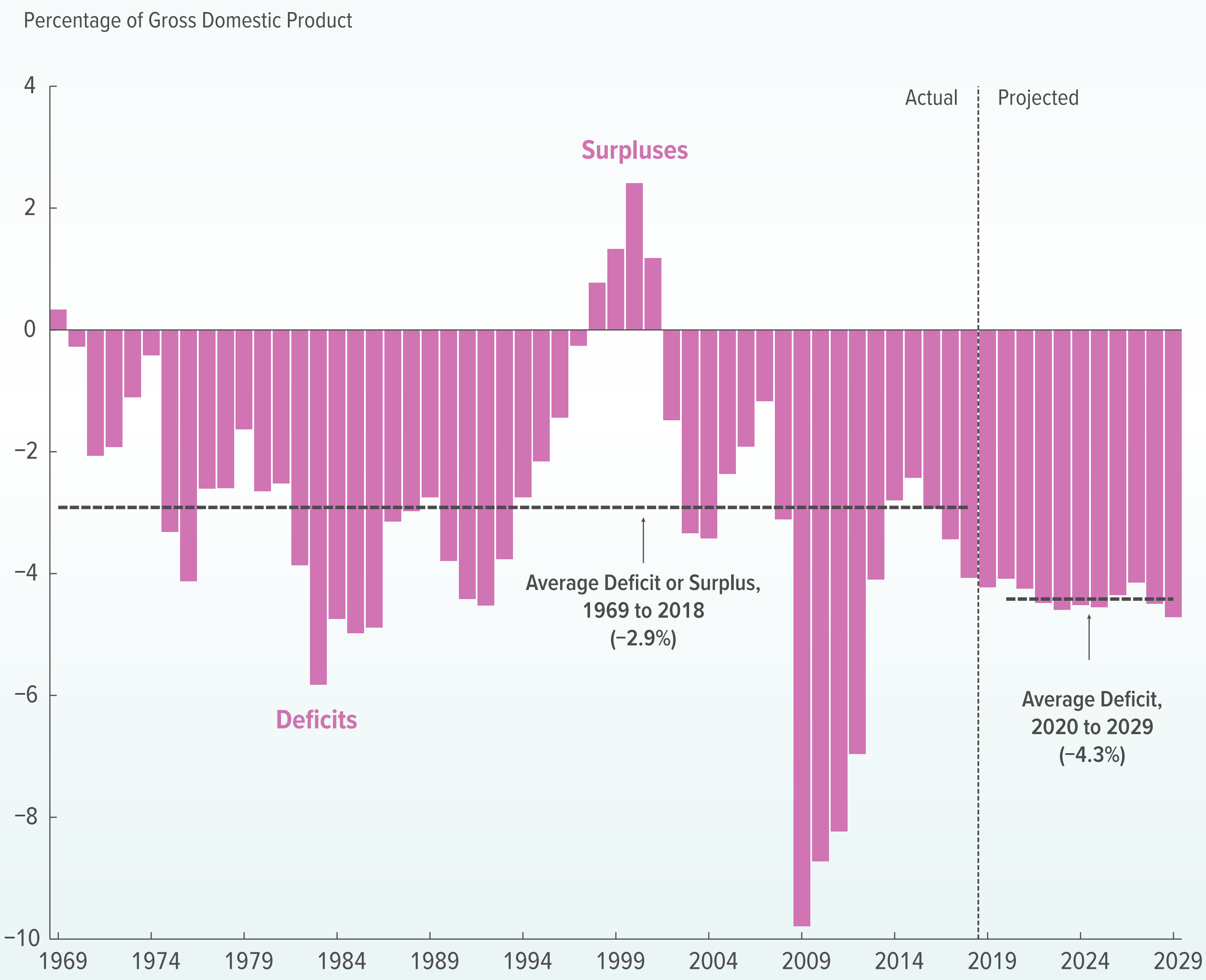
CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

CBO

Updated Budget Projections: 2019 to 2029



MAY 2019

At a Glance

The Congressional Budget Office regularly publishes reports that present budget projections under current law—that is, if existing laws governing taxes and spending generally remained unchanged. This report is the latest in that series.

