

**Congressional Budget Office**

*Nonpartisan Analysis for the U.S. Congress*



# An Update to the Budget Outlook: 2023 to 2033



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# At a Glance

The Congressional Budget Office regularly publishes reports that present projections of what the federal budget would look like in the current year and over the next 10 years if existing laws governing taxes and spending generally remained unchanged. Those baseline projections are developed in accordance with procedures set in law that require the agency to project spending, revenues, deficits, and debt without regard to the statutory limit on federal borrowing known as the debt ceiling.

This report updates CBO's budget projections released in February 2023. The updates to the projections of outlays reflect numerous technical changes, including those that take into account new information released with the President's annual budget request and other information available as of March 30, 2023. Updates to projections of revenues are more limited: A comprehensive revision of revenue projections is typically based on an updated economic forecast; the projections in this report are based on the economic forecast the agency published in February.

**The Budget in 2023.** CBO's current projections show a federal budget deficit of \$1.5 trillion for 2023—which is \$0.1 trillion more than the agency estimated in February. The estimate of the 2023 deficit is subject to considerable uncertainty, which has grown more apparent since late March, when the updated projections were finalized. Since that time, CBO has learned that revenue collections through April were less than the agency expected, which could affect total revenues for fiscal year 2023 (which ends on September 30, 2023). Outlays also could differ significantly from CBO's projections, most notably depending on the outcome of a case currently before the Supreme Court regarding the cancellation of outstanding student loan debt.

**The Budget From 2024 to 2033.** In the agency's updated projections, annual deficits nearly double over the next decade, reaching \$2.7 trillion in 2033. (Deficits have been adjusted to exclude the effects of shifts that occur in the timing of certain payments when October 1, the first day of the fiscal year, falls on a weekend.) The projected cumulative deficit over the 2024–2033 period—\$20.2 trillion—is about the same as the shortfall CBO projected in February. Measured in relation to the size of the economy, deficits grow from 6.0 percent of gross domestic product (GDP) next year to 6.9 percent in 2033—well above their 50-year average of 3.6 percent of GDP.

As a result of those deficits, debt held by the public also increases in CBO's projections, from 98 percent of GDP at the end of this year to 119 percent at the end of 2033. At that time, debt measured as a share of GDP would reach the highest level ever recorded in the United States and would be on track to rise even further.

# By the Numbers

## Budget Outlook, May 2023 Update

	As a Percentage of Gross Domestic Product					In Billions of Dollars			
	Average, 1973–2022	Actual, 2022	2023	2024	2033	Actual, 2022	2023	2024	2033
<b>Revenues, Total</b>	<b>17.4</b>	<b>19.6</b>	<b>18.4</b>	<b>17.8</b>	<b>18.1</b>	<b>4,897</b>	<b>4,815</b>	<b>4,848</b>	<b>7,102</b>
Individual income taxes	8.0	10.5	9.6	9.1	9.7	2,632	2,525	2,475	3,806
Payroll taxes	6.0	5.9	6.0	6.0	5.9	1,484	1,562	1,633	2,307
Corporate income taxes	1.8	1.7	1.8	1.8	1.4	425	475	479	539
Other	1.6	1.4	1.0	1.0	1.1	357	252	261	450
<b>Outlays, Total</b>	<b>21.0</b>	<b>24.8</b>	<b>24.2</b>	<b>23.8</b>	<b>25.0</b>	<b>6,210</b>	<b>6,344</b>	<b>6,492</b>	<b>9,806</b>
Mandatory, subtotal	10.9	16.3	15.1	14.3	15.3	4,074	3,970	3,897	5,999
Social Security	4.4	4.8	5.1	5.3	6.0	1,212	1,345	1,457	2,365
Major health care programs	3.3	5.6	5.8	5.6	6.6	1,404	1,519	1,530	2,605
Medicare, net of offsetting receipts	2.0	2.8	3.1	3.2	4.0	709	819	872	1,590
Medicaid, CHIP, and marketplace subsidies	1.2	2.8	2.7	2.4	2.6	695	700	658	1,015
Other	3.2	5.8	4.2	3.3	2.6	1,458	1,107	910	1,029
Discretionary, subtotal	8.0	6.6	6.5	6.8	6.0	1,659	1,712	1,850	2,366
Defense	4.3	3.0	3.0	3.1	2.8	747	792	852	1,103
Nondefense	3.8	3.6	3.5	3.7	3.2	912	919	998	1,264
Net interest	2.0	1.9	2.5	2.7	3.7	476	663	745	1,440
<b>Deficit, Total</b>	<b>-3.6</b>	<b>-5.2</b>	<b>-5.8</b>	<b>-6.0</b>	<b>-6.9</b>	<b>-1,312</b>	<b>-1,529</b>	<b>-1,644</b>	<b>-2,703</b>
Deficit, Primary	-1.5	-3.3	-3.3	-3.3	-3.2	-836	-867	-899	-1,263
Debt Held by the Public	46.9	96.9	98.2	100.4	118.9	24,252	25,767	27,388	46,709

Data source: Congressional Budget Office.

All years referred to are federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end.

When October 1 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. Mandatory outlays, discretionary outlays, and deficits have been adjusted to exclude the effects of those timing shifts.

CHIP = Children's Health Insurance Program.

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# Notes

Unless this report indicates otherwise, all years referred to are federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end.

Numbers in the text, tables, and figures may not add up to totals because of rounding.

Supplemental data for this analysis, including additional details about discretionary and mandatory spending (published with the 10-year budget projections), are available on the Congressional Budget Office's website ([www.cbo.gov/publication/59096#data](http://www.cbo.gov/publication/59096#data)), as are a glossary of common budgetary and economic terms ([www.cbo.gov/publication/42904](http://www.cbo.gov/publication/42904)), a description of how CBO prepares its baseline budget projections ([www.cbo.gov/publication/58916](http://www.cbo.gov/publication/58916)), and previous editions of this report (<https://tinyurl.com/28cx7cd7>).

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# An Update to the Budget Outlook: 2023 to 2033

## Summary

As it typically does after receiving new data released with the President's budget, the Congressional Budget Office has updated the baseline budget projections it published in February 2023.<sup>1</sup> Updated projections of spending, deficits, and debt include the effects of legislation enacted and regulations announced through March 30, 2023; they do not include budgetary or economic effects of subsequent legislation, economic developments, administrative actions, or regulatory changes. CBO did not fully update its revenue projections for this baseline. Such projections are comprehensively revised in conjunction with updates to the agency's economic forecast. The current projections are based on the economic forecast CBO published along with its budget baseline in February.

CBO's baseline projections are developed in accordance with procedures set in law. Those procedures require the agency to project spending, revenues, deficits, and debt without regard to the statutory limit on the issuance of new federal debt. That limit (now set at \$31.4 trillion) was reached on January 19, 2023. CBO estimates that if the limit is not raised or suspended, there is a significant risk that the Treasury will run out of funds at some point in the first two weeks of June.

## The Budget in 2023

CBO's updated baseline projections show a federal budget deficit of \$1.5 trillion in 2023 (see Table 1). Those projections reflect the assumption that current laws generally remain unchanged and that no further legislation affecting the federal budget is enacted this year.

CBO's projection of the deficit this year is subject to an unusually high degree of uncertainty. That uncertainty has increased since the updated projections were finalized in late March, in part because of new information. In particular, revenue collections through April of this year were lower than the agency projected. CBO's projection of outlays for 2023 also is subject to considerable uncertainty

because the outcome of a case, now before the Supreme Court, regarding student loan debt could affect outlays for the current year. As a result, the deficit for 2023 could be much larger or smaller than the \$1.5 trillion shown in CBO's updated projections (see Box 1).

Compared with CBO's estimate in February, the projected deficit for 2023 is now \$130 billion greater. That change is largely the result of a proposed rule that would establish a new income-driven repayment (IDR) plan for federal student loans and actions taken by the Federal Deposit Insurance Corporation (FDIC) in response to a pair of bank failures in March of this year.

## The Budget From 2024 to 2033

Deficits generally increase over the coming years in CBO's projections, totaling about \$20 trillion over the 2024–2033 period. As a result of those deficits, debt held by the public grows significantly in CBO's projections, rising from 98 percent of gross domestic product (GDP) this year to 119 percent in 2033—which would be the highest level of U.S. debt ever recorded. Debt would continue to grow beyond 2033 if current laws generally remained unchanged.

In the agency's updated projections, outlays and revenues measured in relation to the size of the economy equal or exceed their 50-year averages through 2033. Outlays increase from 23.5 percent of GDP in 2024 (a high level by historical standards) to 25.3 percent in 2033, boosted by rising interest costs and greater spending on programs that provide benefits to older people. Revenues amount to 17.8 percent of GDP in 2024; they decline as a percentage of GDP the next year but then increase after 2025, when certain provisions of the 2017 tax act expire. Revenues are roughly stable after 2027, totaling 18.1 percent of GDP in 2033.

The projected cumulative deficit for the 2024–2033 period is now \$51 billion greater than CBO estimated in February. That increase is the net result of a number of changes to the agency's projections that largely offset one another.

