



Projections at a Glance

The Federal Budget

The deficit totals \$1.6 trillion in fiscal year 2024, grows to \$1.8 trillion in 2025, and then returns to \$1.6 trillion by 2027. Thereafter, deficits steadily mount, reaching \$2.6 trillion in 2034. Measured in relation to gross domestic product (GDP), the deficit amounts to 5.6 percent in 2024, grows to 6.1 percent in 2025, and then shrinks to 5.2 percent in 2027 and 2028. After 2028, deficits climb as a percentage of GDP, returning to 6.1 percent in 2034. Since the Great Depression, deficits have exceeded that level only during and shortly after World War II, the 2007–2009 financial crisis, and the coronavirus pandemic.

Debt held by the public increases from 99 percent of GDP at the end of 2024 to 116 percent of GDP—the highest level ever recorded—by the end of 2034. After 2034, debt would continue to grow if current laws generally remained unchanged.

Outlays in 2024 amount to 23.1 percent of GDP and stay close to that level through 2028. After 2028, growth in spending on programs for elderly people and rising net interest costs drive up outlays, which reach 24.1 percent of GDP by 2034.

Revenues amount to 17.5 percent of GDP in 2024, decline to 17.1 percent in 2025, and then climb to 17.9 percent of GDP by 2027 after certain provisions of the 2017 tax act expire. Revenues remain near that level through 2034.

The U.S. Economy

Economic growth slows in 2024 as unemployment increases, partly as a result of tight monetary policy. Real (inflation-adjusted) GDP growth accelerates in 2025 after the Federal Reserve responds to weaker economic conditions in 2024 by lowering interest rates.

Interest rates rose in 2023 as the federal funds rate increased to its highest level since 2001. In CBO's projections, that rate begins to decline in the second quarter of calendar year 2024. Interest rates on 10-year Treasury notes rise in 2024 and then fall through 2026.

Inflation (as measured by the price index for personal consumption expenditures) slowed markedly in 2023. In CBO's projections, it slows further in 2024—to a rate roughly in line with the Federal Reserve's long-run goal of 2 percent—and then ticks up in 2025, before declining slightly.

CBO's baseline budget and economic projections reflect the assumption that current laws governing taxes and spending will generally remain unchanged. Deficits and outlays have been adjusted to exclude the effects of shifts that occur in the timing of certain payments when the fiscal year begins on a weekend. Without those adjustments, the deficit projected for 2024 is \$1.5 trillion (or 5.3 percent of GDP).

Changes in CBO's Budget Projections Since May 2023

The deficit for 2024 is \$0.1 trillion smaller than CBO projected in May 2023, and the cumulative deficit for the 2024–2033 period is \$1.4 trillion (or 7 percent) smaller.

The biggest factor contributing to smaller projected deficits is a reduction in discretionary spending stemming from the Fiscal Responsibility Act and the Further Continuing Appropriations and Other Extensions Act, 2024.

Changes in CBO's Economic Projections Since February 2023

Growth of real GDP is weaker through 2026, similar in 2027, and slightly stronger afterward.

Interest rates are generally higher. From 2024 to 2027, those higher rates mostly reflect the effects of stronger-than-expected economic growth in 2023. In later years, higher rates are driven by more capital income and less private saving.

The labor force is larger because net immigration, which began increasing in 2022, remains elevated through 2026.

By the Numbers

The Budget Outlook, by Fiscal Year

	_	Pe	ercentage	of GDP			Billions of	dollars	
	Average, 1974–2023	Actual, 2023	2024	2025	2034	Actual, 2023	2024	2025	2034
Revenues	17.3	16.5	17.5	17.1	17.9	4,439	4,935	4,996	7,474
Individual income taxes Payroll taxes Corporate income taxes Other	8.0 6.0 1.8 1.5	8.1 6.0 1.6 0.8	8.8 5.9 2.0 0.8	8.6 5.9 1.7 0.8	9.5 5.9 1.3 1.2	2,176 1,614 420 229	2,469 1,663 569 234	2,520 1,734 494 247	3,973 2,466 551 485
Outlays	21.0	22.7	23.1	23.1	24.1	6,123	6,517	6,768	10,032
Mandatory	11.0	13.9	13.9	13.9	15.1	3,742	3,908	4,061	6,298
Social Security	4.4	5.0	5.2	5.3	5.9	1,348	1,453	1,545	2,471
Major health care programs	3.4	5.8	5.6	5.5	6.7	1,556	1,574	1,619	2,781
Medicare	2.1	3.1	3.2	3.2	4.2	832	896	940	1,740
Medicaid, CHIP, and marketplace subsidies	1.3	2.7	2.4	2.3	2.5	724	678	679	1,042
Other mandatory	3.2	3.1	3.1	3.1	2.5	838	881	897	1,046
Discretionary	8.0	6.4	6.2	6.0	5.1	1,722	1,739	1,756	2,106
Defense	4.2	3.0	2.9	2.9	2.5	805	822	845	1,034
Nondefense	3.7	3.4	3.3	3.1	2.6	917	917	911	1,071
Net interest	2.1	2.4	3.1	3.2	3.9	659	870	951	1,628
Total deficit (-)	-3.7	-6.2	-5.6	-6.1	-6.1	-1,684	-1,582	-1,772	-2,557
Primary deficit (-)	-1.6	-3.8	-2.5	-2.8	-2.2	-1,025	-712	-821	-929
Debt held by the public at the end of each period	48.3	97.3	99.0	101.7	116.0	26,240	27,897	29,749	48,300

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

The Economic Outlook, by Calendar Year

Percent						
					Annual	average
	Actual, 202 3	2024	2025	2026	2027- 2028	2029– 2034
		Change	from fourth qu	uarter to four	h quarter	
Real (inflation-adjusted) GDP Inflation	3.1	1.5	2.2	2.2	2.1	1.9
PCE price index	2.7	2.1	2.2	2.1	2.0	1.9
Consumer price index	3.2	2.5	2.5	2.2	2.2	2.2
Payroll employment (net monthly change, in thousands)	229	84	178	104	63	51
			Annual	average		
Unemployment rate	3.6	4.2	4.4	4.3	4.4	4.5
Interest rates						
Effective federal funds rate	5.0	5.1	4.1	3.3	2.9	2.9
3-month Treasury bills	5.1	4.9	3.8	3.1	2.7	2.8
10-year Treasury notes	4.0	4.6	4.6	3.9	3.8	4.1
Tax bases (percentage of GDP)						
Wages and salaries	43.2	43.5	43.8	43.9	43.8	43.8
Domestic corporate profits	9.9	9.7	9.6	9.4	9.2	9.0

Contents

Execu	itive Summary	1
Chap	ter 1: The Budget Outlook	9
Overv	iew	9
Defici	ts	9
Debt		13
Outlay	ys	16
Reven	nues	29
The Lo	ong-Term Outlook for the Budget	40
Uncer	tainty of Budget Projections	40
Chap	ter 2: The Economic Outlook	43
Overv	iew	43
Recen	at Economic Developments	47
Projec	ctions of Gross Domestic Product and Its Components	48
Projec	ctions of the Labor Market	56
Projec	ctions of Inflation and Interest Rates	58
Projec	ctions of Income	61
Uncer	tainty About the Economic Outlook	62
Comp	arison With CBO's February 2023 Economic Projections	64
Comp	arison With Other Economic Projections	70
Chap	ter 3: Changes in CBO's Baseline Projections Since May 2023	75
Overv	iew	75
Legisl	ative Changes	76
Econo	omic Changes	77
Techn	ical Changes	82
List o	f Tables and Figures	90
Abou	t This Document	91
Boxes	3	
1-1.	How the Fiscal Responsibility Act Affects CBO's Baseline Projections of Discretionary Funding	22
1-2.	Why CBO's Baseline Projections of Discretionary Funding for 2024 Differ From	
	Amounts in Its Cost Estimate for the Continuing Resolution	24
1-3.	CBO's Long-Term Budget Projections	40
2-1.	Economic Effects of CBO's Revised Population Projections	50
3-1.	Technical Changes to CBO's Baseline Projections to Account for Developments Affecting Energy-Related Tax Provisions	86

Notes About This Report

The budget projections in this report include the effects of legislation enacted through January 3, 2024, and are based on the Congressional Budget Office's economic projections. Those economic projections reflect economic developments and information as of December 5, 2023, and are available on CBO's website (www.cbo.gov/data/budget-economic-data#4).

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

When October 1 falls on a weekend, certain payments that the government would have ordinarily made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. Consequently, the number of payments in that previous fiscal year increases, and the number in the present fiscal year decreases. Those shifts in the timing of payments affect outlays and deficits (or surpluses) and thus are reflected in the agency's baseline budget projections (see Table 1-1). But timing shifts can complicate comparisons of annual outlays and deficits and distort certain budgetary trends, so in many cases, CBO presents adjusted baseline projections that treat the payments as if they were not subject to the shifts (for examples, see Tables 1-2, 1-4, 1-6, and 1-9).

Unless this report indicates otherwise, historical data shown in the text, tables, and figures describing the economic forecast reflect data available from the Bureau of Economic Analysis and other sources in late January 2024. Those data contain values for the fourth quarter of 2023, which were not available when CBO developed its current projections.

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

Some of the figures in this report use shaded vertical bars to indicate periods of recession. (A recession extends from the peak of a business cycle to its trough.)

Previous editions of this report often included an appendix of historical budget data. Those data and other supplemental data for this analysis are available on CBO's website (www.cbo.gov/publication/59710#data), as are a glossary of common budgetary and economic terms (www.cbo.gov/publication/42904), a description of how CBO develops its baseline budget projections (www.cbo.gov/publication/58916), a description of how CBO prepares its economic forecast (www.cbo.gov/publication/53537), and previous editions of this report (https://tinyurl.com/4dt4hshv).

Executive Summary

The Congressional Budget Office regularly publishes reports presenting its baseline projections of what the federal budget and the economy would look like in the current year and over the next 10 years if laws governing taxes and spending generally remained unchanged. This report is the latest in that series.

The Budget Outlook

Deficits

In CBO's projections, the federal budget deficit grows from \$1.6 trillion in fiscal year 2024 to \$2.6 trillion in 2034. Deficits also expand in relation to the size of the economy, from 5.6 percent of gross domestic product (GDP) in 2024, when the collection of certain postponed tax payments temporarily boosts revenues, to 6.1 percent of GDP in 2025. In 2026 and 2027, revenues increase faster than outlays, causing the deficit to shrink to 5.2 percent of GDP by 2027. Thereafter, outlays rise faster than revenues. By 2034, the deficit returns to 6.1 percent of GDP—significantly larger than the 3.7 percent that deficits have averaged over the past 50 years.

Projections for **2024**

Debt

Debt held by the public rises each year in relation to the size of the economy, reaching 116 percent of GDP in 2034—an amount greater than at any point in the nation's history. From 2024 to 2034, increases in mandatory spending and interest costs outpace declines in discretionary spending and growth in revenues and the economy, driving up debt. That trend persists, pushing federal debt to 172 percent of GDP in 2054.

Budget deficit: **\$1.6** trillion

Debt held by the public: 99% of GDP

Outlays:

\$6.5 trillion

Revenues:

\$4.9 trillion

Outlays and Revenues

Federal outlays in 2024 total \$6.5 trillion, which amounts to 23.1 percent of GDP. They stay close to that level through 2028 and then increase, reaching 24.1 percent of GDP by 2034. Growth in spending on programs that benefit elderly people and rising net interest costs drive those increases. Revenues in 2024 total \$4.9 trillion, or 17.5 percent of GDP. They reach 17.9 percent of GDP in 2027, in part because of the expiration of provisions of the 2017 tax act, and remain near that level through 2034.

Changes in CBO's Budget Projections

The deficit for 2024 is \$0.1 trillion (or 4 percent) smaller in CBO's current projections than it was in the agency's May 2023 projections, and the cumulative deficit over the 2024–2033 period is smaller by \$1.4 trillion (or 7 percent). The biggest factor contributing to smaller projected deficits over the 10-year period is a \$2.3 trillion reduction in projected discretionary outlays stemming from the combination of the Fiscal Responsibility Act and the Further Continuing Appropriations and Other Extensions Act, 2024.

Deficits and outlays have been adjusted to exclude the effects of shifts that occur in the timing of certain payments when the fiscal year begins on a weekend. Without those adjustments, the deficit projected for 2024 is \$1.5 trillion (or 5.3 percent of GDP).

The Budget Outlook, by Fiscal Year

	_	Po	ercentage	of GDP			Billions of	dollars	
	Average, 1974–2023	Actual, 2023	2024	2025	2034	Actual, 2023	2024	2025	2034
Revenues	17.3	16.5	17.5	17.1	17.9	4,439	4,935	4,996	7,474
Individual income taxes	8.0	8.1	8.8	8.6	9.5	2,176	2,469	2,520	3,973
Payroll taxes	6.0	6.0	5.9	5.9	5.9	1,614	1,663	1,734	2,466
Corporate income taxes	1.8	1.6	2.0	1.7	1.3	420	569	494	551
Other	1.5	0.8	8.0	8.0	1.2	229	234	247	485
Outlays	21.0	22.7	23.1	23.1	24.1	6,123	6,517	6,768	10,032
Mandatory	11.0	13.9	13.9	13.9	15.1	3,742	3,908	4,061	6,298
Social Security	4.4	5.0	5.2	5.3	5.9	1,348	1,453	1,545	2,471
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Debt held by the public at the end of each period	48.3	97.3	99.0	101.7	116.0	26,240	27,897	29,749	48,300

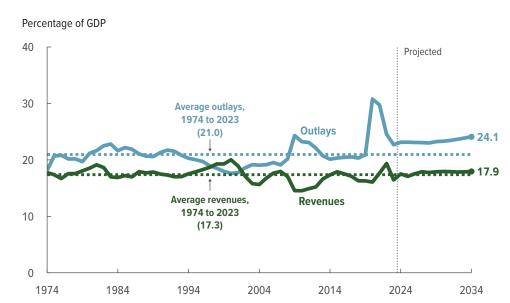
See Chapter 1. When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. Outlays and deficits have been adjusted to remove the effects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

The Budget Outlook in Six Figures

Total Outlays and Revenues

Measured as a percentage of GDP, federal outlays exceed their 50-year average each year from 2024 to 2034 in CBO's projections. Revenues fall below their 50-year average in 2025 but hover slightly above it thereafter.

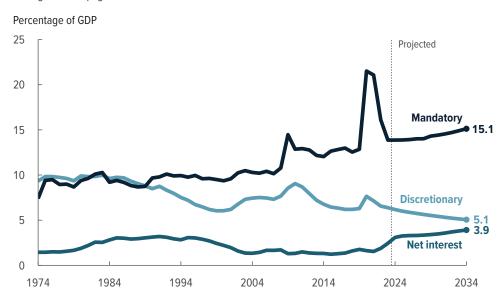
See Figure 1-3 on page 27.



Outlays, by Category

In CBO's projections, rising spending for Social Security and Medicare boosts mandatory outlays. Discretionary spending as a share of GDP falls to historic lows. And mounting debt and higher interest rates cause net outlays for interest to increase. Starting next year, net interest costs are greater in relation to GDP than at any point since at least 1940, the first year for which the Office of Management and Budget reports such data.

See Figure 1-4 on page 28.

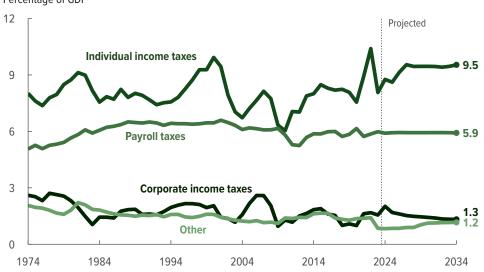


Revenues, by Category

Receipts from individual income taxes fell sharply as a percentage of GDP in 2023, from a historic high in 2022. They declined in part because capital gains on sold assets were smaller and because the Internal Revenue Service extended some tax payment deadlines. As those delayed payments are made, revenues rise in 2024. They rise again in 2026 and 2027, following the scheduled expiration of certain provisions of the 2017 tax act.

See Figure 1-5 on page 33.

Percentage of GDP



Outlook for **2024**— **2034**

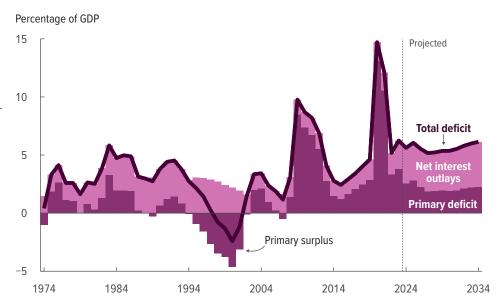
Increases in mandatory spending and rising net interest costs push outlays to \$10.0 trillion, or 24.1% of GDP, in 2034.

Revenues in 2034 total **\$7.5** trillion, or **17.9%** of GDP.

Total Deficit, Net Interest Outlays, and Primary Deficit

In CBO's projections, the total budget deficit—the amount by which outlays exceed revenues—equals 6.1 percent of GDP in 2034. Net interest payments grow in relation to GDP, reaching 3.9 percent of GDP in 2034. Primary deficits (which exclude net outlays for interest) increase in 2025, decline over the next few years, and then increase again.

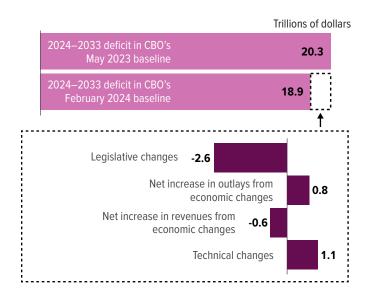
See Figure 1-1 on page 12.



Changes in CBO's Baseline Projections of the 10-Year Deficit Since May 2023

The deficit for the 2024–2033 period is projected to total \$18.9 trillion, \$1.4 trillion less than CBO projected in May 2023. The biggest factor contributing to smaller projected deficits is the reduction in projected discretionary outlays stemming from the Fiscal Responsibility Act and the Further Continuing Appropriations and Other Extensions Act, 2024. Those decreases are partially offset by technical changes that reduce projected revenues and increase projected outlays for Medicare, Social Security, and clean vehicle and energy-related tax credits.

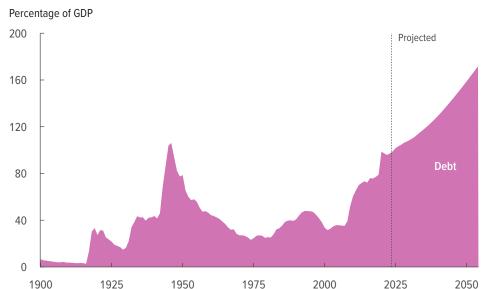
See Figure 3-1 on page 76.



Federal Debt Held by the Public

Federal debt held by the public increases each year in CBO's projections, swelling to an all-time record of 116 percent of GDP in 2034. In the two decades that follow, growing deficits cause debt to soar to 172 percent of GDP by 2054.

See Figure 1-2 on page 15.



The Economic Outlook

Economic Growth

In calendar year 2023, the U.S. economy grew faster than it did in 2022, even as inflation slowed. Economic growth is projected to slow in 2024 amid increased unemployment and lower inflation. CBO expects the Federal Reserve to respond by reducing interest rates, starting in the middle of the year. In CBO's projections, economic growth rebounds in 2025 and then moderates in later years. A surge in immigration that began in 2022 continues through 2026, expanding the labor force and increasing economic output.

Interest Rates

Interest rates rose in 2023 as the federal funds rate (the rate financial institutions charge each other for overnight loans) increased to its highest level since 2001. In CBO's projections, that rate begins to decline in the second quarter of 2024. Interest rates on 10-year Treasury notes rise in 2024 and then fall through 2026.

Inflation

Inflation slowed markedly in 2023. In CBO's projections, inflation as measured by the price index for personal consumption expenditures (PCE) slows further in 2024, to a rate roughly in line with the Federal Reserve's long-run goal of 2 percent. It then ticks up in 2025, before declining slightly.

Changes in CBO's Economic Projections

Since February 2023, when CBO published its last full economic forecast, the agency has lowered its projections of economic growth and inflation (as measured by the PCE price index) for 2024. CBO also expects interest rates to be higher from 2024 to 2027 than it projected last year. After 2027, CBO's current and previous economic forecasts are generally similar.

Outlook for **2024**— **2034**

The growth of real GDP slows to a rate of **1.5%** in 2024 as inflation continues to decline and the federal funds rate falls.

After 2024, real GDP grows at a moderate pace.

The Economic Outlook, by Calendar Year

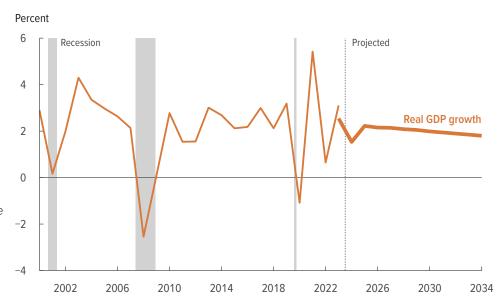
					Δnnual	average
	Actual, 2023	2024	2025	2026	2027– 2028	2029- 2034
		Change	from fourth qu	uarter to four	h quarter	
Real (inflation-adjusted) GDP	3.1	1.5	2.2	2.2	2.1	1.9
Inflation						
PCE price index	2.7	2.1	2.2	2.1	2.0	1.9
Consumer price index	3.2	2.5	2.5	2.2	2.2	2.2
Payroll employment (net monthly change, in thousands)	229	84	178	104	63	51
			Annual	average		
Unemployment rate	3.6	4.2	4.4	4.3	4.4	4.5
Interest rates						
Effective federal funds rate	5.0	5.1	4.1	3.3	2.9	2.9
3-month Treasury bills	5.1	4.9	3.8	3.1	2.7	2.8
10-year Treasury notes	4.0	4.6	4.6	3.9	3.8	4.1
Tax bases (percentage of GDP)						
Wages and salaries	43.2	43.5	43.8	43.9	43.8	43.8
Domestic corporate profits	9.9	9.7	9.6	9.4	9.2	9.0

The Economic Outlook in Six Figures

Growth of Real GDP

The growth of economic output, as measured by the nation's GDP, is projected to slow in 2024 because of weaker growth in consumer spending and a decline in business investment in non-residential structures. Growth of real (inflation-adjusted) GDP is projected to increase in 2025 after the Federal Reserve responds to weaker economic conditions in 2024 by lowering interest rates.

See Figure 2-1 on page 44.



Outlook for **2024**–**2034**

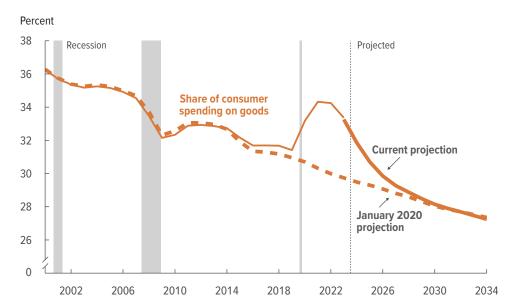
Real GDP growth averages 2.2% annually from 2025 to 2028.

Consumer spending, which shifted sharply toward goods and away from services during the pandemic, returns to prepandemic patterns.

Consumer Spending on Goods and Services

CBO expects consumer spending to continue shifting from goods to services as people gradually resume their prepandemic patterns of consumption. By 2030, the share of consumer spending devoted to goods returns to its prepandemic trend of a gradual decline, in CBO's projections.

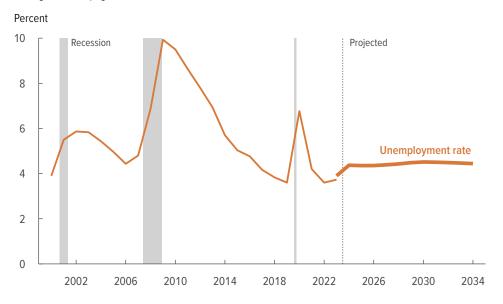
See Figure 2-2 on page 52.



Unemployment

In CBO's projections, the unemployment rate rises to 4.4 percent by the fourth quarter of 2024, reflecting the slowdown in economic growth. In later years, the unemployment rate ranges from 4.3 percent to 4.5 percent. Fluctuations in that rate are mainly attributable to changes in economic growth and in the size and composition of the labor force.

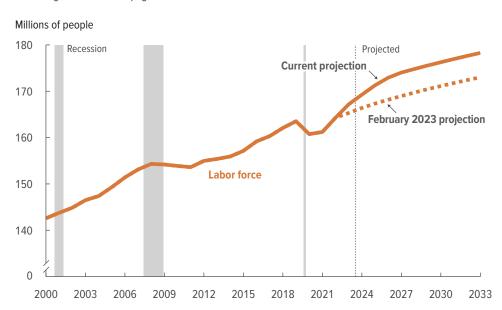
See Figure 2-4 on page 57.



The Labor Force

In CBO's current projections, the number of people who are working or actively seeking employment continues to expand at a moderate pace through 2026. Higher population growth in those years, mainly from increased immigration, more than offsets a decline in labor force participation due to slowing demand for workers and the rising average age of the population. A large proportion of recent and projected immigrants are expected to be 25 to 54 years old—adults in their prime working years.

See the figure in Box 2-1 on page 50.



Outlook for **2024**— **2034**

Unemployment rises to **4.4%** by the end of 2024 and then levels off.

The labor force expands moderately over the next few years.

Outlook for **2024**–**2034**

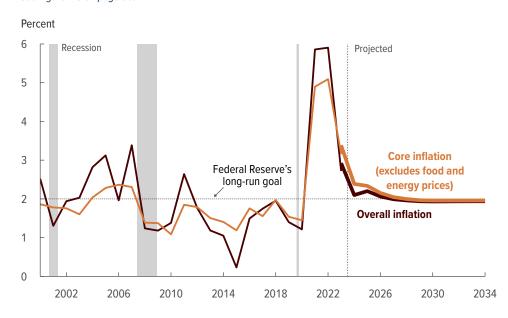
Inflation falls further over the next few years, dropping to **2.0%** or less after 2026.

Interest rates also decline over the next few years and then stabilize.

Overall Inflation and Core Inflation

In CBO's projections, overall prices (as measured by the PCE price index) increase less in 2024 and 2025 than they did last year. One key reason that inflation is projected to be lower than in recent years is the easing of upward pressures on the prices of food, energy, and other goods. Another key reason is weaker growth in the prices of shelter services (which reflect the costs of both rental and owner-occupied housing) because of elevated interest rates in 2024.

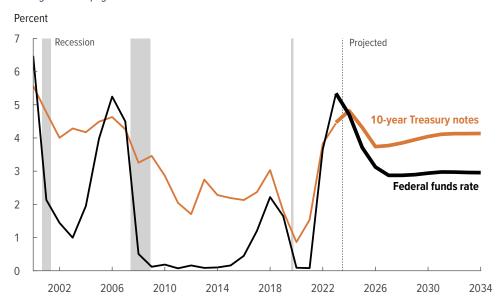
See Figure 2-5 on page 60.



Interest Rates

CBO expects that in the second quarter of 2024, the Federal Reserve will respond to slowing inflation and rising unemployment by lowering the federal funds rate, which affects interest rates throughout the economy. Starting this year, the difference between the federal funds rate and the interest rate on 10-year Treasury notes is projected to gradually return to its long-run average.

See Figure 2-6 on page 61.



Chapter 1: The Budget Outlook

Overview

In the Congressional Budget Office's baseline budget projections, the federal budget deficit is \$1.5 trillion this year and generally increases over the next decade, reaching \$2.6 trillion in 2034. (If adjusted to exclude the effects of shifts that occur in the timing of certain payments when the first day of the fiscal year falls on a weekend, this year's deficit would be \$1.6 trillion.) The cumulative deficit is projected to total \$20.0 trillion over the 2025– 2034 period. Those projections, which were finalized on January 3, 2024, incorporate the effects of legislation enacted as of that date and therefore do not include the effects of any subsequent legislation, including the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35), which was enacted on January 19, 2024. Incorporating the budgetary effects of subsequent legislation enacted to date would not significantly change the projections presented here.

- Measured relative to the size of the economy, the deficit equals 5.3 percent of gross domestic product (GDP) in 2024. In CBO's projections, annual deficits generally increase over the 2025–2034 period, averaging 5.7 percent of GDP per year, well above the average deficit over the past 50 years.
- As a result of those deficits, federal debt held by the public increases each year in CBO's projections, rising from 99 percent of GDP this year to 116 percent in 2034 (see Table 1-1). That would be the largest amount ever recorded in U.S. history.

The deficits in CBO's current projections are generally smaller than those in the agency's previous baseline projections for 2024 to 2033, which were published in May 2023. The budget shortfall for 2024 is now projected to be \$63 billion smaller—and the cumulative deficit for the 2024–2033 period, \$1.4 trillion less—than CBO projected last May. Those net decreases stem from the Fiscal Responsibility Act (FRA, P. L. 118-5) and the Further Continuing Appropriations and Other Extensions Act, 2024 (P.L. 118-22), as well as updates to the agency's economic forecast and other changes (see Chapter 3).

After 2034, deficits continue to increase in relation to the size of the economy in CBO's projections. Outlays increase largely because of rising interest costs and growth in spending for the major health care programs. Revenues also rise over the period, but more slowly than outlays. Such persistently large deficits cause federal debt held by the public, which has recently been at levels not reached since the end of World War II, to rise even further.

CBO prepares its baseline budget projections in accordance with provisions set forth in the Balanced Budget and Emergency Deficit Control Act of 1985 (the Deficit Control Act, P.L. 99-177) 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. For discretionary funding, CBO's baseline incorporates limits on such funding for 2024 and 2025, as specified in the FRA, and then reflects the assumption (as required by law) that funding will grow with inflation once those caps expire. Discretionary funding that is not constrained by the caps is generally assumed to increase with inflation throughout the next decade.

CBO's baseline budget projections are meant to provide a benchmark that policymakers can use to assess the potential effects of changes in policy. They are not intended to provide a forecast of future budgetary outcomes, because future legislative action could lead to markedly different outcomes. 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, such as administrative actions.

Deficits

The projected \$1.5 trillion federal budget deficit for 2024 is \$188 billion less than the shortfall recorded last year. That deficit would be larger, and the decrease would be smaller, if not for a shift in the timing of certain payments in both 2024 and 2023. October 1, 2023 (the first day of fiscal year 2024) fell on a weekend, so certain payments that would ordinarily have been made on that day were instead made in fiscal year 2023. Likewise, October 1, 2022, fell on a weekend, which shifted

Congressional Budget Office, cost estimate for H.R. 2872, the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (January 17, 2024), www.cbo.gov/ publication/59893.

Table 1-1.

CBO's Baseline Budget Projections, by Category

												_	Tot	al
	Actual, 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2025- 2029	2025- 2034
						lı	n billion	s of dolla	ars					
Revenues														
Individual income taxes	2,176	2,469	,	2,789	3,031	3,124	,	3,381	3,511	3,634	3,793	3,973	14,715	33,007
Payroll taxes	1,614	1,663		1,812	,	1,960	2,039	2,121	2,205	2,291	2,379	2,466	9,430	20,892
Corporate income taxes	420	569		491	484	491	501	511	519	519	533	551	2,461	5,094
Other ^a	229	234		259	283	296	355	402	421	445	464	485	1,439	3,656
Total	4,439	4,935	,	5,351	-	•		6,414	•		7,168	7,474	28,046	•
On-budget Off-budget ^b	3,246 1.194	3,706 1,229	- /	4,013 1,337	4,295 1,387	4,430 1,440	4,650 1,496	4,860 1,554	5,041 1,615	5,213 1,677	5,429 1,740	5,672 1,803	21,100 6,946	47,313 15,336
3	1,134	1,223	1,203	1,337	1,507	1,440	1,430	1,554	1,013	1,077	1,740	1,005	0,540	13,330
Outlays	2 752	3,838	4.064	1 216	1 110	4 742	4 007	E 1E2	E 407	E 602	6 121	6 220	22.206	E0 000
Mandatory Discretionary	3,753 1,722	3,030 1,734	•	4,246 1,791	4,448 1,825	4,743 1,866	4,807 1,893	5,153 1,937	5,407 1,975	5,682 2,016	6,131 2,066	6,320 2,106	22,306 9,131	50,999 19,231
Net interest	659	870		1,005	1,049	1,105	1,170	1,241	1,328	1,430	1,527	1,628	5.280	12,435
Total	6.135	6.442		7,042					8,710	9,128	9,724		36,718	
On-budget	4,915	5,121	5,354	5,541	5,736	6,032	6.090	6,448	6,721	7.026	7,516	7,738	28.753	64,201
Off-budget ^b	1,220	1,322		1,501	1,587	1,683	1,781	1,883	1,989	2,102	2,209	2,316	7,965	18,464
Total deficit (-) ^c	-1,695	-1,507	-1,772	-1,692	-1,640	-1,844	-1,723	-1,917	-2,054	-2,238	-2,556	-2,579	-8,672	-20,016
On-budget	-1,669	-1,414	-1,643	-1,528	-1,441	-1,602	-1,439	-1,588	-1,680	-1,813	-2,087	-2,066	-7,653	-16,888
Off-budget ^b	-26	-93	-129	-164	-200	-242	-284	-328	-374	-425	-469	-513	-1,019	-3,128
Primary deficit (-) ^{c,d}	-1,036	-637	-821	-687	-591	-739	-554	-676	-726	-808	-1,029	-951	-3,392	-7,581
Debt held by the public	26,240	27,897	29,749	31,515	33,233	35,141	36,916	38,868	40,945	43,201	45,739	48,300	n.a.	n.a.
Addendum:														
GDP	26,974	28,177	29,256	30,504	31,756	33,043	34,375	35,746	37,157	38,609	40,106	41,646	158,933	352,197
						As	a percei	ntage of	GDP					
Revenues														
Individual income taxes	8.1	8.8	8.6	9.1	9.5	9.5	9.5	9.5	9.5	9.4	9.5	9.5	9.3	9.4
Payroll taxes	6.0	5.9		5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Corporate income taxes	1.6	2.0		1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.5	1.4
Other ^a	0.8	0.8		0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.2	0.9	1.0
Total	16.5	17.5		17.5	17.9	17.8	17.9	17.9	17.9	17.8	17.9	17.9	17.6	17.8
On-budget Off-budget ^b	12.0 4.4	13.2 4.4		13.2 4.4	13.5 4.4	13.4 4.4	13.5 4.4	13.6 4.3	13.6 4.3	13.5 4.3	13.5 4.3	13.6 4.3	13.3 4.4	13.4 4.4
•	7.7	7.7	7.7	7.7	7.7	7.7	7.7	4.5	7.5	т.5	7.5	4.5	7.7	7.7
Outlays	12.0	12 C	12.0	12.0	110	111	110	111	11.0	117	45.0	45.2	110	445
Mandatory Discretionary	13.9 6.4	13.6 6.2		13.9 5.9	14.0 5.7	14.4 5.6	14.0 5.5	14.4 5.4	14.6 5.3	14.7 5.2	15.3 5.2	15.2 5.1	14.0 5.7	14.5 5.5
Net interest	2.4	3.1	3.2	3.3	3.7	3.3	3.4	3.5	3.6	3.7	3.8	3.9	3.7	3.5
Total	22.7	22.9		23.1	23.1	23.3	22.9		23.4	23.6	24.2	24.1	23.1	23.5
On-budget	18.2					18.3	17.7		18.1	18.2	18.7	18.6	18.1	18.2
Off-budget ^b	4.5			4.9	5.0	5.1	5.2		5.4	5.4	5.5	5.6	5.0	5.2
Total deficit (-)°	-6.3	-5.3	-6.1	-5.5	-5.2	-5.6	-5.0	-5.4	-5.5	-5.8	-6.4	-6.2	-5.5	-5.7
On-budget	-6.2			-5.0	-4.5	-4.8	-4.2		-4.5	-4.7	-5.2		-4.8	-4.8
Off-budget ^b	-0.1	-0.3		-0.5		-0.7	-0.8		-1.0	-1.1	-1.2		-0.6	-0.9
Primary deficit (-)c,d	-3.8	-2.3	-2.8	-2.3	-1.9	-2.2	-1.6	-1.9	-2.0	-2.1	-2.6	-2.3	-2.1	-2.2
Debt held by the public	97.3	99.0	101.7	103.3	104.7	106.3	107.4	108.7	110.2	111.9	114.0	116.0	n.a.	n.a.

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

GDP = gross domestic product; n.a. = not applicable.

- a. Consists of excise taxes, remittances from the Federal Reserve System, customs duties, estate and gift taxes, and miscellaneous fees and fines.
- b. The revenues and outlays of the Social Security trust funds and the net cash flow of the Postal Service are classified as off-budget.
- c. When outlays exceed revenues, the result is a deficit. Values in this row were calculated by subtracting outlays from revenues; thus, negative values indicate deficits.

d. Primary deficits exclude net outlays for interest.

Table 1-2.

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

	Actual, 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
					Ir	n billions	of dolla	rs				
Adjustments to exclude effects of timing shifts ^a	-11	75	0	0	0	-117	117	0	0	0	-154	-22
Outlays, adjusted for timing shifts												
Mandatory	3,742	3,908	4,061	4,246	4,448	4,632	4,919	5,153	5,407	5,682	5,984	6,298
Discretionary	1,722	1,739	1,756	1,791	1,825	1,860	1,899	1,937	1,975	2,016	2,059	2,106
Net interest	659	870	951	1,005	1,049	1,105	1,170	1,241	1,328	1,430	1,527	1,628
Total	6,123	6,517	6,768	7,042	7,323	7,597	7,987	8,331	8,710	9,128	9,571	10,032
Total deficit (-), adjusted for timing shifts ^b	-1,684	-1,582	-1,772	-1,692	-1,640	-1,727	-1,841	-1,917	-2,054	-2,238	-2,402	-2,557
Primary deficit (-), adjusted for timing shifts ^{b,c}	-1,025	-712	-821	-687	-591	-622	-671	-676	-726	-808	-875	-929
					Asa	a percen	tage of (GDP				
Outlays, adjusted for timing shifts						-	_					
Mandatory	13.9	13.9	13.9	13.9	14.0	14.0	14.3	14.4	14.6	14.7	14.9	15.1
Discretionary	6.4	6.2	6.0	5.9	5.7	5.6	5.5	5.4	5.3	5.2	5.1	5.1
Net interest	2.4	3.1	3.2	3.3	3.3	3.3	3.4	3.5	3.6	3.7	3.8	3.9
Total	22.7	23.1	23.1	23.1	23.1	23.0	23.2	23.3	23.4	23.6	23.9	24.1
Total deficit (-), adjusted for timing shifts ^b	-6.2	-5.6	-6.1	-5.5	-5.2	-5.2	-5.4	-5.4	-5.5	-5.8	-6.0	-6.1
Primary deficit (-), adjusted for timing shifts ^{b,c}	-3.8	-2.5	-2.8	-2.3	-1.9	-1.9	-2.0	-1.9	-2.0	-2.1	-2.2	-2.2
Addendum:												
Baseline deficit (-), unadjusted												
In billions of dollars ^b	-1,695	-1,507	-1,772	-1,692	-1,640	-1,844	-1,723	-1,917	-2,054	-2,238	-2,556	-2,579
As a percentage of GDP ^b	-6.3	-5.3	-6.1	-5.5	-5.2	-5.6	-5.0	-5.4	-5.5	-5.8	-6.4	-6.2

Data sources: Congressional Budget Office; Department of the Treasury. See www.cbo.gov/publication/59710#data.