- **Deficits.** In CBO's projections, the federal budget deficit reaches $896 billion in 2019 and exceeds $1 trillion each year beginning in 2022. Relative to the size of the economy, the deficits that CBO projects would average 4.3 percent of gross domestic product over the 2020–2029 period, well above the 2.9 percent average over the past 50 years. CBO's estimate of the deficit for 2019 is about the same as it was in January 2019, and projected deficits over the 2020–2029 period are about 2 percent less than CBO projected in January.

- **Debt.** Federal debt held by the public is projected to grow from 78 percent of gross domestic product in 2019 to 92 percent in 2029—the largest share since 1947 and more than twice the 50-year average. Moreover, if lawmakers amended current laws to maintain certain policies now in place, even larger increases in debt would ensue.

www.cbo.gov/publication/55151

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Notes

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

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

Supplemental data for this analysis are available on CBO's website (www.cbo.gov/publication/55151), as are a glossary of common budgetary and economic terms (www.cbo.gov/publication/42904), a description of how CBO prepares baseline budget projections (www.cbo.gov/publication/53532), and previous editions of the report (https://go.usa.gov/xQrzS).

Updated Budget Projections: 2019 to 2029

Summary

As it typically does each spring, the Congressional Budget Office has updated the baseline budget projections it published early in the year.[1] If no further legislation is enacted this year that affects the federal budget, the total federal deficit for fiscal year 2019 will be nearly the same as the agency estimated it to be in January 2019, according to CBO's projections. If current laws remained unchanged, the deficit would generally increase in nominal terms through 2029 and would be considerably larger as a share of the nation's output (gross domestic product, or GDP) than its average over the past 50 years, CBO estimates. As a result, debt held by the public would rise significantly from its already high level.

Growing Deficits Are Projected to Drive Up Debt

Revenues and outlays are both projected to rise through 2029, but the gap between them is projected to persist, resulting in large deficits and rising debt. According to CBO's estimates, the deficit now projected for 2019, $896 billion, would grow to $1.3 trillion by 2029 (see Table 1). However, outlays for 2029 are affected by shifts in the timing of certain federal payments. Without those shifts, the projected deficit in 2029 would be $1.4 trillion (see Table 2).[2]

Relative to the size of the economy, the deficits that CBO projects would average 4.3 percent of GDP over the 2020–2029 period. Other than the period immediately after World War II, the only other time the average deficit has been so large over so many years was after the 2007–2009 recession. Over the past 50 years, deficits have averaged 2.9 percent of GDP (see Figure 1).

Persistently large projected deficits would lead to significant growth in debt held by the public. Under current law, the federal government is projected to borrow an additional $12.7 trillion from the end of 2018 through 2029, boosting debt held by the public to $28.5 trillion, or 92 percent of GDP, by the end of the period—up from 78 percent now.

Beyond 2029, if current laws remained in place, deficits would grow, driving debt to its highest levels in the nation's history. Those large deficits would arise because outlays—particularly for Social Security, Medicare, and interest on the debt—would rise steadily under current law, and revenues would not keep pace with the growth in spending.

Changes Since January Are Relatively Small

CBO currently projects a deficit for 2019 of $896 billion, only $1 billion smaller than the deficit it projected in January. The cumulative deficit projection for the 2020–2029 period has dropped by $249 billion (or 2 percent), largely as a result of a $333 billion decrease in outlays, which is partially offset by an $84 billion reduction in revenues.

CBO's updated budget projections are based on the same economic forecast the agency developed for its January 2019 baseline, and legislation enacted since January has had only a modest effect on the budget totals for the 2019–2029 period. CBO did not fully update its baseline projections of revenue for this report but expects to do so later this year. Thus, the reduction in the cumulative deficit largely stems from technical changes that

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1. See Congressional Budget Office, *The Budget and Economic Outlook: 2019 to 2029* (January 2019), www.cbo.gov/publication/54918.

2. Outlays in some years are affected by shifts in the timing of certain federal payments: When October 1—the first day of a fiscal year—falls on a weekend, certain payments that are due on that date are made at the end of September and, as a result, are recorded in the previous fiscal year. Timing shifts primarily affect mandatory outlays and, to a much lesser degree, discretionary outlays. Net interest outlays are not affected. CBO estimates that $62 billion in outlays ($57 billion of which is mandatory) will shift from 2023 into 2022, $68 billion ($63 billion of which is mandatory) will shift from 2024 into 2023, and $94 billion ($88 billion of which is mandatory) will shift from 2029 into 2028. The discussion of CBO's projections in this report reflects adjustments to remove the effects of those timing shifts.