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1. For those earlier projections, see Congressional Budget Office, *The Budget and Economic Outlook: 2023 to 2033* (February 2023), [www.cbo.gov/publication/58848](http://www.cbo.gov/publication/58848).

Table 1.

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

	Actual, 2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total 2024– 2033	
<b>In Billions of Dollars</b>														
<b>Revenues</b>														
Individual income taxes	2,632	2,525	2,475	2,517	2,768	3,019	3,123	3,248	3,380	3,517	3,652	3,806	13,902	31,505
Payroll taxes	1,484	1,562	1,633	1,703	1,778	1,849	1,920	1,993	2,068	2,147	2,226	2,307	8,884	19,625
Corporate income taxes	425	475	479	489	495	494	506	514	520	527	527	539	2,462	5,089
Other	357	252	261	266	276	295	370	387	400	416	436	450	1,469	3,558
<b>Total</b>	<b>4,897</b>	<b>4,815</b>	<b>4,848</b>	<b>4,974</b>	<b>5,317</b>	<b>5,658</b>	<b>5,919</b>	<b>6,142</b>	<b>6,368</b>	<b>6,607</b>	<b>6,841</b>	<b>7,102</b>	<b>26,716</b>	<b>59,777</b>
On-budget	3,831	3,681	3,652	3,719	4,006	4,295	4,504	4,674	4,846	5,027	5,204	5,407	20,176	45,334
Off-budget <sup>a</sup>	1,066	1,133	1,196	1,255	1,311	1,363	1,415	1,468	1,522	1,580	1,637	1,695	6,540	14,443
<b>Outlays</b>														
Mandatory	4,133	3,980	3,828	4,023	4,205	4,400	4,738	4,760	5,120	5,386	5,675	6,141	21,195	48,277
Discretionary	1,664	1,712	1,845	1,939	1,995	2,055	2,112	2,153	2,209	2,260	2,313	2,373	9,947	21,255
Net interest	476	663	745	773	835	912	1,003	1,084	1,165	1,252	1,350	1,440	4,268	10,559
<b>Total</b>	<b>6,273</b>	<b>6,354</b>	<b>6,418</b>	<b>6,735</b>	<b>7,035</b>	<b>7,367</b>	<b>7,854</b>	<b>7,997</b>	<b>8,494</b>	<b>8,898</b>	<b>9,338</b>	<b>9,955</b>	<b>35,409</b>	<b>80,091</b>
On-budget	5,192	5,142	5,094	5,314	5,529	5,776	6,170	6,223	6,614	6,908	7,230	7,734	27,884	62,593
Off-budget <sup>a</sup>	1,081	1,212	1,324	1,421	1,506	1,591	1,683	1,774	1,880	1,990	2,107	2,221	7,526	17,498
<b>Deficit</b>	<b>-1,376</b>	<b>-1,539</b>	<b>-1,571</b>	<b>-1,761</b>	<b>-1,718</b>	<b>-1,709</b>	<b>-1,934</b>	<b>-1,855</b>	<b>-2,126</b>	<b>-2,291</b>	<b>-2,496</b>	<b>-2,852</b>	<b>-8,693</b>	<b>-20,314</b>
On-budget	-1,361	-1,461	-1,442	-1,595	-1,524	-1,481	-1,666	-1,549	-1,768	-1,881	-2,026	-2,327	-7,708	-17,259
Off-budget <sup>a</sup>	-15	-79	-129	-165	-195	-228	-268	-306	-358	-410	-470	-526	-986	-3,055
Primary Deficit <sup>b</sup>	-900	-877	-826	-988	-883	-797	-931	-771	-961	-1,039	-1,147	-1,412	-4,425	-9,755
Debt Held by the Public	24,252	25,767	27,388	29,246	31,054	32,866	34,895	36,830	39,015	41,347	43,861	46,709	n.a.	n.a.
<b>Memorandum:</b>														
Gross Domestic Product	25,016	26,238	27,266	28,610	29,932	31,251	32,525	33,811	35,133	36,488	37,874	39,288	149,585	332,179
<b>As a Percentage of Gross Domestic Product</b>														
<b>Revenues</b>														
Individual income taxes	10.5	9.6	9.1	8.8	9.2	9.7	9.6	9.6	9.6	9.6	9.6	9.7	9.3	9.5
Payroll taxes	5.9	6.0	6.0	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Corporate income taxes	1.7	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.6	1.5
Other	1.4	1.0	1.0	0.9	0.9	0.9	1.1	1.1	1.1	1.1	1.2	1.1	1.0	1.1
<b>Total</b>	<b>19.6</b>	<b>18.4</b>	<b>17.8</b>	<b>17.4</b>	<b>17.8</b>	<b>18.1</b>	<b>18.2</b>	<b>18.2</b>	<b>18.1</b>	<b>18.1</b>	<b>18.1</b>	<b>18.1</b>	<b>17.9</b>	<b>18.0</b>
On-budget	15.3	14.0	13.4	13.0	13.4	13.7	13.8	13.8	13.8	13.8	13.7	13.8	13.5	13.6
Off-budget <sup>a</sup>	4.3	4.3	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.3	4.4	4.3
<b>Outlays</b>														
Mandatory	16.5	15.2	14.0	14.1	14.0	14.1	14.6	14.1	14.6	14.8	15.0	15.6	14.2	14.5
Discretionary	6.7	6.5	6.8	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1	6.0	6.6	6.4
Net interest	1.9	2.5	2.7	2.7	2.8	2.9	3.1	3.2	3.3	3.4	3.6	3.7	2.9	3.2
<b>Total</b>	<b>25.1</b>	<b>24.2</b>	<b>23.5</b>	<b>23.5</b>	<b>23.5</b>	<b>23.6</b>	<b>24.1</b>	<b>23.7</b>	<b>24.2</b>	<b>24.4</b>	<b>24.7</b>	<b>25.3</b>	<b>23.7</b>	<b>24.1</b>
On-budget	20.8	19.6	18.7	18.6	18.5	18.5	19.0	18.4	18.8	18.9	19.1	19.7	18.6	18.8
Off-budget <sup>a</sup>	4.3	4.6	4.9	5.0	5.0	5.1	5.2	5.2	5.4	5.5	5.6	5.7	5.0	5.3
<b>Deficit</b>	<b>-5.5</b>	<b>-5.9</b>	<b>-5.8</b>	<b>-6.2</b>	<b>-5.7</b>	<b>-5.5</b>	<b>-5.9</b>	<b>-5.5</b>	<b>-6.1</b>	<b>-6.3</b>	<b>-6.6</b>	<b>-7.3</b>	<b>-5.8</b>	<b>-6.1</b>
On-budget	-5.4	-5.6	-5.3	-5.6	-5.1	-4.7	-5.1	-4.6	-5.0	-5.2	-5.3	-5.9	-5.2	-5.2
Off-budget <sup>a</sup>	-0.1	-0.3	-0.5	-0.6	-0.7	-0.7	-0.8	-0.9	-1.0	-1.1	-1.2	-1.3	-0.7	-0.9
Primary Deficit <sup>b</sup>	-3.6	-3.3	-3.0	-3.5	-3.0	-2.6	-2.9	-2.3	-2.7	-2.8	-3.0	-3.6	-3.0	-2.9
Debt Held by the Public	96.9	98.2	100.4	102.2	103.7	105.2	107.3	108.9	111.0	113.3	115.8	118.9	n.a.	n.a.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/59096#data](http://www.cbo.gov/publication/59096#data). n.a. = not applicable.

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.

b. Primary deficits exclude net outlays for interest.



**Box 1.****Uncertainty of CBO's Projections of the Deficit and Debt for 2023**

The Congressional Budget Office's current projection of the deficit for 2023, \$1.5 trillion, is subject to a great deal of uncertainty. Two particularly significant factors respectively affecting revenues and outlays—a shortfall in tax receipts through April and a Supreme Court case involving student loans—could result in a much larger or smaller deficit than that. Although both factors could affect the deficit, only one could affect debt this year. If the deficit increased because revenues were less than projected, then debt would also increase this year; but if the deficit decreased because of a decision in the student loan case, the amount of debt in 2023 would not change significantly.

**Revenues**

In CBO's February budget baseline, projected revenues for 2023 totaled \$4.8 trillion. (The agency has not comprehensively revised that estimate, because such a revision typically occurs in conjunction with updates to its economic forecast.) However, receipts through April were lower than projected, and CBO now anticipates that total receipts collected in 2023 will probably be lower than current projections. The shortfall in revenues will result in the need for more borrowing and, consequently, greater interest costs than the agency expected.

Through April, receipts net of refunds for fiscal year 2023 totaled \$2.7 trillion—about \$250 billion less than CBO anticipated would be received by then. Most of that shortfall is attributable to lower-than-expected receipts from individual income taxes collected in April (after the agency's current projections were finalized). The reasons for the shortfall will be better understood as more information becomes available, but it may partly reflect lower-than-expected realizations of capital gains in calendar year 2022.