GDP = gross domestic product.

payments due on that day into fiscal year 2022 (from fiscal year 2023). If not for those shifts, this year's projected deficit would be \$1.6 trillion, \$102 billion less than the \$1.7 trillion deficit in 2023 (see Table 1-2). Throughout the rest of this chapter, outlays and deficits (both projected and historical amounts) reflect adjustments to exclude the

effects of timing shifts. That allows for a clearer analysis of the underlying annual trends in those budget categories.

The 2023 deficit was significantly affected by actions related to the Administration's plan to cancel outstanding student loans for many borrowers. Those actions resulted in largely offsetting changes to the deficit in the past two years. In September 2022, in keeping with the budgetary procedures used to estimate the costs of federal credit programs, the Administration recorded outlays of \$379 billion to reflect its estimate of the long-term costs of debt cancellation, which increased the deficit in fiscal year 2022. Because of a June 2023 Supreme Court

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.

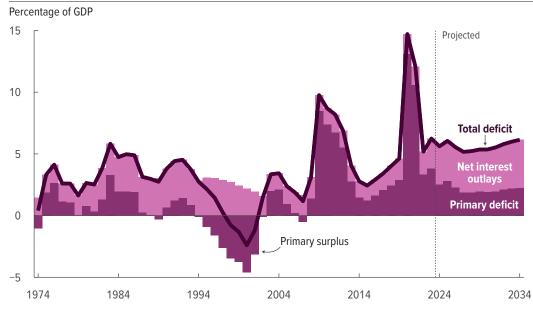
b. When outlays exceed revenues, the result is a deficit. Values in this row were calculated by subtracting outlays from revenues; thus, negative values indicate deficits.

c. Primary deficits exclude net outlays for interest.

^{2.} October 1 will fall on a weekend again in 2028, 2033, and 2034, 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 noticeably boost outlays and the deficit in fiscal years 2028 and 2033; they will reduce federal outlays and deficits in fiscal year 2029.

Figure 1-1.

Total Deficit, Net Interest Outlays, and Primary Deficit



In CBO's projections, the total budget deficit—the amount by which outlays exceed revenues—equals 6.1 percent of GDP in 2034. Net interest payments grow in relation to GDP, reaching 3.9 percent of GDP in 2034. Primary deficits increase in 2025, decline over the next few years, and then increase again.

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#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 presented here have been adjusted to exclude the effects of those timing shifts. Historical amounts have been adjusted as far back as the available data will allow.

Primary deficits or surpluses exclude net outlays for interest. When outlays exceed revenues, the result is a deficit. In this figure, deficits and surpluses were calculated by subtracting revenues from outlays; thus, positive values indicate deficits, and negative values indicate surpluses. When outlays are subtracted from revenues, as recorded in the federal budget and in the tables in this chapter, negative values indicate deficits, and positive values indicate surpluses.

GDP = gross domestic product.

decision, however, the cancellation plan was never implemented. As a result, in August 2023, the Administration recorded a \$333 billion reduction in outlays for the student loan program.³ That action reduced the fiscal year 2023 deficit.

If the reversal of the Administration's plan for student loan cancellations was excluded from the calculation of the deficit in 2023, the deficit that year would have been larger—\$2.0 trillion instead of \$1.7 trillion—and the projected decline in deficits from 2023 to 2024 in CBO's baseline would be \$435 billion rather than \$102 billion.

Measured relative to the size of the economy, this year's deficit is estimated to be smaller than last

year's—5.6 percent of GDP, down from 6.2 percent. (Without the reversal of the student loan cancellations, the 2023 deficit would have been 7.5 percent of GDP.) Deficits in CBO's baseline grow to 6.1 percent of GDP in 2025 and then decline over the next two years—falling to 5.2 percent of GDP in 2027—primarily because of the scheduled expiration at the end of calendar year 2025 of some provisions of the 2017 tax act (P.L. 115-97). After 2028, deficits increase again, reaching 6.1 percent of GDP in 2034, the last year of the projection period (see Figure 1-1). The cumulative deficit for the 2025—2034 period is projected to total \$19.8 trillion, or 5.6 percent of GDP (excluding the effects of timing shifts).

The deficits that CBO projects are large by historical standards. Over the past 50 years, the annual deficit has averaged 3.7 percent of GDP. In CBO's projections, deficits equal or exceed 5.2 percent of GDP in every year from 2024 to 2034. Since at least 1930, deficits have not remained that large for more than five years in a row.

The outlay savings recorded by the Administration in 2023 were smaller than the costs recorded in 2022, primarily because of a new income-driven repayment plan that the Administration finalized in 2023; that plan increased the cost of outstanding student loans.

Primary deficits—that is, deficits excluding net outlays for interest—increase from 2.5 percent of GDP in 2024 to 2.8 percent in 2025 and then decrease, reaching 1.9 percent in 2027 in CBO's projections. From 2027 to 2034, primary deficits average 2.0 percent of GDP. In the 62 years from 1947 to 2008, such deficits exceeded 2.0 percent of GDP only three times. In the past 15 years, though, they have exceeded that level 12 times—in part because of legislation that was enacted in response to the 2007–2009 financial crisis and the coronavirus pandemic that began in early 2020.

The primary deficits in CBO's projections are especially large given the relatively low unemployment rates that the agency is forecasting. From 2025 to 2034—a period in which the average unemployment rate is projected to remain at or below 4.5 percent in each year—primary deficits in CBO's baseline projections average 2.1 percent of GDP. By way of historical contrast, from 1974 to 2023 the unemployment rate was at or below 4.5 percent in nine years; in those years, the budget showed a primary deficit of 0.3 percent of GDP, on average.

Debt

The deficits projected in CBO's baseline would boost federal debt. That debt can be measured in various ways. The most common measure is 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 to pay off its maturing liabilities. Other measures are used for different purposes, such as to provide a more comprehensive picture of the government's financial condition.

Debt Held by the Public

After accounting for all the federal government's borrowing needs, CBO projects that debt held by the public would rise from \$26.2 trillion at the end of 2023 to \$48.3 trillion at the end of 2034 (see Table 1-3). As a percentage of GDP, that debt is projected to reach 116 percent at the end of 2034—about 19 percentage points larger than it was at the end of 2023 and nearly two and a half times its average percentage over the past 50 years (see Figure 1-2).

The net amount that the Treasury borrows each year by issuing securities is determined primarily by the annual budget deficit. However, several other factors also affect

the government's need to borrow from the public. Those factors—collectively referred to as other means of financing—include changes in the government's cash balances and cash flows associated with federal credit programs, such as those related to student loans and loans to small businesses. (Those cash flows are not reflected in the budget deficit, which accounts only for the subsidy costs of credit programs—that is, the estimated net lifetime costs of the programs' loans and loan guarantees.)⁵ As a result of that additional borrowing, the increase in debt held by the public in 2024 will exceed the deficit by about \$150 billion, CBO projects. Over the 2025—2034 period, the increase in federal debt is projected to exceed the cumulative deficit by \$387 billion.

The bulk of that additional borrowing stems from the need to finance federal loan programs. The cash disbursements needed to finance those programs each year—for example, in the case of direct loans, the funds lent to borrowers minus the repayments of principal and payments of interest and other fees—are greater than the net subsidy costs that are recorded in the budget. The Treasury needs to borrow funds each year to make up that difference.

Other Measures of Debt

Four other measures are sometimes used in discussions of federal debt.

- Debt held by the public minus financial assets excludes the value of the government's financial assets. That measure reflects the government's overall financial condition by accounting for the value of financial assets, such as student loans, that the government has acquired while incurring that debt. In CBO's baseline projections, that measure generally varies along with debt held by the public but is 6 percent to 8 percent smaller.
- Debt held by the public minus financial assets and debt held by the Federal Reserve excludes the value of financial assets held by the federal government as well as Treasury securities held by the Federal Reserve. That measure represents the net debt held by entities outside the government, which better reflects the government's overall effect on credit markets. In CBO's baseline projections, that measure increases

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

^{5.} For more details about other means of financing and about federal debt more broadly, see Congressional Budget Office, *Federal Debt: A Primer* (March 2020), www.cbo.gov/publication/56165.

Table 1-3.

CBO's Baseline Projection	s of F	edera	ıl Deb	t								
Billions of dollars												
	Actual, 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Debt held by the public at the beginning of the year	24,252	26,240	27,897	29,749	31,515	33,233	35,141	36,916	38,868	40,945	43,201	45,739
Changes in debt held by the public Resulting from the deficit Resulting from other means of financing ^a Total	1,695 292 1,987	1,507 150 1,657	1,772 81 1,852	1,692 74 1,766	1,640 78 1,718	1,844 64 1,908	1,723 52 1,775	1,917 35 1,952	2,054 23 2,077	2,238 18 2,256	2,556 -18 2,538	2,579 -18 2,561
Debt held by the public at the end of the year In billions of dollars As a percentage of GDP	26,240 97.3	27,897 99.0	29,749 101.7	•	,	•	36,916 107.4	•	•		45,739 114.0	48,300 116.0
Addendum: Federal financial assets ^b	2,203	2,353	2,433	2,507	2,585	2,648	2,700	2,736	2,758	2,776	2,758	2,740
Debt minus financial assets In billions of dollars As a percentage of GDP	24,037 89.1	25,544 90.7	27,316 93.4	29,008 95.1	30,648 96.5	32,492 98.3	34,216 99.5	36,132 101.1	38,187 102.8	40,425 104.7	42,981 107.2	45,560 109.4
Federal Reserve's holdings of debt held by the public	4,958	4,381	4,414	4,969	5,577	6,187	6,718	7,227	7,741	8,264	8,781	9,304
Debt minus financial assets and the Federal Reserve's holdings In billions of dollars As a percentage of GDP	19,079 70.7	21,163 75.1	22,902 78.3	24,038 78.8	25,071 78.9	26,305 79.6	27,498 80.0	28,905 80.9	30,446 81.9	32,161 83.3	34,200 85.3	36,256 87.1
Gross federal debt ^c	32,988	34,825	36,775	38,624	40,243	42,021	43,702	45,460	47,294	49,255	51,718	54,386
Debt subject to limit ^d	33,070	34,906	36,853	38,701	40,319	42,098	43,778	45,535	47,369	49,330	51,791	54,459
Average interest rate on debt held by the public (percent)	2.7	3.3	3.4	3.4	3.3	3.3	3.3	3.3	3.4	3.5	3.5	3.5

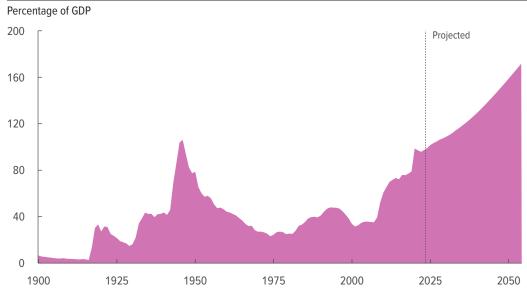
Data sources: Congressional Budget Office; Department of the Treasury. See www.cbo.gov/publication/59710#data.

GDP = gross domestic product.

- a. 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. (The subsidy costs of those programs are reflected in the budget deficit.)
- b. The value of outstanding student loans and other credit transactions, cash balances, and various financial instruments.
- c. Federal debt held by the public plus Treasury securities held by federal trust funds and other government accounts.
- d. 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. Currently, the statutory limit on the issuance of new federal debt is suspended through January 1, 2025. In the absence of any legislative action on the debt limit before the suspension ends, the amount of borrowing accumulated during the suspension will be added to the previous debt limit of \$31.4 trillion. The Deficit Control Act requires CBO to project spending, revenues, and deficits independently of the debt limit. For more details, see Congressional Budget Office, Federal Debt and the Statutory Limit, February 2023 (February 2023), www.cbo.gov/publication/58906.

Figure 1-2.

Federal Debt Held by the Public



Federal debt held by the public increases each year in CBO's projections, swelling to an all-time record of 116 percent of GDP in 2034. In the two decades that follow, growing deficits are projected to cause federal debt to soar to 172 percent of GDP by 2054.

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

GDP = gross domestic product.

from \$19.1 trillion (or 71 percent of GDP) at the end of 2023 to \$36.3 trillion (or 87 percent of GDP) at the end of 2034. (The Federal Reserve's holdings of Treasury securities, which totaled \$5.0 trillion at the end of 2023, are projected to fall to \$4.4 trillion at the end of 2024; thereafter, those holdings increase in CBO's projections, rising to \$9.3 trillion in 2034.)

- Gross debt consists of debt held by the public and Treasury securities held by government accounts (for example, the Social Security trust funds). The debt held by government accounts does not directly affect the economy and has no net effect on the budget. It is not a meaningful benchmark for Treasury's future obligations because it represents the cumulative difference between a program's past collections and expenditures. Although debt held by the public increases by \$22.1 trillion from the end of 2023 to the end of 2034 in CBO's baseline projections, debt held by government accounts falls by about \$660 billion, reflecting declines in the balances of many trust funds. As a result, gross federal debt is projected to rise by \$21.4 trillion over that period and to total \$54.4 trillion at the end of 2034. About 11 percent of that sum would be debt held by government accounts.
- Debt subject to limit is the amount of debt that is subject to the statutory limit on federal borrowing, which is often referred to as the debt ceiling. Such debt differs from gross federal debt mainly in that it excludes debt issued by the Federal Financing Bank and includes certain other adjustments that are excluded from gross debt.6 Currently, the statutory limit on the issuance of new federal debt is suspended through January 1, 2025. In the absence of any legislative action to adjust the debt limit before the suspension ends, the amount of borrowing accumulated during the suspension will be added to the previous debt limit of \$31.4 trillion. The Deficit Control Act requires that CBO project spending, revenues, and deficits independently of the debt limit. Thus, in CBO's baseline projections, debt subject to limit continues rising over the next decade and reaches \$54.5 trillion in 2034.

^{5.} The Federal Financing Bank, a government corporation under the general supervision of the Treasury, assists federal agencies in managing their borrowing and lending programs. It can issue up to \$15 billion of its own debt securities; that amount does not count against the debt limit.

Outlays

In CBO's baseline projections, outlays rise from 22.7 percent of GDP in 2023 to 23.1 percent in 2024 and remain near that level through 2028. Thereafter, outlays increase in each year as a share of the economy, reaching 24.1 percent of GDP in 2034. Since 1974, outlays have averaged 21.0 percent of GDP.

Outlays in 2024

Federal outlays are projected to total \$6.5 trillion in 2024—an increase of \$0.4 trillion (or 6 percent) from the amount recorded in 2023. (If the budgetary effects related to the Administration's plan for student loan cancellations were excluded from last year's total, the projected increase in outlays would instead be 1 percent.) In nominal terms, projected outlays rise this year in all three spending categories—mandatory, discretionary, and net outlays for interest—but net outlays for interest and mandatory spending make up 96 percent of the total increase.

Mandatory Spending. This category includes outlays for most federal benefit programs and for certain other payments to people, businesses, nonprofit institutions, and state and local governments. Such outlays are generally governed by statutory criteria and are not normally constrained by the annual appropriation process. 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 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 its baseline projections for most existing mandatory spending under the assumption that current laws generally remain in place. Therefore, CBO'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 programs.

In 2024, CBO estimates, total mandatory outlays (net of offsetting receipts) will amount to \$3.9 trillion under current law, \$166 billion (or 4 percent) more than they were in 2023 (see Table 1-4). Those outlays are projected to amount to 13.9 percent of GDP this year—equal to last year's percentage but still well above the 11.0 percent of GDP they averaged from 1974 to 2023. If the budgetary effects of the Administration's plan for student loan cancellations were excluded from 2023 totals, projected mandatory outlays this year would be \$167 billion *less* than they were in 2023.

Outlays for these programs decrease the most in 2024 in CBO's projections:

- Deposit insurance. Outlays of the Federal Deposit Insurance Corporation (FDIC) are projected to fall by \$117 billion this year as that agency continues to resolve the bank failures that occurred in 2023. This year (and over the next few years), the FDIC expects to recover much of what it spent to resolve those failures by liquidating the banks' assets and collecting higher premiums from FDIC-insured institutions. CBO projects a reduced risk of bank failures in 2024 relative to last year's activity.
- Medicaid. CBO's updated baseline projections include a \$58 billion (or 9 percent) drop in Medicaid outlays from 2023 to 2024. Two factors account for most of the reduction. First, states are continuing to reassess the eligibility of Medicaid enrollees who remained in the program during the coronavirus public health emergency.8 The Consolidated Appropriations Act, 2023 (P.L. 117-328), ended the continuous-enrollment requirement on March 31, 2023, and states began to review enrollees' eligibility and to disenroll those who no longer qualified. CBO expects Medicaid enrollment to fall in 2024 as states continue that process. In addition, that law lowered the enhanced matching rate for federal reimbursement to states for Medicaid services from an average of 5 percentage points in 2023 to 1.5 percentage points

^{7.} 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, spending for some mandatory programs (such as Medicaid and the Supplemental Nutrition Assistance Program) is considered mandatory, but benefits are paid from amounts provided in appropriation acts.

Provisions of the Families First Coronavirus Response Act (P.L. 116-127) required states to keep all Medicaid enrollees in the program until the coronavirus public health emergency ended. The declaration lifting that emergency took effect on May 11, 2023.

in the first quarter of 2024 and to zero thereafter, which decreases outlays for the program.

- Pension Benefit Guaranty Corporation. Net outlays for the Pension Benefit Guaranty Corporation (PBGC) are projected to decline by \$32 billion (or 80 percent) in 2024, to \$8 billion. That decrease stems almost entirely from less spending for PBGC's special financial assistance program, which makes onetime payments to financially troubled multiemployer pension plans that qualify for assistance.
- Refundable tax credits. Outlays for refundable tax credits total \$118 billion in 2024 in CBO's projections, \$26 billion less than the amount recorded in 2023. Outlays for the coronavirus refundable tax credits decline by \$31 billion in 2024. In the opposite direction, outlays for the earned income tax credit are projected to increase by \$7 billion this year because of higher wages and employment gains.
- Supplemental Nutrition Assistance Program. Outlays for the Supplemental Nutrition Assistance Program (SNAP) are projected to fall by \$23 billion (or 17 percent) in 2024, to \$112 billion. That decrease largely stems from the end of pandemicrelated benefits. Emergency allotments that were provided to SNAP participants during the pandemic ended in February 2023, and CBO projects that spending for the Pandemic Electronic Benefit Transfer Program, which provided food benefits to households with children, will end in 2024. Additionally, CBO projects that SNAP participation will decline by about 1 million people this year, to 41.1 million.

The largest increases in estimated outlays for 2024 are for these programs:

• Higher education. In CBO's baseline, projected outlays for higher education increase by \$213 billion this year, rising to \$29 billion from -\$183 billion last year. In 2023, the Administration recorded a net reduction of \$207 billion in the costs of outstanding loans—primarily reflecting the \$333 billion reduction in outlays that resulted from the Supreme Court's decision

- that blocked implementation of the Administration's plan to cancel outstanding student loans for many borrowers. About one-third of the \$333 billion reduction was offset by increased outlays recorded for the new income-driven repayment plan implemented by the Administration (\$74 billion) and for other modifications the Administration made to the terms of outstanding loans and to changes in the underlying assumptions about the costs of those loans (\$52 billion). Excluding those 2023 revisions to the costs of outstanding loans, spending for higher education would have increased by \$5 billion from 2023 to 2024.
- Social Security. Outlays for Social Security are estimated to increase by \$104 billion (or 8 percent) in 2024, to \$1.5 trillion. About \$80 billion of that growth stems from an increase in average benefits, most of which was driven by the 8.7 percent cost-of-living adjustment (COLA) in January 2023 and the 3.2 percent COLA in January 2024. A net increase in the total number of beneficiaries accounts for the remaining growth. Most of the projected increase in outlays—\$98 billion—is for the Old-Age and Survivors Insurance portion of Social Security. The rest is for the Disability Insurance portion of the program.
- Medicare. Outlays for Medicare (net of offsetting receipts) reach \$896 billion this year in CBO's projections, \$65 billion (or 8 percent) more than in 2023. That increase is the net result of a \$76 billion increase in spending for benefits and a \$12 billion increase in offsetting receipts (mainly from the collection of premiums). The growth in Medicare benefit spending is mostly concentrated in larger payments to Medicare Advantage plans (which allow beneficiaries to receive their Medicare coverage through private plans) and to Part D plans (which cover outpatient prescription drugs). Projected growth in payments for the traditional Medicare fee-for-service program is slower this year because of continued growth in Medicare Advantage enrollment: CBO expects total Medicare enrollment to increase by 1 million in 2024, which reflects an increase of 2 million in enrollment in Medicare Advantage and a decrease of 1 million in enrollment in Medicare fee-for-service.
- Veterans' programs. In CBO's projections, mandatory outlays for veterans' programs increase by \$27 billion (or 16 percent) in 2024, to \$195 billion. Most of that increase stems from growth in the amount of disability compensation payments that some veterans receive. (Average disability ratings

^{9.} The coronavirus refundable tax credits are a group of tax credits to help employers cover the costs of sick and family leave, employee retention, and continuation of health insurance for certain workers during 2020 and 2021. Employers may continue to claim those temporary tax credits on their amended tax returns; CBO projects that those claims will decline over time.

Table 1-4.

CBO's Baseline Projections of Mandatory Outlays, Adjusted to Exclude Effects of Timing Shifts

Billions of dollars

													Tot	al
	Actual, 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2025- 2029	2025- 2034
Social Security														
Old-Age and Survivors Insurance	1,198	1,296	1,381	1,466	1,550	1,642	1,734	1,829	1,927	2,026	2,127	2,230	7,772	17,911
Disability Insurance	150	156	164	175	184	190	197	204	211	219	228	240	910	2,011
Subtotal	1,348	1,453	1,545	1,640	1,734	1,832	1,930	2,032	2,137	2,245	2,355	2,471	8,682	19,922
Major health care programs														
Medicare ^{a,b}	1,009	1,085	1,152	1,223	1,314	1,407	1,507	1,617	1,733	1,859	2,008	2,161	6,604	15,983
Medicaid	616	557	551	582	619	655	691	728	765	806	853	898	3,098	7,148
Premium tax credits and related														
spending ^c	91	103	110	89	91	95	99	103	107	114	121	129	482	1,056
Children's Health Insurance Program	18	18	18	19	19	20	20	21	21	22	16	15	96	191
Subtotal	1,733	1,763	1,831	1,912			2,317			2,801	2,999	3,203	10,280	24,378
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Income security programs														
Supplemental Nutrition Assistance Program	135	112	110	109	112	112	113	114	115	119	121	123	556	1,148
Earned income, child, and other tax	100		110	100			110		110	113		120	000	1,110
credits ^d	144	118	114	102	86	87	87	88	88	89	89	89	477	918
Supplemental Security Income ^a	60	62	64	65	67	69	71	73	75	77	79	81	335	720
Unemployment compensation	30	40	45	45	47	49	51	53	55	56	58	60	238	520
Child nutrition	31	31	33	34	36	38	40	41	43	45	47	50	180	408
Family support and foster care ^e	49	45	35	36	37	37	38	38	38	39	39	40	183	378
Subtotal	448	407	402	392	385	392	400	406	414	426	434	441	1,970	4,091
Federal civilian and military retirement														
Civilian ^f	122	128	133	138	142	145	149	153	156	163	167	171	707	1,516
Military ^a	74	79	82	85	88	91	93	96	98	101	104	106	439	943
Subtotal	197	207	215	223	230	236	242	248	255	264	270	277	1,145	2,459
Veterans' programs														
Income security ^{a,g}	148	172	184	196	209	222	233	243	254	265	276	288	1,044	2,370
Toxic exposures fund ^h	1	8	21	38	36	38	41	46	51	55	60	64	174	450
Other ^{a,i}	19	16	15	16	17	18	19	19	19	20	21	21	85	186
Subtotal	168	195	219	251	263	278	292	308	324	340	357	373	1,303	3,006
Other programs														
Higher education	-183	29	30	30	30	31	31	32	33	33	34	35	152	318
Agriculture	26	27	22	23	23	23	24	21	20	20	20	20	114	216
Deposit insurance	91	-26	-20	-12	-9	-61	-12	-13	-13	-14	-14	-15	-115	-183
MERHCF	12	12	12	13	14	14	15	16	16	17	18	18	69	154
Fannie Mae and Freddie Mac ⁱ	0	0	3	4	6	6	6	6	6	6	10	10	25	64
Pension Benefit Guaranty	40	•	•		•					_	_	_	40	0.7
Corporation	40	8	-2 22	*	-3	-4	-4	-4	-4	-5	-5	-5	-13	-37
Education Stabilization Fund Other	45 162	38	23	6 157	0 151	0 150	144	122	127	102	0	0 91	29 761	29
Subtotal	<u>162</u> 192	<u>152</u> 240	<u>159</u> 226	<u>157</u> 220	<u>151</u> 211	<u>150</u>	<u>144</u> 204	<u>133</u> 191	<u>127</u>	<u>102</u> 160	97 159	155	<u>761</u> 1,022	<u>1,311</u> 1,871
	132	240	220	220	211	100	204	131	104	100	139	133	1,022	1,071
Mandatory outlays, excluding offsetting receipts	4,085	4,264	4,438	4,638	4,866	5,074	5,386	5,656	5,940	6,235	6,574	6,920	24,402	55,727

Continued

Table 1-4. Continued

CBO's Baseline Projections of Mandatory Outlays, Adjusted to Exclude Effects of Timing Shifts

Billions of dollars

													Tot	al
	Actual, 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2025- 2029	2025- 2034
Offsetting receipts														
Medicare	-177	-189	-212	-221	-241	-261	-282	-307	-333	-361	-393	-422	-1,218	-3,032
Federal share of federal employees' retirement														
Civil service retirement and other	-55	-57	-60	-63	-65	-68	-70	-72	-75	-77	-79	-80	-326	-708
Military retirement	-27	-24	-22	-23	-23	-24	-24	-25	-26	-26	-27	-28	-116	-248
Social Security	-22	-23	-23	-24	-25	-26	-26	-27	-28	-29	-30	-31	-125	-269
Subtotal	-104	-104	-105	-109	-113	-117	-121	-125	-128	-132	-136	-138	-566	-1,225
Receipts related to natural resources	-20	-18	-18	-18	-17	-17	-18	-18	-18	-18	-19	-19	-89	-180
MERHCF	-10	-11	-12	-12	-13	-13	-14	-15	-15	-16	-17	-18	-64	-144
Fannie Mae and Freddie Mac ^j	-6	-6	0	0	0	0	0	0	0	0	0	0	0	0
Other	-26	-28	-30	-31	-33	-34	-32	-38	-39	-26	-26	-26	-160	-315
Total	-343	-356	-377	-392	-418	-443	-466	-502	-533	-553	-590	-622	-2,096	-4,897
Mandatory outlays, including offsetting receipts	3,742	3,908	4,061	4,246	4,448	4,632	4,919	5,153	5,407	5,682	5,984	6,298	22,306	50,830
Effects that timing shifts have on mandatory outlays in CBO's baseline projections														
Medicare	7	-45	0	0	0	79	-79	0	0	0	110	16	n.a.	n.a.
Supplemental Security Income	*	-5	0	0	0	5	-5	0	0	0	6	*	n.a.	n.a.
Military retirement	1	-6	0	0	0	7	-7	0	0	0	8	1	n.a.	n.a.
Veterans' income security	3	-13	0	0	0	19	-19	0	0	0	23	4	n.a.	n.a.
Veterans' other	*	1	0	0	0	1	1	0	0	0	1	*	n.a.	n.a.
Total	11	-70	0	0	0	112	-112	0	0	0	147	22	n.a.	n.a.
Mandatory outlays in CBO's baseline projections		3,838	4,061	4,246	4,448	4,743	4,807	5,153	5,407	5,682	6,131	6,320	22,306	50,999
Addendum:														
Outlays, net of offsetting receipts														
Medicare	832	896	940	1,001	1,074	1,146	1,225	1,310	1,400	1,498	1,616	1,740	5,386	12,951
Major health care programs	1,556	1,574	1,619	1,691	1,802	1,915	2,035	2,162	2,294	2,440	2,606	2,781	9,062	21,346

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

Spending for benefit programs shown in this table generally excludes administrative costs, which are discretionary.

MERHCF = Department of Defense Medicare-Eliqible Retiree Health Care Fund; n.a. = not applicable; * = between zero and \$500 million.

- a. When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. Outlays have been adjusted to remove the effects of those timing shifts.
- b. Gross spending, excluding the effects of Medicare premiums and other offsetting receipts. (Net Medicare spending is shown in the addendum section.)
- c. Spending to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and provided through the Basic Health Program and spending to stabilize premiums for health insurance purchased by individuals and small employers.
- d. Includes outlays for the American Opportunity Tax Credit and other credits.
- e. Includes Temporary Assistance for Needy Families, Child Support Enforcement, Child Care Entitlement 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.
- h. Provides funding for health care, claims processing, and certain other incidental expenses related to providing care to veterans exposed to toxic substances.
- i. Primarily the GI Bill and similar education benefits.
- j. Cash payments from Fannie Mae and Freddie Mac to the Treasury are recorded as offsetting receipts in 2023 and 2024. Beginning in 2025, 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.

for veterans continue to rise, which results in larger benefit payments.) The number of new veterans receiving disability compensation is also expected to increase this year, in part from continued implementation of provisions of the Honoring our PACT Act of 2022 (P.L. 117-168). In addition, outlays for veterans' benefits grow as a result of the COLAs that went into effect in January 2023 and 2024—8.7 percent and 3.2 percent, respectively.

Taken together, outlays for all other mandatory programs—including federal retirement programs and subsidies for health insurance—are estimated to rise, on net, by \$13 billion (or 0.3 percent) in 2024.

Discretionary Spending. This category encompasses spending for an array of federal activities that are funded through or controlled by appropriations. Discretionary spending includes most defense spending; spending for many nondefense activities, such as elementary and secondary education, housing assistance, international affairs, and the administration of justice; and outlays for certain transportation programs (though funding for those programs is mandatory). In any year, some discretionary outlays arise from budget authority provided in the same year, and some arise from appropriations made in previous years.¹⁰

In CBO's projections, discretionary funding and discretionary outlays each total \$1.7 trillion this year. Relative to amounts provided last year, this year's funding is lower, but outlays are projected to be \$17 billion more. The agency projects outlays to increase this year despite the reduction in budget authority primarily because of spending from budget authority provided in previous years.

CBO's baseline projections of discretionary spending reflect laws that were in place as of January 3, 2024. The continuing resolution then in effect (the Further Continuing Appropriations and Other Extensions Act, 2024) provided funding through January 19 for some federal agencies and through February 2 for the rest. CBO's baseline incorporates the funding provided by that continuing resolution on an annualized basis—that is, calculated as if the funding provided by the continuing resolution was in effect for the entire fiscal year. Because the resulting amounts exceed the limits on

discretionary funding for 2024 established by the Fiscal Responsibility Act, the total amount of budget authority and the resulting outlays have been adjusted to comply with those limits, or caps. (See Box 1-1 for details about the FRA's effects on CBO's baseline projections of discretionary spending.)

Some discretionary funding in CBO's baseline is not constrained by the limits set in the FRA. Current law allows adjustments to be made to the caps for certain funding designated as an emergency requirement or (within statutory limits) for disaster relief activities, some efforts to reduce overpayments in benefit programs, and wildfire suppression. Other funding is exempt from the caps altogether. Specifically, certain funding provided pursuant to the 21st Century Cures Act (P.L. 114-255), funding derived from the Harbor Maintenance Trust Fund, and emergency funding covered by section 103 of the FRA does not count toward the caps. ¹¹ Funding that does not fall into any of those categories (and is therefore constrained by the caps) is referred to as "base" funding.

In CBO's baseline projections, discretionary budget authority for 2024 is \$122 billion (or 7 percent) less than the amount provided in 2023 (see Table 1-5). (Budget authority does not include obligation limitations that govern discretionary spending for certain transportation programs whose spending authority is mandatory; the limitations are the same under the continuing resolution this year as they were last year.)¹² The amount of base funding in CBO's baseline is \$1.6 trillion in 2024, generally reflecting the limits set in section 102 of the FRA.¹³ (Total base funding for 2024 in CBO's baseline differs from the funding reported in CBO's cost estimate for the continuing resolution by \$37 billion.

- 11. Funding covered by section 103 of the FRA stems from division J of the Infrastructure Investment and Jobs Act, division B of the Bipartisan Safer Communities Act, and section 443 of division G of the Consolidated Appropriations Act, 2023 (which permanently appropriates as an emergency requirement funds collected by the Hazardous Substance Superfund).
- 12. An obligation limitation is a restriction—typically included in an appropriation act—on the amount, purpose, or period of availability of spending authority. The limitation often affects budget authority that has been provided in an authorization act. Although the budget authority for many transportation programs is mandatory, the outlays from the obligation limitations for those programs are considered discretionary.
- 13. Although some funding is not constrained by the caps, that funding could be reduced under statutory procedures used to enforce the caps.

^{10.} 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.

-2.4

-6.6

-1

-122

Other nonbase funding

Total

Table 1-5.

Changes in Discretionary Budget Authority From 2023 to 2024

Billions of dollars Actual, Estimated, Percentage 2023° 2024 Change change Defense Base funding^b 858 850 -9 -1.0Emergency funding not subject to the caps^c 0 0 Emergency funding resulting in cap adjustments^d 33 0 -33 -100.0 Other nonbase funding 0 0 0 n.a. Subtotal 891 850 -42 -4.7 Nondefense 789 750 -40 -5.0 Base funding^b Emergency funding not subject to the caps^c 70 71 8.0 1 Emergency funding resulting in cap adjustments^d 69 28 -41 -59.5 Other nonbase funding 28 28 -2.4-1 957 -81 -8.5 Subtotal 876 Total discretionary budget authority 1,599 -2.9 Base funding^b 1,648 -48 Emergency funding not subject to the caps^c 70 71 1 8.0 Emergency funding resulting in cap adjustments^d 102 28 -74 -72.6

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

This table does not include obligation limitations for certain transportation programs.

FRA = Fiscal Responsibility Act; * = between zero and \$500 million.

- a. Shows amounts for each category of funding had the FRA been in place in 2023.
- b. Consists of all discretionary appropriations except those that have been designated as an emergency requirement or for disaster assistance, certain program integrity activities (which identify and reduce overpayments in some benefit programs), certain fire suppression operations, certain funding derived from the Harbor Maintenance Trust Fund, and programs designated in the 21st Century Cures Act. Funding in this category is subject to the caps established by sections 101 and 102 of the FRA, which were not in effect in 2023.
- c. Consists almost entirely of funding designated as an emergency requirement provided by division J of the Infrastructure Investment and Jobs Act, division B of the Bipartisan Safer Communities Act, and section 443 of division G of the Consolidated Appropriations Act, 2023. Section 103 of the FRA stipulated that such funding does not count toward the caps.
- d. Consists of funding, designated as an emergency requirement in keeping with section 251 of the Deficit Control Act, that changes the level of the caps.

For an explanation, see Box 1-2 on page 24.) Budget authority that is not constrained by the caps totals \$127 billion this year. More than half of that amount was provided by the Infrastructure Investment and Jobs Act (P.L. 117-58) and the Bipartisan Safer Communities Act (P.L. 117-159), both of which were enacted in 2022.

Discretionary budget authority for defense totals \$850 billion in 2024, a \$42 billion—or 5 percent—reduction from the amount provided in 2023. Last year, \$33 billion in funding designated as an emergency requirement was provided, mostly for military assistance to Ukraine. As of January 3, 2024, no such funding had

been provided for 2024. The reduction in base funding, which stems from the cap on defense funding, accounts for the rest of the difference. Outlays for defense are projected to be \$822 billion in 2024, which is \$17 billion (or 2 percent) more than such outlays were in 2023.

28

1,726

28

1,848

From 2023 to 2024, total funding for nondefense discretionary programs decreases by \$81 billion—or 8 percent—in CBO's projections, to \$876 billion. Nondefense base funding accounts for \$40 billion of that reduction, driven largely by the cap on such funding. In addition, funding designated as an emergency requirement that results in an upward adjustment to the

Box 1-1.

How the Fiscal Responsibility Act Affects CBO's Baseline Projections of Discretionary Funding

Two separate sections of the Fiscal Responsibility Act of 2023 (FRA, Public Law 118-5) established differing limits— also known as caps—on both defense discretionary funding and nondefense discretionary funding for 2024 and 2025. Which section of the law applies depends on the timing of the enactment of appropriations and the duration of funding.¹ Caps established by section 101 of the FRA apply at the start of each fiscal year. But if a continuing resolution is still in effect on January 1 of that same fiscal year, those caps will be replaced by the limits established in section 102 of the FRA. (If full-year appropriations are enacted after January 1, the limits will revert to the caps under section 101 of the law.)

The caps on defense and nondefense funding limit most—but not all—discretionary funding. Some funding designated for certain purposes causes an adjustment to the caps, and certain other funding is not subject to the caps at all. Because amounts appropriated for those purposes are generally not constrained by the caps, the Congressional Budget Office projects such funding in accordance with the provisions of the Balanced Budget and Emergency Deficit Control Act of 1985—that is, by assuming that appropriations in future years are equal to the amounts provided for the current year with increases for inflation. (Funding for certain types of activities that result in adjustments to the caps is subject to separate caps.)

CBO's baseline includes downward adjustments to projected discretionary funding to reflect the effects of the caps. For 2024, because a continuing resolution was in place on January 1, the baseline reflects the caps under section 102 of the FRA, which are \$850 billion for defense funding and \$736 billion for nondefense funding. Those amounts are below the amounts CBO estimated in its cost estimate for the continuing resolution underlying the projections in this report

For 2025, CBO's baseline reflects the caps established under section 101 of the FRA, which are \$895 billion for defense funding (an increase from the cap now in effect for 2024) and \$711 billion for nondefense funding (a decrease from the 2024 cap now in effect). Because the amount of base funding projected for defense in 2025 is below the cap, no additional adjustments to projections of that funding in 2025 are required; base defense funding for 2025 and beyond is therefore projected by carrying forward the base funding for 2024, with adjustments for inflation. Thus, base defense funding in the baseline over the next several years is \$10 billion to \$11 billion less than the amounts that would be projected without accounting for the caps.