Table 1.

CBO's Baseline Budget Projections, by Category

	Actual, 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total 2020–2024	Total 2020–2029
							In Billions of Dollars							
Revenues														
Individual income taxes	1,684	1,752	1,833	1,906	1,986	2,078	2,176	2,281	2,512	2,743	2,851	2,978	9,979	23,344
Payroll taxes	1,171	1,233	1,280	1,330	1,382	1,443	1,504	1,567	1,629	1,692	1,758	1,827	6,939	15,412
Corporate income taxes	205	245	274	292	319	358	399	428	427	409	426	428	1,642	3,760
Other	271	280	294	306	317	321	360	361	377	401	402	431	1,598	3,569
Total	**3,330**	**3,511**	**3,681**	**3,834**	**4,004**	**4,200**	**4,439**	**4,637**	**4,946**	**5,244**	**5,437**	**5,664**	**20,158**	**46,086**
On-budget	2,475	2,609	2,741	2,856	2,990	3,145	3,343	3,497	3,762	4,015	4,161	4,338	15,074	34,848
Off-budget[a]	855	902	940	978	1,015	1,054	1,096	1,140	1,184	1,229	1,276	1,325	5,084	11,238
Outlays														
Mandatory	2,523	2,696	2,825	2,980	3,225	3,347	3,465	3,705	3,924	4,124	4,459	4,521	15,841	36,574
Discretionary	1,262	1,330	1,292	1,299	1,318	1,340	1,363	1,399	1,432	1,466	1,506	1,532	6,613	13,948
Net interest	325	382	455	517	578	634	681	721	768	817	870	921	2,866	6,962
Total	**4,109**	**4,407**	**4,573**	**4,796**	**5,121**	**5,321**	**5,510**	**5,826**	**6,125**	**6,406**	**6,836**	**6,973**	**25,319**	**57,485**
On-budget	3,261	3,502	3,606	3,764	4,019	4,144	4,257	4,493	4,716	4,911	5,246	5,288	19,789	44,443
Off-budget[a]	849	905	967	1,031	1,102	1,177	1,253	1,333	1,409	1,495	1,590	1,686	5,530	13,042
Deficit (-) or Surplus	**-779**	**-896**	**-892**	**-962**	**-1,116**	**-1,122**	**-1,071**	**-1,189**	**-1,179**	**-1,162**	**-1,399**	**-1,310**	**-5,162**	**-11,399**
On-budget	-785	-894	-865	-908	-1,029	-999	-914	-996	-954	-896	-1,085	-949	-4,715	-9,595
Off-budget[a]	6	-3	-26	-53	-87	-123	-157	-193	-225	-266	-314	-361	-446	-1,804
Debt Held by the Public	15,750	16,621	17,576	18,589	19,748	20,910	22,021	23,253	24,476	25,684	27,116	28,455	n.a.	n.a.
Memorandum:														
Gross Domestic Product	20,236	21,252	22,120	22,939	23,778	24,672	25,642	26,656	27,667	28,738	29,862	31,006	119,151	263,080
							As a Percentage of Gross Domestic Product							
Revenues														
Individual income taxes	8.3	8.2	8.3	8.3	8.4	8.4	8.5	8.6	9.1	9.5	9.5	9.6	8.4	8.9
Payroll taxes	5.8	5.8	5.8	5.8	5.8	5.8	5.9	5.9	5.9	5.9	5.9	5.9	5.8	5.9
Corporate income taxes	1.0	1.2	1.2	1.3	1.3	1.5	1.6	1.6	1.5	1.4	1.4	1.4	1.4	1.4
Other	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.3	1.4	1.3	1.4
Total	**16.5**	**16.5**	**16.6**	**16.7**	**16.8**	**17.0**	**17.3**	**17.4**	**17.9**	**18.2**	**18.2**	**18.3**	**16.9**	**17.5**
On-budget	12.2	12.3	12.4	12.4	12.6	12.7	13.0	13.1	13.6	14.0	13.9	14.0	12.7	13.2
Off-budget[a]	4.2	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Outlays														
Mandatory	12.5	12.7	12.8	13.0	13.6	13.6	13.5	13.9	14.2	14.3	14.9	14.6	13.3	13.9
Discretionary	6.2	6.3	5.8	5.7	5.5	5.4	5.3	5.2	5.2	5.1	5.0	4.9	5.5	5.3
Net interest	1.6	1.8	2.1	2.3	2.4	2.6	2.7	2.7	2.8	2.8	2.9	3.0	2.4	2.6
Total	**20.3**	**20.7**	**20.7**	**20.9**	**21.5**	**21.6**	**21.5**	**21.9**	**22.1**	**22.3**	**22.9**	**22.5**	**21.2**	**21.9**
On-budget	16.1	16.5	16.3	16.4	16.9	16.8	16.6	16.9	17.0	17.1	17.6	17.1	16.6	16.9
Off-budget[a]	4.2	4.3	4.4	4.5	4.6	4.8	4.9	5.0	5.1	5.2	5.3	5.4	4.6	5.0
Deficit (-) or Surplus	**-3.9**	**-4.2**	**-4.0**	**-4.2**	**-4.7**	**-4.5**	**-4.2**	**-4.5**	**-4.3**	**-4.0**	**-4.7**	**-4.2**	**-4.3**	**-4.3**
On-budget	-3.9	-4.2	-3.9	-4.0	-4.3	-4.0	-3.6	-3.7	-3.4	-3.1	-3.6	-3.1	-4.0	-3.6
Off-budget[a]	*	*	-0.1	-0.2	-0.4	-0.5	-0.6	-0.7	-0.8	-0.9	-1.1	-1.2	-0.4	-0.7
Debt Held by the Public	77.8	78.2	79.5	81.0	83.0	84.8	85.9	87.2	88.5	89.4	90.8	91.8	n.a.	n.a.