The shortfall in revenues through April has implications for revenues in the remaining months of the year—but those implications are unclear. If the shortfall reflected lower final tax payments for calendar year 2022, then that weakness would not necessarily result in lower-than-expected revenues for the rest of 2023. But if the shortfall also reflected lower estimated tax payments for calendar year 2023, then receipts throughout the rest of the year would probably be lower than CBO projected. Finally, if the shortfall through April reflected a delay in tax payments from people affected by certain natural disasters, who have an October filing deadline (instead of the April deadline), then the shortfall would probably be counterbalanced in subsequent months as those payments were made.

**Outlays**

For many reasons, outlays for 2023 could be more or less than CBO projected, but one factor could have a particularly

large effect: Last year, the Administration announced a plan to cancel some outstanding student loan debt and recorded a resulting cost (an increase in outlays, and thus in the deficit) of \$379 billion in fiscal year 2022. The plan faces legal challenges and is currently before the Supreme Court.

If the court entirely invalidates the cancellation, the Administration will probably record the effect as a reduction in outlays, in this fiscal year, by an amount similar to the recorded cost. Under the procedures governing the budgetary treatment of federal credit programs, that change would be recorded up front, on a net-present-value basis. It would have a negligible effect on debt in the current year, however, because the change in cash flows resulting from such a decision would occur over many years in the form of increased future payments to the government as loan balances were repaid rather than forgiven.

**Effects on the Deficit and Debt**

The potential for actual revenues and outlays to differ from CBO's current projections is significant. A comparison of the agency's past projections with actual outcomes gives some indication of the magnitude of the uncertainty of those projections. On the basis of an analysis of its past projections, CBO estimates that for a current-year projection, there is an approximately two-thirds chance that the deficit would be about 0.5 percent of gross domestic product (or about \$140 billion in 2023) larger or smaller than the agency estimates.

Either of the factors discussed—the shortfall in revenues or the outcome of the court case about canceling student loan debt—could significantly affect this year's deficit. All other things being equal, the shortfall in revenues through April and the resulting change in outlays for interest would result in the 2023 deficit's being larger than CBO projected by about 1.0 percent of GDP. Alternatively, if the cancellation of student loan debt is invalidated and the costs recorded in 2022 are reversed this year, the 2023 deficit will be smaller by more than 1.0 percent of GDP, all other things being equal.

Thus, if there were no further changes in revenues in relation to CBO's projections and no other significant changes to outlays, the effects of the shortfall in revenues so far and a decision striking down the cancellation of student loan debt would largely offset one another, yielding a deficit closer to the \$1.5 trillion in CBO's projections; but only the revenue shortfall would significantly affect federal debt this year, which would be larger by the amount of the shortfall and the associated increase in interest costs.

Table 2.

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

	Actual, 2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>In Billions of Dollars</b>												
Payments That Are Shifted In CBO's Baseline <sup>a</sup>	-64	-10	74	0	0	0	-114	114	0	0	0	-149
Outlays, Adjusted for Timing Shifts												
Mandatory	4,074	3,970	3,897	4,023	4,205	4,400	4,630	4,868	5,120	5,386	5,675	5,999
Discretionary	1,659	1,712	1,850	1,939	1,995	2,055	2,107	2,159	2,209	2,260	2,313	2,366
Net interest	476	663	745	773	835	912	1,003	1,084	1,165	1,252	1,350	1,440
<b>Total</b>	<b>6,210</b>	<b>6,344</b>	<b>6,492</b>	<b>6,735</b>	<b>7,035</b>	<b>7,367</b>	<b>7,740</b>	<b>8,111</b>	<b>8,494</b>	<b>8,898</b>	<b>9,338</b>	<b>9,806</b>
<b>Total Deficit, Adjusted for Timing Shifts</b>	<b>-1,312</b>	<b>-1,529</b>	<b>-1,644</b>	<b>-1,761</b>	<b>-1,718</b>	<b>-1,709</b>	<b>-1,820</b>	<b>-1,969</b>	<b>-2,126</b>	<b>-2,291</b>	<b>-2,496</b>	<b>-2,703</b>
Primary Deficit, Adjusted for Timing Shifts <sup>b</sup>	-836	-867	-899	-988	-883	-797	-817	-885	-961	-1,039	-1,147	-1,263
<b>As a Percentage of Gross Domestic Product</b>												
Outlays, Adjusted for Timing Shifts												
Mandatory	16.3	15.1	14.3	14.1	14.0	14.1	14.2	14.4	14.6	14.8	15.0	15.3
Discretionary	6.6	6.5	6.8	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1	6.0
Net interest	1.9	2.5	2.7	2.7	2.8	2.9	3.1	3.2	3.3	3.4	3.6	3.7
<b>Total</b>	<b>24.8</b>	<b>24.2</b>	<b>23.8</b>	<b>23.5</b>	<b>23.5</b>	<b>23.6</b>	<b>23.8</b>	<b>24.0</b>	<b>24.2</b>	<b>24.4</b>	<b>24.7</b>	<b>25.0</b>
<b>Total Deficit, Adjusted for Timing Shifts</b>	<b>-5.2</b>	<b>-5.8</b>	<b>-6.0</b>	<b>-6.2</b>	<b>-5.7</b>	<b>-5.5</b>	<b>-5.6</b>	<b>-5.8</b>	<b>-6.1</b>	<b>-6.3</b>	<b>-6.6</b>	<b>-6.9</b>
Primary Deficit, Adjusted for Timing Shifts	-3.3	-3.3	-3.3	-3.5	-3.0	-2.6	-2.5	-2.6	-2.7	-2.8	-3.0	-3.2
<b>Memorandum:</b>												
Baseline Deficit, Unadjusted												
In billions of dollars	-1,376	-1,539	-1,571	-1,761	-1,718	-1,709	-1,934	-1,855	-2,126	-2,291	-2,496	-2,852
As a percentage of gross domestic product	-5.5	-5.9	-5.8	-6.2	-5.7	-5.5	-5.9	-5.5	-6.1	-6.3	-6.6	-7.3

Data source: Congressional Budget Office. See [www.cbo.gov/publication/59096#data](http://www.cbo.gov/publication/59096#data).

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.

b. Primary deficits exclude net outlays for interest.

## CBO's Baseline Budget Projections

In CBO's updated baseline projections, revenues and outlays grow over the 2023–2033 period, but the gap between them generally widens over that time, resulting in increasing deficits and debt. The deficit for 2023, \$1.5 trillion, grows to \$2.9 trillion by 2033 in CBO's projections; however, outlays in 2023 and 2033 are affected by shifts in the timing of certain federal payments.<sup>2</sup> Without those shifts, the deficit for 2023 would

be \$10 billion smaller and the deficit for 2033 would be \$149 billion smaller, CBO projects (see Table 2). The projections of outlays and deficits cited throughout the rest of this report reflect adjustments to exclude the effects of timing shifts.

CBO prepares its baseline budget projections in accordance with provisions in the Balanced Budget and Emergency Deficit Control Act of 1985 (the Deficit Control Act, Public Law 99-177) and the Congressional

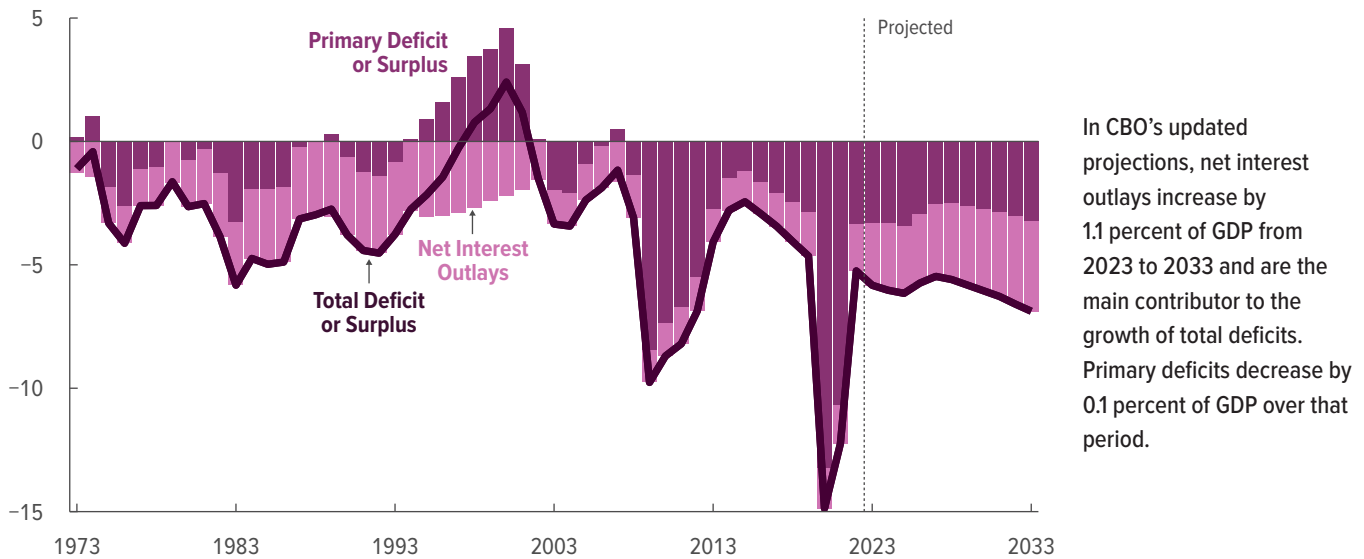
2. In 2022, October 1 (the first day of fiscal year 2023) fell on a weekend, so certain payments that would ordinarily have been made on that day were instead made in fiscal year 2022. October 1, 2023, will also fall on a weekend, pushing payments due on that day into fiscal year 2023 (from fiscal year 2024). October 1 will fall on a weekend again in 2028 and 2033,

causing certain payments due on those days to be made at the end of September and thus to be recorded in the previous fiscal year. Those timing shifts will boost outlays and deficits in fiscal years 2028 and 2033 and will reduce outlays and the deficit in fiscal year 2029.