Projected base funding for nondefense activities exceeds the section 101 cap by \$100 billion in 2025, in CBO's estimation, so the agency has included reductions of that amount to bring such funding in the baseline into compliance with the 2025 cap. Thus, projected base funding in the baseline matches the cap in 2025—\$711 billion—and the baseline incorporates the assumption that base nondefense funding will equal that amount (with increases for inflation) in each year from 2026 through 2034. If not for the caps, beginning in 2025, base nondefense funding would exceed amounts projected in CBO's baseline by more than \$100 billion each year.

by \$10 billion and \$41 billion, respectively.² Because cost estimates for appropriation legislation—not the baseline—are used when enforcing the caps, CBO's baseline reflects downward adjustments of those amounts in 2024 (see the table). (Differences between funding projected in the baseline and funding reported in the cost estimate for the continuing resolution cause total base funding—that is, funding constrained by the caps—in the baseline to exceed the caps.)³

^{1.} For more information, see Congressional Budget Office, letter to the Honorable Jodey Arrington and the Honorable Brendan Boyle regarding implementing the statutory limits on discretionary funding for fiscal year 2024 (January 4, 2024), www.cbo.gov/publication/59861.

Congressional Budget Office, cost estimate for H.R. 6363, the Further Continuing Appropriations and Other Extensions Act, 2024 (November 13, 2023), www.cbo.gov/publication/59755.

For details about differences between CBO's cost estimate for the continuing resolution and total funding in the agency's baseline, see Box 1-2.

Box 1-1. Continued

How the Fiscal Responsibility Act Affects CBO's Baseline Projections of Discretionary Funding

Discretionary Fundin	g Projected in C	BO's Base	eline			
Billions of dollars						
	2024	2025	2026	2027	2028	2029
Projected base funding without accounting for the caps						
Defense	860	881	902	923	944	966
Nondefense	790	811	831	849	865	886
Total	1,650	1,692	1,733	1,773	1,809	1,851
Caps in section 102 of the Budget Control Act, as amended (currently apply in 2024)						
Defense	850	850	n.a.	n.a.	n.a.	n.a.
Nondefense	736	736	n.a.	n.a.	n.a.	n.a.
Total	1,586	1,586	n.a.	n.a.	n.a.	n.a.
Caps in section 101 of the Budget Control Act, as amended (currently apply in 2025)						
Defense	886	895	n.a.	n.a.	n.a.	n.a.
Nondefense	704	711	n.a.	n.a.	n.a.	n.a.
Total	1,590	1,606	n.a.	n.a.	n.a.	n.a.
Effects of the caps on CBO's projections of base funding						
Defense	-10	-10	-10	-11	-11	-11
Nondefense	-41	-100	-103	-105	-107	-109
Total	-51	-110	-113	-116	-118	-121
Projected base funding after accounting for the caps						
Defense	850	871	892	912	933	954
Nondefense	750	711	728	744	758	776
Total	1,599	1,582	1,620	1,657	1,691	1,731

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

Shaded cells reflect which sets of caps CBO used when constructing its baseline.

Base funding is funding that is not designated as an emergency requirement or for disaster relief, certain program integrity activities, certain fire suppression operations, certain funding derived from the Harbor Maintenance Trust Fund, and certain programs designated in the 21st Century Cures Act.

The amount of budget authority in CBO's baseline that is constrained by the caps does not match the level of the caps in 2024 because cost estimates for appropriation legislation—not the baseline—are used when enforcing the caps. Therefore, the downward adjustments in CBO's baseline reflect the differences between the caps on base funding and the agency's estimates for base funding provided by the continuing resolution in place on January 3, 2024. For more on why CBO's cost estimate of that continuing resolution and funding in the agency's baseline differ, see Box 1-2.

n.a. = not applicable.

Box 1-2.

Why CBO's Baseline Projections of Discretionary Funding for 2024 Differ From Amounts in Its Cost Estimate for the Continuing Resolution

Discretionary funding provided for 2024 in the Congressional Budget Office's current baseline is \$35 billion less than the amount shown in CBO's cost estimate for the Further Continuing Appropriations and Other Extensions Act (Public Law 118-22), referred to here as the continuing resolution. That difference occurs for several reasons (see the table).

Major Reasons for the Difference

The largest driver of the difference between the amounts projected in the baseline and CBO's cost estimate for the continuing resolution arises from the estimated effects of the Fiscal Responsibility Act of 2023 (P.L. 118-5), which limits federal funding for discretionary programs over the current and next fiscal year. When the amounts provided by the continuing resolution are annualized—that is, calculated as if the law was in effect through all of 2024—funding provided for 2024 exceeds those limits. As a result, CBO has adjusted the total amount of funding to reflect the expectation that the Administration would implement statutory mechanisms to enforce the caps. In total, those adjustments reduce discretionary funding shown in the baseline by \$51 billion in relation to the funding totals shown in the cost estimate for the continuing resolution.²

Another reason for the difference stems from changes in mandatory programs enacted in appropriation acts, which are known as CHIMPs. Following rules (known as scorekeeping guidelines) that govern how CBO produces its cost estimates,

- Congressional Budget Office, cost estimate for H.R. 6363, the Further Continuing Appropriations and Other Extensions Act, 2024 (November 13, 2023), www.cbo.gov/publication/59755.
- 2. For more information about how the caps may affect discretionary resources in 2024, see Congressional Budget Office, letter to the Honorable Jodey Arrington and the Honorable Brendan Boyle regarding implementing the statutory limits on discretionary funding for fiscal year 2024 (January 4, 2024), www.cbo.gov/publication/59861. Although the adjustments in CBO's baseline affect only discretionary funding that is constrained by the caps ("base funding" in the table), statutory enforcement procedures eventually would affect most funding not constrained by the caps. The total effect of those procedures would still amount to approximately \$51 billion.

such changes made in appropriation acts are classified as reductions or increases in *discretionary spending* in cost estimates. When CBO produces its baseline estimates, though, those CHIMPs are reflected as reductions or increases in *mandatory spending*, following the scorekeeping guidelines that govern their classification.³ On net, CHIMPs reduced CBO's estimate of discretionary funding in its cost estimate for the continuing resolution by \$15 billion. Shifting the effect of that reduction to CBO's projections of mandatory spending boosts net discretionary funding by the same amount.

Other Reasons

Technical and economic updates to estimated components of discretionary funding also account for part of the difference. For example, some fees that agencies collect (for mortgage originations guaranteed by the Federal Housing Administration or aviation security fees collected by the Transportation Security Administration, for instance) are estimated and are classified as offsets to discretionary budget authority. CBO's estimate for the continuing resolution used amounts projected in its May 2023 baseline, but updated estimates of that funding in CBO's most recent baseline result in larger estimates of fees. As a result, net discretionary budget authority in the baseline is \$3 billion smaller than the amount in CBO's estimate for the continuing resolution.

In addition, current law requires CBO to exclude some discretionary funding from its cost estimates. Specifically, the 21st Century Cures Act (P.L. 114-255) and division B of the CARES Act (P.L. 116-136, as amended) require that certain funding provided to the National Institutes of Health and the Food and Drug Administration or derived from the Harbor Maintenance Trust Fund be excluded from CBO's cost estimates. That funding is reflected in CBO's baseline, however, accounting for another \$3 billion of the overall difference.

Continued

For more information about the guidelines, see Congressional Budget
 Office, CBO Explains Budgetary Scorekeeping Guidelines (January 2021),
 www.cbo.gov/publication/56507.

Box 1-2. Continued

Why CBO's Baseline Projections of Discretionary Funding for 2024 Differ From Amounts in Its Cost Estimate for the Continuing Resolution

Finally, when estimating the amount of funding provided by the continuing resolution, CBO was directed by the House and Senate Budget Committees to incorporate the assumption that certain funding provided to the federal power marketing administrations (federal agencies that generate power) would be fully offset by

the fees those agencies collect. (Those fees reduce total budget authority.) Because CBO's baseline does not reflect that assumption, its discretionary budget authority is \$0.1 billion larger than the amount in the cost estimate.

Sources of Differences Between CBO's Estimate of Discretionary Funding Provided for 2024 in Appropriation Legislation and 2024 Discretionary Funding in the Baseline

Billions of dollars

	Defens	e funding	Nondefe	Total	
	Base ^a	Nonbase	Baseª	Nonbase	funding
Amount of funding shown in cost estimate for the continuing resolution	860	*	777	124	1,761
Differences					
Effect of FRA caps ^b	-10	0	-41	0	-51
CHIMPs ^c	0	0	16	*	15
Changes to estimated accounts ^d	*	0	-2	*	-3
Certain funding excluded from estimate ^e	0	0	0	3	3
Directed scoring ^f	0	0	*	0	*
Total difference	-10	0	-27	2	-35
Funding in baseline	850	*	750	127	1,726

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

CHIMPs = changes to mandatory programs; FRA = Fiscal Responsibility Act; * = between -\$500 million and \$500 million.

- a. Base funding is funding that is not designated as an emergency requirement or for disaster relief, certain program integrity activities, certain fire suppression operations, certain funding derived from the Harbor Maintenance Trust Fund, and certain programs designated in the 21st Century Cures Act.
- b. The FRA (Public Law 118-5) established limits on discretionary budget authority. P.L. 118-22, the continuing resolution in effect when CBO completed its analysis, provided funding at annualized levels in excess of the limits under section 102 of that law, which were in place at that time. CBO's baseline includes downward adjustments to funding to reflect the eventual effect of those limits. (See Box 1-1 on page 22 for more information.)
- c. When appropriation acts make changes to mandatory programs, those changes are recorded as discretionary costs or savings pursuant to Congressional scorekeeping guidelines. When those changes are reflected in CBO's baseline, they appear as mandatory spending.
- d. Budget authority for some discretionary accounts is estimated. For example, the total amount of fees collected by the Transportation Security Administration (TSA) is not specified in appropriation acts because that amount is generally determined by the total number of air passengers. Current law requires those collections to be credited against appropriations made to the TSA.
- e. Current law requires certain funding derived from the Harbor Maintenance Trust Fund or for certain programs designated in the 21st Century Cures Act be excluded from CBO's cost estimates. That spending is ultimately reflected in the baseline.
- f. The budget committees directed CBO, in its cost estimate for H.R. 6363, to assume that certain spending would be fully offset by collections not reflected in the baseline.

cap is \$41 billion less than it was last year. ¹⁴ Despite the drop in funding, nondefense discretionary outlays in 2024 are projected to total the same amount as was recorded in 2023—\$917 billion—primarily because of spending from budget authority provided in previous years.

Net Interest Outlays. In the 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 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.

Net outlays for interest have risen by more than 35 percent in each of the past two years and are projected to increase by 32 percent this year. In CBO's projections, those outlays rise from \$659 billion in 2023 to \$870 billion in 2024, surpassing discretionary outlays for defense this year. Relative to the size of the economy, net outlays for interest rise from 2.4 percent in 2023 to 3.1 percent in 2024—double the 1.5 percent of GDP recorded for such outlays in 2021.

The projected increase in 2024 occurs primarily because the average interest rate that the Treasury pays on its debt is higher this year and is expected to rise further as maturing securities are refinanced at rates that exceed those that prevailed when the securities were issued. For example, the interest rate on 10-year Treasury notes averaged 3.0 percent in 2022 and 4.0 percent in 2023; that rate averages 4.6 percent in 2024 in CBO's current economic forecast (see Chapter 2). Debt held by the public (in nominal terms, rather than as a percentage of GDP) is on track to increase by 6 percent from 2023 to 2024, which also boosts net interest payments this year.

Outlays From 2025 to 2034

In CBO's baseline projections, federal outlays (adjusted to exclude the effects of timing shifts) rise from

\$6.8 trillion in 2025 to \$10.0 trillion in 2034, for an average annual increase of 4.5 percent. Heasured in relation to the size of the economy, federal outlays remain around 23 percent of GDP for several years before gradually rising, reaching 24.1 percent in 2034 (see Figure 1-3).

Mandatory Spending. In CBO's projections, nominal outlays for mandatory programs (net of offsetting receipts) rise at an average annual rate of 5 percent over the 2025–2034 period. In relation to GDP, those outlays increase from 13.9 percent in 2025 to 15.1 percent in 2034. At that point, they would be about 4 percentage points higher than the average over the past 50 years (see Figure 1-4). Two underlying trends, the aging of the population and growth in federal health care costs per beneficiary, put upward pressure on mandatory outlays.

The aging of the population causes the number of beneficiaries of Social Security and Medicare to grow faster than the overall population, and federal costs per beneficiary for the major health care programs continue to rise faster than GDP per person. (Spending for the major health care programs consists of outlays for Medicare, Medicaid, and the Children's Health Insurance Program, as well as premium tax credits for health insurance purchased through the marketplaces established under the Affordable Care Act and related spending. The premium tax credits subsidize the purchase of health insurance.) As a result of those two trends, outlays for Social Security and Medicare increase in relation to GDP from 2025 to 2034. Beyond the 10-year period, the effects of those trends on federal spending persist, particularly for Medicare.

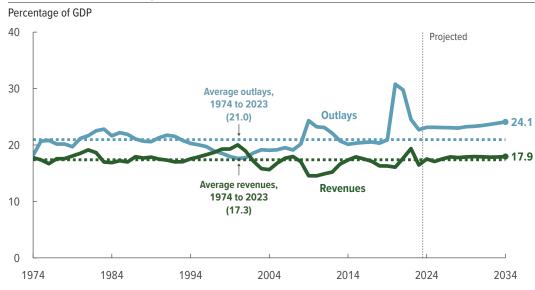
^{14.} Funding that is designated in keeping with the Deficit Control Act as an emergency requirement raises the caps by the amount of funding provided. Section 103 of the FRA stipulated that discretionary emergency-designated funding provided by the Infrastructure Investment and Jobs Act, the Bipartisan Safer Communities Act, and section 443 of the Consolidated Appropriations Act, 2023, does not count toward the caps.

^{15.} The average interest rate on debt reflects the interest rates on Treasury securities of different maturities, the maturity structure of securities issued, and the costs of inflation-linked payments made on some of those securities.

^{16.} CBO's projections follow provisions in section 257 of the Deficit Control Act, which requires CBO 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 trust funds associated with those programs do not have sufficient resources to make full payments. For example, CBO estimates that the Highway Trust Fund will be exhausted in 2028 and the Old-Age and Survivors Insurance Trust Fund will be exhausted in 2033. Nevertheless, CBO's baseline projections reflect the assumption that funding will be adequate to make full payments as required by law. In addition, the Deficit Control Act requires CBO to project spending for certain mandatory programs beyond their scheduled expiration. Other rules that govern the construction of CBO's baseline projections have been developed by the agency in consultation with the House and Senate Budget Committees. For further details, see Congressional Budget Office, CBO Explains How It Develops the Budget Baseline (April 2023), www.cbo.gov/publication/58916, and CBO Explains the Statutory Foundations of Its Budget Baseline (May 2023), www.cbo.gov/ publication/58955.

Figure 1-3.

Total Federal Outlays and Revenues



Measured as a percentage of GDP, projected outlays remain about the same for the next several years as growth in outlays for interest payments is offset by decreases in discretionary spending. Over the 2024–2034 period, outlays exceed their 50-year average by more than revenues exceed their historical average.

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#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 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.

Social Security and the Major Health Care Programs.

Measured as a percentage of GDP, outlays for Social Security and the major health care programs, net of offsetting receipts, are projected to rise in each year of the 10-year period, from 10.8 percent in 2025 to 12.6 percent in 2034.¹⁷

CBO's current baseline includes the following projections for specific programs:

- Outlays for Social Security increase to 5.3 percent of GDP in 2025 and continue rising thereafter, reaching 5.9 percent of GDP in 2034.
- Outlays for Medicare equal 3.2 percent of GDP in 2025 and climb to 4.2 percent of GDP in 2034.
- Federal outlays for Medicaid dip slightly—to 1.9 percent of GDP—in 2025 as pandemic-related spending ends and remain there through 2027. Thereafter, Medicaid outlays gradually climb to 2.2 percent of GDP in 2034.
- Outlays for premium tax credits for health insurance purchased through the marketplaces established under the Affordable Care Act and related spending

average 0.3 percent of GDP per year through 2034, and outlays for the Children's Health Insurance Program average 0.1 percent.

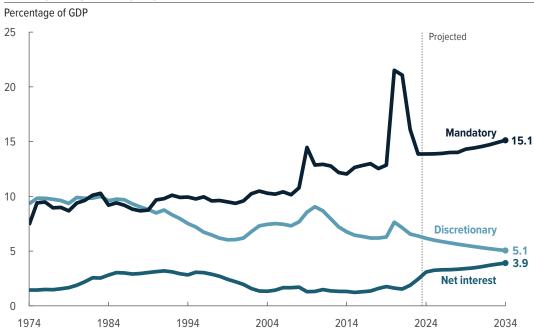
Other Mandatory Programs. Spending for programs other than Social Security and the major health care programs is projected to equal 3.1 percent of GDP in 2025. Such spending includes outlays for income support programs (such as unemployment compensation and SNAP), military and civilian retirement programs, most veterans' benefits, and major agriculture programs. That spending also includes offsetting receipts (other than those related to Medicare) collected by the federal government.

In CBO's baseline projections, other mandatory spending measured relative to GDP generally declines after 2025, falling to 2.5 percent at the end of the projection period. (That spending, including substantial outlays in response to the pandemic, peaked at 10.5 percent of GDP in 2021.) The projected decline occurs in part because benefit amounts for many of those programs are adjusted for inflation each year, and in CBO's economic forecast, the growth of nominal GDP outpaces inflation. Growth in veterans' benefits, which averages 6 percent per year (in nominal terms) after 2024, partially offsets the decline in other mandatory outlays.

^{17.} Offsetting receipts for Medicare mostly consist of payments of premiums, recoveries of overpayments made to providers, and amounts paid by states from savings on Medicaid's prescription drug costs.

Figure 1-4.

Outlays, by Category



In CBO's projections, rising spending for Social Security and Medicare boosts mandatory outlays. Discretionary spending as a share of GDP falls to historic lows. And mounting debt and higher interest rates cause net outlays for interest to increase. Starting next year, those outlays are greater in relation to GDP than at any point since at least 1940, the first year for which the Office of Management and Budget reports such data.

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#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 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.

Discretionary Spending. 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 2024—including funding designated as an emergency requirement—with adjustments for inflation. When the projected amounts exceed the limits established by the FRA, the total amount of budget authority in CBO's baseline is adjusted to comply with those limits. Those adjustments are incorporated in CBO's projections of discretionary funding in future years.

Total discretionary budget authority projected for 2025 amounts to \$1.7 trillion (see Table 1-6). Defense

funding subject to the caps is projected to total \$871 billion, which is below the current limit of \$895 billion for that year. Nondefense funding constrained by the caps is limited to \$711 billion, the amount of the cap currently in place for 2025. Funding not constrained by the caps—mostly funding designated as an emergency requirement—is projected to total \$127 billion in 2025; all but \$20 million of that funding is for nondefense programs. In 2025, discretionary outlays—which are projected to total \$1.8 trillion—exceed total funding provided for the year, largely as a result of spending from budget authority provided in previous years.

After 2025, when the caps are no longer in effect, total discretionary budget authority rises by an average of 2.3 percent per year in CBO's projections. Discretionary outlays initially grow more slowly, primarily because of funding reductions in 2024 and 2025. By 2034, the growth in discretionary outlays—at 2.2 percent—nearly matches the rate of growth in funding for that year.

^{18.} 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 projected future discretionary funding for those years for which funding has not been provided, starting with existing appropriations and adjusting those amounts for inflation.

Measured as a percentage of GDP, discretionary outlays decline steadily, from 5.9 percent in 2026 to 5.1 percent in 2034. (Their previous low—6.0 percent—was in 1999.) Over the past 50 years, discretionary outlays have averaged 8.0 percent of GDP.

In CBO's projections, defense outlays fall to 2.5 percent of GDP in 2034—their smallest percentage since at least 1962 (the earliest year for which the Office of Management and Budget reports such data). Outlays for nondefense discretionary programs amount to 2.6 percent of GDP in 2034, also their smallest share since at least 1962. The previous lows for defense and nondefense spending compared with the size of the economy occurred at the turn of the 21st century and were 2.9 percent and 3.1 percent, respectively.

Net Interest Outlays. Over the 10-year projection period, net outlays for interest increase by 6.2 percent a year, on average, rising from \$951 billion in 2025 to \$1.6 trillion in 2034. Measured relative to the size of the economy, those outlays rise from 3.2 percent in 2025 to 3.9 percent in 2034—1.9 percentage points higher than their 50-year average and higher than they have been in any year since at least 1940 (the first year for which the Office of Management and Budget reports such data).

The *amount* of the federal government's net interest costs is mainly determined by the outstanding debt held by the public and the average interest rate on that debt. *Growth* in net interest costs is affected by changes in the average interest rate on federal debt and by the size of the primary deficit, which requires the government to borrow more and thus boosts debt held by the public. ¹⁹ Borrowing to pay for greater interest costs pushes up the net cost of interest further—in large part because of the way that increases in the average interest rate and the primary deficit interact.

Average interest rates on federal debt rise in CBO's projections as debt matures and is refinanced. In 2025, the average interest rate on debt held by the public is projected to be 3.4 percent, 0.1 percentage point higher than it was in 2024 and 0.7 percentage points higher than it was in 2023. That rate generally remains steady thereafter, declining slightly

to 3.3 percent from 2027 through 2030 before increasing again to 3.5 percent in the final years of the projection period. Changes in the average interest rate stem from interest rates on Treasury securities, the rate of inflation applicable to Treasury inflation-protected securities, and the maturity structure of outstanding securities. (For a discussion of the factors responsible for changes in interest rates and inflation, see Chapter 2.)

 Primary deficits average 2.1 percent of GDP from 2025 to 2034, adding to debt held by the public each year.

On average, in CBO's projections, increases in the average interest rate on federal debt account for about two-thirds of the increase in net interest costs from 2025 to 2034.²⁰

Revenues

Federal revenues in 2023 totaled \$4.4 trillion. At 16.5 percent of GDP, revenues in that year were considerably lower than the 19.4 percent recorded in 2022, which was the highest percentage in more than 20 years. That decline was largely in collections of individual income taxes, which had reached an unprecedented high in 2022. Also contributing to the decline in 2023 were lower remittances from the Federal Reserve, which fell to near zero in that year as rising short-term interest rates pushed the agency's expenses above its income.

CBO expects total receipts to temporarily jump to 17.5 percent of GDP in 2024 as a result of the collection of certain postponed tax payments, before declining to 17.1 percent of GDP in 2025 (see Table 1-7 on page 32). Receipts are projected to subsequently rise to 17.9 percent by 2034, largely because of scheduled changes in tax provisions and because the Federal Reserve is anticipated to begin once again remitting significant amounts to the Treasury.

^{19.} For more details on the government's net interest costs, see Congressional Budget Office, *Federal Net Interest Costs: A Primer* (December 2020), www.cbo.gov/publication/56780. The costs also are affected by debt that is not counted as part of primary deficits, such as that issued to partly finance federal credit programs.

^{20.} To assess the share of the increase in net interest costs attributable to changes in the average interest rate, CBO started by examining a benchmark scenario in which that rate did not change after 2023 and there were no primary deficits adding to the amount of debt. CBO estimated the increase, relative to that benchmark, in net interest costs from the change in the average interest rate in CBO's projections (by using a scenario with those rates and no primary deficits) and from primary deficits in CBO's projections (by using a scenario with those deficits and no change in the average interest rate). The agency used the relative size of those estimates to calculate the share of the total increase in net interest costs attributable to the increase in the average interest rate by allocating the interaction between the average interest rate and the primary deficit proportionally.

Table 1-6.

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

Billions of dollars

		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	To	al
	Actual, 2023												2025- 2029	2025- 2034
	Budget authority													
Defense									•					
Base spending ^b	858	850	871	892	912	933	954	976	998	1,021	1,045	1,069	4,562	9,672
Emergency spending not subject to the caps ^c	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Emergency spending resulting in cap adjustments ^d	33	0	0	0	0	0	0	0	0	0	0	0	0	0
Other nonbase spending	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal, defense	891	850	871	892	912	933	954	976	998	1,021	1,045	1,069	4,562	9,672
Nondefense														
Base spending ^b	789	750	711	728	744	758	776	795	814	833	853	873	3,718	7,885
Emergency spending not subject to the caps ^c	70	71	70	68	70	71	72	74	75	77	78	80	352	736
Emergency spending resulting in cap adjustments ^d	69	28	29	29	30	30	31	32	32	33	34	34	149	314
Other nonbase spending	28	28	28	29	29	30	31	31	32	33	33	34	147	311
Subtotal, nondefense	957	876	838	854	873	890	911	932	954	975	998	1,022	4,366	9,246
Total budget authority	1,848	1,726	1,709	1,746	1,786	1,823	1,865	1,908	1,952	1,996	2,043	2,090	8,928	18,917

Continued

Those overall movements are driven by the following changes in specific sources of revenues in CBO's projections:

- **Individual income tax receipts** declined sharply in relation to GDP last year—from 10.4 percent in 2022 to 8.1 percent in 2023. That reduction occurred in part because asset values and realizations of capital gains fell, and also because the Internal Revenue Service (IRS) postponed until 2024 certain tax payment deadlines for taxpayers in areas affected by natural disasters. (Otherwise, those payments would have been due in 2023.) CBO expects receipts to climb to 8.8 percent of GDP in 2024 as those delayed payments come in and fall to 8.6 percent of GDP in 2025 because no further delays are anticipated. Receipts then grow from 2025 to 2027 because scheduled changes in tax provisions, including an increase in most tax rates, are projected to drive up receipts in relation to taxable personal income. Real bracket creep (explained below) also contributes to rising receipts over time.
- Corporate income tax receipts climb from 1.6 percent of GDP in 2023 to 2.0 percent in

- 2024 for two reasons: because of the collection of postponed payments from corporations in areas affected by natural disasters, and because payments related to the corporate alternative minimum tax that was enacted in 2022 were deferred until 2024 as a result of penalty relief granted by the IRS. As those delays end, receipts decline to 1.7 percent of GDP in 2025. Through 2034, receipts decrease steadily in relation to GDP, primarily from the net effects of scheduled changes in tax rules.
- Federal Reserve remittances, or the net earnings of the central bank, remain near zero from 2023 to 2028 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 rise in 2029 and total 0.4 percent of GDP in 2034—the same level as in 2022.
- Excise tax receipts are projected to increase between 2023 and 2026. The recent large amounts reported for refunds and tax credits for the nontaxable use of gasoline—which are currently unexplained decline over the next few years in CBO's projections.

Table 1-6. Continued

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

Billions of dollars

													Tot	al
	Actual, 2023ª	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2025- 2029	2025- 2034
							Oı	ıtlays						
Defense								•						
Base spending ^{b,e}	805	822	845	869	888	907	926	946	966	988	1,011	1,034	4,435	9,381
Emergency spending not subject to the caps ^c	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Emergency spending resulting in cap adjustments ^d	n.a.	0	0	0	0	0	0	0	0	0	0	0	0	0
Other nonbase spending	n.a.	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal, defense	805	822	845	869	888	907	926	946	966	988	1,011	1,034	4,435	9,381
Nondefense														
Base spending ^b	900	875	846	836	835	840	853	868	884	902	920	940	4,210	8,723
Emergency spending not subject to the caps ^c	17	28	38	51	62	68	71	72	71	70	70	71	290	645
Emergency spending resulting in cap adjustments ^d	n.a.	8	14	18	21	23	25	26	28	29	30	30	102	245
Other nonbase spending	n.a.	6	12	17	20	22	23	25	26	27	28	29	95	230
Subtotal, nondefense	917	917	911	922	938	953	972	991	1,009	1,028	1,048	1,071	4,696	9,843
Total outlays ^e	1,722	1,739	1,756	1,791	1,825	1,860	1,899	1,937	1,975	2,016	2,059	2,106	9,131	19,224
Addendum:														
Discretionary timing shifts in CBO's baseline	*	-5	0	0	0	6	-6	0	0	0	7	*	n.a.	n.a.
Discretionary outlays in CBO's baseline	1,722	1,734	1,756	1,791	1,825	1,866	1,893	1,937	1,975	2,016	2,066	2,106	9,131	19,231
Outlays from the BSCA and IIJA as specified ^f	16	27	36	49	58	59	52	40	28	18	11	6	254	358

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

BSCA = Bipartisan Safer Communities Act; FRA = Fiscal Responsibility Act; IIJA = Infrastructure Investment and Jobs Act; n.a. = not applicable; * = between zero and \$500 million.

- a. The Treasury does not distinguish between outlays stemming from base funding and outlays stemming from nonbase funding. Consequently, the budget does not record any actual amounts attributed specifically to base or nonbase funding. Amounts show how the FRA would have applied to budget authority or some outlays were that act in effect in 2023. (Outlays from funding not subject to the caps is estimated on the basis of data from the Office of Management and Budget.)
- b. Consists of all discretionary appropriations except those that have been designated as an emergency requirement or for disaster assistance, certain program integrity activities (which identify and reduce overpayments in some benefit programs), certain fire suppression operations, certain funding derived from the Harbor Maintenance Trust Fund, and programs designated in the 21st Century Cures Act. Funding in this category is subject to the caps established by sections 101 and 102 of the FRA, which are in effect for 2024 and 2025.
- c. Consists almost entirely of funding designated as an emergency requirement provided by the IIJA, the BSCA, and section 443 of the Consolidated Appropriations Act, 2023. Section 103 of the FRA stipulates that such funding does not count toward the caps.
- d. Consists of funding, designated as an emergency requirement in keeping with section 251 of the Deficit Control Act, that changes the caps.
- e. When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. Outlays have been adjusted to remove the effects of those timing shifts.
- f. Most funding provided by the IIJA and BSCA was provided only through 2026. In consultation with the budget committees, CBO applied its typical baseline treatment of discretionary funding to the funding provided by those bills and therefore projects it to grow with inflation beyond 2026. These amounts show what CBO's baseline projections of outlays from that funding would look like if that funding was instead not projected.

Table 1-7.

CBO's Baseline Projections of Revenues

													To	tal
	Actual, 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2025- 2029	2025- 2034
						li	n billions	of dolla	irs					
Individual income taxes	2,176	2,469	2,520	2,789	3,031	3,124	3,251	3,381	3,511	3,634	3,793	3,973	14,715	33,007
Payroll taxes	1,614	1,663	1,734	1,812	1,884	1,960	2,039	2,121	2,205	2,291	2,379	2,466	9,430	20,892
Corporate income taxes	420	569	494	491	484	491	501	511	519	519	533	551	2,461	5,094
Other														
Excise taxes	76	85	92	97	99	100	100	100	100	101	101	102	487	991
Federal Reserve remittances	1	1	3	4	7	12	65	109	122	138	149	161	91	770
Customs duties	80	80	83	87	91	93	96	98	100	103	105	107	450	963
Estate and gift taxes	34	33	31	31	44	47	49	52	55	58	62	66	203	496
Miscellaneous fees and fines	38	35	38	40	42	43	46	44	44	45	47	48	209	437
Subtotal	229	234	247	259	283	296	355	402	421	445	464	485	1,439	3,656
Total	4,439	4,935	4,996	5,351	5,683	5,870	6,147	6,414	6,656	6,890	7,168	7,474	28,046	62,649
On-budget	3,246	3,706	3,711	4,013	4,295	4,430	4,650	4,860	5,041	5,213	5,429	5,672	21,100	47,313
Off-budget ^a	1,194	1,229	1,285	1,337	1,387	1,440	1,496	1,554	1,615	1,677	1,740	1,803	6,946	15,336
Addendum:														
GDP	26,974	28,177	29,256	30,504	31,756	33,043	34,375	35,746	37,157	38,609	40,106	41,646	158,933	352,197
						As	a percer	itage of	GDP					
Individual income taxes	8.1	8.8	8.6	9.1	9.5	9.5	9.5	9.5	9.5	9.4	9.5	9.5	9.3	9.4
Payroll taxes	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Corporate income taxes	1.6	2.0	1.7	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.5	1.4
Other														
Excise taxes	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3
Federal Reserve remittances	*	*	*	*	*	*	0.2	0.3	0.3	0.4	0.4	0.4	0.1	0.2
Customs duties	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Estate and gift taxes	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1
Miscellaneous fees and fines	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Subtotal	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.2	0.9	1.0
Total	16.5	17.5	17.1	17.5	17.9	17.8	17.9	17.9	17.9	17.8	17.9	17.9	17.6	17.8
On-budget	12.0	13.2	12.7	13.2	13.5	13.4	13.5	13.6	13.6	13.5	13.5	13.6	13.3	13.4
Off-budget ^a	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.3	4.4	4.4

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

GDP = gross domestic product; * = between zero and 0.05 percent of GDP.

Thereafter, excise taxes gradually decrease in relation to GDP along with the tax bases on which many excise taxes are levied.

Individual Income Taxes

In 2022, receipts from individual income taxes totaled \$2.6 trillion, or 10.4 percent of GDP—the highest those receipts have been in relation to the size of the economy since the 16th Amendment authorizing the federal government to collect income taxes was ratified in 1913. Those receipts fell sharply in 2023, to 8.1 percent of

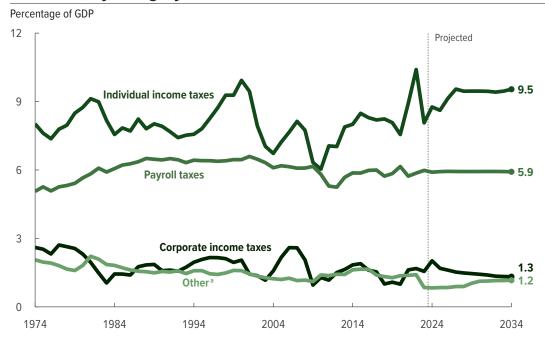
GDP—close to the 8.0 percent of GDP they averaged over the past 50 years (see Figure 1-5).

That decline resulted from several factors. First, realizations of capital gains dropped from historic highs to a level closer to their long-term average. Second, the IRS postponed some filing deadlines for taxpayers in areas affected by natural disasters (including most of California), which delayed some tax payments that would otherwise have been made in 2023. Third, the Treasury reclassified as payroll taxes some receipts

a. Receipts from Social Security payroll taxes.

Figure 1-5.

Revenues, by Category



Receipts from individual income taxes fell sharply in 2023 from a historic high in 2022. They declined in part because of lower capital gains on sold assets and because the Internal Revenue Service extended some tax payment deadlines. As those delayed payments are made, revenues are projected to rise in 2024. They rise again in 2026 and 2027.

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

GDP = gross domestic product.

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

initially recorded in prior years as individual income tax revenues, and the amount of that adjustment was larger in 2023 than it was in 2022.²¹

Receipts from individual income taxes are projected to rebound to 8.8 percent of GDP this year, largely because of factors that reduced receipts in 2023 but that CBO does not expect to persist. Those factors include the delay in tax payments and the large reclassification of tax revenues. Receipts then decline to 8.6 percent of GDP in 2025 because no further postponed deadlines are anticipated. Scheduled changes in tax rules and real bracket creep cause individual income tax receipts to rise in relation to GDP after 2025, totaling 9.5 percent of GDP in 2034, 0.8 percentage points higher than projected for

2024. The offsetting factors that contribute to that net increase are described in more detail below.

Scheduled Tax Changes. At the end of calendar year 2025, nearly all the changes to the individual income tax made by the 2017 tax act are scheduled to expire under current law. Together, those scheduled changes are the most significant factor pushing up tax revenues in relation to income over the next 10 years in CBO's projections. The expiring provisions affect major elements of the individual income tax code, including statutory tax rates and brackets, allowable deductions, the size and refundability of the child tax credit, the 20 percent deduction for certain business income, and the income levels at which the alternative minimum tax takes effect.²² Those changes cause tax liabilities (the amount taxpayers owe) to rise beginning in calendar year 2026, boosting receipts in fiscal year 2026 and beyond. In CBO's projections,

^{21.} Those reclassifications occur because the Treasury initially cannot distinguish payroll taxes from individual income taxes in the payments of withheld taxes it receives. 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 information from tax returns), the Treasury revises those allocations.

^{22.} The alternative minimum tax is similar to the regular income tax but includes fewer exemptions, deductions, and rates. People who file individual income tax returns must calculate the tax owed under each system and pay the larger of the two amounts.

the scheduled changes to those tax rules boost individual income tax receipts measured as a share of GDP by 0.8 percentage points from 2025 to 2034.

Real Bracket Creep and Related Effects. 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).²³ When income grows faster than prices—as CBO projects it will over the 2024–2034 period—more income is pushed into higher tax brackets, a process known as real bracket creep. Many other parameters of the tax system are also indexed for inflation, including the amounts of the standard deduction and the earned income tax credit. But certain parameters, such as the amount of the child tax credit, are fixed in nominal dollars and not adjusted for inflation.

The individual income tax system is thus not indexed for real growth (that is, growth beyond the rate of inflation). Instead, it is partially indexed for inflation, and the indexing occurs with a lag. Together, those features of the system cause projected annual revenues measured as a percentage of GDP to rise by 0.4 percentage points from 2025 to 2034.

Other Factors. Over the next decade, several other factors decrease individual income tax receipts measured as a share of GDP—by 0.4 percentage points, on net, in CBO's projections.

The largest factor is a projected decline in realizations of capital gains relative to the size of the economy. Detailed tax return data for calendar year 2021—the most recent available—now show that such realizations totaled 8.8 percent of GDP in that year. Although CBO estimates that realizations subsequently decreased, they are projected to equal 5.1 percent of GDP in calendar year 2023—which is still above the 3.9 percent of GDP they have averaged over the past 40 years. In CBO's baseline projections, capital gains realizations continue to diminish over the next decade to a level that, after differences in applicable tax rates are accounted for, is consistent with their historical average. That anticipated decline reduces receipts from individual income taxes measured as a share of GDP by a total of about 0.3 percentage points from 2025 to 2034.

Other factors are projected to reduce receipts relative to GDP by an additional 0.1 percentage point, on net, over the 2024–2034 period. One of those factors is the IRS's decision to postpone until fiscal year 2024 the filing deadlines for taxpayers affected by natural disasters. Those delayed payments (which would typically have been due throughout fiscal year 2023) will boost receipts this year but not in future years. In addition, CBO anticipates a modest decline in the share of business income that is subject to the individual income tax rather than the corporate income tax. The agency also projects an increase relative to the size of the economy in the amount of interest paid on mortgages, which is deductible for taxpayers who itemize.

Partially offsetting those trends is a modest increase relative to GDP in wages and taxable interest, which is expected to boost receipts over the next decade. Moreover, for the past several years, the correlation between individual income tax revenues and the economy has been weaker than is typical. In 2023, those receipts were less than expected given currently available data on the state of the economy and other factors that CBO could identify. That unexplained weakness in individual income tax receipts is projected to gradually dissipate over the next few years.

Payroll Taxes

Receipts from payroll taxes, which fund social insurance programs—primarily Social Security and Medicare—totaled \$1.6 trillion in 2023, or 6.0 percent of GDP. In CBO's projections, payroll taxes decline to 5.9 percent of GDP in 2024 and remain at that level through the end of the 10-year period. That initial decline results from the Treasury's reclassification of \$48 billion of past individual income tax receipts as payroll taxes—an action that boosted the amount of payroll taxes recorded for 2023 but will not affect those collections in later years.

