

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.

Although the agency's current economic and budget projections are subject to an unusually high degree of uncertainty, particularly in the near term, historical experience gives some indication of the magnitude of the uncertainty of budget projections.³⁰ On the basis of an analysis of its past projections, CBO estimates that there is approximately a two-thirds chance that, under current law, the deficit in 2021 would be between 7.6 percent and 9.7 percent of GDP. (The baseline projection is 8.6 percent.) The range in 2025 would be larger: CBO estimates that, under current law, there is approximately a two-thirds chance that the deficit would be between 2.8 percent and 6.6 percent of GDP in that year. (The baseline projection is 4.7 percent.)

30. See Congressional Budget Office, *An Evaluation of CBO's Past Deficit and Debt Projections* (September 2019), www.cbo.gov/publication/55234.