Figure 1.

## Total Deficits, Primary Deficits, and Net Interest Outlays

Percentage of GDP



Data source: Congressional Budget Office. See [www.cbo.gov/publication/59096#data](http://www.cbo.gov/publication/59096#data).

Primary deficits exclude net outlays for interest.

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 allow.

GDP = gross domestic product.

Budget and Impoundment Control Act of 1974 (the Budget Act, P.L. 93-344). Those laws require the agency to project spending, revenues, and deficits or surpluses without regard to the statutory limit on federal borrowing. Following procedures established in those laws, CBO constructs its baseline under the assumptions that current laws governing revenues and spending will generally stay the same and that discretionary funding provided in appropriation acts in future years will match current funding, with adjustments for inflation.

The baseline projections are meant to provide a benchmark that policymakers can use to assess the potential effects of changes in policy; they are not 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 projections, not only because of unanticipated economic conditions, but also because of the many other factors that affect federal revenues and outlays.

### Deficits

Measured in relation to the size of the economy, this year's deficit (adjusted to exclude the effects of timing shifts) totals 5.8 percent of GDP in CBO's projections. The cumulative deficit for the 2024–2033 period is projected to total \$20.2 trillion, or 6.1 percent of GDP. From 1973 to 2022, annual deficits averaged 3.6 percent of GDP—and when unemployment was low (as it is now), deficits were much smaller than that.

Primary deficits—that is, deficits excluding net outlays for interest—increase from 3.3 percent of GDP in 2023 and 2024 to 3.5 percent in 2025, in the agency's current projections (see Figure 1). They then decrease, because of an uptick in revenues, and hover around 2.5 percent of GDP from 2027 to 2029 before rising again, reaching 3.2 percent of GDP in 2033. In the 62 years from 1947 to 2008, primary deficits exceeded 2.5 percent of GDP only twice. In the past 14 years, they have exceeded that amount nine times—in large part because of legislation enacted in response to the 2007–2009 recession and to the recession of early 2020, induced by the coronavirus pandemic.

## Debt

The deficits projected in CBO’s baseline would increase federal debt held by the public, which consists mostly of securities the Treasury issues to raise cash to fund the federal government’s activities and to pay off its maturing liabilities.<sup>3</sup> The net amount the Treasury borrows each year by issuing securities is determined primarily by the annual budget deficit.

After all the government’s borrowing needs are accounted for, debt held by the public would rise from \$24.3 trillion recorded at the end of 2022 to \$46.7 trillion at the end of 2033, CBO projects (see Table 3). Such debt is projected to reach 119 percent of GDP at the end of 2033—about 22 percentage points higher than it was at the end of 2022 and about two and one-half times its average over the past 50 years (see Figure 2).

Another measure of federal debt, debt subject to limit, is the amount of debt that is subject to the statutory limit on federal borrowing, often referred to as the debt ceiling.<sup>4</sup> The current statutory limit on the issuance of new federal debt, which is set at \$31.4 trillion, was reached on January 19, 2023. At that time, the Treasury announced a “debt issuance suspension period” and began using well-established “extraordinary measures” to borrow additional funds without breaching the debt ceiling. CBO projects that if the debt limit remains unchanged, there is a significant risk that at some point in the first two weeks of June, the government will no longer be able to pay all of its obligations.<sup>5</sup>

## Outlays

In CBO’s current projections, federal outlays (adjusted to exclude the effects of timing shifts) rise from \$6.3 trillion in 2023 to \$9.8 trillion in 2033, an average annual

increase of 4.5 percent.<sup>6</sup> Outlays for Social Security and Medicare account for over half of that \$3.5 trillion increase. By 2033, outlays for Social Security, the major health care programs, and interest account for 65 percent of projected spending.

Measured in relation to the size of the economy, federal outlays dip from 24.2 percent of GDP in 2023 to 23.5 percent in 2025 and 2026 and then generally increase thereafter, equaling 25.0 percent of GDP in 2033 (see Figure 3, upper panel). Outlays for Social Security, the major health care programs, and interest rise from 13.4 percent of GDP in 2023 to an average of 15.6 percent over the 2029–2033 period (see Table 4).

**Mandatory Spending.** Mandatory, or direct, spending includes outlays for most 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>7</sup> Certain types of payments that federal agencies receive from the public and from other government agencies (such as premiums paid by Medicare beneficiaries and payments made by federal agencies to

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

4. Debt subject to limit consists of debt held by the public and debt held by government accounts, which is issued to the federal government’s trust funds and other federal accounts for internal transactions. Trust funds for Social Security, military retirement, civil service retirement and disability, and Medicare account for most of that debt.

5. Congressional Budget Office, *Federal Debt and the Statutory Limit, May 2023* (May 2023), [www.cbo.gov/publication/59130](http://www.cbo.gov/publication/59130).

6. CBO’s projections follow provisions in section 257 of the Deficit Control Act, which requires the agency to project spending for certain programs, including Social Security and Medicare, under the assumption that they will be fully funded and thus able to make all scheduled payments, even if the balances in the trust funds associated with those programs are not sufficient to make full payments. For example, CBO estimates that the Highway Trust Fund would be exhausted in 2028 and the Old-Age and Survivors Insurance trust fund would be exhausted in 2032. Nevertheless, CBO’s baseline projections reflect the assumption that full payments from those funds will continue to be made. In addition, the Deficit Control Act requires CBO to project spending for certain mandatory programs beyond their scheduled expiration. Other rules that govern CBO’s baseline projections have been jointly developed by the agency, the House and Senate Budget Committees, and the Office of Management and Budget. For further details, see Congressional Budget Office, *CBO Explains How It Develops the Budget Baseline* (April 2023), [www.cbo.gov/publication/58916](http://www.cbo.gov/publication/58916).

7. Each year, some mandatory programs are modified by provisions in annual appropriation acts. Such changes may increase or decrease spending on the affected programs for one or more years. In addition, some mandatory programs, such as Medicaid, the Supplemental Nutrition Assistance Program, and veterans’ disability compensation and pensions, are considered mandatory but require benefits to be paid from amounts provided in appropriation acts.

Table 3.

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

Billions of Dollars

	Actual, 2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Debt Held by the Public at the Beginning of the Year	22,283	24,252	25,767	27,388	29,246	31,054	32,866	34,895	36,830	39,015	41,347	43,861
Changes in Debt Held by the Public												
Deficit	1,376	1,539	1,571	1,761	1,718	1,709	1,934	1,855	2,126	2,291	2,496	2,852
Other means of financing <sup>a</sup>	594	-25	50	97	90	102	96	79	58	41	18	-5
<b>Total</b>	<b>1,970</b>	<b>1,515</b>	<b>1,621</b>	<b>1,858</b>	<b>1,808</b>	<b>1,812</b>	<b>2,030</b>	<b>1,934</b>	<b>2,185</b>	<b>2,332</b>	<b>2,514</b>	<b>2,848</b>
Debt Held by the Public at the End of the Year												
<b>In billions of dollars</b>	<b>24,252</b>	<b>25,767</b>	<b>27,388</b>	<b>29,246</b>	<b>31,054</b>	<b>32,866</b>	<b>34,895</b>	<b>36,830</b>	<b>39,015</b>	<b>41,347</b>	<b>43,861</b>	<b>46,709</b>
<b>As a percentage of GDP</b>	<b>96.9</b>	<b>98.2</b>	<b>100.4</b>	<b>102.2</b>	<b>103.7</b>	<b>105.2</b>	<b>107.3</b>	<b>108.9</b>	<b>111.0</b>	<b>113.3</b>	<b>115.8</b>	<b>118.9</b>
<b>Memorandum:</b>												
Federal Financial Assets <sup>b</sup>	1,959	1,934	1,984	2,081	2,171	2,274	2,369	2,449	2,507	2,548	2,566	2,561
Debt Held by the Public Minus Financial Assets												
In billions of dollars	22,294	23,833	25,404	27,164	28,883	30,592	32,526	34,381	36,508	38,799	41,295	44,147
As a percentage of GDP	89.1	90.8	93.2	94.9	96.5	97.9	100.0	101.7	103.9	106.3	109.0	112.4
Debt Held by the Federal Reserve	5,635	5,070	4,369	3,905	4,222	4,726	5,225	5,708	6,178	6,638	7,116	7,573
Debt Net of Financial Assets and Debt Held by the Federal Reserve												
In billions of dollars	16,659	18,763	21,035	23,259	24,660	25,866	27,301	28,674	30,329	32,161	34,179	36,575
As a percentage of GDP	66.6	71.5	77.1	81.3	82.4	82.8	83.9	84.8	86.3	88.1	90.2	93.1
Gross Federal Debt <sup>c</sup>	30,839	32,461	34,205	36,096	37,931	39,606	41,435	43,237	45,180	47,212	49,467	52,353
Debt Subject to Limit <sup>d</sup>	30,869	32,492	34,237	36,129	37,964	39,638	41,468	43,270	45,213	47,245	49,501	52,387
Average Interest Rate on Debt Held by the Public (Percent)	2.1	2.7	2.9	2.8	2.8	2.9	3.0	3.0	3.1	3.1	3.2	3.2

Data sources: Congressional Budget Office; Department of the Treasury. See [www.cbo.gov/publication/59096#data](http://www.cbo.gov/publication/59096#data).