Corporate Income Taxes

In 2023, receipts from corporate income taxes totaled \$420 billion, or 1.6 percent of GDP. CBO expects corporate income tax receipts to rise to 2.0 percent of GDP in 2024, largely because payments that otherwise would have been made in 2023 will instead be paid in fiscal year 2024.²⁴ Following the temporary boost in receipts

^{23.} For more information, see Congressional Budget Office, "How Income Growth Affects Tax Revenues in CBO's Long-Term Budget Projections" (June 25, 2019), www.cbo.gov/publication/55368.

^{24.} For more details about how CBO projects corporate income tax revenues, see Congressional Budget Office, "How CBO Projects Corporate Income Tax Revenues" (October 5, 2023), www.cbo.gov/publication/59436.

in 2024 from those delayed payments, corporate income tax receipts decline in CBO's projections to 1.7 percent of GDP in 2025. They continue to gradually decrease as a share of GDP throughout the next decade, totaling 1.3 percent of GDP in 2034. The overall reduction in revenues over the 10-year projection period stems from the varying effects of the postponed tax payments, provisions of the 2017 tax act, and other factors.

Postponed Payments. Two actions are estimated to have shifted a total of about \$60 billion in payments from 2023 into 2024. First, the IRS postponed payment deadlines for taxpayers, including corporations, in areas affected by natural disasters. Second, a new corporate alternative minimum tax on the book income of certain corporations (based on an adjusted measure of the income reported on their financial statements) was created as part of the 2022 reconciliation act. That tax went into effect in 2023, but the IRS subsequently granted penalty relief to corporations that did not make estimated payments in 2023 while it finalized the necessary guidelines and regulations for calculating their liability for the tax. Taken together, those additional collections are projected to boost receipts by 0.2 percent of GDP in 2024 but not in later years.

Provisions of the 2017 Tax Act. Over the next decade, several provisions of the 2017 tax act affect corporate income tax receipts. In CBO's projections, those provisions reduce receipts as a share of GDP by 0.2 percentage points, on net, between 2025 and 2034.

Following one provision of that law, firms have been making scheduled payments for a onetime tax on certain foreign profits since 2018. That tax applied to foreign profits for which U.S. taxes had been deferred under prior law. Taxes on those earnings, which are based on the value of those profits as of late calendar year 2017 (and which are unrelated to future business activity), can be paid over eight years in installments that vary in size. The payments thus boost receipts in CBO's baseline projections to varying degrees from 2023 to 2026 but not in later years, thereby contributing to lower receipts relative to GDP after 2026.

Another provision of the law, which took effect in 2022, requires firms to begin capitalizing and amortizing certain expenditures for research and development over a five-year period as they are incurred; previously, firms could immediately deduct such expenses. That change elevated

receipts in 2023 and will continue to do so for several more years as firms take fewer deductions up front. (It will not significantly affect receipts in later years.) Additionally, provisions allowing firms to immediately deduct from their taxable income 100 percent of their investments in equipment are scheduled to phase out from 2023 to 2026. By reducing the deduction that can be taken on new investments in the first year such an investment is made, that change will add to receipts during the phase-down period but will have little effect by 2034.

Other provisions of the law changed rules related to the taxation of foreign profits. Those changes, which are scheduled to take effect in 2026, will increase revenues in subsequent years. The increases will be more than offset by the reductions stemming from the previously described changes, however.

Other Factors. Various other factors are projected to reduce corporate income tax revenues as a share of GDP by an additional 0.3 percent between 2025 and 2034. Most significantly, profits on businesses' domestic activity are projected to decline over the next decade, reducing taxes as a share of the economy. CBO further anticipates that businesses will claim more tax credits in future years, in part because international firms are expected to increasingly report foreign profits earned in jurisdictions with higher taxes. Collections of taxes for years other than firms' most recent tax years are also projected to decrease over the next decade. Those collections have been high as a share of tax liabilities over the past several years, but they decline in CBO's projections to a level consistent with their average over the past decade.

Receipts From Other Sources

Receipts from all revenue sources other than individual income taxes, payroll taxes, and corporate income taxes totaled \$229 billion, or 0.8 percent of GDP, in 2023 (see Table 1-8). Those receipts are projected to remain at that level this year and for the next few years. By 2034, they rise to 1.2 percent of GDP in CBO's projections, because remittances from the Federal Reserve, which nearly ceased in 2023, are expected to resume in higher amounts starting in 2029.

Estate and Gift Taxes. In 2023, revenues from estate and gift taxes totaled \$34 billion, or 0.1 percent of GDP. They are projected to rise by 45 percent from 2026 to 2027 because of the expiration at the end of calendar year 2025 of a provision of the 2017 tax act that doubled

Table 1-8.

CBO's Baseline Projections of Smaller Sources of Revenues

Billions of dollars

													To	otal
	Actual, 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2025– 2029	2025– 2034
Excise taxes														
Highway	27	30	37	41	42	41	41	40	40	39	39	38	176	377
Health care	2	4	3	3	3	3	3	3	3	3	3	3	14	29
Aviation	17	19	20	21	21	22	23	24	25	26	27	27	98	218
Tobacco	10	10	9	8	8	7	7	6	5	5	5	4	45	75
Alcohol	11	11	11	10	11	11	11	11	11	11	12	12	53	109
Other excise taxes	9	12	13	14	15	15	16	16	16	17	17	18	62	142
Subtotal	76	85	92	97	99	100	100	100	100	101	101	102	449	948
Federal Reserve remittances	1	1	3	4	7	12	65	109	122	138	149	161	91	770
Customs duties	80	80	83	87	91	93	96	98	100	103	105	107	450	963
Estate and gift taxes	34	33	31	31	44	47	49	52	55	58	62	66	203	496
Miscellaneous fees and fines														
Universal Service Fund fees	9	9	10	9	10	10	10	10	10	10	10	10	48	96
Other fees and fines	20	25	24	25	27	30	32	35	33	33	34	35	139	310
Subtotal	38	35	38	40	42	43	46	44	44	45	47	48	209	437
Total	229	234	247	259	283	296	355	402	421	445	464	485	1,439	3,656

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

the amount of the estate and gift tax exemption. By 2034, those revenues total 0.2 percent of GDP.

Excise Taxes. Collections of excise taxes—which are levied on the production or purchase of particular types of goods and services, including motor fuels, tobacco, alcohol, and aviation—totaled \$76 billion, or 0.3 percent of GDP, in 2023. Those receipts rise slightly through 2026 but eventually decline to 0.2 percent of GDP in 2034 in CBO's projections.

The initial increase in receipts reflects CBO's expectation that the large amounts reported for refunds and tax credits attributable to the nontaxable use of gasoline will not continue. Those amounts, which are estimated to have totaled \$18 billion last year, did not exceed \$2 billion in any prior year. Because CBO cannot determine the cause of those elevated refunds and tax credits, it projects that they will gradually dissipate over the next several years. After 2026, excise taxes decrease in relation to GDP as the number of units of taxed goods and services is projected to grow slowly or decline. (Many excise taxes are imposed as a fixed dollar amount per unit sold.) For example, taxes on gasoline will decline, CBO projects, as the average fuel efficiency of fleets of vehicles improves and the consumption of gasoline thus decreases. CBO

also anticipates that excise taxes on tobacco and alcohol products will be reduced over the next decade as a result of importers' increasingly claiming drawbacks (or refunds) of those taxes.²⁵

Customs Duties. Collections of customs duties, which are assessed on certain imported goods, totaled \$80 billion, or 0.3 percent of GDP, in 2023. Those receipts are projected to decline slightly but remain near 0.3 percent as a share of GDP through 2034. That slight decline reflects CBO's expectation that some imported goods from countries subject to the additional tariffs imposed beginning in 2018 (in particular, the additional tariffs that apply to a large share of imported goods from China) will continue to be diverted to other countries. (Although those additional tariffs increased customs duties by roughly 0.2 percent of GDP from 2020

^{25.} On August 23, 2021, the U.S. Court of Appeals for the Federal Circuit upheld an earlier ruling by the U.S. Court of International Trade in *National Association of Manufacturers v. Department of the Treasury*. As a result of the ruling, tobacco and alcohol products on which excise taxes would normally be levied will receive a drawback (or refund) of those excise taxes when the merchandise can be matched to similar products that are exported or destroyed—even when no excise tax had previously been collected on the exported or destroyed merchandise. Those drawbacks are often referred to as double drawbacks.

through 2022, their effect diminished as customs duties declined sharply in 2023.) CBO's baseline projections reflect the assumption that tariffs, along with any subsequent exemptions provided by the Administration, continue at the rates in effect as of December 5, 2023, when CBO completed its economic forecast.

Remittances From the Federal Reserve. The central bank's remittances to the Treasury declined from \$107 billion (or 0.4 percent of GDP) in 2022 to less than \$1 billion in 2023—the lowest amount as a share of the economy since remittances began in 1947. That sharp drop occurred because higher short-term interest rates increased the Federal Reserve System's interest expenses to such an extent that they exceeded its income. When a Federal Reserve bank's expenses exceed its income, it records the difference as a deferred asset (or negative liability) and suspends remittances to the Treasury.

Although CBO estimates that the Federal Reserve System as a whole will have losses through 2025, the agency's baseline projections show small remittances for the next few years to account for the possibility that some individual Federal Reserve banks might record profits and remit them to the Treasury. As falling inflation allows the Federal Reserve to lower interest rates, the system returns to net profitability in 2026 in CBO's projections. Those profits gradually reduce the deferred asset through 2028; thereafter, remittances return to 0.4 percent of GDP—reflecting the difference between the income the Federal Reserve earns on its portfolio of assets and the interest it pays to banks that hold reserves with the central bank. CBO's estimates of remittances are highly uncertain because they depend on the path of short-term interest rates in the projection period.

Miscellaneous Fees and Fines. Receipts from other fees and fines totaled \$38 billion, or 0.1 percent of GDP, in 2023. Those receipts are projected to remain at 0.1 percent of GDP every year through 2034.

Tax Expenditures

Many exclusions, deductions, credits, and preferential rates in the federal tax system cause revenues to be lower than they would be otherwise for any underlying set of tax rates. Such provisions resemble federal spending and contribute to the budget deficit; thus, they are known as tax expenditures.²⁶

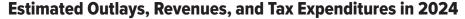
Like federal spending, tax expenditures provide financial assistance for specific activities, entities, or groups of people. However, the budgetary treatment of tax expenditures differs from that of spending programs. Tax expenditures increase the deficit by reducing the government's revenue collections, although the amount of forgone revenues attributable to specific tax expenditures (or to tax expenditures in general) is not typically recorded separately in the budget, unlike outlays for each spending program.²⁷ The Congressional Budget Act of 1974 requires that the federal budget list tax expenditures. The Administration regularly publishes estimates of tax expenditures prepared by the Treasury's Office of Tax Analysis, and the Congress publishes estimates prepared by the staff of the Joint Committee on Taxation (JCT).²⁸

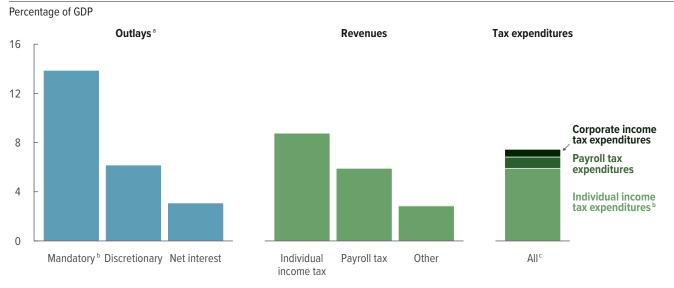
Tax expenditures have a large effect on the federal budget. In fiscal year 2024, the value of all the tax expenditures in the individual and corporate income tax systems (including their effects on payroll taxes) is estimated to be \$2.1 trillion, or 7.4 percent of GDP.²⁹ That amount, which was calculated by CBO on the basis of estimates

- the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability."
- 27. The exception is the portion of refundable tax credits that exceeds a taxpayer's tax liability; that amount is recorded in the budget as mandatory spending.
- 28. For this analysis, CBO adopted JCT's definition of tax expenditures as deviations from a "normal" income tax structure. For the individual income tax, that structure includes existing regular tax rates, the standard deduction, personal exemptions, and deductions of business expenses. For the corporate income tax, that structure includes the statutory tax rate, generally defines income on an accrual basis, and allows for costs to be recovered according to a specified depreciation system that is less favorable than under current law. For more information, see Congressional Budget Office, How Specifications of the Reference Tax System Affect CBO's Estimates of Tax Expenditures (December 2021), www.cbo.gov/publication/57543; and Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2023–2027, JCX-59-23 (December 2023), www.jct.gov/publications/2023/jcx-59-23. The Treasury's definition of tax expenditures is broadly similar to JCT's. See Office of Management and Budget, Analytical Perspectives: Budget of the U.S. Government, Fiscal Year 2024 (March 2023), pp. 203-235, www.govinfo.gov/app/details/ BUDGET-2024-PER.
- 29. Unlike JCT, CBO includes estimates of the largest payroll tax expenditures. As defined by CBO, a normal payroll tax structure includes the existing payroll tax rates as applied to a broad definition of compensation, which consists of cash wages and fringe benefits. Tax expenditures that reduce the tax base for payroll taxes also decrease spending for Social Security by reducing the earnings base used to calculate Social Security benefits.

^{26.} Sec. 3(3) of the Congressional Budget and Impoundment Control Act of 1974, codified at 2 U.S.C. § 622(3) (2023), defines tax expenditures as "those revenue losses attributable to provisions of

Figure 1-6.





Tax expenditures are provisions of the tax system (such as tax credits and deductions) that cause revenues to be lower than they would be otherwise. Like federal spending programs, tax expenditures add to the budget deficit. In 2024, the total revenues forgone because of tax expenditures are projected to equal 7.4 percent of GDP.

Data source: Congressional Budget Office, using estimates of tax expenditures prepared by the staff of the Joint Committee on Taxation. See www.cbo.gov/publication/59710#data.

GDP = gross domestic product.

- a. When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. Outlays here have been adjusted to exclude the effects of those timing shifts.
- b. The outlay portions of refundable tax credits, which are estimated to total 0.6 percent of GDP in 2024, are included in tax expenditures as well as in mandatory outlays.
- c. This total is the sum of the estimates for each separate tax expenditure and does not account for interactions among them. However, CBO estimates that in 2024, the total for all tax expenditures will roughly equal the sum of the estimates for each separate tax expenditure. Because estimates of tax expenditures are based on people's behavior with current provisions of the tax code in place, they do not reflect the amount of revenues that would be collected if provisions were eliminated and taxpayers adjusted their activities accordingly.

prepared by JCT, equals about 43 percent of all federal revenues in 2024 and exceeds projected outlays for all discretionary programs combined (see Figure 1-6).

Simply adding up the estimates for specific tax expenditures does not account for the interactions that may occur among those tax provisions. For instance, the total tax expenditure for all itemized deductions would be smaller than the sum of the separate tax expenditures for each deduction. The reason is that all taxpayers would claim the standard deduction if there were no itemized deductions; but if only one or a few itemized deductions were removed, many taxpayers would still choose to itemize. The progressive structure of the tax brackets (meaning that higher rates apply to higher income) ensures that the opposite would be the case with income

exclusions. In other words, the tax expenditure for all exclusions considered together would be greater than the sum of the separate tax expenditures for each exclusion. In 2024, those and other factors are expected to be approximately offsetting, so the total amount of tax expenditures is projected to roughly equal the sum of the individual tax expenditures.

Estimates of tax expenditures measure the difference between households' and businesses' tax liability under current law and the tax liability they would have incurred if the provisions generating those tax expenditures were repealed and taxpayers' behavior was unchanged. Such estimates do not represent the amount of revenues that would be raised if those provisions were eliminated, because the changes in incentives that would result from

Table 1-9.

Key Projections in CBO's Baseline, Adjusted to Exclude Effects of Timing Shifts, Through 2054

Percentage of GDP

				Annual	average	
	2024	2025	2026– 2029	2030- 2034	2035– 2044	2045– 2054
Revenues						
Individual income taxes	8.8	8.6	9.4	9.5	9.7	10.1
Payroll taxes	5.9	5.9	5.9	5.9	5.9	5.8
Corporate income taxes	2.0	1.7	1.5	1.4	1.3	1.4
Other ^a	0.8	0.8	0.9	1.1	1.2	1.3
Total revenues	17.5	17.1	17.8	17.9	18.2	18.6
Outlays						
Mandatory						
Social Security	5.2	5.3	5.5	5.8	6.0	6.0
Major health care programs ^{b,c}	5.6	5.5	5.7	6.4	7.5	8.3
Other ^b	3.1	3.1	2.8	2.6	2.4	2.1
Subtotal	13.9	13.9	14.1	14.8	15.8	16.4
Discretionary ^b	6.2	6.0	5.7	5.2	4.9	4.9
Net interest	3.1	3.2	3.3	3.7	4.5	5.8
Total outlays	23.1	23.1	23.1	23.7	25.2	27.1
Deficit (-) ^d	-5.6	-6.1	-5.3	-5.8	-7.0	-8.5
Debt held by the public at the end of the period	99	102	107	116	141	172
Addendum:						
Social Security						
Revenues ^e	4.6	4.6	4.6	4.6	4.6	4.5
Outlays ^f	5.2	5.3	5.5	5.8	6.0	6.0
Contribution to the deficit (-) ^{d,g}	-0.6	-0.7	-0.9	-1.2	-1.4	-1.5
Medicare						
Revenuese	1.5	1.5	1.5	1.6	1.7	1.8
Outlays ^{b,f}	3.9	3.9	4.2	4.9	6.0	6.8
Offsetting receipts	-0.7	-0.7	-0.8	-0.9	-1.2	-1.5
Contribution to the deficit (-) ^{d,g}	-1.7	-1.7	-1.9	-2.4	-3.1	-3.6
GDP at the end of the period (trillions of dollars)	28.2	29.3	34.4	41.6	59.8	85.2

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#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.

GDP = gross domestic product.

- a. Consists of excise taxes, remittances from the Federal Reserve System, customs duties, estate and gift taxes, and miscellaneous fees and fines.
- b. When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. Outlays have been adjusted to remove the effects of those timing shifts.
- c. Consists of outlays for Medicare (net of premiums and other offsetting receipts), Medicaid, and the Children's Health Insurance Program, as well as subsidies for health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.
- d. When outlays exceed revenues, the result is a deficit. Values in this row were calculated by subtracting outlays from revenues; thus, negative values indicate deficits or contributions to deficits.
- e. 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.
- f. 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.
- g. The contribution to the deficit shown in this row 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.

Box 1-3.

CBO's Long-Term Budget Projections

The Congressional Budget Office's long-term projections follow the agency's 10-year baseline budget projections and then extend the concepts underlying them for an additional 20 years—in this case, through 2054.¹ Those projections are inherently uncertain because budgetary outcomes are hard to predict, particularly over the long run. That said, even if conditions were more favorable than CBO projects, federal debt held by the public measured in relation to the size of the economy would almost certainly be much greater in 30 years than it is today if current laws remain unchanged.

Deficits and Debt

In CBO's projections, federal deficits grow from 6.1 percent of gross domestic product (GDP) in 2034 to 9.1 percent of GDP in 2054 because outlays start off larger than revenues in 2034 and increase faster than revenues over the subsequent 20 years. Primary deficits—that is, deficits excluding net outlays for interest—grow from 2.2 percent of GDP in 2034 to 2.6 percent in 2054, far less than total deficits grow.

As a result of mounting deficits, federal debt held by the public rises from 116 percent of GDP in 2034 to 172 percent of GDP in 2054. Such soaring debt would slow economic growth, push up interest payments to foreign holders of U.S. debt, and pose significant risks

 For years after 2034, CBO has updated its long-term population, economic, and revenue projections. In place of a full update, though, the agency has used a simplified approach to project spending in those years. CBO expects to publish fully updated long-term projections later in 2024. to the fiscal and economic outlook. It could also cause lawmakers to feel more constrained in their policy choices.

Spending

Total outlays increase from 24.1 percent of GDP in 2034 to 27.9 percent in 2054 in CBO's projections. Rising interest costs and growth in spending for the major health care programs, particularly Medicare, are significant drivers of that increase.² Rising interest rates and mounting debt cause net interest costs to increase from 2034 to 2054, from 3.9 percent of GDP to 6.5 percent.

Noninterest outlays—that is, all spending other than net outlays for interest—are projected to increase from 20.2 percent of GDP to 21.4 percent over the 20-year period. Mandatory spending increases from 15.1 percent of GDP in 2034 to 16.5 percent in 2054. Discretionary spending is projected to decline from 5.1 percent of GDP in 2034 to 4.9 percent in 2038 and is assumed to remain constant thereafter.

Revenues

Revenues increase from 17.9 percent of GDP in 2034 to 18.8 percent in 2054 in CBO's projections. Receipts from individual income taxes rise in relation to GDP over that period as real

Continued

eliminating those provisions would lead households and businesses to modify their behavior in ways that would lessen the effect on revenues.

The Long-Term Outlook for the Budget

Beyond the coming decade, the United States faces a challenging fiscal outlook. In CBO's projections, deficits grow in relation to GDP as increases in outlays (largely driven by rising interest costs and greater spending for the major health care programs) outpace increases in revenues. Those growing deficits boost federal debt dramatically over the next three decades (see Table 1-9 on page 39). In 2054, debt held by the public is projected to reach 172 percent of GDP—far larger than it

has ever been—and be on track to rise even further (see Figure 1-2 on page 15).

Measured as a percentage of GDP, federal debt over the 2034–2053 period is smaller in CBO's current projections than it was in the agency's June 2023 projections.³⁰ Deficits over that period are also now smaller than the agency projected last June. (See Box 1-3 for details about CBO's long-term budget projections.)

Uncertainty of Budget Projections

CBO's baseline budget projections are intended to show what would happen to federal spending, revenues,

^{2.} Spending for the major health care programs consists of outlays for Medicare, Medicaid, and the Children's Health Insurance Program, as well as premium tax credits for health insurance purchased through the marketplaces established under the Affordable Care Act and related spending. The premium tax credits subsidize the purchase of health insurance.

^{30.} Congressional Budget Office, *The 2023 Long-Term Budget Outlook* (June 2023), www.cbo.gov/publication/59014.

Box 1-3. Continued

CBO's Long-Term Budget Projections

income growth (that is, growth adjusted to remove the effects of inflation) pushes an increasing share of income into higher tax brackets—a process known as real bracket creep. Revenues from other sources, on net, change little from 2034 to 2054.

Changes to CBO's Long-Term Projections Since June 2023

In relation to the size of the economy, federal debt is now projected to be smaller throughout the 2034–2053 period than it was projected to be when CBO last published its long-term budget projections. All told, that difference is the net result of a decrease, measured as a percentage of GDP, in CBO's projections of spending—primarily driven by changes in discretionary spending and net interest costs—and a reduction in projected revenues, measured as a percentage of GDP, throughout that period. (Nominal GDP, which has not been adjusted to remove the effects of inflation, is now projected to be higher than it was previously projected to be, so a given dollar amount of spending, revenues, deficits, or debt equals a smaller percentage of GDP in the current projections than it would have equaled in last year's projections.)

Changes to Deficits and Debt. Throughout the 2034–2053 period, both total federal deficits and primary deficits, measured as a percentage of GDP, are now projected to be smaller (by an average of 0.7 percentage points each) than they were in June 2023's projections. As a result of changes to deficits, federal debt as a percentage of GDP is now projected to be lower and to grow more slowly throughout the 2034–2053 period than in last year's projections. By 2053, that measure is projected to be 12 percentage points lower than it was last year.

Changes to Spending. Measured as a percentage of GDP, total outlays over the 2034–2053 period are 0.9 percentage points lower, on average, in CBO's current projections than they were in the agency's June 2023 projections. Noninterest outlays measured as a percentage of GDP are also lower by 0.9 percentage points, on average, in the agency's current projections than they were in last year's.

In CBO's projections and in relation to the size of the economy, the change in total outlays is largely driven by reductions in discretionary spending throughout the 2034–2053 period and changes in net interest costs. Measured as a percentage of GDP, net interest costs are higher from 2034 to 2046 and then lower from 2047 to 2053 than they were in last year's projections. That is, relative to last year's projections, increases in net interest costs measured as a percentage of GDP partially offset the decreases in discretionary spending in the initial years of the period. By the end of the 20-year period, discretionary spending and net interest costs are both lower in this year's projections than in last year's.

Changes to Revenues. CBO's current projections of revenues measured as a percentage of GDP for the 2034—2053 period are 0.2 percentage points lower, on average, than its June 2023 projections. The agency revised downward its projections of receipts from individual income taxes for several reasons; the largest change arises because CBO now projects that the amount of interest paid on mortgages, which is deductible for taxpayers who itemize, is higher than it projected in June.

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.

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 (such as administrative actions, regulatory changes, and judicial decisions) 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

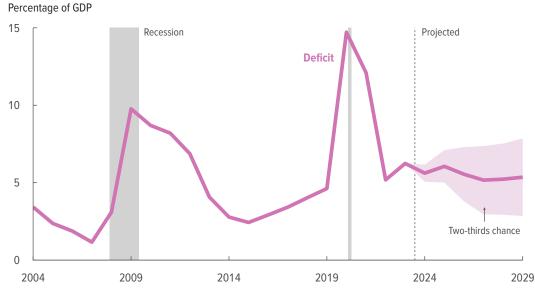
part on the agency's economic projections, which include forecasts for wage growth, interest rates, inflation, and economic growth. Actual outcomes for those variables are likely to differ from CBO's projections.

A comparison of CBO's past projections with actual outcomes indicates the magnitude of the uncertainty of the agency's budget projections.³¹ On the basis of an analysis of its past projections, CBO estimates that there is an

^{31.} Evaluations of the accuracy of CBO's budget projections are available at www.cbo.gov/topics/budget/accuracy-projections. Up-to-date data on the history of CBO's projections and actual outcomes for deficits, debt, outlays, and revenues are available at https://github.com/US-CBO/eval-projections.

Figure 1-7.

Uncertainty of CBO's Baseline Projections of the Budget Deficit



In CBO's baseline projections, the deficit in 2029 is 5.4 percent of GDP. There is a roughly two-thirds chance that the deficit in that year would be between 2.9 percent and 7.9 percent of GDP, CBO estimates.

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

The shaded area around CBO's baseline deficit projection is based on the errors in CBO's one-, two-, three-, four-, five-, and six-year projections of the deficit for fiscal years 1985 through 2023. Actual outcomes will be affected by legislation enacted in future years. The effects of future legislation are not reflected in this figure.

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

When outlays exceed revenues, the result is a deficit. In this figure, deficits and surpluses were calculated by subtracting revenues from outlays; thus, positive values indicate deficits. When outlays are subtracted from revenues, as recorded in the federal budget and in the tables in this chapter, negative values indicate deficits, and positive values indicate surpluses.

GDP = gross domestic product.

approximately two-thirds chance that, under current law, the deficit in 2025 would be between 5.0 percent and 7.1 percent of GDP (see Figure 1-7). (The baseline projection of the deficit for that year is 6.1 percent of GDP.) The range in 2029 would be wider: CBO estimates that,

under current law, there is a roughly two-thirds chance that the deficit for that year would be between 2.9 percent and 7.9 percent of GDP. (The baseline projection for that year is 5.4 percent of GDP.) The range of outcomes would be wider still in later years.

Chapter 2: The Economic Outlook

Overview

The projections for the federal budget described in Chapter 1 are based in part on recent economic developments and the Congressional Budget Office's projections of how the economy will perform in coming years. In calendar year 2023, the U.S. economy grew faster than it did in 2022, even as inflation slowed. In addition, the Federal Reserve raised the federal funds rate to its highest level since 2001. (That rate, which financial institutions charge each other for overnight loans of their monetary reserves, affects interest rates throughout the economy.)

Economic growth is projected to slow in 2024, accompanied by increased unemployment and lower inflation. CBO expects the Federal Reserve to respond to slowing economic activity by reducing interest rates, starting in the middle of the calendar year. Economic growth is expected to rebound in 2025 and then moderate in later years. CBO projects that a surge in the rate of net immigration that began in 2022 will continue through 2026. That rise in the number of people who enter the United States minus the number who leave is projected to expand the labor force and increase economic growth.

CBO's economic projections reflect developments in the economy as of December 5, 2023, and the assumption that current laws governing federal taxes and spending generally remain in place. The projections also incorporate the effects of the Fiscal Responsibility Act of 2023 (Public Law 118-5), which limits federal funding for discretionary programs over the next two years, as described in Chapter 1.

Gross Domestic Product

Economic output, as measured by the nation's gross domestic product (GDP), grew by 3.1 percent in 2023 in real terms (that is, adjusted to remove the effects of inflation). The growth of real GDP is projected to slow to 1.5 percent in 2024 (see Figure 2-1) as consumer spending increases more slowly and investment in private nonresidential structures, such as offices, declines. (Unless this report indicates otherwise, all annual growth rates are measured from the fourth quarter of one calendar year to the fourth quarter of the next year.)

Real GDP growth is projected to increase to 2.2 percent in 2025 after the Federal Reserve responds to weaker economic conditions in the middle of 2024 by lowering interest rates. CBO projects that growth in 2025 will be supported by increased economic activity in sectors sensitive to interest rates, such as residential investment and consumer spending. CBO also projects that high rates of net immigration through 2026 will support economic growth, adding an average of about 0.2 percentage points to the annual growth rate of real GDP over the 2024–2034 period.

Beyond 2026, CBO's projections of real GDP are driven mainly by its projections of real potential GDP (the maximum sustainable output of the economy). CBO expects real GDP to grow at an average rate of 2.0 percent a year from 2027 to 2034—similar to the average growth rate of potential GDP over the past 20 years.

The Labor Market

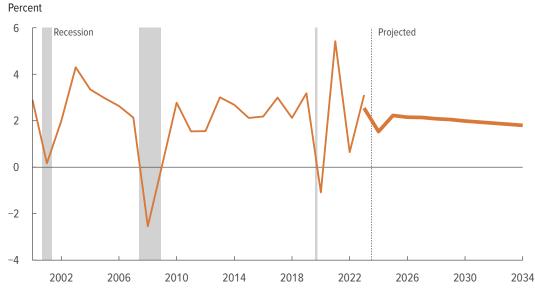
As economic growth slows in 2024, the demand for labor is expected to soften, slowing the growth of payroll employment (the number of employees on businesses' payrolls). The unemployment rate, which was 3.7 percent in the fourth quarter of 2023, is projected to rise to 4.4 percent in the fourth quarter of 2024 and then remain at 4.4 percent, on average, from 2025 to 2034 (see Table 2-1). The labor force is expected to keep growing at a moderate pace through 2026 as continued high rates of net immigration more than offset a projected decline in the rate of labor force participation stemming from weaker demand for workers and the rising average age of the population (referred to as the aging of the population).

Inflation

The rate at which overall prices rise each year is expected to slow further in 2024—to a rate roughly in line with the Federal Reserve's long-run goal of 2 percent—and then tick up in 2025, before declining slightly. CBO projects that inflation as measured by the price index for personal consumption expenditures (PCE), the Federal Reserve's preferred measure of inflation, will fall from 2.9 percent in 2023 to 2.1 percent in 2024, reflecting

Figure 2-1.

Growth of Real GDP



The growth of economic output is projected to slow in 2024 as the growth of consumer spending slows and as business investment in nonresidential structures declines. Economic growth is projected to increase in 2025 after the Federal Reserve responds to weaker economic conditions in 2024 by lowering interest rates.

Data sources: Congressional Budget Office; Bureau of Economic Analysis. See www.cbo.gov/publication/59710#data.

Real GDP is nominal GDP that has been adjusted to remove the effects of changes in prices. Growth of real GDP is measured from the fourth quarter of one calendar year to the fourth quarter of the next year.

Values for 2000 to 2023 reflect data available from the Bureau of Economic Analysis as of late January 2024. Those data contain values for the fourth quarter of 2023, which were not available when CBO developed its current projections.

GDP = gross domestic product.

softer demand for labor and slower increases in rents. Inflation is projected to tick up to 2.2 percent in 2025 as factors that have tended to limit price increases for food and energy recede and as stronger economic activity modestly increases the pressure on prices for some types of services. CBO projects that inflation will decline to 2.1 percent in 2026 and then average 2.0 percent a year through 2034.

Interest Rates

Short-term interest rates are expected to remain stable through the first quarter of 2024, decline gradually through the middle of 2027, and remain roughly steady thereafter. CBO expects that after holding the federal funds rate between 5.25 percent and 5.50 percent through the first quarter of 2024, the Federal Reserve will begin reducing that rate in the second quarter of 2024 in response to slowing inflation and rising unemployment. The federal funds rate is projected to fall to

2.9 percent by mid-2027 and stay roughly steady in later years. The interest rate on three-month Treasury bills is projected to follow a similar path.

Longer-term interest rates, such as the rate on 10-year Treasury notes, are typically higher than short-term rates. Although that was not the case in early 2024, CBO projects that the 10-year rate will increase relative to short-term rates, and the spread between them will gradually return to its long-run average. The 10-year rate, which was 4.4 percent in the fourth quarter of 2023, is projected to rise to 4.8 percent in the fourth quarter of 2024, before falling to 3.7 percent in the fourth quarter of 2026. After that, the 10-year rate is expected to rise gradually to 4.1 percent by 2034.

Income

As the demand for labor softens, the growth of employee compensation is projected to slow over the 2024–2034 period. GDP is expected to grow more slowly than compensation during that period. As a result, labor income as a percentage of GDP is projected to increase from 55.9 percent at the end of 2023 to 57.0 percent by the end of 2027 and then remain generally stable.

The Federal Reserve sets a target range for the federal funds rate that is 0.25 percentage points (25 basis points) wide. In this report, the term "federal funds rate" refers to the effective federal funds rate, an interest rate that the Federal Reserve calculates as a volume-weighted median of rates on overnight federal funds transactions.

Table 2-1.

CBO's Economic Projections for Calendar Years 2024 to 2034

Percent

	Actual, 2023				Annual average					
		2024	2025	2026	2027- 2028	2029- 2034				
		Change	from fourth qu	uarter to four	th quarter					
Gross domestic product		J	·		•					
Real ^a	3.1	1.5	2.2	2.2	2.1	1.9				
Nominal	5.8	3.5	4.3	4.1	4.1	3.9				
Inflation										
PCE price index	2.7	2.1	2.2	2.1	2.0	1.9				
Core PCE price index ^b	3.2	2.4	2.3	2.2	2.0	2.0				
Consumer price index ^c	3.2	2.5	2.5	2.2	2.2	2.2				
Core consumer price index ^b	4.0	2.9	2.6	2.4	2.3	2.3				
GDP price index	2.6	1.9	2.0	1.9	1.9	1.9				
Employment cost index ^d	4.3	3.6	3.4	3.3	3.1	3.0				
Payroll employment (net monthly change, in thousands) ^e	229	84	178	104	63	51				
	Fourth-quarter level									
Unemployment rate	3.7	4.4	4.4	4.4	4.4 ^f	4.4 ⁹				
			Change fron	n year to year						
Gross domestic product			J	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Real ^a	2.5	1.8	2.0	2.2	2.1	1.9				
Nominal	6.3	3.9	4.0	4.2	4.1	3.9				
Inflation										
PCE price index	3.7	2.2	2.2	2.1	2.0	1.9				
Core PCE price index ^b	4.1	2.5	2.4	2.2	2.0	2.0				
Consumer price index ^c	4.1	2.6	2.5	2.3	2.2	2.2				
Core consumer price index ^b	4.8	3.1	2.7	2.5	2.3	2.3				
GDP price index	3.6	2.1	2.0	2.0	1.9	1.9				
Employment cost index ^d	4.6	3.9	3.5	3.3	3.1	3.0				
			Annual	average						
Unemployment rate	3.6	4.2	4.4	4.3	4.4	4.5				
Interest rates		•			-					
Effective federal funds rate ^h	5.0	5.1	4.1	3.3	2.9	2.9				
3-month Treasury bills	5.1	4.9	3.8	3.1	2.7	2.8				
10-year Treasury notes	4.0	4.6	4.6	3.9	3.8	4.1				
Tax bases (percentage of GDP)			• •							
Wages and salaries	43.2	43.5	43.8	43.9	43.8	43.8				
Domestic corporate profits ⁱ	9.9 ^j	9.7	9.6	9.4	9.2	9.0				
Current account balance (percentage of GDP) ^k	-3.1 ^j	-3.4	-3.8	-3.8	-3.7	-3.7				

Data sources: Congressional Budget Office; Bureau of Economic Analysis; Bureau of Labor Statistics; Federal Reserve. See www.cbo.gov/publication/59710#data. Values for 2023 reflect data available from the Bureau of Economic Analysis and the Bureau of Labor Statistics as of late January 2024. Those data contain values for the fourth quarter of 2023, which were not available when CBO developed its current projections.

GDP = gross domestic product; PCE = personal consumption expenditures.

- a. Real values are nominal values that have been adjusted to remove the effects of changes in prices.
- b. Excludes prices for food and energy.
- c. The consumer price index for all urban consumers.
- d. The employment cost index for wages and salaries of workers in private industry.
- e. The average monthly change is calculated by dividing by 12 the net change in nonfarm payrolls from the fourth quarter of one calendar year to the fourth quarter of the next year.
- f. Value for the fourth quarter of 2028.
- g. Value for the fourth quarter of 2034.
- h. The median interest rate that financial institutions charge each other for overnight loans of their monetary reserves, weighted by loan volume.
- i. Adjusted to exclude the effects of tax rules on depreciation allowances and the effects of changes in prices on the value of inventories.
- j. Estimated value for 2023.
- k. Represents net exports of goods and services, net capital income, and net transfer payments between the United States and the rest of the world.

Domestic corporate profits, which have been elevated in recent years, are projected to grow more slowly than GDP over the 2024–2027 period because of increases in interest payments and employee compensation. As a result, domestic corporate profits are projected to decrease from 9.8 percent of GDP at the end of 2023 to 9.2 percent by the end of 2027 and remain roughly steady as a percentage of GDP thereafter.

Uncertainty About the Economic Outlook

CBO develops its projections so they fall in the middle of the likely range of outcomes under current law. Those projections are highly uncertain, and many factors could lead to different outcomes. That uncertainty arises from various domestic factors as well as from developments outside the United States.

In the short run, key sources of uncertainty include the projected paths for consumer spending, inflation, and interest rates. Consumer spending could grow faster than CBO anticipates, leading to stronger economic growth; in addition, inflation could fall more slowly than CBO projects, which could affect the outlook for interest rates and income growth. Beyond the short run, important areas of uncertainty about the economy include the pace of advances in technology, the strength of the demand for Treasury securities from U.S. and foreign investors, and the size of the U.S. population.