Source: Congressional Budget Office.

n.a. = not applicable; * = between -0.5 percent of gross domestic product and zero.

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

Table 2.

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

	Actual, 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
						In Billions of Dollars						
Payments That Are Shifted in CBO's Baseline[a]	-44	0	0	0	62	5	-68	0	0	0	94	-93
Outlays Adjusted for Timing Shifts												
Mandatory	2,563	2,696	2,825	2,980	3,167	3,342	3,528	3,705	3,924	4,124	4,371	4,608
Discretionary	1,266	1,330	1,292	1,299	1,313	1,340	1,368	1,399	1,432	1,466	1,501	1,538
Net interest	325	382	455	517	578	634	681	721	768	817	870	921
Total	**4,153**	**4,407**	**4,573**	**4,796**	**5,058**	**5,316**	**5,577**	**5,826**	**6,125**	**6,406**	**6,742**	**7,067**
Deficit Adjusted to Exclude Timing Shifts	**-823**	**-896**	**-892**	**-962**	**-1,054**	**-1,116**	**-1,138**	**-1,189**	**-1,179**	**-1,162**	**-1,305**	**-1,403**
						As a Percentage of Gross Domestic Product						
Outlays Adjusted for Timing Shifts												
Mandatory	12.7	12.7	12.8	13.0	13.3	13.5	13.8	13.9	14.2	14.3	14.6	14.9
Discretionary	6.3	6.3	5.8	5.7	5.5	5.4	5.3	5.2	5.2	5.1	5.0	5.0
Net interest	1.6	1.8	2.1	2.3	2.4	2.6	2.7	2.7	2.8	2.8	2.9	3.0
Total	**20.5**	**20.7**	**20.7**	**20.9**	**21.3**	**21.5**	**21.8**	**21.9**	**22.1**	**22.3**	**22.6**	**22.8**
Deficit Adjusted to Exclude Timing Shifts	**-4.1**	**-4.2**	**-4.0**	**-4.2**	**-4.4**	**-4.5**	**-4.4**	**-4.5**	**-4.3**	**-4.0**	**-4.4**	**-4.5**
Memorandum:												
Baseline Deficit												
In billions of dollars	-779	-896	-892	-962	-1,116	-1,122	-1,071	-1,189	-1,179	-1,162	-1,399	-1,310
As a percentage of gross domestic product	-3.9	-4.2	-4.0	-4.2	-4.7	-4.5	-4.2	-4.5	-4.3	-4.0	-4.7	-4.2

Source: Congressional Budget Office.