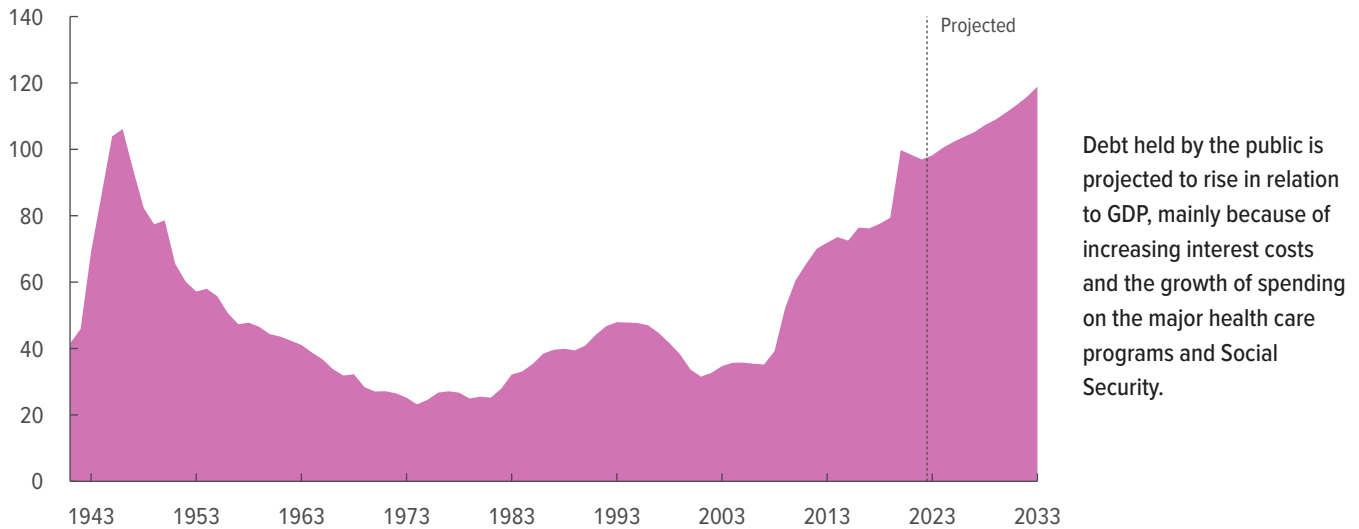
GDP = gross domestic product.

- 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 and cash flows associated with federal credit programs, such as those related to student loans. (Only the subsidy costs of those programs are reflected in the budget deficit.)
- 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 is currently set at \$31.4 trillion. On January 19, 2023, the debt reached that limit, and the Treasury announced a "debt issuance suspension period" and began using well-established "extraordinary measures" to borrow funds without breaching the limit. CBO projects that if the debt limit remains unchanged, there is a significant risk that at some point in the first two weeks of June, the government will no longer be able to pay all of its obligations. The Deficit Control Act requires CBO to project spending, revenues, and deficits without regard to the debt limit. For more details, see Congressional Budget Office, *Federal Debt and the Statutory Limit, May 2023* (May 2023), [www.cbo.gov/publication/59130](http://www.cbo.gov/publication/59130).

Figure 2.

## Federal Debt Held by the Public, 1941 to 2033

Percentage of GDP



Debt held by the public is projected to rise in relation to GDP, mainly because of increasing interest costs and the growth of spending on the major health care programs and Social Security.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/59096#data](http://www.cbo.gov/publication/59096#data).

GDP = gross domestic product.

employees' retirement plans) 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 existing mandatory spending under the assumption that current laws generally remain in place. Therefore, the agency's baseline projections of mandatory spending reflect the estimated effects of changes in the economy, 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 resources (known as sequestration) that are required under current law for some mandatory accounts.

In CBO's current projections, outlays for mandatory programs (net of offsetting receipts) decrease from 15.1 percent of GDP in 2023 to 14.0 percent in 2026 but then rise steadily through 2033, when they total 15.3 percent. That pattern occurs in part because spending related to the pandemic continues to drop over the next few years while two underlying factors—the aging of the population and growth in federal health care costs—put upward pressure on mandatory spending. The increase in the average age of the population causes the number of beneficiaries of Social Security and Medicare

to grow faster than the overall population, and federal health care costs per beneficiary continue to rise faster than GDP per person. As a result of those two trends, outlays for Social Security and Medicare will increase from 8.2 percent of GDP in 2023 to 10.1 percent in 2033, CBO projects. The effects of those trends on federal spending will persist beyond the next decade.

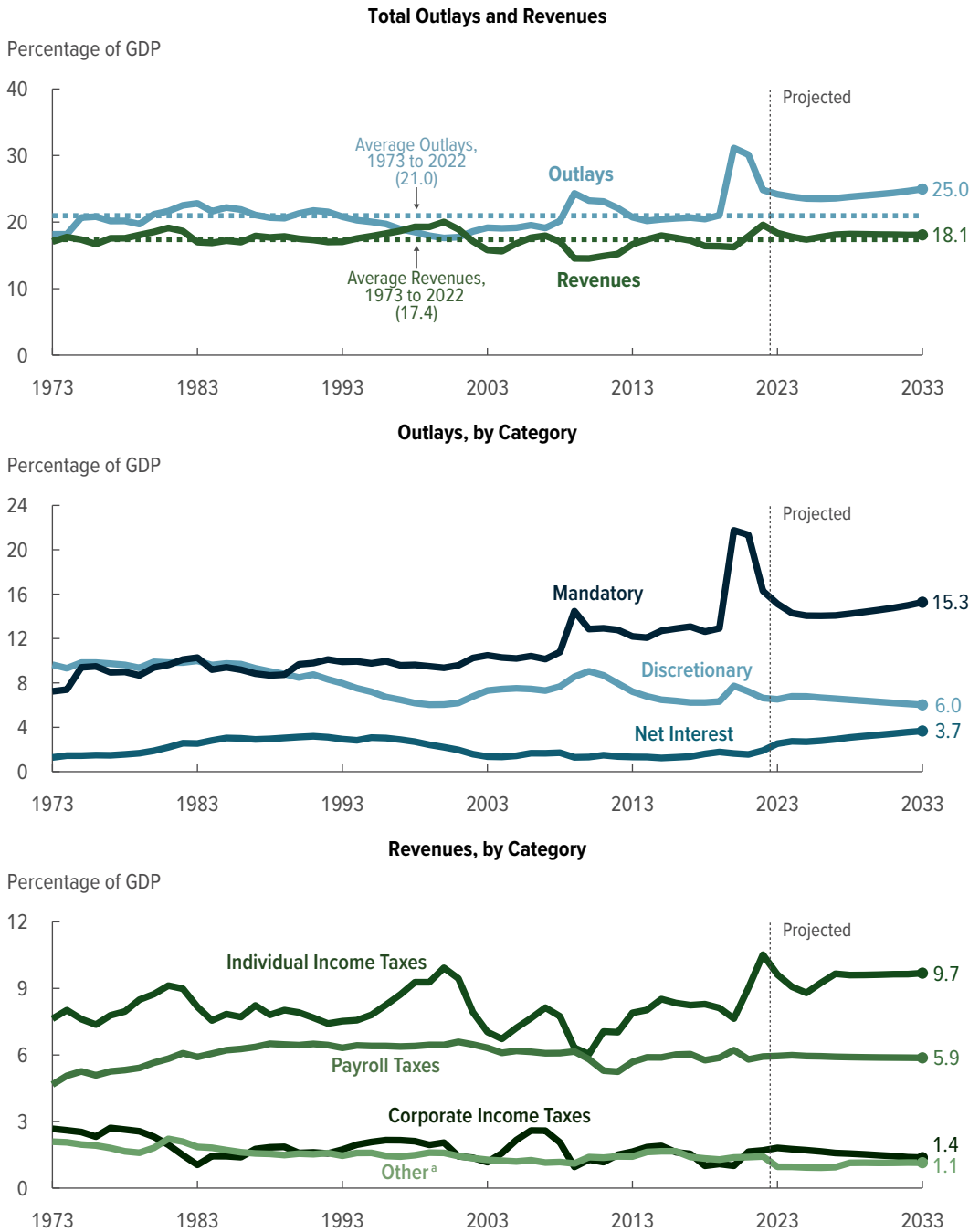
**Discretionary Spending.** Discretionary spending encompasses an array of federal activities funded through or controlled by appropriations. That category includes most defense spending and spending for many non-defense activities, such as elementary and secondary education, housing assistance, international affairs, the administration of justice, and highway programs.<sup>8</sup> 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>9</sup>

8. Even though funding for highway programs is provided in authorizing legislation and is considered mandatory, outlays for those programs are considered discretionary because they are governed by limitations set in appropriation acts.