Comparison With CBO's Previous Economic Projections

Real GDP grew more in 2023 than CBO forecast in February 2023, when it published its previous set of 11-year economic projections.² That economic strength was driven by more robust growth of consumer spending, business investment, and exports than CBO had expected.

CBO is now projecting a lower average rate of economic growth from 2024 to 2027 than it did last February (2.0 percent a year versus 2.4 percent), largely because of slower projected growth in sectors of the economy that are sensitive to interest rates, such as consumer spending, investment, and net exports. The downward revision to

economic growth resulting from higher projected interest rates is partly offset by an increase in economic activity over the 2024–2027 period stemming from greater projected net immigration. From 2028 to 2033, real GDP is now projected to grow at a higher average rate than CBO forecast last February (2.0 percent a year versus 1.8 percent), mainly because of faster projected growth in output per worker and the larger labor force.

CBO has lowered its projection of the average unemployment rate over the 2024–2027 period (to 4.3 percent from 4.7 percent) because of stronger-than-expected economic growth in 2023. That stronger growth pushed the unemployment rate in the fourth quarter of 2023 below what CBO forecast last February. Although the unemployment rate is projected to rise in 2024 as the economy slows, it is expected to be lower, on average, than in CBO's previous projections. After 2027, CBO's projections of the unemployment rate are roughly the same as they were last February.

The average rate of participation in the labor force is now projected to be higher from 2024 through 2033 than CBO projected last February (62.0 percent versus 61.7 percent). That increase results partly from the effects of upward revisions to CBO's projections of net immigration from 2022 through 2026.

CBO's current projections of inflation are mixed relative to its February 2023 projections: lower in some cases and higher in others. Prices increased less in 2023 than CBO had anticipated, even though economic growth was stronger than expected. Inflation in 2024 is now projected to be slightly lower than CBO forecast last February. For 2025, CBO has reduced its projection of inflation as measured by the growth of the PCE price index but has slightly increased its projection of another measure of inflation, the growth of the consumer price index for all urban consumers (CPI-U). The reason for the difference is that the CPI-U places greater weight on the cost of shelter than the PCE price index does, and CBO now expects shelter costs to rise more in 2025 than previously forecast because of faster growth in home prices.

Short-term interest rates are expected to be higher in 2024 and 2025 than CBO forecast last February. That change reflects the stronger-than-anticipated economic activity in 2023, which led the Federal Reserve to raise the target range for the federal funds rate higher than CBO had projected. After 2027, both short-term and

Congressional Budget Office, The Budget and Economic Outlook: 2023 to 2033 (February 2023), www.cbo.gov/publication/58848.
 CBO published an update to its February 2023 economic forecast in July, but that update contained only three years of projections and thus does not provide a complete basis for comparison with the current projections. See Congressional Budget Office, An Update to the Economic Outlook: 2023 to 2025 (July 2023), www.cbo.gov/publication/59258.

long-term interest rates are now expected to be slightly higher than previously projected.

Projections of nominal labor income over the 2024–2027 period are largely unchanged since last February. CBO has increased its forecast of labor income after 2027, mainly because of higher projections of employment. In addition, corporate profits are now projected to be larger than previously forecast; that change is consistent with recent revisions by the Bureau of Economic Analysis (BEA) to data about past profits.

Comparison With Other Economic Projections

CBO's projections of real GDP growth are roughly in line with those of outside forecasters. Its projections of interest rates on 10-year Treasury notes over the next year and a half are higher than those of most other forecasters.

Recent Economic Developments

The U.S. economy grew strongly in 2023, following modest growth in 2022. That acceleration was propelled by stronger growth of consumer spending and nonresidential investment. Inflation slowed in 2023—because of looser constraints on the supply of goods affected by pandemic-related disruptions and slower growth of shelter-related prices—but remained above the Federal Reserve's long-run goal. Responding to elevated inflation, the central bank continued raising the federal funds rate, which reached its highest level in 22 years. The growth of the labor force increased, employment grew at a strong pace, the unemployment rate hovered near its 60-year low for much of 2023, and the number of job vacancies remained high.

Output and the Labor Market

Following growth of 0.7 percent in 2022, real GDP grew by 3.1 percent in 2023. Increases in consumer spending contributed 1.8 percentage points to that 3.1 percent growth rate, and increases in government spending contributed 0.7 percentage points. A slowdown in inventory investment by businesses subtracted 0.3 percentage points from GDP growth in 2023.

Demand for labor remained strong in much of 2023; at the same time, the supply of labor grew steadily. Nonfarm payroll employment increased by an average of more than 229,000 jobs per month in 2023, ending the year about 4.7 million jobs (or roughly 3 percent) higher than its prepandemic peak in February 2020. Despite the increase in employment, the unemployment rate rose

slightly in 2023—from 3.5 percent at the end of 2022 to 3.7 percent in December 2023—as the labor force expanded more quickly than employment did.³

The overall rate of participation in the labor force increased in 2023, mainly because of strong growth in the participation of workers ages 25 to 54. The labor force participation rate of those prime-age workers now exceeds its prepandemic peak. The participation rate of workers age 55 or older has not fully recovered from its large drop in the early months of the pandemic.

Total nonfarm payroll employment included roughly 1.3 million more jobs in 2023 than CBO projected for that year in January 2020, just before the pandemic. That greater-than-expected employment resulted from a larger population, a higher rate of labor force participation among prime-age workers, and a lower unemployment rate than CBO anticipated in January 2020.

The number of job openings per unemployed worker decreased in 2023, although it remained larger than its prepandemic average. That decrease contributed to a slowdown in the growth of compensation.

Inflation and Interest Rates

Although inflation slowed significantly in 2023, it remained higher than the Federal Reserve's long-run goal of 2 percent. Inflation as measured by the growth of the PCE price index declined from 5.9 percent in 2022 to 2.7 percent in 2023, while the annual growth of the CPI-U dropped from 7.1 percent to 3.2 percent. By comparison, PCE inflation averaged 1.5 percent a year from 2010 to 2019, and CPI-U inflation averaged 1.7 percent. Large price increases in 2023 were mostly concentrated in the service sector; many goods experienced small increases. The PCE price index for goods was unchanged in 2023, whereas the index for services rose by 4.1 percent.

Some factors that had fueled inflation in 2022, such as pressures on supply chains and steep increases in home prices, eased during 2023. In the first half of the year,

^{3.} The labor force consists of people age 16 or older in the civilian noninstitutionalized population who have jobs or who are unemployed (available for work and either seeking work or expecting to be recalled from a temporary layoff). The unemployment rate is the percentage of the labor force that is unemployed. The labor force participation rate is the percentage of the civilian noninstitutionalized population age 16 or older that is in the labor force.

the PCE price index grew at an average annual rate of 3.3 percent, driven by large increases in the prices of shelter services, services other than shelter and energy, and motor vehicles.⁴ In the second half of 2023, PCE inflation declined to an average annual rate of 2.1 percent as prices for motor vehicles and various services began to grow more slowly.

In response to higher inflation than its long-run goal, the Federal Reserve increased the federal funds rate from 4.5 percent in the first quarter of 2023 to 5.3 percent during the second half of the year. As a result, in December 2023, the federal funds rate remained at its highest level since February 2001.

The interest rate on 10-year Treasury notes increased from an average of 3.8 percent in the fourth quarter of 2022 to an average of 4.4 percent in the fourth quarter of 2023. That rate varied substantially during 2023, rising from an average of 3.5 percent in April to an average of 4.8 percent in October, before falling to an average of 4.0 percent in December.

Projections of Gross Domestic Product and Its Components

In CBO's projections—which reflect the assumption that current laws governing federal taxes and spending generally remain unchanged—real GDP grows modestly this year and then more strongly next year. After 2025, the growth of real GDP stabilizes at approximately the same rate as the growth of potential output (the amount of real GDP that can be produced if labor and capital are employed at their maximum sustainable rates).

Specifically, the growth of real GDP, which was 3.1 percent in 2023, is projected to slow to 1.5 percent in 2024 because of weak growth in spending by consumers and governments and in investment by businesses (see Table 2-2). In 2025, stronger growth in consumer spending and investment is projected to push economic growth up to 2.2 percent. That increase largely reflects the stimulative effects of lower interest rates and the stronger growth in residential investment that is expected to result from continued high rates of net immigration (see Box 2-1). CBO projects that the high rate of net immigration that began in 2022 will continue through 2026, adding an

average of about 0.2 percentage points to the annual growth rate of real GDP during the 2024–2034 period. From 2026 to 2034, real GDP is projected to grow by 2.0 percent a year, on average, roughly in line with the growth of aggregate supply (the total productive capacity of the economy, which depends on the supplies of labor, capital, and technology).

CBO constructs its economic projections by focusing on the interaction in the economy between aggregate supply and aggregate demand—which consists of consumer spending, business fixed investment, inventory investment, residential investment, government spending, and net exports. In CBO's short-run economic projections, which generally cover the next two to five years, fluctuations in real GDP are determined mainly by movements in aggregate demand, although they are also affected by supply-related factors, such as immigration, taxes on labor, and factors that affect the cost of new investments.

Over time, businesses are increasingly able to respond to changes in demand and in supply-related factors by altering their inputs to production. Thus, CBO's economic projections for later years mainly reflect the factors that underlie aggregate supply and determine potential output. CBO's assessment of potential output depends on its projections of key factors of production, including hours worked, the supply of capital services (the services provided by capital assets, such as equipment, software, and factories), and the pace and adoption of technological innovation in the economy.

CBO's current economic projections reflect the laws enacted and the policy measures taken through December 5, 2023, as well as the agency's initial projections of the effects of the Fiscal Responsibility Act. CBO's projections also reflect the scheduled expiration of temporary provisions in the 2017 tax act (P.L. 115-97)—including the expiration at the end of 2025 of most provisions affecting individual income taxes and the phaseout by the end of 2026 of bonus depreciation provisions for businesses (which allow businesses to immediately deduct a portion of the cost of certain investments). Those expirations are projected to increase the amount of taxes owed by individuals and corporations.

Consumer Spending

In CBO's projections, real consumer spending increases by 1.3 percent in 2024, roughly half of last year's growth rate, and then rebounds in 2025 to grow by 1.9 percent. In 2026, the growth of real consumer spending slows to

^{4.} Shelter services, as defined by the Bureau of Labor Statistics, measure the flow of housing services that housing units provide to their occupants. The prices of such services are a component of inflation as measured by the PCE price index and the CPI-U, whereas home prices are not included in those measures.

Projected Growth of Real GDP and Its Components

					Annual	average
	Actual, 2023	2024	2025	2026	2027- 2028	2029– 2034
		Change from	fourth quarte	r to fourth qu	arter (percen	:)
Real GDP	3.1	1.5	2.2	2.2	2.1	1.9
Components of real GDP						
Consumer spending	2.6	1.3	1.9	1.6	2.1	2.3
Business fixed investment ^a	4.1	2.0	3.0	3.4	3.2	2.7
Residential investment ^b	-0.1	5.1	10.9	10.7	2.6	-0.7
Purchases by federal, state, and local governments ^c	4.3	8.0	8.0	0.9	0.7	0.5
Federal	4.0	0.1	0.2	0.6	0.5	0.4
State and local	4.5	1.2	1.1	1.1	0.9	0.5
Exports	2.1	1.6	2.7	2.9	3.0	2.2
Imports	-0.2	1.4	2.8	2.6	2.3	2.1
Addendum:						
Inventory investment (billions of 2017 dollars) ^d	-69.2	14.1	17.0	3.6	-0.3	0.2
	Cor	ntributions to	the growth o	of real GDP (pe	ercentage poi	nts)
Components of real GDP						
Consumer spending	1.8	0.9	1.3	1.1	1.4	1.5
Business fixed investment ^a	0.5	0.3	0.4	0.5	0.4	0.4
Residential investment ^b	*	0.2	0.4	0.5	0.1	*
Purchases by federal, state, and local governments ^c	0.7	0.1	0.1	0.2	0.1	0.1
Federal	0.3	*	*	*	*	*
State and local	0.5	0.1	0.1	0.1	0.1	0.1
Exports	0.2	0.2	0.3	0.3	0.3	0.2
Imports	*	-0.2	-0.4	-0.3	-0.3	-0.3
Inventory investment ^d	-0.3	0.1	0.1	*	*	*

Data sources: Congressional Budget Office; Bureau of Economic Analysis. See www.cbo.gov/publication/59710#data.

Real values are nominal values that have been adjusted to remove the effects of changes in prices.

Data are annual. Changes are measured from the fourth quarter of one calendar year to the fourth quarter of the next year.

Values for 2023 reflect data available from the Bureau of Economic Analysis as of late January 2024. Those data contain values for the fourth quarter of 2023, which were not available when CBO developed its current projections.

GDP = gross domestic product; * = between -0.05 percentage points and 0.05 percentage points.

- a. Purchases of equipment, nonresidential structures, and intellectual property products.
- b. Construction of single-family and multifamily structures, manufactured homes, and dormitories; spending on home improvements; and brokers' commissions and other ownership-transfer costs.
- c. Based on the national income and product accounts.
- d. The change in private inventories.

1.6 percent because of scheduled increases in individual income taxes. Real consumer spending then grows at an average annual rate of 2.2 percent from 2027 to 2034, consistent with the growth of potential output in those years.

Credit conditions, such as interest rates and lending standards, are expected to discourage consumer spending this year but encourage it next year. In 2022 and

2023, consumer spending was partially insulated from rising interest rates because many people were able to draw on savings accumulated during the pandemic.⁵

^{5.} The total amount of personal saving rose to high levels during the pandemic, partly because financial support provided by the government to households more than offset declines in employment income and partly because households cut back on spending.

Box 2-1.

Economic Effects of CBO's Revised Population Projections

The size and age composition of the U.S. population are important factors in the Congressional Budget Office's economic projections. CBO now projects that the population over the next 10 years will be larger—and more concentrated among people ages 16 to 54—than it projected last year.¹ Those increases result from higher projections of net immigration (the number of people who migrate to the United States minus the number who leave) and lower projections of mortality rates.

The changes to CBO's population projections affect the agency's projections of economic activity by increasing the overall demand for goods and services, expanding the labor force, and altering productivity. A larger population is projected to put modest downward pressure on total factor productivity (TFP) in the near term but moderate upward pressure on TFP after 2027.² CBO also estimates that the increase in population will put downward pressure on average real wages in the near term. That effect is projected to partially reverse after 2027, but average real wages are expected to be slightly lower by 2034 than they would be otherwise.

Most of the increase in the projected population reflects larger net immigration. That greater immigration is projected to boost the growth rate of the nation's real gross domestic product (GDP) by an average of 0.2 percentage points a year from 2024 to 2034, leaving real GDP roughly 2 percent larger in 2034 than it would be otherwise. Real GDP per person, however, would be 0.8 percent smaller in 2034 because of the increase in immigration than it would be otherwise, in CBO's assessment.

Population Projections

CBO now expects that the civilian population age 16 or older in 2033 will be larger by 7.4 million people, or 2.6 percent, than the agency previously projected. Most of that increase (5.9 million) represents a rise in the net number of people expected to immigrate to the United States. The rest stems from lower

mortality rates because of a reduction in projected deaths from COVID-19.

The foreign nationals added to CBO's current population projections because of greater net immigration are projected to include a larger share of people under age 55, both male and female, than in the overall U.S. population. In CBO's projections, 91 percent of the additional foreign nationals age 16 or older who immigrate to the United States from 2022 to 2034 are under age 55, compared with 62 percent of the overall U.S. population age 16 or older during that period. Those additional foreign nationals include people who enter the United States lawfully through the use of parole authority and people who enter illegally.

How Changes in the Projected Population Affect the Economy

Increases in the population boost the demand for goods, services, and housing. They also expand the productive capacity of the economy by increasing the size of the labor force. The increases to CBO's population projections have raised projected consumer spending over the 2027–2033 period by roughly 2 percent, or 1.4 percent of GDP—and raised projected residential investment (such as spending on housing construction and home improvements) over that period by roughly 10 percent, or 0.4 percent of GDP—compared with the agency's previous projections.

In addition, the larger population boosts the supply of labor. CBO now expects the labor force to have 5.2 million more people in 2033 than the agency projected last year (see the figure). Most of that increase results from additional foreign nationals in CBO's new population projections. The additional foreign nationals boost the size of the labor force more slowly than they boost the size of the population, in part because of the time it takes them to obtain authorization to work. The majority of that population is projected to receive work authorization within six months of entering the United States; a minority is projected to work without authorization.

The age composition of the additional foreign nationals affects the change in the size of the labor force. People ages 25 to 54 tend to participate in the workforce at higher rates than people in other age groups do. Thus, the larger share of younger workers—25- to 54-year-olds, as well as 16- to 24-year-olds,

Congressional Budget Office, The Demographic Outlook: 2024 to 2054 (January 2024), www.cbo.gov/publication/59697, and The Demographic Outlook: 2023 to 2053 (January 2023), www.cbo.gov/publication/58612.

Total factor productivity is the average real output per unit of combined labor and capital services, excluding the effects of business cycles. Real values are nominal values that have been adjusted to remove the effects of changes in prices.

Box 2-1. Continued

Economic Effects of CBO's Revised Population Projections

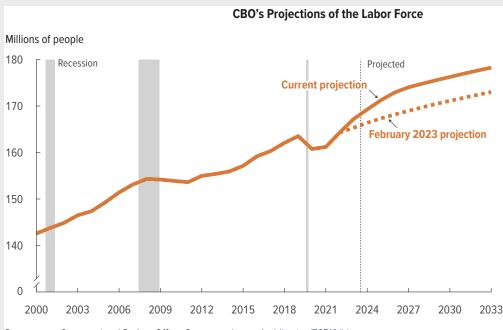
who will enter their prime working age over the coming decade—is projected to increase the labor force by roughly 0.9 million people by 2033 compared with what its size would be if the additional foreign nationals had the same age characteristics as the overall population.

Increased immigration also affects the supply of goods and services by altering total factor productivity. CBO expects the projected increase in immigration to reduce TFP in the near term and boost it in later years.

The near-term effect reflects the expectation that a significant share of additional foreign nationals will initially work in sectors of the economy that have relatively low productivity, such as services, thus pushing down TFP by a small amount. That effect is projected to partly reverse over time as immigrants assimilate into the labor market and gain additional skills. In addition, CBO expects that roughly 2 percent of the additional foreign nationals will be highly skilled workers employed in the fields of science, technology, engineering, or mathematics.

Those immigrants are expected to boost total factor productivity through innovation. That positive effect on TFP is projected to outweigh the negative effect by 2027, causing TFP to be roughly 0.2 percent greater in 2034 than it otherwise would have been.

Increased net immigration is projected to affect average real wages through several channels. First, additional foreign nationals are expected to work in sectors of the economy that pay relatively low wages, thus putting downward pressure on average wages. Second, the projected increase in workers reduces the amount of capital (factories and machinery) per worker, which also puts downward pressure on average real wages. Both effects are expected to lessen over time as workers gain more skills and as additional capital is built. Third, the projected increase in total factor productivity is expected to put upward pressure on wages. That effect is expected to build slowly over time. By 2034, CBO estimates, the three effects combined will cause average real wages to be slightly lower than they would have been otherwise.



Since last year, CBO has increased its projection of the size of the labor force in 2033 by 5.2 million people. Most of that increase results from higher projected net immigration.

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

The labor force consists of people age 16 or older in the civilian noninstitutionalized population who have jobs or who are unemployed (available for work and either seeking work or expecting to be recalled from a temporary layoff).

CBO expects the share of consumer spending on

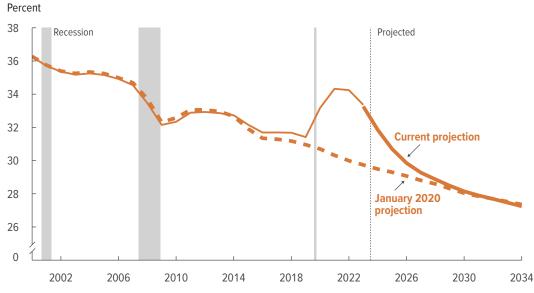
goods to decline in the coming years as people

gradually return to their prepandemic patterns of

consumption.

Figure 2-2.

Spending on Consumer Goods as a Share of Nominal Consumer Spending



Data sources: Congressional Budget Office; Bureau of Economic Analysis. See www.cbo.gov/publication/59710#data.

Nominal consumer spending reflects the prices that prevail at a given time, with no adjustment to remove the effects of changes in prices. Goods' share of nominal personal consumption expenditures consists of nominal consumer spending on durable and nondurable goods.

Values for 2000 to 2023 reflect data available from the Bureau of Economic Analysis as of late January 2024. Those data contain values for the fourth quarter of 2023, which were not available when CBO developed its current projections.

In addition, the effect of tighter credit requirements in 2022 and 2023 was dampened by consumers' historically high average credit scores. By the end of 2023, however, total deposits at banks and other financial institutions had declined, and delinquencies on consumer loans had increased. In 2024, elevated interest rates on credit cards and consumer goods, along with stricter credit requirements for consumer loans, are expected to put downward pressure on consumer spending. The resumption of student loan repayments in late 2023 (after a pandemicera pause) is also expected to dampen the growth of consumer spending in 2024. In 2025, lower interest rates are expected to boost consumer spending.

Other important factors in CBO's projections of consumer spending over the 2024–2034 period include conditions in the labor market, taxes, and population growth. Unemployment is projected to increase in 2024 and 2025, putting downward pressure on consumer spending. And in 2026, people's payments of individual income taxes are set to increase because of the scheduled expiration of temporary provisions in the 2017 tax act. In the other direction, high rates of net immigration are projected to boost consumer spending (see Box 2-1 on page 50).

CBO expects consumer spending to continue shifting away from goods and toward services throughout the 2024–2034 period as people gradually return to their prepandemic patterns of consumption (see Figure 2-2). Before the coronavirus pandemic, spending on goods had been gradually declining as a share of total consumption. During the pandemic, as people reduced their spending on in-person services, the share of consumer spending devoted to goods increased considerably. In 2023, that share fell markedly. In CBO's projections, spending on goods continues to decline as a share of total consumption after 2023, first rapidly and then more slowly. By 2030, the share of consumer spending devoted to goods returns to its prepandemic trend of a gradual decline.

Business Investment

CBO expects real business fixed investment—purchases of new equipment, nonresidential structures, and intellectual property products (such as software) by private companies and nonprofit institutions—to increase at the moderate rate of 2.0 percent in 2024, restrained by slower growth of demand for businesses' products and services. Within that category of spending, real investment in nonresidential structures, which soared in 2023

because of increased factory construction, is expected to decline modestly this year because of high interest rates and weak demand for new office space. By contrast, real investment in equipment and intellectual property products is expected to rise this year.

The growth of business investment as a whole will rebound after 2024, in CBO's estimation. One reason is that the Federal Reserve is expected to continue to lower the federal funds rate as inflation continues to wane. Nominal interest rates are expected to decline more than inflation, reducing the real cost of borrowing for businesses. Another reason is that stronger demand for businesses' output will encourage them to expand their capacity. In addition, CBO expects that companies' purchases of equipment will increase as a percentage of GDP to a share closer to the average over the past two decades. In CBO's projections, real business fixed investment grows at an average rate of 3.3 percent a year from 2025 to 2027. After that, as the growth rate of GDP moves closer to the growth rate of potential GDP, the growth of real business fixed investment slows to an average rate of 2.7 percent a year from 2028 to 2034.

CBO anticipates that businesses' investment in real inventories (finished goods, work in process, and materials and supplies) will have little effect on GDP growth in 2024, after subtracting 0.3 percentage points from GDP growth in 2023 (see Table 2-2 on page 49). In 2025, investment in inventories is expected to pick up as the growth of GDP accelerates.

Residential Investment

CBO expects mortgage interest rates to remain high in 2024 compared with rates in the decade before the pandemic. Even so, rapid population growth, pent-up demand, and a scarcity of existing homes for sale are expected to boost demand for new homes, leading real residential investment to rise by 5.1 percent in 2024. CBO projects that the annual growth of real residential investment will jump to an average of 10.8 percent in 2025 and 2026 because of declines in mortgage interest rates and the increased demand for housing associated with the large number of recent immigrants.

Net immigration is projected to slow after 2024, although it is expected to remain higher than during the 2010–2019 period. Because immigrants tend to live with family or friends initially and form their own households gradually, high rates of immigration from 2022 to 2026 will continue to stimulate construction of new homes during the second half of the 2020s, in CBO's

estimation. CBO projects that housing starts (the beginning of construction on new residential housing units) will average 1.7 million per year from 2026 to 2029.

Home prices (as measured by the S&P CoreLogic Case-Shiller home price index) rose by 9.5 percent in 2020, 19.0 percent in 2021, and 7.5 percent in 2022 because of rising demand for homes and a limited inventory of existing homes for sale. CBO estimates that the rise in home prices slowed to 5.6 percent in 2023 as higher mortgage interest rates and high home prices reduced demand. CBO expects the growth of home prices to slow further over the next two years—to 4.3 percent in 2024 and 2.1 percent in 2025—before picking up in later years.

Government Purchases

Total real purchases by federal, state, and local governments grew by 4.3 percent in 2023. If current laws governing federal taxes and spending generally remain in place, those purchases will grow by 0.8 percent in 2024, CBO projects. The growth of real federal purchases, which was 4.0 percent in 2023, is expected to slow to 0.1 percent in 2024, in part because of limits on discretionary funding that were enacted in the Fiscal Responsibility Act. Those limits will constrain funding levels over the next two years, as described in Chapter 1. Purchases by state and local governments are expected to grow more rapidly than purchases by the federal government. The reasons include federally funded state and local infrastructure projects (such as those for broadband internet services, transportation, public transit, and water systems) and expected increases in the payrolls of state and local governments.

In CBO's projections, real government purchases grow at an average annual rate of 0.6 percent from 2025 to 2034. Federal purchases increase by an average of 0.4 percent a year during that period. Purchases by state and local governments increase much faster in that period, by an average of 0.7 percent a year, mainly because of federal assistance such as education grants provided by the American Rescue Plan Act of 2021 (P.L. 117-2) and infrastructure grants provided by the Infrastructure Investment and Jobs Act (P.L. 117-58). Although those grant programs began in 2021, their spending is projected to continue throughout the projection period.

Exports and Imports

CBO projects that the U.S. trade deficit (the gap between the value of the United States' imports and the value of its exports) will remain roughly steady as a percentage of GDP in 2024, increase slightly in 2025, and decline

gradually relative to GDP thereafter. In 2024, the trade deficit is projected to equal 2.8 percent of GDP, the same percentage as in 2023, as modest growth of exports is generally offset by weak growth of imports. Both exports and imports will grow at a more robust pace in 2025, CBO projects, but imports will grow slightly faster than exports, increasing the trade deficit to 2.9 percent of GDP.

From 2026 to 2034, the trade deficit is projected to gradually shrink, mainly because of stronger growth of exports, supported by a weakening dollar and improved economic growth among major U.S. trading partners. During that period, nominal export growth is projected to average 4.2 percent a year, nominal import growth is expected to average 3.9 percent a year, and the trade deficit is expected to decline from 2.9 percent of GDP to 2.6 percent.

Value of the Dollar. CBO's projections of the flow of exports and imports are influenced by its projections of the foreign exchange value of the U.S. dollar. After remaining generally stable throughout 2023, the exchange value of the dollar will gradually decrease from 2024 to 2034, CBO projects. That projection reflects CBO's expectation that interest rates in countries that are major U.S. trading partners will rise relative to projected interest rates in the United States, causing the value of the dollar to fall against the currencies of those trading partners. In all, CBO projects that the foreign exchange value of the dollar will decline by approximately 13 percent between the first quarter of 2024 and the end of 2034.

Exports. Real exports are expected to grow slowly this year, by only 1.6 percent. One reason is the expected weakness in economic conditions abroad, which will reduce international demand for U.S. goods and services. CBO projects that the real economic output of major U.S. trading partners, which increased by 2.0 percent in 2023, will grow by 1.8 percent in 2024.⁷ After 2024,

as the pace of foreign economic growth returns to its prepandemic trend and the weakening dollar makes U.S. exports more competitive in international markets, real exports will grow at a moderate rate, averaging about 2.9 percent a year from 2025 to 2028, CBO projects.

Imports. The growth of imports was unusually weak in 2023 as U.S. consumers shifted their spending away from goods (many of which are produced abroad) and toward services (more of which are produced domestically). CBO projects that slow growth of consumer spending and domestic investment will limit the growth of real imports to 1.4 percent in 2024. The following year, as growth of consumer spending and investment increases, the growth of real imports is projected to rise to 2.8 percent. After 2025, the growth rate of real imports will moderate, averaging 2.2 percent a year from 2026 to 2034, CBO projects.

Potential Output

Although CBO's economic projections for the next several years depend strongly on expected changes in the overall demand for goods and services, the agency's projections for the rest of the 2024–2034 period are fundamentally determined by its assessment of key inputs to potential GDP. Those inputs include the potential number of workers in the labor force, the flow of productive services from the nation's stock of capital assets, and the potential productivity of labor and capital.

In CBO's projections, real potential GDP grows at an average rate of 2.2 percent a year from 2024 to 2028 slightly higher than the average rate since the business cycle peak in 2007—and then grows at an average rate of 1.9 percent a year from 2029 to 2034 (see Table 2-3). The higher growth rate of potential GDP over the next five years stems mainly from rapid growth in the labor force, reflecting a surge in the rate of net immigration from 2022 to 2026 compared with recent years. Since 2008, the potential labor force has grown by 0.6 percent a year, on average. CBO projects that the potential labor force will grow at an average annual rate of 0.9 percent from 2024 to 2028 and 0.4 percent from 2029 to 2034. The productivity of the potential labor force (which equals real potential GDP divided by the size of the potential labor force) is projected to grow by an average of 1.2 percent a year from 2024 to 2028 and 1.5 percent a year from 2029 to 2034 (see Figure 2-3).

The growth rate of real GDP is projected to decline after 2025 and converge toward the growth rate of real potential GDP. By the end of 2026, the output gap (the

CBO's measure of the exchange value of the U.S. dollar is an export-weighted average of exchange rates between the dollar and the currencies of leading U.S. trading partners.

^{7.} The projected decline in the economic growth of major U.S. trading partners in 2024 results mostly from slower projected growth in China, Japan, and Mexico. CBO projects that economic growth in China will slow in 2024 because of continued weakness in consumer spending and the real estate sector. Economic growth in Japan is expected to weaken this year as export growth moderates after being unexpectedly strong last year. In Mexico, weaker growth of investment is expected to dampen economic growth in 2024. CBO expects those factors to subside in 2025 and later years, bringing the growth rate of major U.S. trading partners back to its long-term trend.

Table 2-3.

Key Inputs in CBO's Projections of Real Potential GDP

Percen:

			Averag		Projected average annual growth					
	1950– 1973	1974– 1981	1982– 1990	1991– 2001	2002- 2007	2008- 2023	Overall, 1950– 2023	2024- 2028	2029- 2034	Overall, 2024– 2034
					Overa	ll econom	у			
Real potential GDP ^a	4.0	3.1	3.2	3.2	2.4	1.9	3.1	2.2	1.9	2.0
Potential labor force ^b	1.6	2.4	1.6	1.2	1.0	0.6	1.4	0.9	0.4	0.6
Potential labor force productivity ^c	2.3	0.7	1.6	2.0	1.4	1.3	1.7	1.2	1.5	1.4
	Nonfarm business sector									
Real potential output	4.1	3.5	3.5	3.7	2.5	2.2	3.4	2.5	2.2	2.3
Potential hours worked	1.4	2.2	1.7	1.3	0.1	0.7	1.3	0.9	0.5	0.7
Capital services ^d	3.8	3.7	3.5	3.9	2.8	2.5	3.4	2.3	2.4	2.3
Potential total factor productivity ^e	1.8	0.7	1.1	1.5	1.4	0.9	1.4	1.1	1.1	1.1
Contributions to the growth of real potential output (percentage points)										
Potential hours worked	1.0	1.5	1.1	0.9	0.1	0.5	8.0	0.6	0.3	0.5
Capital services ^d	1.2	1.2	1.1	1.3	0.9	8.0	1.1	0.8	0.8	0.8
Potential total factor productivity ^e	1.8	0.7	1.1	1.5	1.4	0.9	1.4	1.1	1.1	1.1
Total contributions	4.0	3.4	3.4	3.7	2.5	2.2	3.3	2.4	2.2	2.3
Potential labor productivity ^f	2.6	1.2	1.7	2.4	2.3	1.5	2.1	1.5	1.8	1.7

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

Real values are nominal values that have been adjusted to remove the effects of changes in prices.

The table shows compound annual growth rates over the specified periods. Those rates are calculated from the fourth quarter of the year immediately preceding each period to the fourth quarter at the end of that period.

GDP = gross domestic product.

- a. CBO's estimate of the amount of real GDP that can be produced if labor and capital are employed at their maximum sustainable rates.
- b. CBO's estimate of how big the labor force would be if economic output and other key variables were at their maximum sustainable amounts.
- c. The ratio of real potential GDP to the potential labor force.
- d. The services provided by capital goods (such as computers and other equipment) that constitute the actual input in the production process.
- e. The average real output per unit of combined labor and capital services, excluding the effects of business cycles.
- f. The ratio of potential output to potential hours worked in the nonfarm business sector.

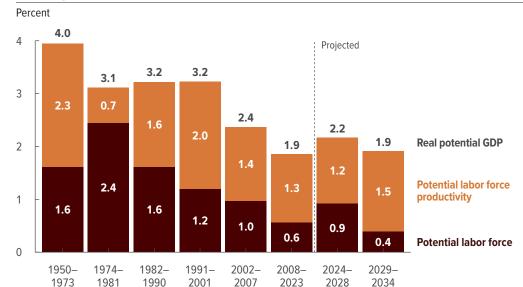
difference between actual and potential GDP, expressed as a percentage of potential GDP) narrows to -0.5 percent. It remains at that percentage thereafter, consistent with the long-term relationship between actual and potential output. From 2029 to 2034, the growth of real GDP is projected to average 1.9 percent a year, the same as the growth of real potential GDP.

About three-quarters of the U.S. economy's activity, and the bulk of its productivity growth, occurs in the non-farm business sector. The potential output of that sector

is projected to grow at an average rate of 2.3 percent a year over the 2024–2034 period. About 1.1 percentage points of that growth rate are attributable to growth of the sector's potential total factor productivity (the average real output per unit of combined labor and capital services, excluding the effects of business cycles). An additional 0.8 percentage points of that growth rate are attributable to increases in capital services, and the remaining 0.5 percentage points are attributable to increases in potential hours worked.

Figure 2-3.

Average Annual Growth of Real Potential GDP and Its Components



Real potential GDP is projected to grow at an average annual rate of 2.2 percent over the next five years, faster than it has since the recession of 2007 to 2009. That faster growth of potential GDP stems mainly from CBO's projection of a surge in net immigration from 2022 to 2026, which increases the projected growth of the labor force.

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

Real values are nominal values that have been adjusted to remove the effects of changes in prices.

Real potential GDP is CBO's estimate of the amount of real GDP that can be produced if labor and capital are employed at their maximum sustainable rates. Its growth is the sum of the growth of the potential labor force and of potential labor force productivity. The potential labor force is CBO's estimate of how big the labor force would be if economic output and other key variables were at their maximum sustainable amounts. Potential labor force productivity is the ratio of real potential GDP to the potential labor force.

The bars show average annual growth rates over the specified periods. Those rates are calculated using calendar year data.

GDP = gross domestic product.

Projections of the Labor Market

Conditions in the labor market are expected to soften in the near term as the slowdown in economic growth in early 2024 moderates the demand for workers. In CBO's projections, the growth of employment wanes through early 2024, while the unemployment rate rises and the growth of wages slows (see Figure 2-4). A surge in immigration that began in 2022 and is projected to continue through 2026 is expected to increase the size of the labor force over the entire 2024–2034 period. The percentage of people participating in the labor force is projected to decline through 2034 because of the aging of the population. After 2026, the labor market gradually returns to its past long-term average relationship to potential GDP, and the growth of employment, nominal labor compensation, and wages is projected to be slower than during the next several years. The unemployment rate is projected to rise gradually from 2026 through 2030 and then decline slightly through 2034.

For the 2028–2034 period, CBO's projections of employment, the unemployment rate, labor force participation, and hourly compensation mainly reflect the agency's assessment of the overall performance of the economy and the effects of demographic trends over the long term. The aging of the population and net immigration are expected to strongly influence the size and composition of the workforce for decades to come.

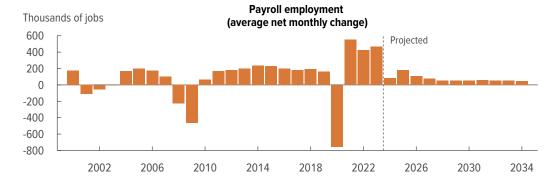
Employment

The growth of nonfarm payroll employment is projected to slacken in 2024 as the slowdown in real output growth dampens the demand for workers. CBO expects employment growth to increase in 2025 as economic growth rebounds but to remain moderate through 2027. In CBO's projections, employment grows by an average of 110,000 jobs per month, on net, through 2027.

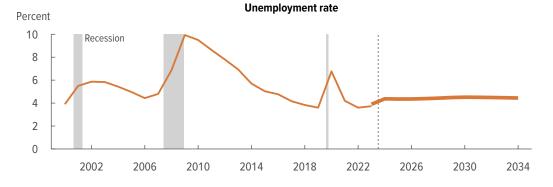
The growth of employment is projected to be slower after 2027 than during the next several years. In CBO's projections, nonfarm payroll employment grows by

Figure 2-4.

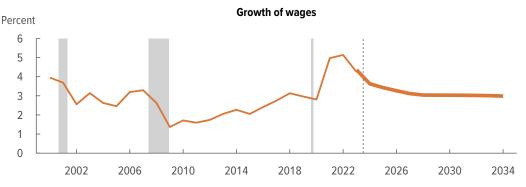
Employment, Unemployment, and Wage Growth



The number of payroll employees is projected to grow more slowly in 2024 than it has in recent years as the expected slowdown in economic growth dampens the demand for workers.



The slowdown in economic growth is also expected to raise the unemployment rate through early 2025.



Less demand for labor and falling inflation are projected to slow the growth of nominal wages over the next year. Wage growth is projected to keep declining gradually after 2024 but to remain above its prepandemic 2015–2019 average through 2034.

Data sources: Congressional Budget Office; Bureau of Labor Statistics. See www.cbo.gov/publication/59710#data.

Payroll employment is the number of employed workers, excluding proprietors, private household employees, unpaid volunteers, farm employees, and unincorporated self-employed workers. The average monthly change in payroll employment is calculated by dividing by 12 the net change in nonfarm payrolls from the fourth quarter of one calendar year to the fourth quarter of the next year.

The unemployment rate is the percentage of people in the labor force who are not working but who are available for work and are either seeking work or expecting to be recalled from a temporary layoff. Data for the unemployment rate are fourth-quarter average values.