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.

lowered the agency's projections of outlays for mandatory spending and net interest.

CBO's Baseline Budget Projections

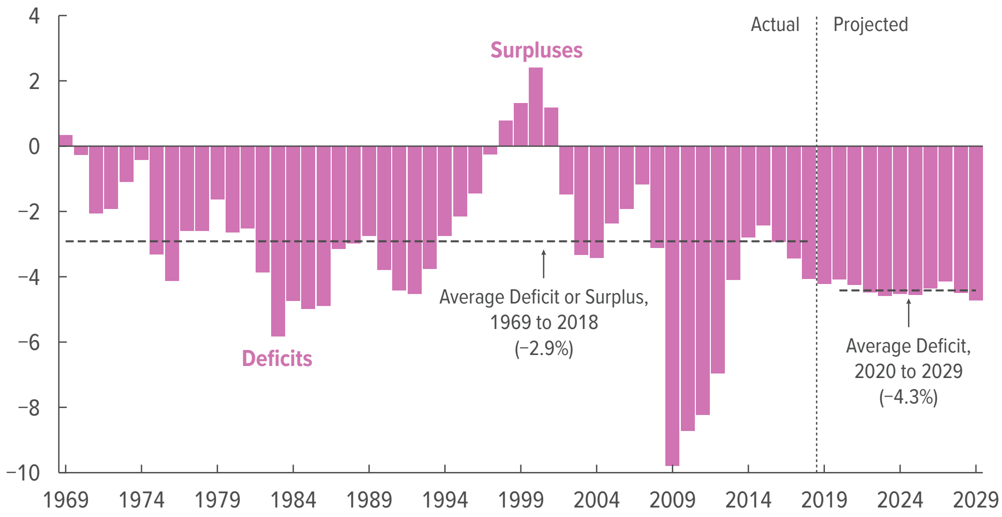
CBO's baseline projections show a persistent gap between revenues and outlays, even though both components of the federal budget grow faster than GDP. Federal revenues rise, in CBO's projections, from 16.5 percent of GDP in 2019 to 17.4 percent in 2025 and then grow more rapidly, reaching 18.3 percent of GDP in 2029. The projected growth in revenues after 2025 is largely attributable to the scheduled expiration of nearly all of the individual income tax provisions of the 2017 tax act (Public Law 115-97). Federal outlays (adjusted to exclude shifts in the timing of certain payments) are projected to climb from 20.7 percent of GDP in 2019 to 22.8 percent in 2029 (see Figure 2). That path of growth includes the effects of a sharp reduction in the statutory caps on discretionary budget authority in 2020 and 2021 that are set in current law.

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

Figure 1.

Total Deficits and Surpluses

Percentage of Gross Domestic Product



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

Source: Congressional Budget Office.

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

CBO's baseline not only because of unanticipated economic conditions but also as a result of the many other factors that affect federal revenues and outlays.

Deficits and Debt

In CBO's projections, the total deficit increases from 4.2 percent of GDP in 2019 to 4.5 percent of GDP in 2029. That percentage has been exceeded in only eight years since 1946; four of those years followed the 2007–2009 recession. During the past 50 years, in years when the unemployment rate has been below 6 percent—as it is now—deficits averaged just 1.5 percent of GDP.

Primary deficits—that is, deficits excluding outlays for net interest—are projected to remain large but decrease over time as a percentage of GDP, averaging 1.9 percent over the 2020–2024 period and 1.5 percent from 2025 through 2029 (see Figure 3). At the same time, because of projected increases in interest rates and federal borrowing, net interest outlays grow steadily from 1.8 percent of GDP to 3.0 percent.

Those large deficits are projected to boost federal debt held by the public, which consists mostly of the securities that the Treasury issues to raise cash to fund federal activities and pay off the government's maturing liabilities. The net amount that the Treasury borrows by issuing those securities (the amounts that are sold minus the amounts that have matured) is influenced primarily by the annual budget deficit.