9. Budget authority, or funding, is the authority provided by federal law to incur financial obligations that will result in immediate or future outlays of federal government funds.

Figure 3.

## Outlays and Revenues



Measured as a percentage of GDP, outlays exceed their 50-year average in each year of the projection period. Revenues fall to their 50-year average in 2025 but then exceed it in each subsequent year because of scheduled changes in tax law.

In CBO’s projections, rising spending on Social Security and Medicare boosts mandatory outlays, but total discretionary spending falls in relation to GDP. Net outlays for interest increase substantially and, beginning in 2030, exceed their previous peak.

Receipts from individual income taxes are projected to fall in 2023 because collections from taxes on capital gains realizations and other sources, which have been strong in recent years, fall in CBO’s projections. Projected receipts rise after 2025 because of the scheduled expiration of certain provisions of the 2017 tax act.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/59096#data](http://www.cbo.gov/publication/59096#data).

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 of outlays 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 allow.

GDP = gross domestic product.

a. Consists of excise taxes, remittances from the Federal Reserve System to the Treasury, customs duties, estate and gift taxes, and miscellaneous fees and fines.

Table 4.

**Key Projections in CBO's Baseline**

Percentage of Gross Domestic Product

	2023	2024	Annual Average			
			2025–2028	2029–2033	2034–2043	2044–2053
<b>Revenues</b>						
Individual income taxes	9.6	9.1	9.3	9.6	9.9	10.4
Payroll taxes	6.0	6.0	5.9	5.9	5.8	5.8
Corporate income taxes	1.8	1.8	1.6	1.4	1.4	1.4
Other	1.0	1.0	1.0	1.1	1.2	1.2
<b>Total Revenues</b>	<b>18.4</b>	<b>17.8</b>	<b>17.9</b>	<b>18.1</b>	<b>18.3</b>	<b>18.8</b>
<b>Outlays</b>						
Mandatory						
Social Security	5.1	5.3	5.5	5.9	6.2	6.4
Major health care programs <sup>a</sup>	5.8	5.4	5.7	6.3	7.4	8.2
Other	4.2	3.2	3.0	2.7	2.5	2.3
Subtotal	15.2	14.0	14.2	14.8	16.1	16.9
Discretionary	6.5	6.8	6.6	6.2	5.9	5.8
Net Interest	2.5	2.7	2.9	3.4	4.4	6.2
<b>Total Outlays</b>	<b>24.2</b>	<b>23.5</b>	<b>23.7</b>	<b>24.5</b>	<b>26.3</b>	<b>29.0</b>
<b>Deficit</b>	<b>-5.9</b>	<b>-5.8</b>	<b>-5.8</b>	<b>-6.4</b>	<b>-8.0</b>	<b>-10.2</b>
<b>Debt Held by the Public at the End of the Period</b>	<b>98</b>	<b>100</b>	<b>107</b>	<b>119</b>	<b>152</b>	<b>195</b>
<b>Memorandum:</b>						
Social Security						
Revenues <sup>b</sup>	4.5	4.6	4.6	4.6	4.6	4.5
Outlays <sup>c</sup>	5.1	5.3	5.5	5.9	6.2	6.4
Contribution to the Federal Deficit	-0.6	-0.8	-0.9	-1.3	-1.6	-1.9
Medicare						
Revenues <sup>b</sup>	1.5	1.5	1.5	1.6	1.6	1.6
Outlays <sup>c</sup>	3.8	3.7	4.2	4.7	5.8	6.6
Offsetting receipts	-0.7	-0.7	-0.8	-0.9	-1.1	-1.3
Contribution to the Federal Deficit	-1.7	-1.5	-1.9	-2.3	-3.1	-3.7
Gross Domestic Product at the End of the Period (Trillions of dollars)	26.2	27.3	32.5	39.3	56.1	79.5

Data source: Congressional Budget Office. See [www.cbo.gov/publication/59096#data](http://www.cbo.gov/publication/59096#data).

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

- 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.
- 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.
- 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.



In accordance with section 257 of the Deficit Control Act, discretionary funding in future years is assumed to equal the amount provided so far for 2023—including funding designated as an emergency requirement—with adjustments for inflation.<sup>10</sup> As a result, discretionary outlays are projected to increase over the next 10 years, rising from \$1.7 trillion in 2023 to \$2.4 trillion in 2033. Outlays from funding designated as an emergency requirement (including funding provided by the Infrastructure Investment and Jobs Act, P.L. 117-58, and the Bipartisan Safer Communities Act, P.L. 117-159; and amounts stemming from the assumption that such funding would continue to be provided in each year) account for 7 percent of discretionary outlays in CBO’s updated baseline.

In the agency’s current projections, total discretionary *budget authority* rises by an average of 2.6 percent per year after 2023. Total discretionary *outlays* rise faster than budget authority over the first few years of the projection period, mainly because of spending stemming from budget authority provided in previous years. After 2027, outlays rise at about the same rate as budget authority, increasing by an average of 2.4 percent per year through 2033. Measured in relation to the size of the economy, discretionary outlays rise from 6.5 percent of GDP in 2023 to 6.8 percent in 2024 and 2025. They then decrease steadily to 6.0 percent of GDP in 2033—when they would equal their lowest recorded level (see Figure 3 on page 9, middle panel). By comparison, discretionary outlays averaged 8.0 percent of GDP over the past 50 years.

In the agency’s current projections, defense discretionary outlays fall to 2.8 percent of GDP in 2032 and 2033—which would be the smallest percentage since 1962 (the first year such data were reported). Outlays for non-defense discretionary programs amount to 3.2 percent of GDP in 2033. Measured as a share of the economy, nondefense discretionary outlays have been less than that only three times—in 1999, 2018, and 2019—when they equaled 3.1 percent of GDP.

10. The Deficit Control Act specifies which measures of inflation CBO should use to construct its projections: The employment cost index for wages and salaries of workers in private industry is used to adjust discretionary funding related to federal personnel, and the gross domestic product price index is used to adjust other discretionary funding. For accounts with enacted advance appropriations, CBO applied provisions of law that require it to project future discretionary funding for those years for which funding has not been provided, starting with existing appropriations and adjusting them for inflation.

**Net Interest Outlays.** In the federal budget, net outlays for interest consist of the government’s interest payments on federal debt, offset by interest income that the government receives. Net interest outlays are dominated by the interest paid to holders of the debt 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 do not affect the budget deficit.

In CBO’s projections, net interest outlays rise from \$663 billion in 2023 to \$1.4 trillion in 2033, more than doubling over that period. Measured in relation to the size of the economy, those outlays rise from 2.5 percent of GDP in 2023 to 3.7 percent in 2033—when they would be 1.6 percentage points higher than their 50-year average.

The amount of outstanding debt and the average interest rate on that debt determine the federal government’s net interest costs. Growth in net interest costs is mainly affected by the average interest rate on federal debt and by the primary deficit, which requires the government to borrow more and thus increases debt held by the public.<sup>11</sup> Borrowing to pay for greater interest costs increases the net cost of interest further. In CBO’s projections, increases in the average interest rate on federal debt account for about three-quarters of the growth in net interest costs from 2023 to 2033.<sup>12</sup>

11. Average interest rates on federal debt rise in CBO’s projections, as debt matures and is refinanced. In 2024, the projected average interest rate on debt held by the public is 2.9 percent—0.2 percentage points higher than it was in 2023 and 0.7 percentage points higher than in 2022. That rate generally rises thereafter, albeit more slowly, reaching 3.2 percent in 2033. For more details about the government’s net interest costs, see Congressional Budget Office, *Federal Net Interest Costs: A Primer* (December 2020), [www.cbo.gov/publication/56780](http://www.cbo.gov/publication/56780). Interest costs are also affected by debt issuance not accounted for by primary deficits, such as some of the debt issued to finance federal credit programs.

12. To determine the percentage of increase in net interest costs attributable to changes in the average interest rate, CBO started with a benchmark scenario in which, after 2022, the average interest rate did not change and there were no primary deficits adding to the amount of debt. The agency then estimated the increase in net interest costs resulting from primary deficits (by estimating those deficits without a change in the average interest rate) and from the change in the average interest rate (by estimating those rates without primary deficits). The relative size of those estimates was then used to calculate the percentage of the total increase in net interest costs attributable to the increase in the average interest rate by proportionally allocating the interaction between the average interest rate and the primary deficit.

## Revenues

Federal revenues totaled \$4.9 trillion in 2022. In CBO's projections, under current law, revenues fall to \$4.8 trillion (or by 2 percent) in 2023. Measured as a share of the economy, they fall from 19.6 percent of GDP in 2022 to 18.4 percent this year, still above the 17.4 percent of GDP they averaged over the past 50 years (see Figure 3 on page 9, upper panel). Revenues drop to 17.4 percent of GDP in 2025 and then, over the next two years, climb to 18.1 percent of GDP, remaining at that level through the end of the projection period.