Wages are measured using the employment cost index for wages and salaries of workers in private industry. Annual wage growth is measured from the fourth quarter of one calendar year to the fourth quarter of the next year.

Values for 2000 to 2023 reflect data available from the Bureau of Labor Statistics as of late January 2024. Those data contain values for the fourth quarter of 2023, which were not available when CBO developed its current projections.

an average of 51,000 jobs per month, on net, over the 2028–2034 period. That projected growth is smaller than the average increase over the past two decades because of the aging of the population, which will cause the labor force to grow more slowly over the 2028–2034 period, in CBO's estimation, than it did during the past 20 years.

Unemployment

The unemployment rate and the number of unemployed people are projected to increase through early 2025, reflecting the slowdown in economic growth. The overall unemployment rate was 3.7 percent in the fourth quarter of 2023. In CBO's projections, that rate rises to 4.4 percent by early 2025. The number of unemployed people increases from 6.3 million in the fourth quarter of 2023 to 7.5 million in early 2025.

The unemployment rate is projected to decline slightly in the second half of 2025, mainly in response to stronger GDP growth in the first half of the year, but then rise to 4.4 percent through 2027. In CBO's projections, the unemployment rate continues to rise through 2030 as GDP returns to its historical relationship with potential GDP. After peaking at nearly 4.5 percent at the end of 2030, the unemployment rate declines slightly through 2034—in line with the projected decline during that period in the noncyclical rate of unemployment (the rate of unemployment resulting from all sources except changes in aggregate demand). That decline reflects the continuing shift in the composition of the workforce toward older workers, who tend to have lower rates of unemployment (when they participate in the labor force), and away from less educated workers, who tend to have higher rates of unemployment.

Labor Force

In CBO's projections, the labor force continues to expand at a moderate pace through 2026. Higher population growth during that period, mainly from increased immigration, more than offsets a projected decline in the labor force participation rate because of slowing demand for workers and the aging of the population. A large proportion of recent and projected immigration is expected to include people in the prime working ages of 25 to 54 (see Box 2-1 on page 50).

Despite relatively high participation rates among recent and projected immigrants, CBO expects the effects of the aging of the population to reduce the overall labor force participation rate from 62.7 percent in 2023 to 62.2 percent in 2027. In addition, higher tax rates in

2026 and later years (after individual income tax provisions in the 2017 tax act expire at the end of 2025) are projected to cause some people to leave the labor force.

CBO expects the labor force participation rate to keep falling thereafter—from 62.2 percent at the end of 2027 to 61.4 percent at the end of 2034. That decline is mostly driven by the aging of the population, particularly the continued retirement of members of the baby boom generation. The projected labor force participation rate in 2034 is slightly below CBO's estimate of the potential labor force participation rate, which falls from 62.4 percent in 2023 to 62.1 percent in 2027 and 61.5 percent in 2034.

Hourly Wages and Salaries

In CBO's projections, slowing demand for labor and falling inflation restrain the growth of nominal wages. CBO expects the employment cost index for wages and salaries of workers in private industry—a measure of the hourly price of labor, excluding fringe benefits—to grow by 3.6 percent in 2024, down from 4.3 percent in 2023. Wage growth is projected to continue to slow gradually through 2029 but remain above 2.7 percent, its annual average from 2015 to 2019, before the pandemic. Real compensation per hour in the nonfarm business sector—a useful gauge of longer-term trends in labor costs—is projected to grow at an average rate of 2.0 percent a year over the 2028–2034 period, close to the projected average growth of labor productivity in that sector.

Projections of Inflation and Interest Rates

In CBO's projections, inflation continues to slow in 2024, even as the unemployment rate remains below the noncyclical unemployment rate, because the factors that caused demand to grow more rapidly than supply after the pandemic are expected to ease this year. The inflation rate will decline toward the Federal Reserve's long-run goal of 2 percent in 2024 and tick up slightly in 2025, CBO projects, before declining slightly in the following years.

Short-term interest rates are projected to stay roughly unchanged early in 2024, before declining from the middle of the year through 2026. Long-term interest rates are expected to rise from early 2024 through the end of the year and then decline moderately through 2026. From 2027 to 2034, short-term interest rates are projected to stay roughly steady while long-term interest rates rise modestly.

Inflation

Disruptions in the supply of goods and services—as well as the effects of pandemic-related legislation on the demand for goods and services—will continue to fade in 2024 and 2025. In CBO's projections, inflation slows in 2024, although it remains higher than before the pandemic (see Figure 2-5, top panel). The growth rate of the PCE price index—the Federal Reserve's preferred measure of inflation—declined to 2.7 percent last year. CBO projects that PCE inflation will fall to 2.1 percent in 2024 and then tick up slightly to 2.2 percent in 2025. The core PCE price index, which excludes prices for food and energy, grew by 3.2 percent in 2023. Its growth is expected to decelerate over the next two years, to 2.4 percent in 2024 and 2.3 percent in 2025.

Inflation is projected to be lower in 2024 for three main reasons. First, CBO expects that supply chains have largely recovered from issues stemming from the pandemic, and the effects of that recovery will continue relieving upward pressure on prices for goods this year (see Figure 2-5, bottom panel). Second, the projected slowdown in economic growth and rise in unemployment in 2024 will put downward pressure on prices by slowing demand and the growth of wages. Third, CBO projects that higher long-term interest rates in 2024 will put downward pressure on certain types of prices, such as the prices of shelter services, motor vehicles, and home furnishings. The rapid growth of shelter prices began easing in the second half of 2023.

Overall PCE inflation is projected to tick up in 2025 even as core PCE inflation declines because the factors that have tended to limit price increases for food and energy (items that are not included in the core PCE index) are expected to recede. In addition, stronger economic activity is expected to modestly increase the pressure on prices for some types of services, especially housing.

Overall and core inflation as measured by the consumer price index for all urban consumers are projected to be slower, on average, over 2024 and 2025 than they were last year. Core CPI-U inflation is usually about 0.3 percentage points higher than core PCE inflation. But in 2023, growth of the core CPI-U outpaced growth of the core PCE price index by 0.8 percentage points because of the greater weight the CPI-U places on shelter costs, which rose rapidly. CBO expects the gap between those two measures of inflation to narrow—becoming smaller than its historical average after 2025—as price increases

ease for categories of goods and services that are assigned greater weight in the calculation of the CPI-U.

Over the 2026–2028 period, PCE inflation is projected to decline gradually because of slower economic growth and the delayed effects of elevated interest rates on price increases. Those factors affect inflation by reducing the demand for goods and services as well as by reducing the demand for labor, which puts upward pressure on the unemployment rate. CBO expects the unemployment rate to remain above the noncyclical rate of unemployment, on average, over the 2026–2028 period. A rise in the unemployment rate relative to the noncyclical rate is expected to put further downward pressure on the growth of wages and prices by reducing workers' bargaining power for wages and households' spending power.

In CBO's projections for 2028 to 2034, core PCE inflation averages 2.0 percent a year, and overall PCE inflation averages 1.9 percent a year. Both of those growth rates are close to the Federal Reserve's long-run goal. The CPI-U is projected to grow by an average of 2.2 percent a year over that period, a rate consistent with the average difference of 0.3 percentage points between CPI-U and PCE inflation seen over the 2000–2015 period and the Federal Reserve's long-run goal for PCE inflation.

Interest Rates

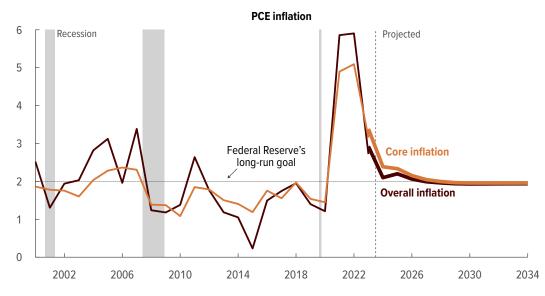
CBO anticipates that the Federal Reserve will continue holding the federal funds rate between 5.25 percent and 5.50 percent through the first quarter of 2024. That tight monetary policy, reflected in high real interest rates, will continue to dampen economic activity and reduce inflationary pressures. High real interest rates slow the growth of consumer spending by making it more costly to finance purchases (especially large ones, such as houses and motor vehicles). They also reduce the growth of business investment by making it more expensive for companies to borrow money to expand productive capacity. In addition, high interest rates on mortgages reduce the growth of residential investment.

As inflation continues to slow and the economy weakens, the Federal Reserve is expected to reduce the federal funds rate starting in the second quarter of this year. CBO projects that after 2024, the Federal Reserve will continue to lower the federal funds rate as inflation falls toward the central bank's 2 percent long-term goal. The federal funds rate is projected to decline to 2.9 percent in mid-2027, increase slightly to 3.0 percent in 2031, and remain steady

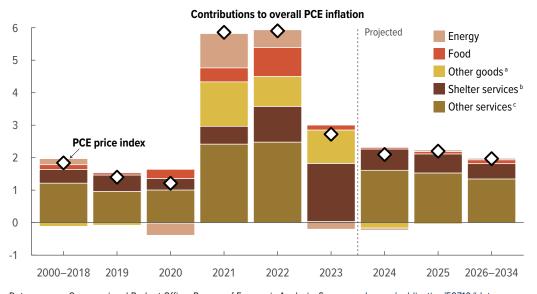
Figure 2-5.

Overall Inflation, Core Inflation, and Contributions to Overall Inflation

Percen



In CBO's projections, overall prices, as measured by the PCE price index, increase less in 2024 and 2025 than they did last year, although the overall rate of inflation remains higher than before the pandemic.



Key reasons that inflation is projected to be lower in 2024 and 2025 than in recent years include the easing of upward pressures on the prices of food, energy, and other goods and slower growth in the price of shelter services (because of elevated interest rates).

 $Data\ sources: Congressional\ Budget\ Office; Bureau\ of\ Economic\ Analysis.\ See\ www.cbo.gov/publication/59710\#data.$

The overall inflation rate is the rate of growth of the PCE price index; the core inflation rate excludes prices for food and energy. Inflation is measured from the fourth quarter of one calendar year to the fourth quarter of the next year.

In the bottom panel, values in the bars represent the contributions, in percentage points, of each category of goods and services to the growth rate of the PCE price index. The sum of those categories' contributions equals the overall growth of that index. Values for 2000 to 2018 and for 2026 to 2034 are annual averages over those periods.

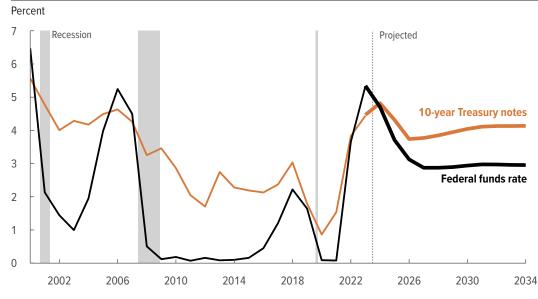
Values for 2000 to 2023 reflect data available from the Bureau of Economic Analysis as of late January 2024. Those data contain values for the fourth quarter of 2023, which were not available when CBO developed its current projections.

PCE = personal consumption expenditures.

- a. Core durable and nondurable goods, including vehicles and parts, electronics, home furnishings, and apparel.
- b. The flow of housing services that housing units provide to their occupants.
- c. Services other than shelter services, including medical services and transportation and recreation services.

Figure 2-6.

Interest Rates



In CBO's projections, the Federal Reserve begins lowering the federal funds rate in the second quarter of 2024 in response to slowing inflation and rising unemployment. Starting this year, the spread between the federal funds rate and the interest rate on 10-year Treasury notes is projected to gradually revert to its long-run average.

Data sources: Congressional Budget Office; Federal Reserve. See www.cbo.gov/publication/59710#data.

The federal funds rate shown here is the effective federal funds rate—the median interest rate that financial institutions charge each other for overnight loans of their monetary reserves, weighted by loan volume. Data are fourth-quarter average values.

Values for 2023 reflect data on interest rates for all of December 2023. Those data were not available when CBO developed its current projections.

thereafter (see Figure 2-6). Interest rates on short-term Treasury securities, such as 3-month Treasury bills, are expected to move largely in concert with changes in the Federal Reserve's target range for the federal funds rate.

Interest rates on long-term Treasury securities are expected to rise in 2024 and then fall from early 2025 through 2026, before increasing modestly. The interest rate on 10-year Treasury notes, which averaged 4.4 percent in the fourth quarter of 2023, rises to 4.8 percent in the fourth quarter of 2024 in CBO's projections. That increase mainly results from a projected increase in term premiums (the additional returns paid to bondholders for the extra risk associated with holding long-term bonds) because of weakening conditions in the labor market and reductions in the size of the Federal Reserve's balance sheet as a percentage of GDP.8 After 2024, interest rates on long-term Treasury securities are projected to fall along with shorter-term rates, though not by as

much. The interest rate on 10-year Treasury notes is projected to decline from 4.8 percent in the fourth quarter of 2024 to 3.7 percent in the fourth quarter of 2026.

After 2026, interest rates on short- and long-term Treasury securities will be higher than they were, on average, in the decade before the pandemic, CBO projects. Compared with that decade, federal debt will be larger and productivity will grow more quickly, pushing up real interest rates. In addition, inflation is projected to be higher than it was before the pandemic, resulting in higher nominal interest rates.

Projections of Income

Economic activity and federal tax revenues depend on how the total amount of income in the economy is divided among labor income, domestic corporate profits, proprietors' income, income from interest and dividends, and other categories. (Labor income includes payments of wages and salaries, as well as other forms of compensation, such as employer-paid benefits and the part of proprietors' income that corresponds to compensation for hours worked.) The shares of income attributable to wages and salaries and to domestic corporate profits are particularly

^{8.} The Federal Reserve's balance sheet shows its assets and liabilities. The central bank pays for financial assets mainly by creating bank reserves and issuing Federal Reserve notes (paper currency), which are liabilities. Reducing the size of its balance sheet means that the Federal Reserve reduces its assets and liabilities by equal amounts.

important for projecting federal revenues because those types of income are taxed at higher rates than other types.

Labor Income

The growth of employee compensation is projected to slow during the 2024–2027 period because of declines in labor force participation, increases in unemployment, and slowdowns in wage growth. However, GDP is expected to grow more slowly than compensation during that period. As a result, labor income is projected to increase as a percentage of GDP, from 55.9 percent at the end of 2023 to 57.0 percent by the end of 2027.

CBO's projection is consistent with past cyclical patterns for compensation as a percentage of GDP. When the economy slows, as it does in CBO's near-term projections, the growth of compensation tends to slow less than the growth of other types of income, because compensation is less sensitive to cyclical fluctuations in the economy. As a result, labor income as a percentage of GDP tends to rise, and other categories of income as a percentage of GDP tend to fall, during periods when the growth of GDP slows.

From 2028 to 2034, labor income is projected to remain stable as a percentage of GDP, averaging 57.1 percent. That projection is below labor income's average percentage of GDP from 1947 to 2000, 60.4 percent, because some factors that have depressed labor income relative to GDP since 2000 are expected to persist in the coming decade. Those factors include globalization, which has tended to move the production of labor-intensive goods and services to countries with lower labor costs, and technological change, which appears to have increased returns on capital more than returns on labor.

In CBO's projections, wages and salaries follow roughly the same cyclical pattern as labor income as a percentage of GDP. After equaling 43.1 percent of GDP at the end of 2023, wages and salaries are projected to increase to 43.8 percent at the end of 2027 and remain roughly constant as a percentage of GDP thereafter.

Corporate Profits

Domestic corporate profits as a percentage of GDP are expected to decline over the next decade as interest payments and wage costs erode companies' profit margins. CBO projects that domestic corporate profits will fall from 9.8 percent of GDP at the end of 2023 to 9.2 percent by the end of 2027 because of increases in interest payments and employee compensation. From 2028 to

2034, domestic corporate profits are projected to be relatively stable as a percentage of GDP, averaging 9.0 percent, close to their average over the past few decades.

Uncertainty About the Economic Outlook

CBO's economic projections are subject to a large amount of uncertainty, both in the short run and beyond. Areas of uncertainty include economic growth, the strength of the labor market, increases in prices and wages, credit conditions and asset prices, productivity growth, interest rates and monetary policy, developments outside the United States, and the effects of previously enacted legislation. Other sources of uncertainty include rare, hard-to-predict events that would have significant economic consequences, such as wars, pandemics, natural disasters, and financial crises.

CBO's baseline projections reflect the assumption that current laws governing federal taxes and spending generally remain in place. Although new laws could be enacted that significantly alter federal taxes and spending, the following discussion is restricted to uncertainty stemming from other sources.

Uncertainty in the Short Run

The paths of wage growth, inflation, and economic growth are key contributors to the uncertainty of CBO's projections for the next few years. If inflation ended up being higher than CBO projects, the Federal Reserve would probably raise interest rates or keep rates elevated for a longer period. Alternatively, weaker economic growth in the short term could reduce inflationary pressures more rapidly than CBO projects, leading to lower interest rates.

Growth of Wages and Prices. The rates at which wages and consumer prices will increase in coming years is highly uncertain. In the case of wage growth, that uncertainty is related to how much the economy grows, how the demand for labor responds to economic growth, how changes in the demand for labor affect wage growth, and how past inflation feeds into wages in the future. If wages were to grow more rapidly than CBO projects, businesses could pass along the cost of higher wages to consumers by raising prices, which might result in higher inflation than the agency projects. Conversely, slower-than-expected wage growth might result in lower inflation than CBO projects.

The price of shelter services is another source of uncertainty. CBO projects that growth in the PCE category

of shelter services will slow throughout 2024 because of slower growth in the price of new rental agreements. That decline in the growth of rental prices results from a slowdown in the rise of home prices that began in the second half of 2022, when interest rates increased and demand for homes softened. Because of the way in which shelter services are calculated, home prices affect them only indirectly. Thus, it is difficult to predict the size and timing of the effect of home prices on growth in the price of shelter services; the slowdown in that growth could be larger or smaller than CBO projects. In turn, the rates of PCE inflation and CPI-U inflation could be lower or higher than CBO projects.

CBO's projections of inflation depend in part on people's expectations about price increases. (When people expect prices to rise significantly in the future, they tend to buy more now, thus fueling price increases.)⁹ If high inflation ended up lasting longer than CBO projects, inflation expectations could rise more materially, and inflation could be higher than the agency projects. Alternatively, if inflation turned out to be lower than expected, consumers could revise their inflation expectations downward.

Growth of the Economy. CBO's forecast of modest growth of real GDP in 2024, followed by stronger growth in 2025 and 2026, is highly uncertain. Key sources of uncertainty are the future paths of inflation and interest rates. Higher-than-expected inflation would probably cause the Federal Reserve to raise interest rates or keep them elevated for longer than CBO anticipates. Those higher interest rates would put further downward pressure on interest-sensitive sectors of the economy, such as residential investment, net exports, and business investment. Alternatively, if inflation slowed more rapidly than CBO projects, interest rates would probably fall faster than anticipated, helping interest-sensitive sectors of the economy.

Another important area of uncertainty is the size of the effects of higher interest rates on those interest-sensitive sectors. High mortgage interest rates could have a larger or smaller impact on the construction of new homes and the sale of existing homes than CBO projects. The purchase of a home often leads to the purchase of related

consumer goods, so a different path for home sales would have downstream effects on consumer spending. Likewise, a rise in the exchange value of the dollar stemming from higher interest rates could have a larger or smaller effect on net exports than CBO projects. And the change in business investment in response to higher borrowing costs could be bigger or smaller than forecast.

The outlook for consumer spending is also uncertain. Consumer spending depends on the strength of the labor market, both directly through income and indirectly through consumer confidence. If unemployment rises less than expected, people will have more income to spend on discretionary goods and services. Furthermore, consumer confidence may be higher than expected if there is less uncertainty about future employment. Conversely, if unemployment rises more than expected, people may rein in their spending.

Consumer spending also depends on credit conditions. If conditions for consumer credit (such as interest rates and lending standards) are more restrictive than expected, some people may not be able to finance large purchases, such as cars or furniture, and they may have to reduce credit card spending.

Uncertainty Beyond the Short Run

Areas of uncertainty that have particularly large implications for CBO's projections after the next few years include productivity growth, the demand for Treasury securities from U.S. and foreign investors, and net immigration. Higher rates of productivity growth would boost economic growth and interest rates above what CBO projects; lower rates of productivity growth would dampen economic growth and interest rates relative to CBO's projections. If investors' demand for Treasury securities fell short of or exceeded CBO's expectations, interest rates and the federal government's interest payments on its debt would be higher or lower than projected. Higher or lower rates of net immigration than CBO projects would increase or slow the growth of the labor force, leading to an increase or decrease in hours worked and overall economic growth compared with what the agency projects.

Productivity. Factors such as the pandemic and, more broadly, the pace and adoption of technological innovation contribute to uncertainty about productivity growth beyond the short run. The effects of the pandemic could increase or decrease the growth rate of potential total factor productivity in the nonfarm business sector over the

For more information about the connection between inflation expectations and actual inflation, see Jeffrey Schafer, *Inflation Expectations and Their Formation*, Working Paper 2022-03 (Congressional Budget Office, March 2022), pp. 4–5, www.cbo.gov/publication/57398.

medium term. The pandemic sped the adoption of new technologies, such as teleconferencing and telemedicine, but the effects of that rapid adoption on productivity remain unknown. An increase in remote work could create opportunities for new businesses and new jobs. It could also spur movements between economic sectors and geographic areas that could help improve people's productivity and social and economic well-being. And innovations associated with remote work could lead to substantial reductions in companies' costs. Nevertheless, uncertainty exists about the extent to which such dynamic forces could make existing businesses and business models obsolete, as well as about the negative consequences for output and labor markets.

More generally, technologies that have a wide application to many production processes, such as artificial intelligence, increase productivity growth in the long run but take time to diffuse through the economy. Moreover, the process of adopting those technologies could temporarily reduce productivity growth.

Demand for U.S. Federal Debt. Another area of uncertainty is the demand for Treasury securities from U.S. and foreign investors and the effect of that demand on the interest rates the federal government will pay on its rising stock of debt. One factor that could affect the demand for Treasury securities is the international importance of the U.S. dollar. If use of the dollar to settle international transactions and foreign holdings of U.S. dollars and dollar-denominated assets were to shrink faster than CBO expects, foreign demand for Treasury securities would be lower than expected, and interest rates would be higher than anticipated. But if foreign demand for Treasury securities was stronger than projected, perhaps because of heightened geopolitical concerns, interest rates would be lower.

Uncertainty about the path of interest rates in the long term contributes to uncertainty about the economic effects of larger federal deficits and debt. CBO estimates that factors such as increased saving in the United States and other countries, slower growth of total factor productivity, and lower labor force participation have contributed to the downward trend in U.S. interest rates over the past several decades. Great uncertainty remains about how much those factors will continue to affect interest rates over the 2024–2034 period and beyond. In addition, the extent to which projected increases in federal debt would put upward pressure on interest rates, and the timing of that effect, are highly uncertain.

Immigration. Several factors contribute to the uncertainty of CBO's projections of net immigration. The surge in net immigration since 2022 that CBO projects will continue through 2026 could be smaller or larger than the agency forecasts. CBO's projection that net immigration will slow beginning in 2025 is also very uncertain. For example, changing conditions in immigrants' countries of origin could affect the amount of immigration significantly. In addition, estimates and projections of net immigration by some groups—such as people who enter the country illegally—are particularly uncertain, as are projections of those groups' impact on economic activity as measured by GDP and other indicators. Information about those groups can be difficult to come by.

Quantifying the Uncertainty of CBO's Projections

CBO's economic projections, especially for nominal GDP, are a primary input in the agency's baseline budget projections. Thus, much of the uncertainty of the baseline budget projections reflects the uncertainty of the economic forecast.

To quantify the uncertainty of its economic projections for 2024 to 2027, CBO conducted 1,000 simulations of several key macroeconomic variables to produce probability distributions for the future path of those variables. ¹⁰ On the basis of that analysis, CBO estimates that there is approximately a two-thirds chance that the annual rate of real GDP growth will be between –0.2 percent and 2.9 percent in calendar year 2024 and between zero and 4.1 percent in 2027 (see Figure 2-7). In addition, there is roughly a two-thirds chance that in 2024, the unemployment rate will be between 3.4 percent and 5.4 percent, the rate of PCE inflation will be between 1.1 percent and 3.1 percent, and the interest rate on 10-year Treasury notes will be between 3.9 percent and 5.2 percent, CBO estimates.

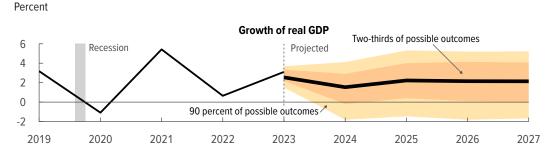
Comparison With CBO's February 2023 Economic Projections

Since February 2023, when CBO published its previous full economic forecast, the agency has lowered its projections of real GDP growth and PCE inflation

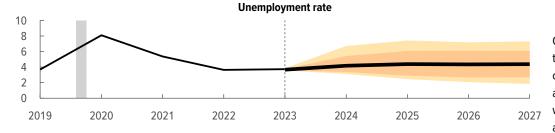
^{10.} For a discussion of the methods used to quantify uncertainty, see Congressional Budget Office, "Estimating the Uncertainty of the Economic Forecast Using CBO's Expanded Markov-Switching Model" (January 2023), www.cbo.gov/publication/58884, and "Estimating the Uncertainty of the Economic Forecast Using CBO's Bayesian Vector Autoregression Model" (January 2023), www.cbo.gov/publication/58883.

Figure 2-7.

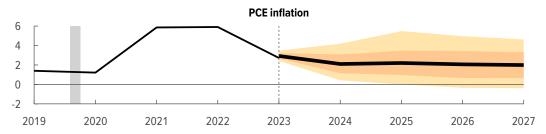
Uncertainty of CBO's Projections of Output, Unemployment, Inflation, and Interest Rates



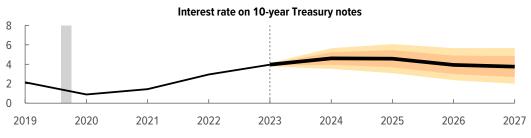
CBO estimates that there is approximately a two-thirds chance that the annual growth rate of real GDP will be between -0.2 percent and 2.9 percent in 2024 and between zero and 4.0 percent in 2027.



CBO also estimates that there is roughly a two-thirds chance that in 2024, the average unemployment rate will be between 3.1 percent and 5.4 percent,



... the inflation rate as measured by the PCE price index will be between 1.1 percent and 3.1 percent, and



... the average interest rate on 10-year Treasury notes will be between 3.9 percent and 5.2 percent.

Data sources: Congressional Budget Office; Bureau of Economic Analysis; Bureau of Labor Statistics. See www.cbo.gov/publication/59710#data.

To quantify the uncertainty of its projections for 2024 to 2027, CBO conducted 1,000 simulations of several key macroeconomic variables to produce probability distributions for the future path of those variables. For a discussion of the methods used to quantify uncertainty, see Congressional Budget Office, "Estimating the Uncertainty of the Economic Forecast Using CBO's Expanded Markov-Switching Model" (January 2023), www.cbo.gov/publication/58884, and "Estimating the Uncertainty of the Economic Forecast Using CBO's Bayesian Vector Autoregression Model" (January 2023), www.cbo.gov/publication/58883.

Real GDP is nominal GDP that has been adjusted to remove the effects of changes in prices. Growth of real GDP is measured from the fourth quarter of one calendar year to the fourth quarter of the next year. The unemployment rate is the percentage of people in the labor force who are not working but who are available for work and are either seeking work or expecting to be recalled from a temporary layoff. Data for the unemployment rate and the interest rate on 10-year Treasury notes are annual averages. The inflation rate based on the PCE price index is measured from the fourth quarter of one calendar year to the fourth quarter of the next year.

Values for 2019 to 2023 reflect data available from the Bureau of Economic Analysis and the Bureau of Labor Statistics as of late January 2024. Those data contain values for the fourth quarter of 2023, which were not available when CBO developed its current projections and analyzed their uncertainty.

GDP = gross domestic product; PCE = personal consumption expenditures.

Table 2-4.

CBO's Current and Previous Economic Projections for Calendar Years 2023 to 2033

Percent

				Annual average				
	2023	2024	2025	2023–2027	2028–2033	Overall, 2023–2033		
		Chang	e from fourth	quarter to fourth o	uarter			
Real GDP ^a								
February 2024	2.5	1.5	2.2	2.1	2.0	2.0		
February 2023	0.1	2.5	2.6	2.0	1.8	1.9		
Nominal GDP								
February 2024	5.4	3.5	4.3	4.3	3.9	4.1		
February 2023	3.1	4.9	4.8	4.3	3.8	4.0		
nflation								
PCE price index								
February 2024	2.9	2.1	2.2	2.3	1.9	2.1		
February 2023	3.3	2.4	2.2	2.4	2.0	2.2		
Core PCE price index ^b								
February 2024	3.4	2.4	2.3	2.5	2.0	2.2		
February 2023	3.4	2.7	2.4	2.6	2.0	2.3		
Consumer price index ^c								
February 2024	3.2	2.5	2.5	2.5	2.2	2.4		
February 2023	4.0	2.4	2.1	2.5	2.3	2.4		
Core consumer price index ^b								
February 2024	3.9	2.9	2.6	2.8	2.3	2.5		
February 2023	4.2	2.8	2.3	2.7	2.3	2.5		
GDP price index								
February 2024	2.8	1.9	2.0	2.1	1.9	2.0		
February 2023	3.0	2.3	2.1	2.3	2.0	2.1		
Employment cost indexd								
February 2024	4.4	3.6	3.4	3.6	3.0	3.3		
February 2023	4.5	3.8	3.5	3.7	3.2	3.4		
Real potential GDP ^a								
February 2024	2.2	2.2	2.3	2.2	2.0	2.1		
February 2023	1.7	1.7	1.8	1.8	1.8	1.8		

Continued

for 2024 (see Table 2-4). CBO also expects interest rates to be higher from 2024 to 2027 than it projected last year. After 2027, the differences between CBO's current and previous economic forecasts are smaller. Comparing the latest projections with those published in February 2023 illuminates aspects of the current economic forecast and highlights the kinds of uncertainty that affect all such projections.

Output

CBO's current projection of the growth rate of real GDP in 2024, 1.5 percent, is much lower than its February 2023 projection of 2.5 percent. That change reflects slower expected growth of consumer spending, business fixed investment, residential investment, and exports.

CBO reduced its projections of growth for those components of GDP for two main reasons. First, economic growth turned out to be much stronger in 2023 than CBO anticipated last February. As a result of that stronger growth, the Federal Reserve is expected to keep interest rates at a high level for a longer period, slowing economic growth in 2024, particularly in sectors that are sensitive to interest rates. Second, CBO has reduced its projections of economic growth among major U.S. trading partners and increased its projections of the foreign exchange value of the U.S. dollar. Those changes suggest that the growth of real exports in 2024 will be slower than previously projected.

For the 2025–2027 period, CBO is now projecting slightly slower growth of real GDP than it forecast last

Table 2-4. Continued

CBO's Current and Previous Economic Projections for Calendar Years 2023 to 2033

Percent

				Annual average								
	2023	2024	2025	2023–2027	2028–2033	Overall, 2023–2033						
			Annua	Annual average								
Unemployment rate												
February 2024	3.7	4.2	4.4	4.2	4.5	4.3						
February 2023	4.7	4.9	4.7	4.7	4.5	4.6						
Interest rates												
Effective federal funds rate ^e												
February 2024	5.0	5.1	4.1	4.1	2.9	3.5						
February 2023	5.0	3.6	2.7	3.2	2.6	2.9						
10-year Treasury notes												
February 2024	4.0	4.6	4.6	4.2	4.0	4.1						
February 2023	3.9	3.8	3.8	3.8	3.8	3.8						
Tax bases (percentage of GDP)												
Wages and salaries												
February 2024	43.2	43.5	43.8	43.7	43.8	43.8						
February 2023	44.3	44.5	44.5	44.4	44.0	44.2						
Domestic corporate profits ^f												
February 2024	9.9	9.7	9.6	9.6	9.0	9.3						
February 2023	7.9	7.5	7.9	7.9	8.0	8.0						

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

For the February 2024 projections, the values shown are based on the economic forecast that CBO completed on December 5, 2023.

GDP = gross domestic product; PCE = personal consumption expenditures.

- a. Real values are nominal values that have been adjusted to remove the effects of changes in prices.
- b. Excludes prices for food and energy.
- c. The consumer price index for all urban consumers.
- d. The employment cost index for wages and salaries of workers in private industry.
- e. The median interest rate that financial institutions charge each other for overnight loans of their monetary reserves, weighted by loan volume.
- f. Adjusted to exclude the effects of tax rules on depreciation allowances and the effects of changes in prices on the value of inventories.

February, as the economy rebounds from slower growth in 2024 and the Federal Reserve reduces interest rates from higher levels than previously projected. CBO now projects that real GDP will grow at an average rate of 2.2 percent a year from 2025 to 2027, rather than the 2.4 percent average projected last February. That change mainly results from reductions in the projected growth of business fixed investment and federal spending. Partially offsetting those effects, CBO increased its projections of the size of the labor force because of higher net immigration, boosting the growth of real GDP slightly.

After 2027, growth of real GDP is now projected to be faster than CBO expected last February, averaging 2.0 percent a year over the 2028–2033 period rather

than 1.8 percent. That change stems from faster expected growth of potential GDP because CBO increased its projections of three key inputs to potential output:

• Private business investment determines the stock of productive capital available to businesses. Since CBO's February 2023 forecast was completed, values for the past growth of price indexes for structures and software have been revised downward by the Bureau of Economic Analysis, so CBO lowered its projections for the growth of those prices. A lower price means more real investment for the same amount of nominal investment. For example, CBO increased its forecast of real business fixed investment in 2033 by 3.9 percent but reduced its forecast of nominal

business fixed investment by 0.4 percent. Greater real business investment raises the growth of potential labor force productivity over the projection period.

- Growth of total factor productivity in the nonfarm business sector is now projected to be faster over the 2028–2033 period than previously projected. Upward revisions by BEA to the past several years of data for real GDP led CBO to increase its estimates of the average growth of total factor productivity in the past and its projections of that growth over the next decade. As a result, total factor productivity is now projected to grow 0.04 percentage points faster, on average, from 2028 to 2033 than CBO projected last February.
- Net immigration contributes to the size of the labor force and, ultimately, to the number of hours worked. In the past year, CBO has raised its projections of net immigration over the next decade. The potential labor force is now projected to be 2.7 percent bigger by 2027 than CBO projected last year. For 2028 to 2033, smaller increases in projections of net immigration have raised the projected annual growth of the potential labor force by 0.04 percentage points compared with last year's forecast.

Because of the changes to investment and total factor productivity, CBO now projects that the average growth rates of potential labor force productivity and real potential GDP will be 0.1 percentage point higher over the 2028–2033 period than the agency projected last February. Taken together, faster growth in potential labor force productivity and, to a lesser extent, in the size of the labor force have added just over 0.1 percentage point to CBO's projections of the average growth of real GDP and real potential GDP over the 2028–2033 period, compared with the February 2023 projections.

CBO's projections of the size of nominal GDP are larger throughout the 2023–2033 period than they were previously, in part because of upward revisions to data about past GDP. Nominal GDP is now projected to be 2.1 percent larger in 2033 than CBO projected last February.

The Labor Market

Since February 2023, CBO has reduced its projection of the average unemployment rate for the 2024–2027 period from 4.7 percent to 4.3 percent. That reduction stems mainly from recent data showing that the unemployment rate was lower in 2023 than previously forecast. CBO's current projection of the average unemployment rate over the 2028–2033 period, 4.5 percent, is the same as its previous projection.

CBO has increased its projections of the size of the labor force and the amount of employment from 2024 to 2033. Those upward revisions result partly from changes to CBO's population projections and partly from recent data that showed a larger labor force and greater employment than previously projected. At the end of 2023, the labor force was larger by 2.0 million people, and payroll employment was larger by 3.4 million jobs, than CBO projected in February 2023.

The labor force participation rate over the 2024–2027 period is now projected to be higher than CBO projected last February: an average of 62.4 percent versus 62.0 percent. CBO has also raised its projection of the average labor force participation rate over the 2028–2033 period, but to a lesser extent: to 61.8 percent from 61.5 percent. That change is mainly attributable to an increase in CBO's projection of net immigration that results in people ages 25 to 54 making up a larger expected share of the population than CBO projected last February. People in that age group have the highest average rates of labor force participation, so an increase in their share of the population tends to raise the overall participation rate.

CBO has also revised its method for projecting the potential rate of labor force participation. That revision boosted the projected average rate over the 2024–2027 period but had little effect on the projected average rate over the succeeding six years.

Inflation

CBO is now projecting lower inflation in 2024 as measured by the PCE price index than it forecast last February: 2.1 percent instead of 2.4 percent. The agency's projection of CPI-U inflation in 2024, however, is slightly higher: 2.5 percent instead of 2.4 percent.

The revised outlook for PCE inflation this year reflects momentum from larger recent declines in inflation in many sectors of the economy than CBO anticipated last February. For example, prices for consumer durable goods and imported goods and services rose less in 2023 than CBO had expected. As a result, the agency is now projecting smaller price increases in 2024 for most goods and services than it forecast last February.

For 2025 to 2027, CBO has raised its projections of CPI-U inflation but left its projections of PCE inflation unchanged since last February. A major reason for the increase to the CPI-U projections involves growth in the price of shelter services. CBO now projects that the

CPI-U index for rent of primary residences—one component of shelter services—will rise by 4.0 percent in 2025 instead of the 2.0 percent previously projected.

That upward revision reflects the persistent nature of price increases in that category, as well as recent increases in home prices (which tend to feed into increases in the price of shelter services five quarters later). Because the CPI-U gives more weight to shelter services than the PCE price index does, the revised outlook for the growth of shelter prices prompted an increase to projections of CPI-U inflation but had little effect on projections of PCE inflation. Growth in the price of shelter services is projected to remain above its long-run trend in 2026 and 2027 because of a weaker-than-expected decline in the growth of home prices. That stronger growth of shelter prices puts upward pressure on overall inflation, but it affects the CPI-U more than the PCE price index.

For 2028 to 2033, CBO's current projections of inflation are similar to its projections from last February. The reason is that CBO expects inflation to return over the long term to the Federal Reserve's goal of 2 percent annual growth in the PCE price index. In CBO's projections, a combination of the Federal Reserve's policy actions, the easing of supply-related issues, and inflation expectations that continue to remain anchored near the Federal Reserve's goal keep inflation close to that 2 percent target after 2027.

Interest Rates

CBO now expects both short- and long-term interest rates to be higher, on average, over the next several years than it forecast last February. The increase to projected interest rates in the 2024–2027 period mostly reflects stronger economic growth in 2023 than CBO had anticipated. In response to that stronger-than-expected growth, the Federal Reserve has raised the target range for the federal funds rate higher than previously projected, meaning that short-term interest rates are projected to be higher, on average, over the 2024–2027 period than CBO expected last February. Long-term rates, which partly reflect the expected path of short-term rates, will also be higher, on average.

CBO has also slightly increased its projections of average short- and long-term interest rates over the 2028–2033 period since last February. That revision was driven mainly by higher projections of capital income as a share of total income and lower projections of the rate of private saving in the United States—changes that, in CBO's estimation, put upward pressure on interest rates.

Increases to interest rate projections for 2028 to 2033 were partly offset by the effects of a change in how CBO projects interest rates in the period beyond the short run. For the current forecast, CBO reduced its estimate of how sensitive the interest rate on 10-year Treasury notes is over the long term to changes in federal debt. CBO now estimates that an increase of 1 percentage point in federal debt as a percentage of GDP will cause the interest rate on 10-year Treasury notes to rise by 2 basis points (0.02 percentage points) rather than by 2.5 basis points. That change reflects CBO's analysis of the statistical relationship between the 10-year Treasury rate and federal debt (accounting for a variety of other factors) and CBO's review of the related research literature.

Income

CBO's current projections of nominal labor compensation are similar to its previous projections for 2024 to 2027. For later years, however, CBO has raised its projections of labor compensation, largely because of increases in its projections of employment.

CBO increased its projections of labor compensation by less than its projections of GDP. Consequently, labor income as a percentage of GDP is now projected to be lower than CBO forecast last February: 55.9 percent of GDP at the end of 2023 rather than 58.4 percent; 56.7 percent of GDP at the end of 2024 rather than 58.4 percent; and a long-term level of 57.2 percent of GDP by 2033 rather than 58.1 percent.

New information about corporate profits has prompted CBO to increase its projections of profits over the coming 10 years. After the previous projections were released, BEA revised data about the size of past profits, raising the value of domestic corporate profits at the end of 2022 from 9.2 percent of GDP to 10.4 percent. In addition, corporate profits declined less in the first three quarters of 2023 than CBO had expected. (Data for the fourth quarter of 2023 will be released in March.) For those reasons, CBO has raised its forecast of domestic corporate profits at the end of 2023 from 7.4 percent of GDP to 9.8 percent and its forecast of profits at the end of 2024 from 7.7 percent of GDP to 9.7 percent. And whereas last February CBO projected that domestic corporate profits would reach a long-term size of 7.9 percent of GDP by 2033, the agency now expects them to equal 8.9 percent of GDP in 2033.

Comparison With Other Economic Projections

CBO routinely compares its economic projections with those of the private-sector economists included in the *Blue Chip Economic Indicators* and the Federal Reserve Bank of Philadelphia's *Survey of Professional Forecasters*, as well as with the projections of the Federal Reserve's Federal Open Market Committee. Some of the differences between CBO's projections and those of other forecasters are attributable to differences in the economic data available when the projections were made, as well as to differences in the economic and statistical models used in making the projections. In addition, other forecasts may reflect an expectation that additional legislation will be enacted, whereas CBO's projections reflect the assumption that current laws generally remain unchanged.

The Blue Chip Forecasts

CBO's economic projections can be compared with the forecasts of the more than 40 private-sector economists published in the January 2024 Blue Chip Economic Indicators (see Figure 2-8).11 CBO's forecasts for 2024 and 2025 of the unemployment rate, inflation as measured by the GDP price index, and interest rates on 3-month Treasury bills are within the middle two-thirds of the ranges of *Blue Chip* forecasts. CBO's projections of real GDP growth and CPI-U inflation are also within the middle two-thirds of the range of Blue Chip forecasts for 2024 but are above that range for 2025. The agency's projections of interest rates on 10-year Treasury notes are higher than the middle two-thirds of the range of Blue Chip forecasts for both 2024 and 2025. (For 2024, CBO is projecting higher 10-year rates than any of the Blue *Chip* forecasters.)

The Survey of Professional Forecasters

CBO's economic projections can also be compared with the projections of the more than 30 private-sector and academic forecasters included in the Federal Reserve Bank of Philadelphia's *Survey of Professional Forecasters* (SPF). ¹² CBO's projections are within the middle two-thirds of the ranges of SPF forecasts for 2024 and 2025 for the growth of real GDP, the unemployment rate, overall CPI-U inflation, and interest rates on 3-month Treasury bills (see Figure 2-9). CBO's forecasts of core

CPI-U inflation and interest rates on 10-year Treasury notes are at or above the high end of those ranges.

The Federal Reserve

The Federal Open Market Committee, which sets monetary policy for the Federal Reserve, also produces economic projections. CBO's projection of real GDP growth in 2024 is within the central tendency (roughly the middle two-thirds) of the forecasts in the Federal Reserve's most recent *Summary of Economic Projections*, but CBO's projections of real GDP growth in 2025 and 2026 are above the central tendency (see Figure 2-10). ¹³ CBO's projection of real GDP growth in the longer term is within the central tendency of the Federal Reserve's forecasts.

For the unemployment rate, CBO's forecasts are above the central tendency for the 2024–2026 period and later years. One possible reason for that divergence may be differences between CBO's and the Federal Reserve's estimates of the noncyclical rate of unemployment. CBO's projections of PCE inflation are slightly below the central tendency of the Federal Reserve's forecasts for 2024, at the high end of the central tendency for 2025, slightly above it for 2026, and then below the central tendency over the longer term. CBO's projections of the federal funds rate are within the central tendency of the Federal Reserve's forecasts for 2024 and 2025 but on the high end of the central tendency for 2026 and later years.

A key difference between CBO's economic projections and those made by Federal Reserve officials is that CBO develops its projections so they fall in the middle of the likely range of outcomes under current law. The Federal Reserve uses a different concept: Each Federal Reserve official provides a "modal" forecast—a forecast of the most likely outcome—reflecting that person's assessment of appropriate monetary policy, and the Federal Reserve reports ranges of those modal values.

^{11.} Wolters Kluwer, *Blue Chip Economic Indicators*, vol. 49, no. 1 (January 10, 2024).

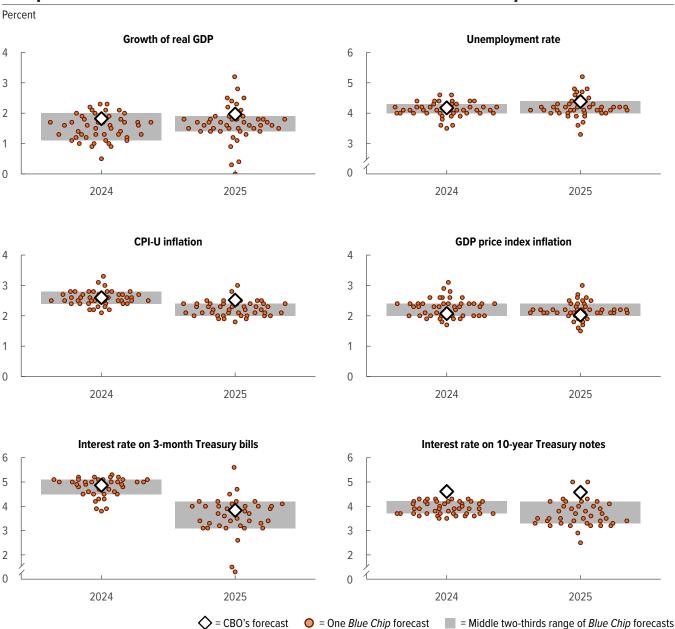
^{12.} Federal Reserve Bank of Philadelphia, *Survey of Professional Forecasters: Fourth Quarter 2023* (November 13, 2023), http://tinyurl.com/ywwvvhkd.

^{13.} Board of Governors of the Federal Reserve System, "Table 1.

Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, Under Their Individual Assumptions of Projected Appropriate Monetary Policy, December 2023," Summary of Economic Projections (December 13, 2023), p. 2, http://tinyurl.com/2t9t7m4e (PDF). The range of Federal Reserve forecasts is based on the highest and lowest projections made by the members of the Board of Governors of the Federal Reserve System and the presidents of the Federal Reserve Banks; the central tendency is the range that results after removing the three highest and three lowest forecasts. For comparison with the Federal Reserve's longer-term projections, CBO used its projections for the last quarter of 2034.

Figure 2-8.

Comparison of CBO's Economic Forecasts With Those of the Blue Chip Forecasters



Data sources: Congressional Budget Office; Wolters Kluwer, *Blue Chip Economic Indicators*, vol. 49, no. 1 (January 10, 2024). See www.cbo.gov/publication/59710#data.

Each of the data points represents a forecast made by the more than 40 forecasters included in the *Blue Chip* survey. The middle two-thirds range omits the top one-sixth and the bottom one-sixth of the forecasts.

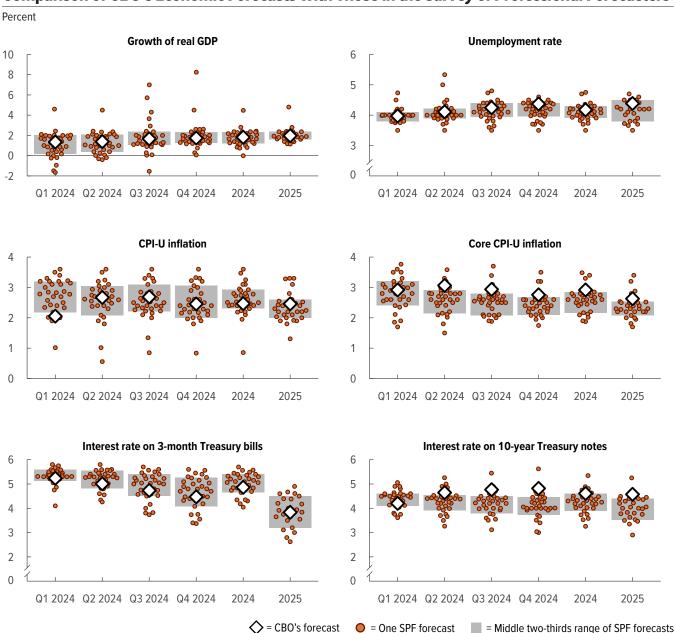
Real GDP is nominal GDP that has been adjusted to remove the effects of changes in prices. Rates of real GDP growth and CPI-U inflation are measured as changes from the average of one calendar year to the next year.

The unemployment rate is the percentage of people in the labor force who are not working but who are available for work and are either seeking work or expecting to be recalled from a temporary layoff. The unemployment rate and the interest rate on 10-year Treasury notes are calendar year averages.

CPI-U = consumer price index for all urban consumers; GDP = gross domestic product.

Figure 2-9.

Comparison of CBO's Economic Forecasts With Those in the Survey of Professional Forecasters



Data sources: Congressional Budget Office; Federal Reserve Bank of Philadelphia, *Survey of Professional Forecasters: Fourth Quarter 2023* (November 13, 2023), http://tinyurl.com/ywwvvhkd. See www.cbo.gov/publication/59710#data.

Each of the data points represents a forecast made by the more than 30 respondents in the *Survey of Professional Forecasters*. The middle two-thirds range omits the top one-sixth and the bottom one-sixth of the forecasts.

Real GDP is nominal GDP that has been adjusted to remove the effects of changes in prices. Quarterly growth of real GDP is measured from one quarter to the next quarter and is expressed as an annual rate; annual growth is measured from the average of one calendar year to the next year.

The unemployment rate is the percentage of people in the labor force who are not working but who are available for work and are either seeking work or expecting to be recalled from a temporary layoff. The unemployment rate and interest rates are quarterly or calendar year averages.

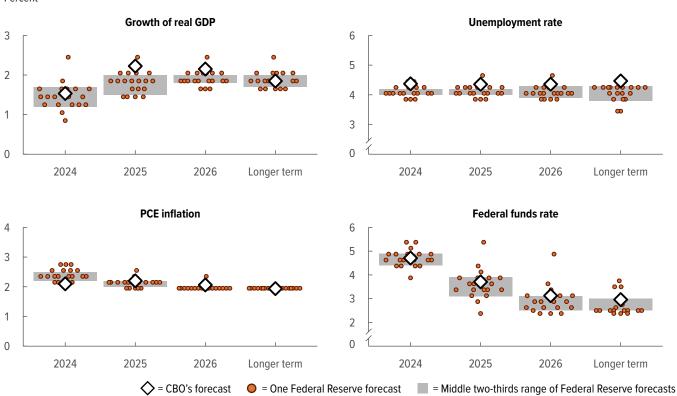
Quarterly CPI-U inflation is measured from one quarter to the next quarter and is expressed as an annual rate; annual CPI-U inflation is measured from the fourth quarter of one calendar year to the fourth quarter of the next year. The core CPI-U excludes prices for food and energy.

CPI-U = consumer price index for all urban consumers; GDP = gross domestic product; SPF = Survey of Professional Forecasters.

Figure 2-10.

Comparison of CBO's Economic Forecasts With Those of the Federal Reserve

Percent



Data sources: Congressional Budget Office; Board of Governors of the Federal Reserve System, *Summary of Economic Projections* (December 13, 2023), Table 1, http://tinyurl.com/2t9t7m4e (PDF). See www.cbo.gov/publication/59710#data.

Each of the data points represents the midpoint of a forecast range (for real GDP growth, the unemployment rate, and PCE inflation) or an actual forecast (for the federal funds rate) made by one of the members of the Federal Reserve Board or one of the presidents of the Federal Reserve Banks in December 2023. (One Federal Reserve official did not submit longer-term projections for real GDP growth, the unemployment rate, or the federal funds rate.) The middle two-thirds range omits the three highest and three lowest projections.

Real GDP is nominal GDP that has been adjusted to remove the effects of changes in prices. Growth of real GDP is measured from the fourth quarter of one calendar year to the fourth quarter of the next year.

The unemployment rate is the percentage of people in the labor force who are not working but who are available for work and are either seeking work or expecting to be recalled from a temporary layoff. Data for the unemployment rate are fourth-quarter average values.

The inflation rate based on the PCE price index is measured from the fourth quarter of one calendar year to the fourth quarter of the next year.

The federal funds rate is the interest rate that financial institutions charge each other for overnight loans of their monetary reserves. The Federal Reserve officials' forecasts of the federal funds rate are for the rate at the end of the year, whereas CBO's forecasts are fourth-quarter values.

GDP = gross domestic product; PCE = personal consumption expenditures.

Chapter 3: Changes in CBO's Baseline Projections Since May 2023

Overview

The Congressional Budget Office estimates that if no new legislation affecting spending and revenues is enacted, the budget deficit for fiscal year 2024 will total \$1.5 trillion. That amount is \$0.1 trillion (or 4 percent) less than the \$1.6 trillion deficit the agency estimated in May 2023, when it last updated its baseline budget projections. Since then, CBO has increased its projection of revenues in 2024 by \$88 billion (or 2 percent) and its estimate of outlays by \$24 billion (or less than 1 percent).

CBO now projects that if current laws generally remained in place, the cumulative deficit for the 2024–2033 period would be \$18.9 trillion. That amount is \$1.4 trillion (or 7 percent) less than the \$20.3 trillion the agency projected in May 2023 (see Figure 3-1). That change is the net result of a \$1.0 trillion (or 1 percent) decrease in projected outlays and a \$0.3 trillion (or 1 percent) increase in projected revenues over the 2024–2033 period. The biggest factor contributing to smaller projected deficits was the reduction in projected discretionary outlays stemming from the combination of the Fiscal Responsibility Act (FRA, Public Law 118-5) and the Further Continuing Appropriations and Other Extensions Act, 2024 (P.L. 118-22, referred to here as the continuing resolution).

In CBO's current projections, debt held by the public reaches \$45.7 trillion at the end of 2033—\$1.0 trillion less than the \$46.7 trillion that it reached that year in the agency's May 2023 projections. Measured in relation to the size of the economy, federal debt at the end of that year is now projected to equal 114 percent of gross domestic product (GDP); last year, debt in 2033 was projected to be 119 percent of GDP.

When CBO updates its baseline budget projections, it groups the revisions into three categories—legislative, economic, and technical. Those categories are defined as follows:

- Legislative changes result from laws enacted since the agency published its previous baseline projections.²
- Economic changes arise from revisions that the agency has made to its economic forecast, including those made to incorporate the projected effects of enacted legislation on the economy.³
- Technical changes are revisions to projections that are neither legislative nor economic.

The \$1.4 trillion reduction in the projected deficit over the 2024–2033 period is the net result of the following changes:

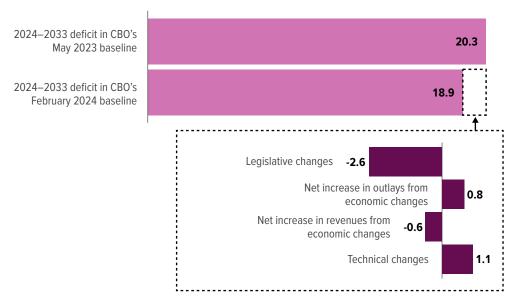
- A \$2.6 trillion decrease attributable to legislative changes. In particular, CBO reduced its projections of discretionary spending to account for the limits, or caps, on funding enacted in the FRA, and for the funding amounts provided by the continuing resolution, which are less than the amounts in CBO's May 2023 baseline projections.
- A \$0.1 trillion net increase resulting from economic changes. A \$1.2 trillion increase in projected net outlays for interest was almost completely offset by a \$0.6 trillion increase in projected revenues,
- 2. The baseline budget projections described in this report incorporate the effects of legislation enacted through January 3, 2024, and therefore do not include the effects of the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (P.L. 118-35), which was enacted on January 19, 2024. Subsequent legislation that has been enacted to date would not significantly change the projections presented here. The effects of legislation discussed here generally reflect the estimates provided for budget enforcement purposes around the time the legislation was enacted.
- 3. CBO's current economic forecast reflects the laws enacted and the policy measures taken through December 5, 2023, as well as the agency's initial projections of the effects of the Fiscal Responsibility Act. The economic changes discussed in this chapter reflect differences between that forecast and CBO's February 2023 forecast. For more details about that earlier forecast, see Congressional Budget Office, *The Budget and Economic Outlook: 2023 to 2033* (February 2023), www.cbo.gov/publication/58848.

Congressional Budget Office, An Update to the Budget Outlook: 2023 to 2033 (May 2023), www.cbo.gov/publication/59096.

Figure 3-1.

Changes in CBO's Baseline Projections of the 10-Year Deficit Since May 2023

Trillions of dollars



The cumulative deficit over the 2024–2033 period is \$1.4 trillion smaller in CBO's current baseline projections than it was in the agency's May 2023 projections, mainly because of newly enacted legislation that reduced discretionary outlays.

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

largely from corporate income taxes, and decreases in projected mandatory and discretionary outlays totaling \$0.4 trillion.

• A \$1.1 trillion net increase attributable to technical changes. Several large changes increased deficits: a downward revision to projections of corporate income tax revenues and upward revisions to projections of net outlays for interest and outlays for Medicare, Social Security, and clean vehicle and energy-related tax credits. The largest of the technical changes that reduced deficits was an increase in projected payroll tax revenues.

As a result of those changes, *primary* deficits—that is, deficits excluding net outlays for interest—are now projected to total \$2.5 trillion (or 26 percent) less over the 2024–2033 period than CBO projected in May 2023. That reduction was partially offset by an increase of \$1.1 trillion (or 11 percent) in projected net interest outlays over the 2024–2033 period.

Legislative Changes

Revisions CBO made to its projections of outlays and revenues to account for legislation enacted after the May 2023 baseline projections were prepared reduced the agency's estimate of the deficit for 2024 by

\$0.1 trillion and its projections of deficits over the 2024–2033 period by \$2.6 trillion (see Table 3-1).⁴ Most of the legislative changes were to projected outlays for discretionary programs.

Changes in Outlays

Incorporating the effects of recently enacted legislation into CBO's baseline projections reduced estimated outlays in 2024 by \$0.1 trillion (or 1 percent) and projected outlays over the 2024–2033 period by \$2.6 trillion (or 3 percent). Most of the decrease over the 10-year period is in projected outlays for discretionary programs. Nearly all of the rest is a reduction in projected net outlays for interest that stems from the federal government's borrowing less to finance the smaller deficits resulting from the legislative changes. Legislative changes to projections of outlays for mandatory programs were minimal.

Discretionary Outlays. To account for legislation enacted since the agency completed its May 2023 baseline projections, CBO lowered its projections of

The May 2023 baseline projections incorporated the effects of legislation enacted through March 30, 2023.

^{5.} Funding that is provided in annual appropriation acts and the outlays that result from it are generally categorized as discretionary.

discretionary outlays over the 2024–2033 period by \$2.3 trillion. That downward revision resulted from the caps on discretionary funding established by the FRA and from the continuing resolution's providing less funding (including funding designated as an emergency requirement) than the amounts in the May 2023 projections.

The FRA established caps that limit most defense funding and nondefense funding for 2024 and 2025. (Funding constrained by those caps is often referred to as base funding.) Although the base funding provided by the continuing resolution is less than the funding amounts projected in CBO's May 2023 baseline, in CBO's estimation, it still exceeds the caps that were in place on January 3, 2024. As a result, the agency's baseline projections include reductions in funding to comply with those caps (see Box 1-1 on page 22).

Total base discretionary funding is \$1.6 trillion in 2024 and in 2025 in CBO's current baseline projections. Those annual funding amounts are \$0.1 trillion and \$0.2 trillion less, respectively, than the amounts CBO projected for 2024 and 2025 in May 2023. In accordance with provisions of the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), CBO generally projects funding for discretionary programs by assuming that funding in future years is equal to the amount provided for the current year with increases for inflation.⁶ As a result, those downward adjustments continue to have effects after 2025 in the agency's baseline projections. In all, to account for the caps in place in 2024 and 2025 and the reductions in base funding resulting from the continuing resolution, CBO lowered its projections of outlays from 2024 to 2033 by \$1.5 trillion.

In addition, as of January 3, 2024, \$99 billion in funding designated as an emergency requirement, which is not constrained by the caps set in the FRA, has been provided for this fiscal year. That amount is \$80 billion less than the amount of such funding in CBO's May 2023 baseline projections. Because CBO's current projections of such funding begin with that smaller amount and grow with inflation over the next 10 years, projected outlays stemming from funding designated

as an emergency requirement are now \$0.7 trillion less (\$0.3 trillion less for defense and \$0.4 trillion less for nondefense activities) over the 2024–2033 period than they were in CBO's previous baseline projections.

Mandatory Outlays. CBO lowered its estimate of mandatory outlays in 2024 by \$3 billion (or 0.1 percent) and its projections of such outlays over the 2024–2033 period by \$8 billion (or less than 0.1 percent), on net, to account for legislation enacted since the agency prepared its previous baseline projections. The largest change stems from the FRA, which rescinded unobligated funds provided to certain programs during the 2020–2022 period as part of the federal response to the coronavirus pandemic.

Net Interest Outlays. Before accounting for the changes in interest payments that would result from changes in projected deficits (known as debt service), CBO lowered its estimate of the deficit for 2024 by \$0.1 trillion and its projection of the cumulative deficit for the 2024–2033 period by \$2.3 trillion to account for legislation enacted since the May 2023 baseline was prepared. The reduction in federal borrowing stemming from the smaller annual deficits would lower debt-service costs; thus, CBO reduced its projections of net outlays for interest over the 10-year period by \$0.4 trillion.

Changes in Revenues

To account for legislation enacted since it prepared its previous baseline projections, CBO revised downward its estimate of revenues in 2024 by less than \$1 billion and its projection of revenues over the 2024–2033 period by \$3 billion. Those reductions are largely to account for a provision of the FRA that rescinded funds provided to the Internal Revenue Service (IRS) for tax enforcement and related activities.

Economic Changes

The economic forecast that underlies CBO's baseline budget projections includes the agency's projections of GDP, interest rates, the labor force, wages and salaries, inflation, and other factors that affect federal spending and revenues. Taken together, the revisions made to account for changes in that forecast reduced CBO's estimate of the deficit in 2024 by \$0.1 trillion and increased its projection of the cumulative deficit for the 2024—2033 period by the same amount. Upward revisions to revenues and downward revisions to noninterest outlays in the agency's projections largely offset upward revisions to net outlays for interest.

^{6.} For its projections of discretionary funding related to federal personnel, CBO is required to use the employment cost index for wages and salaries to adjust for inflation; for its projections of other types of discretionary funding, the agency is required to use the GDP price index.

Table 3-1.

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

Billions of dollars

Billions of dollars											Tot	tal
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2024- 2028	2024- 2033
Deficit in CBO's May 2023 baseline ^a	1,571	1,761	1,718	1,709	1,934	1,855	2,126	2,291	2,496	2,852	8,693	20,314
					Le	gislative	change	S				
Changes in revenues	*	*	*	*	*	*	*	*	*	*	-1	-3
Changes in outlays Discretionary												
Defense	-26	-41	-50	-58	-65	-71	-77	-79	-81	-83	-240	-631
Nondefense	-58	-125	-147	-168	-177	-184	-189	-193	-197	-202	-675	-1,640
Subtotal, discretionary	-84	-167	-197	-225	-242	-254	-265	-273	-279	-285	-915	-2,271
Mandatory	-3	-3	1	1	-1	*	1	*	-2	-1	-5	-8
Debt service ^b	-2	-8	-15	-21	-29	-37	-46	-56	-67	-79	-74	-360
Total change in outlays	-88	-177	-210	-246	-272	-291	-311	-329	-348	-365	-994	-2,638
Increase or decrease (-) in the deficit from legislative changes	-88	-177	-210	-246	-272	-291	-311	-328	-348	-365	-993	-2,636
					Ec	onomic	changes	5				
Changes in revenues												
Individual income taxes	76	64	25	-3	-15	-18	-22	-28	-34	-38	147	8
Payroll taxes	8	2	-3	-2	3	8	13	18	23	27	8	98
Corporate income taxes	72	69	60	51	46	46	48	49	49	50	298	541
Federal Reserve remittances	-3	-3	-2	-2	-63	-23	11	12	16	19	-73	-38
Other	4	4	4	5	4	4	3	3	3	3	21	37
Total change in revenues	157	136	84	50	-25	17	54	55	56	61	401	645
Changes in outlays Mandatory												
Social Security	-10	-18	-18	-14	-13	-15	-18	-24	-29	-34	-73	-193
Medicaid	-4	-3	-3	-4	-6	-8	-9	-11	-13	-15	-20	-75
SNAP	-6	-8	-7	-6	-5	-5	-4	-4	-4	-5	-32	-54
Child nutrition		-1	-2	-2 *	-2	-2	-2	-3	-3	-3	-7 22	-20
Other	-11	-9	-6		4	6	8	8	8	13	-22	20
Subtotal, mandatory	-32	-39	-35	-26	-22	-23	-27	-34	-41	-43	-154	-321
Discretionary	0	*	-2	-3	-5	-7	-9	-12	-14	-16	-10	-69
Net interest	00	450	450	404	400	07	0.4	400	400	440		4.450
Effect of interest rates and inflation Debt service ^b	82 -2	153 -5	158 -5	134 -3	109	97 2	94 3	100 4	109 4	119 4	635 -15	1,153 2
Subtotal, net interest Total change in outlays	80 48	147 108	153 116	131 102	109 82	100 70	97 61	103 58	112 57	123 64	620 456	1,155 766
Increase or decrease (-) in the deficit from economic changes	-109	-28	32	53	107	53	7	3	1	3	54	121

Continued

Table 3-1. Continued

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

Billions of dollars

Billions of dollars										_	Tot	tal
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2024- 2028	2024- 2033
					Te	chnical	changes					
Changes in revenues							3					
Individual income taxes	-82	-60	-4	15	16	22	23	22	16	24	-115	-8
Payroll taxes	22	30	36	37	37	38	39	40	43	45	162	367
Corporate income taxes	19	-64	-63	-61	-61	-59	-57	-57	-57	-56	-230	-517
Customs duties	-17	-15	-14	-12	-11	-10	-9	-8	-7	-6	-70	-111
Other	-11	-5	-5	-4	-4	-2	-2	-2	-2	-2	-29	-40
Total change in revenues	-69	-114	-50	-25	-23	-12	-7	-6	-8	5	-282	-309
Changes in outlays												
Mandatory												
Medicare	24	25	18	19	21	20	21	21	21	23	106	212
Social Security	6	10	14	16	19	21	23	23	24	23	65	180
Clean vehicle and energy-related tax credits	5	9	12	14	17	18	15	14	14	7	57	124
Veterans' benefits	-14	-5	4	-4	-7	-14	-15	-17	-20	-20	-26	-111
Medicaid	23	17	11	10	11	9	5	*	-7	-11	72	67
Deposit Insurance	-18	-12	-2	3	-48	2	2	2	2	1	-77	-67
Student loans	5	6	6	5	6	6	6	6	6	6	27	57
Coronavirus refundable tax credits	21	13	0	0	0	0	0	0	0	0	34	34
Other	-7	17	14	9	9	9	3	5	10	5	42	73
Subtotal, mandatory	45	80	75	73	28	70	60	 54	49	33	301	568
Discretionary												
Defense	-5	-2	*	-1	-1	-1	1	*	*	*	-7	-6
Nondefense	-23	-15	-5	*	2	2	1	-1	-4	-6	-41	-50
	-27	-17	-5	-1				<u>'</u>	-4	-6	-49	-56
Subtotal, discretionary	-21	-17	-3	-1	'	1	2	-1	-4	-0	-49	-56
Net interest	-	4.5	20	22	24	25	27	20	22	2.4	0.0	222
Debt service ^b	5	15	20	22	24	25	27	29	32	34	86	232
Other	42	24	11	5	1	-2	-2		4	10	81	90
Subtotal, net interest	47	39	31	27	22	23	25	29	36	43	166	322
Total change in outlays	65	102	101	100	51	94	87	83	81	71	419	835
Increase or decrease (-) in the deficit from technical changes	134	216	151	125	75	106	94	88	89	66	701	1,144
						All cha	naes					
Total increase or decrease (-) in the deficit	-63	11	-26	-69	-90	-132	-210	-237	-258	-296	-238	-1,370
Deficit in CBO's February 2024 baseline ^a	1,507	1,772	1,692	1,640	1,844	1,723	1,917	2,054	2,238	2,556	8,456	18,944
Addendum:												
Change in revenues	88	22	34	24	-49	4	46	49	48	66	118	332
Change in outlays	24	32	7	-44	-139	-127	-163	-188	-210	-230		-1,038
Increase or decrease (-) in the primary deficit ^c	-188	-167	-196	-206	-192	-217	-285	-313	-339	-383		-2,488
Increase or decrease (-) in the deficit from the change in net interest outlays	125	178	170	137	102	86	76	76	81	87		1,118

Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

SNAP = Supplemental Nutrition Assistance Program; * = between -\$500 million and \$500 million.

- a. When outlays exceed revenues, the result is a deficit. Values in this row were calculated by subtracting revenues from outlays; thus, positive values indicate deficits. When outlays are subtracted from revenues, as recorded in the federal budget and in the tables in Chapter 1, negative values indicate deficits.
- b. Debt-service costs are the changes in interest payments resulting from an increase or decrease in projected deficits.
- c. Primary deficits exclude net outlays for interest.

Changes in Outlays

Revisions to CBO's economic forecast include increases in projected interest rates and reductions in projected rates of inflation. Those and other changes to the economic forecast resulted in net increases of \$48 billion (or 1 percent) in the agency's estimate of outlays in 2024 and of \$0.8 trillion (or 1 percent) in its projections of outlays over the 2024–2033 period.

Mandatory Outlays. Economic changes decreased CBO's estimate of mandatory outlays in 2024 by \$32 billion (or 1 percent), on net. Projections of mandatory outlays from 2024 to 2033 fell by \$0.3 trillion (or 1 percent). Downward revisions to projected outlays for Social Security and Medicaid account for five-sixths of that decrease.

Social Security. CBO lowered its projections of outlays for Social Security from 2024 to 2033 by a total of \$0.2 trillion (or 1 percent) because the agency now projects inflation and average wages to be lower than it did previously. Social Security provides annual cost-of-living adjustments (COLAs) based on changes in the consumer price index for urban wage earners and clerical workers (CPI-W). CPI-W growth in 2023 and the corresponding COLA that took effect in January 2024 were 1 percentage point lower than CBO previously projected. As a result, projected Social Security outlays fell (see Figure 3-2). COLAs in later years are unchanged, on average.

Medicaid. CBO lowered its projections of outlays for Medicaid over the 2024–2033 period by \$75 billion (or 1 percent). The agency's latest economic forecast includes downward revisions to projected increases in many prices, which reduce projected payment rates for Medicaid.

Supplemental Nutrition Assistance Program and Child Nutrition. Economic changes to CBO's projections for the 2024–2033 period decreased projected outlays for the Supplemental Nutrition Assistance Program by \$54 billion (or 4 percent) and for child nutrition programs by \$20 billion (or 4 percent). Those decreases stemmed primarily from downward revisions to CBO's projections of increases in food prices.

Other Mandatory Programs. Changes in CBO's economic forecast also affected projected outlays for other mandatory programs. Although those updates included both upward and downward adjustments, the net effect was a \$20 billion increase in projected outlays for those programs over the 2024–2033 period.

Discretionary Outlays. Economic changes—stemming primarily from downward revisions to the agency's forecasts of certain measures of inflation—reduced projected discretionary outlays over the 2024–2033 period by \$69 billion (or less than 1 percent). CBO's baseline projections generally reflect the assumption that discretionary funding that *is not* constrained by the statutory caps currently in place keeps pace with inflation. Base funding for discretionary programs is assumed to keep pace with inflation after 2025, when the caps are no longer in effect.

Net Interest Outlays. Economic changes boosted CBO's estimate of net outlays for interest in 2024 by \$0.1 trillion and its projections of such outlays over the 2024–2033 period by \$1.2 trillion (or 11 percent). Those changes are largely attributable to upward revisions to the agency's forecasts of interest rates on Treasury securities.

Before debt service is taken into account, changes stemming from revisions to CBO's economic forecast increased the projected cumulative deficit for the 2024—2033 period by \$119 billion. The costs of servicing the additional borrowing needed to finance the larger deficits increased the agency's projections of net outlays for interest over that period by an additional \$2 billion.

Changes in Revenues

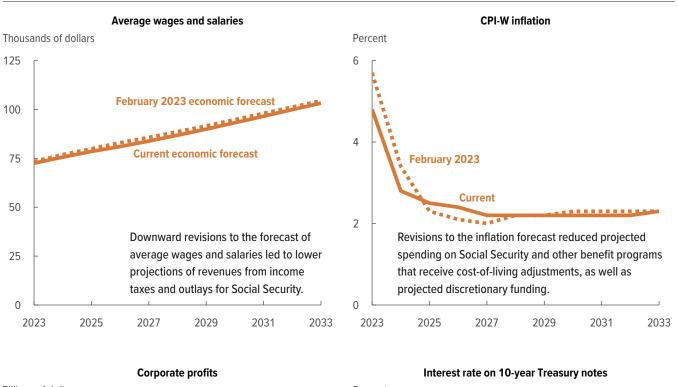
To account for changes in its economic forecast, CBO increased its estimate of revenues in 2024 by \$157 billion (or 3 percent) and raised its projection of revenues for the entire 2024–2033 period by \$645 billion (or 1 percent), on net. That increase is largely driven by changes to CBO's projections of revenues from corporate income taxes.

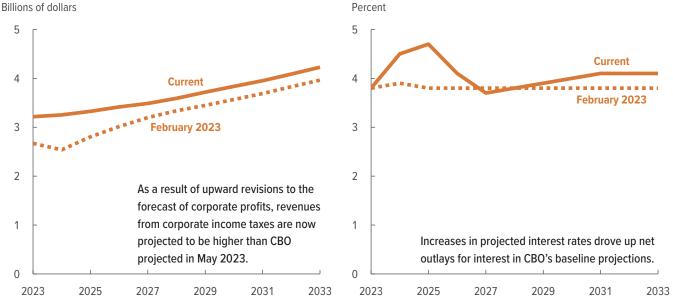
Revenues over most of the 2024–2033 period are higher in the agency's current projections than they were in its May 2023 projections, mainly because CBO increased its projections of wages and profits: The higher wages increased revenues from payroll taxes, and the greater profits increased receipts from individual and corporate income taxes. Partially offsetting those increases in projected revenues, CBO revised downward its projections of remittances from the Federal Reserve to the Treasury. That change stemmed from upward revisions to the agency's forecast of short-term interest rates, which increased the Federal Reserve's interest expenses in CBO's projections.

Individual Income Taxes. Economic changes increased CBO's estimate of individual income tax revenues in 2024 by \$76 billion (or 3 percent) and its projections of

Figure 3-2.

Key Changes in CBO's Economic Forecast Since February 2023





Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

Data are for fiscal years.

In the lines representing the current economic forecast, values for 2023 are actual values.

CPI-W = consumer price index for urban wage earners and clerical workers.

such revenues over the 2024–2033 period by \$8 billion (or less than 1 percent), on net. The increase in 2024 was driven partly by higher estimates of asset values, which tended to boost expected capital gains realizations and distributions from pensions. Additionally, higher projections of domestic economic profits increased expected pass-through business income, which is taxed as individual income.

After 2026, receipts from individual income taxes are now projected to be lower, on net, than they were projected to be last May. Those downward revisions result from several factors. Projected overall wage income over the next decade was revised upward by 1 percent, which boosted receipts. But an upward revision of 3 percent to the agency's projections of the size of the labor force caused projections of average wages per worker to fall. As a result, a smaller share of income is taxed at higher marginal tax rates in CBO's current projections, which lowered projected receipts. Other economic factors that reduced projected individual income tax revenues include lower projections of proprietors' income and higher projections of deductible mortgage interest; those revisions were partially offset by higher projections of taxable interest income.

Payroll Taxes. Revisions to CBO's economic forecast increased the agency's estimate of payroll tax revenues in 2024 by \$8 billion (or less than 1 percent) and its projections of such revenues over the 2024–2033 period by a total of \$98 billion (or less than 1 percent). Higher projections of wages and salaries more than offset reductions in projected proprietors' income. In addition, a larger share of earnings is now projected to fall below the taxable maximum for Social Security taxes, boosting projected payroll taxes.

Corporate Income Taxes. To account for changes in its economic forecast, CBO raised its estimate of corporate income tax revenues in 2024 by \$72 billion (or 15 percent) and its projections of such revenues over the 2024–2033 period by \$541 billion (or 11 percent). Those changes resulted from increases in the agency's projections of corporate profits over the next decade. Projected domestic corporate profits, which make up most of the corporate income tax base, rose by 15 percent.

Federal Reserve Remittances. Revisions to CBO's economic forecast reduced its estimate of remittances from the Federal Reserve in 2024 by \$3 billion and its projections of such remittances over the 2024–2033 period by \$38 billion (or 6 percent). The agency's projections of

short-term interest rates are higher now than they were in the economic forecast published in February 2023; those higher projected interest rates increased the Federal Reserve's projected interest expenses. CBO projects that the Federal Reserve System's expenses will continue to exceed its income through 2025. In addition, CBO increased its projections of the size of both the assets and liabilities held by the Federal Reserve, a change that boosted projected remittances in the longer term.