Those overall changes in revenues are driven by projected changes in specific sources of revenues (see Figure 3 on page 9, lower panel). In CBO's projections:

- **Individual income tax receipts** decline in relation to GDP through 2025, in part because the agency expects collections from taxes on capital gains realizations and other sources, which have been strong in recent years, to fall. Receipts grow from 2025 to 2027 because scheduled changes in tax law—including an increase in most tax rates stemming from the expiration of certain provisions of the 2017 tax act—are projected to boost receipts in relation to taxable personal income. Real bracket creep (which occurs when income rises faster than inflation) also contributes to rising receipts over time.<sup>13</sup>
- **Corporate income tax receipts** decrease steadily in relation to GDP from 2023 to 2033, reflecting the net effects of scheduled changes in tax rules.
- **Federal Reserve remittances** to the Treasury remain near zero from 2023 to 2027 because higher short-term interest rates have increased the Federal Reserve System's interest expenses to such an extent that they exceed its income. CBO anticipates that remittances will increase significantly in 2028 and rise slowly as a share of GDP thereafter.
- **Excise tax receipts** rise in 2024 after recent legislative changes take effect. Thereafter, excise taxes gradually decline in relation to GDP, along with the tax bases on which many excise taxes are levied.

13. The income thresholds for the various tax rate brackets in the individual income tax are indexed to increase with inflation (as measured by the chained consumer price index published by the Bureau of Labor Statistics). Real bracket creep occurs when income grows faster than prices, causing more income to be pushed into higher tax brackets.

## The Long-Term Outlook for the Budget

Beyond the coming decade, the fiscal outlook for the United States is challenging. In CBO's long-term projections, budget deficits increase in relation to GDP as growth in outlays, largely driven by rising interest costs and increased spending on Medicare, outpaces growth in revenues. Those rising deficits would boost federal debt significantly over the next three decades. In 2053, debt is projected to reach 195 percent of GDP—far higher than it has ever been—and would be on track to rise even further.

## Uncertainty of Budget Projections

CBO's baseline budget projections are intended to show what would happen to federal spending, revenues, deficits, and debt if current laws governing spending and taxes generally remained the same. Changes to laws—particularly those affecting fiscal policies—could lead to budgetary outcomes that diverged considerably from those in the baseline. But even if federal laws remained unchanged for the next decade, actual budgetary outcomes would differ from CBO's baseline projections because of unanticipated changes in economic conditions and in other factors that affect federal spending and revenues. For example, CBO's projections of outlays and revenues—and therefore its projections of deficits and debt—depend in part on the agency's economic projections, which include forecasts for such variables as interest rates, inflation, and productivity. Actual outcomes for those variables are likely to differ in various ways from the agency's projections. Still other changes, including administrative actions and court rulings, could cause deficits to differ from the projections shown in this report.

CBO's projection of the deficit this year is particularly uncertain for reasons that affect both revenues and outlays (see Box 1 on page 3). On the basis of an analysis of its past projections, the agency estimates that for current-year projections (that is, projections for the year in which they are made), the average absolute error in its projections of revenues has been 0.5 percent of GDP, which would amount to \$130 billion in 2023.<sup>14</sup> The average absolute error in CBO's current-year projections of outlays has been smaller—0.3 percent of GDP, which

14. Average absolute error is the average of errors without regard to whether they are overestimates or underestimates (the negative signs are removed from underestimates before averaging), so errors in different directions do not offset one another.

for 2023 would translate to about \$90 billion.<sup>15</sup> This year, each of those errors could be substantially larger than those averages.

## Changes in CBO's Baseline Projections Since February 2023

Since the agency published its baseline projections in February, CBO's estimate of the deficit has increased by \$130 billion (or 9 percent) for 2023 and by \$51 billion (or less than 1 percent) for the 2024–2033 period (see Table 5). In the agency's current projections, debt held by the public reaches \$46.7 trillion by the end of 2033, amounting to 119 percent of GDP—both measures nearly unchanged from the February projections.

CBO's updated budget projections are based on the economic forecast the agency developed for its February 2023 baseline; no legislation enacted since that baseline was published has affected projected budget totals for the 2023–2033 period.<sup>16</sup> Therefore, all the changes to the baseline since February are categorized as technical changes—adjustments made for reasons other than revised economic information or the enactment of new laws. Technical changes include, for example, updated estimates of how quickly agencies will obligate and expend funds, incorporating year-end data for various program activities; updated population data; and changes related to new administrative actions, such as rule changes.

The two largest technical changes in CBO's current projections stem from administrative actions related to payments for Medicare Advantage (MA), a program that allows beneficiaries to enroll in private plans for their Medicare coverage, and student loans. The announced policy changes affecting payments to MA plans caused CBO to decrease projected spending over the 2024–2033 period by \$223 billion, compared with the February baseline. The baseline also reflects costs of \$43 billion in 2023 and \$68 billion over the 2024–2033 period (a total of \$111 billion) for the Administration's

proposed rule that would establish a new income-driven repayment plan for federal student loans.<sup>17</sup>

CBO generally does not project the full effects of future administrative actions that would change the way programs operate, except in cases in which current law stipulates a change. Instead, the agency includes partial costs for administrative actions, such as regulations and program memorandums, in its budget projections after such actions are first proposed and then incorporates the full costs after they are finalized. Hence, the foregoing amounts for the IDR plan are 50 percent of the total estimated costs of the rules, following a long-standing convention that CBO uses for incorporating the effects of proposed rules.

## Outlays

Technical changes led CBO to increase projected outlays for 2023 by \$133 billion, mostly because of higher estimated costs for student loans and other credit programs and higher projected spending on deposit insurance. Projected outlays for the 2024–2033 period rose by \$101 billion, the net result of increased projections of net interest outlays and certain mandatory spending that were partially offset by decreased projections of Medicare and discretionary spending.

**Medicare.** CBO's projection of spending on Medicare over the 2024–2033 period is now \$255 billion (or 2 percent) less than it was in February. The reduction is largely the result of the \$223 billion (or 3 percent) decrease in projected outlays for Medicare Advantage, reflecting the announced policy changes to that program.<sup>18</sup> In addition, projections of spending on the fee-for-service program under Medicare Part B (which covers physicians' and other outpatient services) are lower than spending projected in February. Partially offsetting that decrease is higher projected growth in per-enrollee spending on the MA program over the 2025–2033 period than was estimated in the February baseline.

15. For additional analysis of past projections, see Congressional Budget Office, *An Evaluation of CBO's Projections of Outlays From 1984 to 2021* (April 2023), [www.cbo.gov/publication/58613](http://www.cbo.gov/publication/58613), *An Evaluation of CBO's Past Revenue Projections* (August 2020), [www.cbo.gov/publication/56499](http://www.cbo.gov/publication/56499), and *An Evaluation of CBO's Past Deficit and Debt Projections* (September 2019), [www.cbo.gov/publication/55234](http://www.cbo.gov/publication/55234).

16. The baseline projections described in this report incorporate the effects of legislation enacted and regulations announced through March 30, 2023.

17. Congressional Budget Office, *CBO's Estimate of the Budgetary Effects of H.R. 2811, the Limit, Save, Grow Act of 2023* (April 25, 2023), [www.cbo.gov/publication/59102](http://www.cbo.gov/publication/59102).

18. On February 1, 2023, the Centers for Medicare & Medicaid Services (CMS) announced changes for calendar year 2024 that would result in slower growth in payments to MA plans than projected in CBO's February baseline. On March 31, 2023, CMS announced that some of those changes would phase in over three years, along with other changes. Because of when its baseline was finalized, CBO's updated projections reflect the changes announced on February 1, 2023, but not those announced on March 31, 2023.

Table 5.

**Changes in CBO's Baseline Projections of the Deficit Since February 2023**

Billions of Dollars

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total	
												2024–2028	2024–2033
Deficit in CBO's February 2023 Baseline	-1,410	-1,576	-1,752	-1,716	-1,706	-1,929	-1,847	-2,115	-2,291	-2,480	-2,851	-8,679	-20,263
<b>Technical Changes</b>													
Changes in Revenues													
Individual income taxes	2	8	6	4	1	1	2	2	3	3	3	20	33
Other	1	1	2	3	2	2	2	1	1	1	1	11	17
<b>Total Change in Revenues</b>	<b>3</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>31</b>	<b>50</b>
Changes in Outlays													
Mandatory													
Medicare	-6	-17	-16	-24	-25	-28	-27	-28	-36	-21	-34	-110	-255
Premium tax credits and related spending	7	25	28	22	14	14	13	13	11	10	9	103	160
Student loans	71	5	6	6	7	7	7	7	7	7	7	30	63
Social Security	9	7	7	9	9	9	10	10	10	10	11	41	91
Deposit Insurance	33	3	1	-2	-3	-4	-4	-4	-5	-5	-4	-6	-28
Other revisions to the costs of credit programs	17	0	0	0	0	0	0	0	0	0	0	0	0
Veterans' benefits	-3	3	3	4	6	7	7	9	10	11	14	23	73
Other	12	-9	1	-3	-1	2	*	-1	-2	-1	-1	-11	-18
Subtotal	139	16	28	13	5	7	4	5	-5	11	2	69	86
Discretionary													
Defense	-8	4	3	2	1	-1	-1	-1	-2	-2	-2	10	2
Nondefense	-21	-23	-19	-13	-9	-6	-5	-5	-5	-5	-5	-70	-94
Subtotal	-29	-19	-16	-10	-8	-7	-6	-6	-6	-7	-7	-60	-92
Net interest													
Debt service	1	2	1	2	5	7	9	12	12	11	9	16	69
Other	22	5	3	5	5	2	4	4	4	5	2	19	38
Subtotal	23	6	4	7	9	8	13	16	16	16	12	36	108
<b>Total Change in Outlays</b>	<b>133</b>	<b>3</b>	<b>17</b>	<b>10</b>	<b>6</b>	<b>9</b>	<b>11</b>	<b>15</b>	<b>4</b>	<b>20</b>	<b>6</b>	<b>45</b>	<b>101</b>
<b>Increase (-) or Decrease in the Deficit From Technical Changes</b>	<b>-130</b>	<b>6</b>	<b>-9</b>	<b>-3</b>	<b>-3</b>	<b>-6</b>	<b>-8</b>	<b>-11</b>	<b>*</b>	<b>-16</b>	<b>-2</b>	<b>-14</b>	<b>-51</b>
Deficit in CBO's May 2023 Baseline	-1,539	-1,571	-1,761	-1,718	-1,709	-1,934	-1,855	-2,126	-2,291	-2,496	-2,852	-8,693	-20,314
<b>Memorandum:</b>													
Increase (-) or Decrease in the Primary Deficit <sup>a</sup>	-107	12	-4	5	7	3	5	5	16	*	10	22	56

Data source: Congressional Budget Office. See [www.cbo.gov/publication/59096#data](http://www.cbo.gov/publication/59096#data).

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

a. Primary deficits exclude net outlays for interest.

**Premium Tax Credits and Related Spending.** CBO and the staff of the Joint Committee on Taxation increased their projections of outlays for premium tax credits for health insurance purchased through the marketplaces established under the Affordable Care Act and related spending by \$7 billion for 2023 and by \$160 billion (or 18 percent) for the 2024–2033 period. That increase is mostly the result of two factors. First, the current projections reflect higher enrollment in the marketplaces than previously estimated. Second, portions of those refundable tax credits are recorded as outlays, and portions are recorded as reductions in revenues—and projections of that mix have changed: The estimated share of the premium tax credits recorded as outlays rather than reductions in tax liability has increased. That change also results in a corresponding increase in projected revenues and thus does not affect projected deficits. (See the discussion of that increase in the subsequent section on revenues.)

**Student Loans.** CBO’s estimate of outlays for student loan programs in 2023 is now \$71 billion more than it was in February; projections of such outlays over the 2024–2033 period are now \$63 billion more. Most of those increases stem from the Administration’s proposed rule for a new IDR plan for federal student loans.

The increase for 2023 results from several factors: Modifications that the Department of Education would make, under the new IDR plan, to outstanding loans originated *before* 2023 increased estimated outlays for the year by \$38 billion (or 50 percent of the Administration’s estimate of \$76 billion). The IDR plan increased projected outlays by \$5 billion for loans that would originate *in* 2023. Projected outlays for 2023 increased by an additional \$23 billion because of the extension of the pause on student loan payments, interest accrual, and collection of loans in default through August 30, 2023.

The increase in projected outlays for the 2024–2033 period is largely attributable to the IDR plan’s effects on loans that would originate in 2024 and later (reflecting 50 percent of the projected total cost of the plan over that period, which CBO estimates to be \$68 billion).

**Social Security.** CBO’s current projection of spending on Social Security in 2023 is \$9 billion more, and for the 2024–2033 period is \$91 billion (or less than 1 percent) more, than the agency projected in February. Those increases mainly stem from larger-than-expected

caseloads and average benefits in the Old-Age and Survivors Insurance program in recent months.

**Deposit Insurance.** CBO increased its projections of outlays for deposit insurance by \$33 billion for 2023 and lowered such projections by \$28 billion over the following decade. The increase for 2023 stems from two sources: payments made by the Federal Deposit Insurance Corporation when it invoked a systemic risk exception in March of this year in response to two bank failures; and an increased likelihood of losses from additional bank failures.<sup>19</sup> The decrease in outlays for the 2024–2033 period stems from CBO’s expectation that over the next decade, the FDIC will recover much of the amounts it spent to resolve bank failures in 2023 by liquidating the banks’ assets and collecting higher premiums over the next several years.

**Other Revisions to the Costs of Credit Programs.**

CBO increased its projection of mandatory outlays for 2023 by \$17 billion because the Administration changed the recorded subsidy costs of federal loans and loan guarantees made before 2023 (excluding student loan programs, which are discussed separately). The largest of those changes include a \$28 billion increase in the cost of certain disaster loan programs run by the Small Business Administration (SBA), a \$4 billion reduction in the cost of business loan guarantees provided by SBA, and a \$4 billion reduction in the cost of loan guarantees provided by the Federal Housing Administration.

**Veterans’ Benefits.** Initial claims for new benefits authorized by the Honoring Our PACT Act of 2022 (P.L. 117-168) have been larger than CBO expected. The agency therefore increased its estimate of outlays for veterans’ benefits over the 2024–2033 period by \$73 billion.

**Discretionary Spending.** CBO’s estimate of discretionary outlays for 2023 is \$29 billion less than it was in February; projected discretionary outlays over the 2024–2033 period decreased by \$92 billion (or less than 1 percent). Those changes generally stem from adjustments to better reflect the recent rates at which

19. On May 1, 2023, the FDIC announced it had taken First Republic Bank into receivership and estimated a total cost to the agency of \$13 billion. Because projections in this report do not take into account events occurring after March 30, 2023, they do not reflect the budgetary effects of the failure of First Republic Bank.

discretionary budget authority has translated into outlays. In particular, CBO now anticipates a slower pace of spending on programs funded by the Infrastructure Investment and Jobs Act.

**Net Interest Outlays.** CBO increased its projection of net interest outlays by \$23 billion for 2023 and by \$108 billion (or less than 1 percent) for the 2024–2033 period. The increase in 2023 is largely a result of incorporating into the baseline actual rates paid on recently issued Treasury securities. Most of the increase over the 10-year period stems from higher debt-service costs resulting from the increase in CBO’s projections of the deficit and other means of financing (and therefore debt). The technical updates to CBO’s projections of federal borrowing increased estimated net interest outlays by \$69 billion. The remaining increase of \$38 billion is a result of the agency’s updated estimates of intragovernmental interest payments and technical changes to the projected mix of securities issued by the Treasury.

### Revenues

CBO did not fully update its revenue projections for this baseline; those projections are comprehensively revised in conjunction with updates to the agency’s economic

forecast. However, largely because of revisions to its projections of health insurance coverage, the agency increased its revenue projections for 2023 by \$3 billion and for the 2024–2033 period by \$50 billion.

Most significantly, CBO has revised its estimates of subsidies for health insurance purchased through the marketplaces established under the Affordable Care Act. Although the total amount of those subsidies has been revised upward, the estimated share of premium tax credits recorded as reductions in tax liability rather than outlays for refundable tax credits has been reduced. That change increased projections of net receipts from individual income taxes by \$35 billion over the 2023–2033 period; the difference in receipts is offset by correspondingly higher projected outlays for the credits.

CBO also increased projected revenues in the category of other miscellaneous receipts by \$18 billion over the 2023–2033 period. That revision also largely stems from updated projections of health insurance coverage, which result in larger expected collections for risk adjustment and reinsurance as well as increased collections of penalty payments from employers that do not offer coverage meeting the Affordable Care Act’s standards.

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# About This Document

This document is one of a series of reports on the state of the budget and the economy that the Congressional Budget Office issues each year. It satisfies the requirement in section 202(e) of the Congressional Budget Act of 1974 for CBO to submit to the Committees on the Budget periodic reports about fiscal policy and to provide baseline projections of the federal budget. In keeping with CBO's mandate to provide objective, impartial analysis, this report makes no recommendations.

Amber Marcellino wrote the report with assistance from Aaron Feinstein, Dan Ready, and Joshua Shakin. Christina Hawley Anthony, Theresa Gullo, John McClelland, and Sam Papenfuss provided guidance. The estimates in the report are the work of more than 100 staff members at CBO and the staff of the Joint Committee on Taxation.

Mark Doms, Mark Hadley, Jeffrey Kling, and Robert Sunshine reviewed the report. Scott Craver edited it, and Jorge Salazar created the graphics and prepared the text for publication. The report is available at [www.cbo.gov/publication/59096](http://www.cbo.gov/publication/59096).

CBO seeks feedback to make its work as useful as possible. Please send comments to [communications@cbo.gov](mailto:communications@cbo.gov).



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