Other Revenues. CBO raised its projections of revenues from estate and gift taxes, customs duties, and excise taxes over the 2024–2033 period by a total of \$37 billion (or 1 percent) to account for changes in its economic forecast. Most of that increase resulted from higher projected asset values, which increased the expected tax base for estate and gift taxes.

Technical Changes

Technical changes—those changes that are neither legislative nor economic—result from a variety of factors, such as revisions to CBO's population projections, new information or data from federal agencies (including actual outlays and revenues for fiscal year 2023), and changes in the way programs are administered that affect federal spending and revenues. Such changes increased CBO's estimate of the deficit in 2024 by \$0.1 trillion and boosted projected deficits over the 2024–2033 period by \$1.1 trillion (see Table 3-1 on page 78).

Several technical changes stemmed from administrative actions. Of the four administrative actions with the largest effects on CBO's baseline projections, two increased the projected cumulative deficit for the 2024–2033 period: a rule proposed by the Environmental Protection Agency that would impose more stringent standards to limit vehicle emissions and a final rule that made changes to income-driven repayment (IDR) plans for federal student loans.⁷ Two other administrative actions reduced the projected deficit: the IRS's

^{7.} When an agency publishes a proposed rule in the *Federal Register*, CBO generally does not incorporate an estimate of the total estimated effects of the rule as proposed into its baseline projections. Rather, the agency typically incorporates a portion of those effects based on the assigned probability (often 50 percent) that the rule will be implemented to reflect the uncertainty about whether and how the rule will ultimately be carried out. After the final version of a rule is published, CBO incorporates the total estimated effects of the final rule into its subsequent cost estimates and baseline projections. See Congressional Budget Office, *CBO Explains How It Develops the Budget Baseline* (April 2023), www.cbo.gov/publication/58916.

postponement of 2023 filing deadlines for certain taxpayers, which shifted income tax revenues that would otherwise have been collected that year into 2024, and actions taken by the Federal Deposit Insurance Corporation (FDIC) in 2023 to resolve bank failures, which will lower outlays over the next few years as the FDIC recovers the payments it made to resolve those failures.

Changes in Outlays

Taken together, technical revisions increased CBO's estimate of outlays in 2024 by \$0.1 trillion (or 1 percent) and its projections of outlays over the 2024–2033 period by \$0.8 trillion (or 1 percent).

Mandatory Outlays. CBO increased its projections of outlays for several mandatory programs and decreased them for others to account for revisions to its demographic projections, updated projections of enrollment in benefit programs, and changes in other technical factors that underlie those spending projections (see Figure 3-3). On net, technical changes to CBO's projections increased its estimate of mandatory outlays in 2024 by \$45 billion (or 1 percent) and its projections of such outlays over the 2024–2033 period by \$0.6 trillion (or 1 percent).

Medicare. CBO's estimate of outlays for Medicare in 2024 rose by \$24 billion (or 3 percent) and its projections of outlays for the program over the 2024—2033 period increased by \$0.2 trillion (or 2 percent) because of technical revisions. Two factors explain most of that increase over the 10-year period. First, outlays for Medicare in 2023 were higher than expected, so CBO increased its projections of such outlays in later years. Second, CBO reduced its projections of mortality from COVID-19 and, as a result, increased its projections of the population age 65 or older. To account for the increase in its projection of that population, CBO revised its projections of enrollment in Medicare upward, resulting in larger projected outlays for the program than those in the agency's May 2023 baseline projections.

Social Security. CBO increased its projections of outlays for Social Security over the 2024–2033 period by \$0.2 trillion (or 1 percent) for technical reasons. About half of that increase stems from higher-than-projected actual outlays in 2023 and the beginning of 2024. The other half of the increase results from the upward revision to the agency's projections of the population age 65

or older, which increased the projected number of Old-Age and Survivors Insurance beneficiaries.

Clean Vehicle and Energy-Related Tax Credits. For technical reasons, the estimated outlay portion of clean vehicle and energy-related tax credits in 2024 rose by \$5 billion, and projected outlays for those credits over the 2024-2033 period increased by \$124 billion. Outlays for clean vehicle tax credits are projected to be \$73 billion over the 2024–2033 period. In CBO's May 2023 projections—which were based on the cost estimate prepared by the staff of the Joint Committee on Taxation (JCT) when the credits were enacted in August 2022 as part of the 2022 reconciliation act clean vehicle credits reduced tax revenues and had no effect on outlays. Guidance from the Treasury about how clean vehicle tax credits may be claimed led CBO to attribute a portion of clean vehicle credits to outlays in its current projections. In addition, outlays for energyrelated credits in CBO's current projections are \$51 billion more than they were in the May 2023 projections, which were based on JCT's initial estimate. That change largely reflects an increase in projected investment in battery manufacturing, which qualifies for the advanced manufacturing production credit enacted as part of the 2022 reconciliation act (see Box 3-1 on page 86).

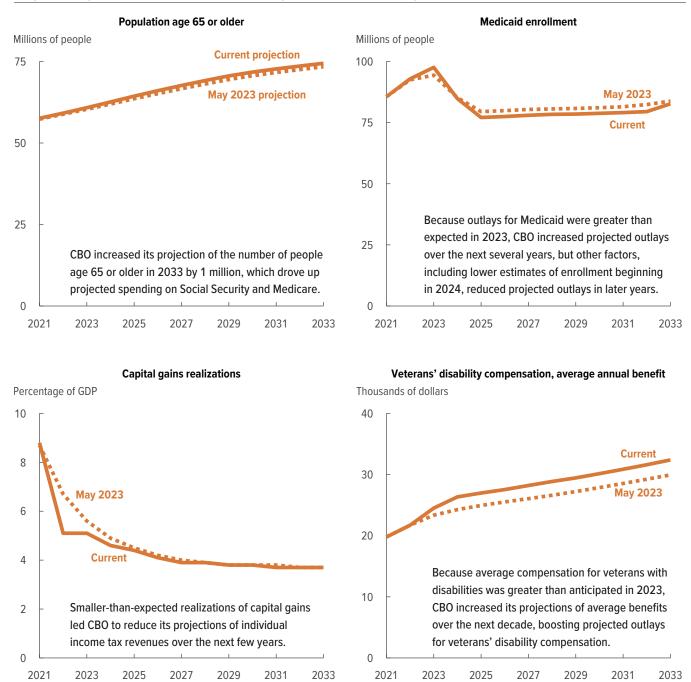
Veterans' Benefits. CBO lowered its projections of spending for veterans' benefits over the 2024–2033 period by \$111 billion (or 4 percent) for technical reasons. That net decrease is largely the result of two partially offsetting factors. CBO increased its projections of outlays for disability compensation over the 10-year period by \$169 billion because of faster-than-expected growth in disability compensation outlays in 2023. That increase was more than offset by a decrease in projected outlays from the toxic exposures fund.

Medicaid. Technical revisions increased CBO's projections of outlays for Medicaid over the 2024–2033 period by \$67 billion. Those increases are the net result of two mostly offsetting factors. First, actual outlays in 2023 were higher than expected, causing CBO to raise its projections of spending for the program in future years. That increase was partially offset by interactions associated with the winding down in 2023 of policies that were put in place during the coronavirus pandemic. During the public health emergency brought on by the pandemic, states were required to provide continuous eligibility for all Medicaid enrollees so that they could maintain their coverage

^{8.} Congressional Budget Office, *The Demographic Outlook: 2024 to 2054* (January 2024), www.cbo.gov/publication/59697.

Figure 3-3.

Key Changes in CBO's Technical Projections Since May 2023



Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

The projections of the population and of capital gains realizations are on a calendar year basis. The projections of Medicaid enrollment and veterans' disability compensation are on a fiscal year basis.

GDP = gross domestic product.

without interruption, and in exchange, the federal government temporarily increased the portion of the program's costs that it covered. CBO previously underestimated the increases in enrollment stemming from the continuous eligibility policy, so more beneficiaries than the agency anticipated have lost coverage since the policy ended.

Deposit Insurance. CBO decreased its projections of outlays for deposit insurance over the 2024–2033 period by \$67 billion for technical reasons. Four bank failures occurred during 2023 (three in the spring and one later in the year). The agency's May 2023 baseline projections reflected the expectation that the FDIC would recover any payments it made related to the resolution of bank failures in 2023 in that same year. (The FDIC recovers such payments by liquidating assets and by raising the premiums it collects from FDIC-insured institutions.) The FDIC did not recover as much as CBO anticipated in 2023. Those recoveries—which are reflected in the budget as negative outlays—are now projected to occur over the next few years.⁹

Student Loans. CBO's projections of outlays for student loan programs over the 2024-2033 period are \$57 billion higher than they were in May 2023. Those increases stem primarily from the inclusion of CBO's projections of the full cost of the Administration's changes to the income-driven repayment plans that were finalized by the Department of Education in June 2023. Following its typical procedure for accounting for proposed rules, CBO incorporated only half of the projected cost of the changes to the IDR plans in its May 2023 baseline. For most borrowers, the changes make the IDR plans more generous, and many borrowers selecting an IDR plan will now pay less in principal and interest than they would have previously paid. In addition, in CBO's estimation, some students who would have borrowed before the change will now borrow more, and other students who previously would not have borrowed will now do so because of the

new plan's more generous terms. All those factors increased costs of IDR plans in CBO's projections. ¹⁰

Coronavirus Refundable Tax Credits. CBO increased its projections of total outlays for the coronavirus refundable tax credits—a group of tax credits for employers intended to enable them to provide sick and family leave, retain employees, and maintain health insurance for certain workers during the pandemic. In CBO's current projections, outlays for those credits are \$21 billion more in 2024, and \$13 billion more in 2025, than they were in the agency's May 2023 projections. Those revisions were made because outlays for the employee retention tax credit in 2023 were higher than anticipated. The IRS announced a moratorium on processing new claims for that credit in September 2023, but CBO anticipates additional outlays will be made this year and next.¹¹

Other Mandatory Programs. Technical changes increased CBO's estimate of outlays for other mandatory programs by \$0.1 trillion over the 2024–2033 period.

Discretionary Outlays. Technical changes lowered CBO's projections of discretionary outlays over the 2024–2033 period by \$56 billion (or less than 1 percent). The largest changes were to estimated outlays in 2024; those revisions totaled \$27 billion, on net, and were dispersed across the budget. In general, they stemmed from adjustments to better reflect the recent rates at which discretionary budget authority has translated into outlays. The largest such adjustment—made to the rate applied to funding for Indian Health Services—reduced total projected outlays for that program over the 2024–2033 period by \$48 billion.

Net Interest Outlays. Technical changes increased CBO's projections of net outlays for interest over the 2024–2033 period by \$322 billion (or 3 percent). Most of that increase is attributable to debt-service costs. All told, technical changes to revenues and noninterest

^{9.} As part of the resolution of the failure of First Republic Bank in spring 2023, the FDIC (acting in its capacity as receiver) received a purchase money note from J.P. Morgan for \$50 billion to be repaid within five years. In September 2023, the FDIC sold the cash flows from the note to the Federal Financing Bank in exchange for \$50 billion in borrowing, financed through the issuance of Treasury securities. That transaction was recorded in the federal budget as a \$50 billion outlay in 2023 by the FDIC. CBO expects the note to be repaid in 2028, in which case the transaction would be recorded in the federal budget as a receipt of \$50 billion in that year.

^{10.} Under the Federal Credit Reform Act of 1990, the present value of expected reductions of cash inflows to the Treasury are recorded in the federal budget. A present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) at a specific time. The present value depends on the rate of interest (the discount rate) that is used to translate future cash flows into current dollars.

^{11.} For further details about employee retention tax credits in 2023, see Congressional Budget Office, *The Accuracy of CBO's Budget Projections for Fiscal Year 2023* (December 2023), Box 2, www.cbo.gov/publication/59682.

Box 3-1.

Technical Changes to CBO's Baseline Projections to Account for Developments Affecting Energy-Related Tax Provisions

The Congressional Budget Office has revised the baseline projections of revenues and outlays to account for several technical factors pertaining to energy-related tax provisions. Those factors include a rule proposed by the Environmental Protection Agency (EPA) that would change standards for vehicle emissions, guidance from the Treasury about certain provisions of the 2022 reconciliation act, and market developments.

The estimates of the effects of the energy-related provisions that underlie the projections in CBO's May 2023 baseline were prepared by the staff of the Joint Committee on Taxation (JCT) in August 2022 when the 2022 reconciliation act was enacted. After considering technical factors as of December 5, 2023, CBO revised the projections of amounts claimed for clean vehicle and energy-related tax credits; they are now substantially higher than the amounts originally projected by JCT. Those changes reduced projected revenues from individual and corporate income taxes and increased projected outlays for payments related to those credits. Technical factors also led CBO to lower its projections of revenues from excise taxes on gasoline.

Together, those technical revisions increased CBO's estimate of the budget deficit in 2024 by \$25 billion and its projections of the cumulative deficit from 2024 to 2033 by \$428 billion. More than half of the increase in the 10-year deficit—\$224 billion—is from revised projections of amounts claimed for clean vehicle tax credits and of revenues from excise taxes on gasoline (see the figure). Of that increase, \$151 billion is attributable to reductions in projected revenues, and \$73 billion to increases in projected outlays.

The largest factor contributing to those revisions is that, in April 2023 (after CBO finalized its May baseline), the EPA proposed more stringent vehicle emissions standards that would begin with the 2027 model year. Incorporating that proposed rule into the baseline (with a 50-percent weight, following

CBO's typical practice for rules that are not yet finalized) increased projected claims for clean vehicle tax credits and reduced projected revenues from excise taxes on gasoline.¹

Additionally, the projections of amounts claimed for the clean vehicle tax credits were revised upward to reflect guidance from the Treasury that provided greater flexibility than JCT anticipated when it prepared its estimates in 2022, as well as recent information about vehicle sales.² For example, the Treasury determined that credits claimed by businesses for vehicles leased to individuals are not subject to the restrictions that apply to credits claimed directly by individuals—including limits on a buyer's income and on the price of an eligible vehicle as well as rules about where critical minerals are sourced, battery components are manufactured, and final vehicle assembly occurs. Dealers and buyers have responded to that guidance by leasing more electric vehicles than JCT anticipated when preparing its 2022 estimates. In separate guidance, the Treasury outlined the process that dealers can follow beginning in 2024 to receive payments for electric vehicle credits that buyers transfer to them so that the dealers can pass the credit on to buyers at the time of purchase. Payments for those transferred credits are recorded in the budget as outlays.

CBO also revised estimates of the effects of other energyrelated tax provisions that were part of the 2022 reconciliation act. Those revisions—which reduced projected revenues over the 2024–2033 period by \$153 billion and increased projected

- For more information about how CBO estimates the budgetary effects of proposed regulations, see Congressional Budget Office, CBO Explains How It Develops the Budget Baseline (April 2023), www.cbo.gov/ publication/58916.
- Joint Committee on Taxation, Factors Considered When Estimating the Revenue Effects of the Energy Provisions of Public Law 117-169 and Subsequent Developments (May 2023), http://tinyurl.com/3mcs95v5.

Continued

outlays increased CBO's projections of deficits over the 10-year period by \$0.9 trillion, and the projected cost of servicing the additional debt stemming from those higher deficits is \$232 billion. Moreover, debt at the end of 2023 was greater than CBO projected in May 2023. To account for that additional debt, CBO increased its projections of net interest costs over the 10-year period by \$90 billion.

Changes in Revenues

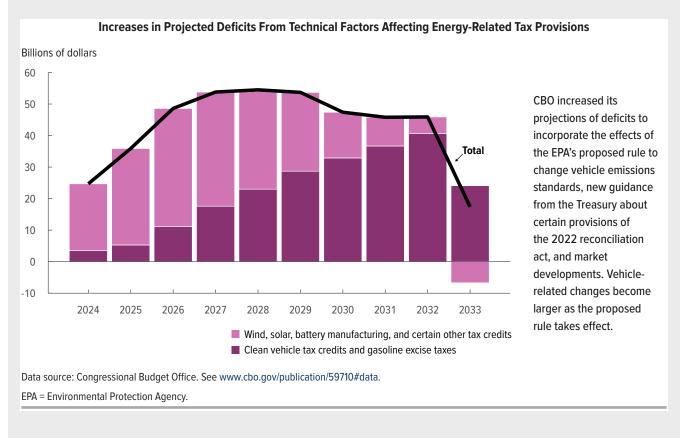
For technical reasons, CBO's estimate of revenues in 2024 fell by \$69 billion (or 1 percent), and its projections of revenues over the 2024–2033 period dropped by \$309 billion (or 1 percent). CBO revised downward its projections of receipts from individual income taxes and other revenues in 2024, but those revisions were partially offset by upward revisions to the agency's projections of

Box 3-1. Continued

Technical Changes to CBO's Baseline Projections to Account for Developments Affecting Energy-Related Tax Provisions

outlays by \$51 billion—added a total of \$204 billion to the agency's projections of deficits over the 10-year period. Most significantly, CBO and JCT now expect greater investment in the manufacturing of batteries and in wind and solar power generation than was anticipated in August 2022. In addition, CBO reduced the projected amounts claimed for other energy-related business tax credits following their expiration, partially offsetting the increase in the deficit from the larger amounts claimed for clean vehicle credits and the reduced revenues from gasoline excise taxes in 2033.

The budgetary effects of energy-related tax provisions remain highly uncertain. One source of that uncertainty is the pace of deployment and use of low-emissions technologies and electric vehicles. In addition, taxpayers have yet to claim certain tax credits that were enacted in the 2022 reconciliation act, including the advanced manufacturing production credit. The budgetary effects of those credits will be better understood as more detailed tax data become available. Moreover, administrative actions taken by federal or state agencies, including the Treasury, could affect budgetary outcomes.



receipts from corporate income and payroll taxes in that year. Over the 2024–2033 period, individual income tax receipts, corporate income tax receipts, and other revenues are now projected to be lower than the agency projected last year, but receipts from payroll taxes are projected to be higher.

Individual Income Taxes. Technical revisions reduced CBO's estimate of individual income tax receipts in 2024 by \$82 billion (or 3 percent) and its projections of such receipts over the 2024–2033 period by \$8 billion (or less than 1 percent).

CBO lowered its projection of individual income tax receipts in 2024 in part because 2023 receipts were

significantly lower than it anticipated.¹² Although some of the factors leading to that weakness in receipts are expected to continue and thus reduce projected revenues in the future, one reason for the lower-than-expected receipts in 2023—administrative actions taken by the IRS—increased CBO's estimate of receipts from individual income taxes for 2024. For taxpayers affected by natural disasters, including most taxpayers in California, the IRS postponed deadlines for payments that would typically have been due in fiscal year 2023, allowing those payments to be made in 2024 instead. CBO projects that about \$60 billion in individual income tax payments that would otherwise have been due in 2023 will now be collected in 2024. That upward revision to projected individual income tax receipts in 2024 partially offset other factors that reduced projections of such receipts for the year.

Several other factors contributed to individual income tax receipts' being lower than anticipated in 2023. Recent data for calendar year 2022 show that capital gains realizations were smaller than anticipated; projected individual income tax receipts were revised downward for 2024 as a result. That downward revision would have been even greater if not for an unanticipated increase in asset values in calendar year 2023. In addition, more employers than expected claimed the employee retention tax credit in 2023, and CBO anticipates that additional claims will be made in 2024. Moreover, CBO revised downward its projections of high-wage earners' share of total wages and salaries on the basis of data for calendar year 2022 that showed a smaller-than-expected share of earnings accruing to high-wage earners. When that share is smaller, individual income tax revenues fall because people with less income are subject to lower income tax rates.

The downward revisions due to the new information about the historical wage distribution persist throughout the projection period. In addition, other changes affect projections of individual income tax revenues over the 2024–2033 period. CBO revised downward its estimates of the share of business income being taxed at the individual level, reflecting the agency's expectation that more business activity will be taxed under the corporate income tax after provisions of the 2017 tax act expire at the end of calendar year 2025.

In later years of the projection period, the effects of factors contributing to reductions in projected receipts are more than offset by increases in the agency's projections of distributions from taxable retirement accounts. Those increases stem from upward revisions to historical data on pension asset values in calendar years 2020 and 2021 and from new information about such values in 2022. In addition, on the basis of newly available data from past years' wage and tax statements, CBO now anticipates that contributions to Roth retirement accounts, which are nondeductible, will make up a larger share of total retirement contributions than the agency previously expected. Both of those changes increased projected individual income tax receipts.

Taken together, technical changes resulted in a net increase in the agency's projections of receipts from individual income taxes in every year from 2027 to 2033.

Payroll Taxes. For technical reasons, CBO increased its estimate of payroll tax revenues in 2024 by \$22 billion (or 1 percent) and its projections of such revenues over the 2024–2033 period by a total of \$367 billion (or 2 percent). Those upward revisions resulted in part from updated projections of the distribution of earnings, which indicate that a larger share of total earnings will fall below the maximum taxable amount (\$168,600 in calendar year 2024).

Corporate Income Taxes. For technical reasons, CBO raised its estimate of corporate income tax revenues in 2024 by \$19 billion (or nearly 4 percent) and lowered its projections of such revenues for the 2024–2033 period by \$517 billion (or 10 percent). CBO increased its estimate for 2024 because certain corporate tax payments previously expected to be made in 2023 will instead be made in 2024. Corporate tax payments from taxpayers affected by disasters were deferred in 2023, and CBO anticipates that those payments will be made in 2024. In addition, the agency expects that initial payments for the new minimum tax on the book income of certain corporations will be collected in 2024. CBO originally expected the first payments for that tax, which was enacted as part of the 2022 reconciliation act, to be collected in 2023, but the IRS subsequently granted penalty relief for corporations that did not make estimated payments in 2023. As a result of those two actions, CBO estimates, about \$60 billion in corporate tax payments that would have been received in 2023 will now be collected in 2024.

^{12.} For further details on tax receipts in 2023, see Congressional Budget Office, *The Accuracy of CBO's Budget Projections for Fiscal Year 2023* (December 2023), www.cbo.gov/publication/59682.

Technical changes lowered CBO's projections of corporate income tax receipts for 2025 to 2033 by \$535 billion (or 12 percent), on net. CBO increased its projections of deductions for foreign-derived investment income and its projections of amounts claimed for foreign tax and other credits, thereby reducing projected corporate income tax receipts. Those revisions were made in part to reflect recent tax data that indicate certain credits and deductions have been greater than anticipated. The projected amounts claimed for the energy-related tax credits that were part of the 2022 reconciliation act were also revised upward (see Box 3-1 on page 86). In addition, CBO revised downward its estimate of revenues generated by the limitation on deductions for net interest.

Other technical changes increased projected corporate income tax receipts, partially offsetting those downward revisions. One reason for such a change is that CBO now expects that more business activity than it previously anticipated will be subject to the corporate income tax after certain provisions of the 2017 tax act that reduced individual tax rates on business income expire at the end of calendar year 2025.

Other Revenues. Technical revisions lowered CBO's estimate of other revenues, including customs duties and excise taxes, in 2024 by \$28 billion (or 11 percent) and its projections of such revenues over the 2024–2033 period by \$151 billion (or 4 percent). CBO lowered its projections of customs duties over the 2024–2033 period by \$111 billion (or 11 percent) because collections of administratively imposed tariffs on imports from China have been smaller than projected. The agency also lowered its estimate of excise tax receipts in 2024 to reflect larger-than-expected amounts reported

for refunds and tax credits for the nontaxable use of gasoline in 2023. After averaging about \$1 billion over the previous 10 years, those refunds and credits are estimated to have totaled \$18 billion in 2023. Because the cause of those larger-than-anticipated refunds and credits is currently unknown, CBO projects that they will fall from that elevated level over the next several years.

The agency's projections of excise tax receipts over the 2024-2033 period are lower, on net, than they were in May 2023 for several additional reasons. CBO revised downward its projections of revenues from excise taxes on gasoline because it now expects vehicles' fuel economy to improve more quickly than it previously anticipated (in part as a result of rules proposed by the Environmental Protection Agency). In addition, projected receipts from excise taxes on tobacco were revised downward: CBO now expects a larger share of those products to avoid excise taxes as a result of a 2021 court ruling.¹³ The agency also lowered its projections of receipts from the excise tax on chemicals in response to smaller-than-anticipated collections in 2023. Those downward revisions were partially offset by an upward revision to the agency's projections of receipts from the excise tax on corporate stock repurchases.

^{13.} On August 23, 2021, the U.S. Court of Appeals for the Federal Circuit upheld an earlier ruling by the U.S. Court of International Trade in *National Association of Manufacturers v. Department of the Treasury*. As a result of the ruling, tobacco and alcohol products that would normally be subject to excise taxes will receive a refund (or drawback) of those excise taxes in situations in which the merchandise can be matched to similar products that are exported or destroyed—even when no excise tax had previously been collected on the exported or destroyed merchandise. Those drawbacks are often referred to as double drawbacks.

List of Tables and Figures

lable	5	
1-1.	CBO's Baseline Budget Projections, by Category	10
1-2.	CBO's Baseline Projections of Outlays and Deficits, Adjusted to Exclude Effects of Timing Shifts	11
1-3.	CBO's Baseline Projections of Federal Debt	14
1-4.	CBO's Baseline Projections of Mandatory Outlays, Adjusted to Exclude Effects of Timing Shifts	18
1-5.	Changes in Discretionary Budget Authority From 2023 to 2024	21
1-6.	CBO's Baseline Projections of Discretionary Spending, Adjusted to Exclude Effects of Timing Shifts	30
1-7.	CBO's Baseline Projections of Revenues	32
1-8.	CBO's Baseline Projections of Smaller Sources of Revenues	36
1-9.	Key Projections in CBO's Baseline, Adjusted to Exclude Effects of Timing Shifts, Through 2054	39
2-1.	CBO's Economic Projections for Calendar Years 2024 to 2034	45
2-2.	Projected Growth of Real GDP and Its Components	49
2-3.	Key Inputs in CBO's Projections of Real Potential GDP	55
2-4.	CBO's Current and Previous Economic Projections for Calendar Years 2023 to 2033	66
3-1.	Changes in CBO's Baseline Projections of the Deficit Since May 2023	78
Figur	es	
1-1.	Total Deficit, Net Interest Outlays, and Primary Deficit	12
1-2.	Federal Debt Held by the Public	15
1-3.	Total Federal Outlays and Revenues	27
1-4.	Outlays, by Category	28
1-5.	Revenues, by Category	33
1-6.	Estimated Outlays, Revenues, and Tax Expenditures in 2024	38
1-7.	Uncertainty of CBO's Baseline Projections of the Budget Deficit	42
2-1.	Growth of Real GDP	44
2-2.	Spending on Consumer Goods as a Share of Nominal Consumer Spending	52
2-3.	Average Annual Growth of Real Potential GDP and Its Components	56
2-4.	Employment, Unemployment, and Wage Growth	57
2-5.	Overall Inflation, Core Inflation, and Contributions to Overall Inflation	60
2-6.	Interest Rates	61
2-7.	Uncertainty of CBO's Projections of Output, Unemployment, Inflation, and Interest Rates	65
2-8.	Comparison of CBO's Economic Forecasts With Those of the Blue Chip Forecasters	71
2-9.	Comparison of CBO's Economic Forecasts With Those in the Survey of Professional Forecasters	72
2-10.	Comparison of CBO's Economic Forecasts With Those of the Federal Reserve	73
3-1.	Changes in CBO's Baseline Projections of the 10-Year Deficit Since May 2023	76
3-2.	Key Changes in CBO's Economic Forecast Since February 2023	81
3-3.	Key Changes in CBO's Technical Projections Since May 2023	84

About This Document

This volume 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 of 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.

CBO's Panel of Economic Advisers commented on an early version of the economic forecast underlying this report at a meeting in November 2023. At that time, members of the panel were Katharine Abraham, Alan Auerbach, Markus Brunnermeier, Seth Carpenter, Steven Davis, Kathryn Dominguez, Karen Dynan, Robert Hall, Jan Hatzius, Donald Kohn, Gregory Mankiw, Giuseppe Moscarini, Emi Nakamura, Jonathan Parker, James Poterba, Valerie Ramey, Joshua Rauh, Ayşegül Şahin, James Stock, Kevin Warsh, and Mark Zandi. Robin Brooks, Bart Hobijn, and Brian Sack attended the panel's meeting as guests. Although CBO's outside advisers provided considerable assistance, they are not responsible for the contents of this report.

The following pages list CBO's staff members who contributed to this report by preparing the economic, revenue, and spending projections; writing the report; reviewing, editing, fact-checking, designing, and publishing it; compiling the supplemental materials posted along with it on CBO's website (www.cbo.gov/publication/59710); and providing other support.

CBO seeks feedback to make its work as useful as possible. Please send any comments to communications@cbo.gov.

Phillip L. Swagel

Director

February 2024

Economic Projections

The economic projections were prepared by the Macroeconomic Analysis Division, with contributions from analysts in other divisions. That work was supervised by Richard DeKaser, Devrim Demirel, Robert Arnold, and Jaeger Nelson.

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Joyce Bai · Financial markets

Grace Berry · Motor vehicle sector, research assistance

Aaron Betz · Effects of fiscal policy, potential output, productivity

Daniel Fried · Net exports, exchange rates, energy prices

Edward Gamber · Labor markets, current-quarter analysis

Ron Gecan · Energy prices

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Michael McGrane · Financial markets, Federal Reserve's balance sheet, quantifying uncertainty

Christine Ostrowski · Consumer spending, income

Jeffrey Schafer · Interest rates, monetary policy

Byoung Hark Yoo · Quantifying uncertainty

Revenue Projections

The revenue projections were prepared by the Tax Analysis Division, supervised by John McClelland, Joseph Rosenberg, Edward Harris, and Joshua Shakin. In addition, the staff of the Joint Committee on Taxation provided valuable assistance.

Kathleen Burke · Individual income taxes, wage distribution

Dorian Carloni · Business taxation

Nathaniel Frentz · Federal Reserve System's remittances, miscellaneous fees and fines

Bilal Habib · Tax modeling

Eshika Kaul · Excise taxes

Shannon Mok · Estate and gift taxes

Omar Morales · Excise taxes

James Pearce · Capital gains realizations, wage distribution, tax modeling

Kevin Perese · Tax modeling

Molly Saunders-Scott · International taxation, business taxation

Kurt Seibert · Payroll taxes, depreciation, tax modeling

Jennifer Shand · Corporate income taxes

Molly Sherlock · Energy and excise taxes

Naveen Singhal · Capital gains realizations, tax modeling

Ellen Steele · Refundable tax credits

Emma Uebelhor · Customs duties

James Williamson · Retirement income, estate and gift taxes

Spending Projections

The spending projections were prepared by the Budget Analysis Division, with contributions from analysts in other divisions. That work was supervised by Chad Chirico, Christina Hawley Anthony, Sam Papenfuss, Barry Blom, Megan Carroll, Elizabeth Cove Delisle, Sean Dunbar, Kathleen FitzGerald, Ann E. Futrell, Justin Humphrey, Sarah Masi, David Newman, Robert Reese, Asha Saavoss, and Emily Stern of the Budget Analysis Division, as well as by Chapin White, Tamara Hayford, and Alexandra Minicozzi of the Health Analysis Division and by Sebastien Gay of the Financial Analysis Division.

Defense, International Affairs, and Veterans' Affairs

Sunita D'Monte · International affairs

Caroline Dorminey · Defense (procurement)

Paul B. A. Holland · Veterans' education benefits, reservists' education benefits, veterans' home loans

Etaf Khan · Veterans' health care, toxic exposures fund, international food assistance

William Ma · Defense (operation and maintenance, intelligence programs, other defense programs)

Christopher Mann · Defense (facilities, energy, nuclear programs)

Aldo Prosperi · Defense (research and development, cybersecurity)

David Rafferty · Military retirement, compensation for radiation exposure and energy employees' occupational illness, immigration

Dawn Sauter Regan · Defense (military personnel)

Matt Schmit · Military health care

Logan Smith · Veterans' compensation and pensions, other benefits for disabled veterans, toxic exposures fund

Education, Finance, and Housing

Julia Aman · Federal Deposit Insurance Corporation, National Credit Union Administration, Orderly Liquidation Fund, Federal Housing Administration, Bureau of Indian Affairs

Joyce Bai · Student loans

Margot Berman · Student loans

Jeremy Crimm · Law enforcement, justice assistance, homeland security, Postal Service

Michael Falkenheim · Federal Deposit Insurance Corporation

David Hughes · Commerce, Consumer Financial Protection Bureau, Universal Service Fund

Wendy Kiska · Pension Benefit Guaranty Corporation, student loans

Leah Koestner · Student loans, higher education programs

Noah Meyerson · Pension Benefit Guaranty Corporation

Zunara Naeem · Fannie Mae and Freddie Mac, Federal Housing Finance Agency, housing assistance

Garrett Quenneville · Elementary and secondary education, Pell grants

Mitchell Remy · Veterans' housing, Fannie Mae and Freddie Mac

Jon Sperl · Community and regional development, Federal Emergency Management Agency, judicial branch, administration of justice

Aurora Swanson · Securities and Exchange Commission, Small Business Administration

Byoung Hark Yoo · Fannie Mae and Freddie Mac, Federal Housing Administration

Health

Austin Barselau · Medicare

Ezra Cohn · Food and Drug Administration, prescription drugs, National Institutes of Health

Ryan Greenfield · Prescription drugs, Food and Drug Administration

Jessica Hale · Health insurance marketplaces, private health insurance

Cornelia Hall · Medicare

Caroline Hanson · Health insurance coverage

Nianyi Hong · Health insurance coverage

Ben Hopkins · Health insurance coverage

Claire Hou · Health insurance coverage

Robert Lindsay · Health insurance coverage

Sean Lyons · Health insurance coverage

Julianna Mack · Health insurance coverage

Eamon Molloy · Health insurance coverage

Hudson Osgood · Medicare, Public Health Service

Romain Parsad · Health insurance coverage

Allison Percy · Health insurance coverage

Aaron Pervin · Medicaid

Lara Robillard · Medicare

Sarah Sajewski · Medicare, Centers for Disease Control and Prevention

Julia Sheriff · Medicare

Robert Stewart · Medicaid, Children's Health Insurance Program, Indian Health Service

Carolyn Ugolino · Medicaid, Health Resources and Services Administration

Emily Vreeland · Health insurance marketplaces, private health insurance, Federal Employees Health Benefits program

Kate Young · Medicaid, prescription drugs, Substance Abuse and Mental Health Services Administration

Katie Zhang · Health insurance marketplaces, private health insurance

Chris Zogby · Health insurance coverage

Noah Zwiefel · Medicare

Income Security

Susan Yeh Beyer · Child nutrition and other nutrition programs, Smithsonian Institution, arts and humanities

Meredith Decker · Unemployment insurance, job training programs

Jennifer Gray · Supplemental Nutrition Assistance Program and other nutrition programs

Jada Ho · Refugee and Entrant Assistance program, Child Care and Development Block Grant

Justin Latus · Supplemental Security Income, Administration on Aging

Michael McGrane · Extended benefits for unemployment insurance

Susanne Mehlman · Temporary Assistance for Needy Families, child support enforcement, foster care, child care programs, Low Income Home Energy Assistance Program

Noah Meyerson · Old-Age and Survivors Insurance, Social Security trust funds

Delaney Smith · Disability Insurance, rehabilitation services, Social Services Block Grant, support programs for children and families

Natural and Physical Resources

Tiffany Arthur · Agriculture

Kelly Durand · General government

David Hughes · Outer Continental Shelf receipts

Aaron Krupkin · Energy, air, water, and other transportation

Willow Latham-Proença · Energy, highways, mass transit, Amtrak, spectrum auction receipts

Lilia G. Ledezma · Conservation and land management

Erik O'Donoghue · Agriculture

Matthew Pickford · General government, legislative branch, recreational resources

Alaina Rhee · Energy

Aurora Swanson · Water resources, pollution control and abatement, other natural resources

Other Areas and Functions

Shane Beaulieu · Computer applications and data systems

Breanna Browne-Pike · Appropriation bills (Labor, Health and Human Services, and Education; Legislative Branch)

Aaron Feinstein · Other interest, monthly Treasury data, historical data

Avi Lerner · Debt, interest on the public debt

Amber Marcellino · Federal civilian retirement

George McArdle · Appropriation bills (Military Construction and Veterans Affairs; State and Foreign Operations)

Amy McConnel · Appropriation bills (Commerce, Justice, and Science; Financial Services and General Government)

Dan Ready · Various federal retirement programs, national income and product accounts, federal pay

Justin Riordan · Budget concepts and process; sequestration, appropriation bills (Labor, Health and Human Services, and Education)

Mark Sanford · Appropriation bills (Agriculture and Food and Drug Administration; Defense)

Esther Steinbock · Appropriation bills (Energy and Water Development; Transportation and Housing and Urban Development)

J'nell Blanco Suchy · Appropriation bills (Homeland Security; Interior and Environment), scorekeeping for authorization acts

Patrice Watson · Computer applications and data systems

Olivia Yang · Budget projections and appropriation bills

Long-Term Spending Projections

The long-term spending projections were prepared by the Labor, Income Security, and Long-Term Analysis Division, with contributions from analysts in other divisions. That work was supervised by Julie Topoleski and Molly Dahl. The projections were prepared by Alia Abdelkader, Xinzhe Cheng, Michael McGrane, and Charles Pineles-Mark.

Writing

Dan Ready prepared the executive summary, with assistance from Daniel Fried. Amber Marcellino, Dan Ready, and Nathaniel Frentz wrote Chapter 1, with assistance from Molly Dahl, Aaron Feinstein, and Avi Lerner. Daniel Fried wrote Chapter 2, with contributions from Edward Gamber. Aaron Feinstein, Jennifer Shand, and Molly Sherlock wrote Chapter 3.

Reviewing, Editing, Fact-Checking, Designing, and Publishing

Mark Doms, Mark Hadley, Jeffrey Kling, and Robert Sunshine reviewed the report. The editing and publishing were handled by CBO's editing and publishing group, supervised by Lora Engdahl and John Skeen, and the agency's communications team, supervised by Deborah Kilroe.

Christine Bogusz, Christine Browne, Scott Craver, Christian Howlett, Rebecca Lanning, Loretta Lettner, Bo Peery, and Caitlin Verboon edited and proofread the report; Casey Labrack and Jorge Salazar created the graphics; R. L. Rebach prepared the text for publication; and Annette Kalicki published the report on CBO's website.

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Nicholas Abushacra and Grace Berry coordinated the preparation of figures and tables related to economic projections. Nicholas Abushacra, Grace Berry, Aaron Feinstein, Eshika Kaul, Avi Lerner, Omar Morales, Charles Pineles-Mark, and Dan Ready compiled data and supplemental information, and Annette Kalicki coordinated the presentation of those materials on CBO's website.