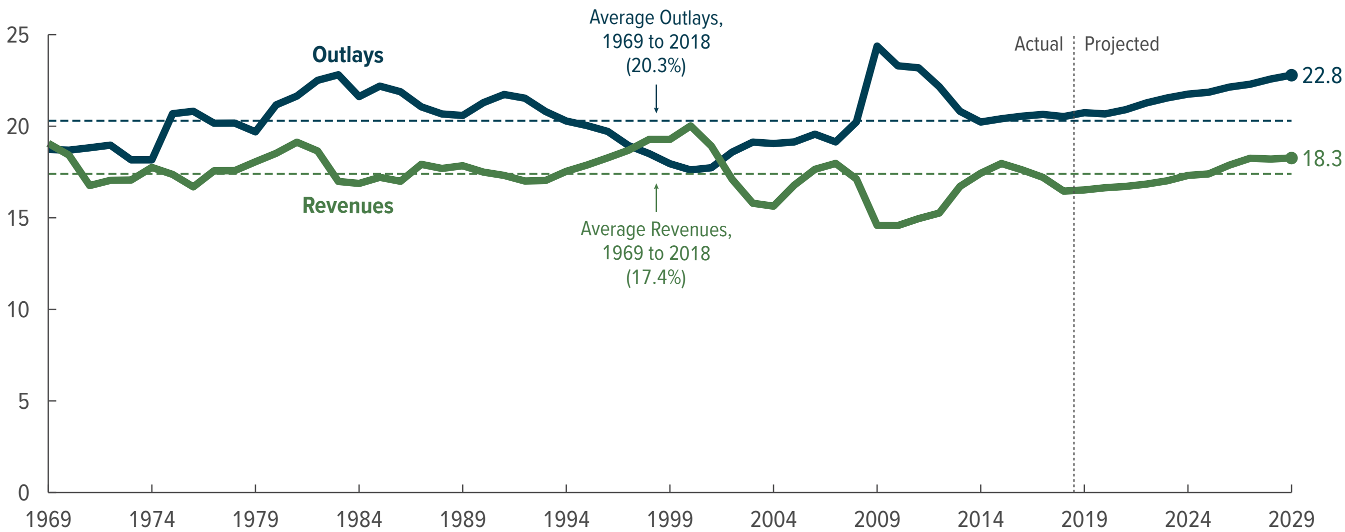
Consequently, under current law, debt held by the public would increase significantly in upcoming years. In CBO's baseline, after accounting for all of the government's borrowing needs, debt held by the public rises from \$15.7 trillion at the end of 2018 to \$28.5 trillion at the end of 2029 (see Table 3). That debt would increase from 77.8 percent of GDP in 2018 to 91.8 percent of GDP by the end of the projection period. At that point, such debt would be the largest since 1947 and more than twice the 50-year average (see Figure 4).

Almost half of the increase from 2018 to 2029 would result from the projected rise in the average interest rate on federal debt. The remainder would stem from the costs, at the current average interest rate, of financing the existing stock of debt and projected large primary deficits. (Primary deficits under current law—with no

Figure 2.

Total Revenues and Outlays

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

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

change in the average interest rate on federal debt—are large enough to push up debt as a share of GDP over the next decade; see Box 1.)

Revenues

After a decline in revenues as a percentage of GDP between 2017 and 2018—from 17.2 percent in 2017 to 16.5 percent in 2018—CBO expects receipts to grow slightly relative to the size of the economy in 2019, to just over 16.5 percent of GDP (see Table 4). That amount would be below the average of 17.4 percent of GDP recorded over the past 50 years. The decline in receipts in 2018 resulted from the enactment of the 2017 tax act. The law made many significant changes to the individual and corporate income tax systems that, on net, lowered taxes owed by most individuals and businesses beginning in calendar year 2018.

In CBO's baseline, revenues rise markedly over the next decade—growing by more than 50 percent—from $3.7 trillion in 2020 to $5.7 trillion in 2029. Revenues grow steadily through 2025—reaching 17.4 percent of GDP in that year—and then rise sharply following the scheduled expiration of many temporary provisions of the 2017 tax act at the end of calendar year 2025. As a share of GDP, revenues are projected to reach 17.9 percent in 2026 and 18.3 percent in 2029, nearly 1 percentage point higher than the long-term average of 17.4 percent. Revenues over the past 50 years have been as high as 20.0 percent of GDP (in 2000) and as low as 14.6 percent (in 2009 and 2010).

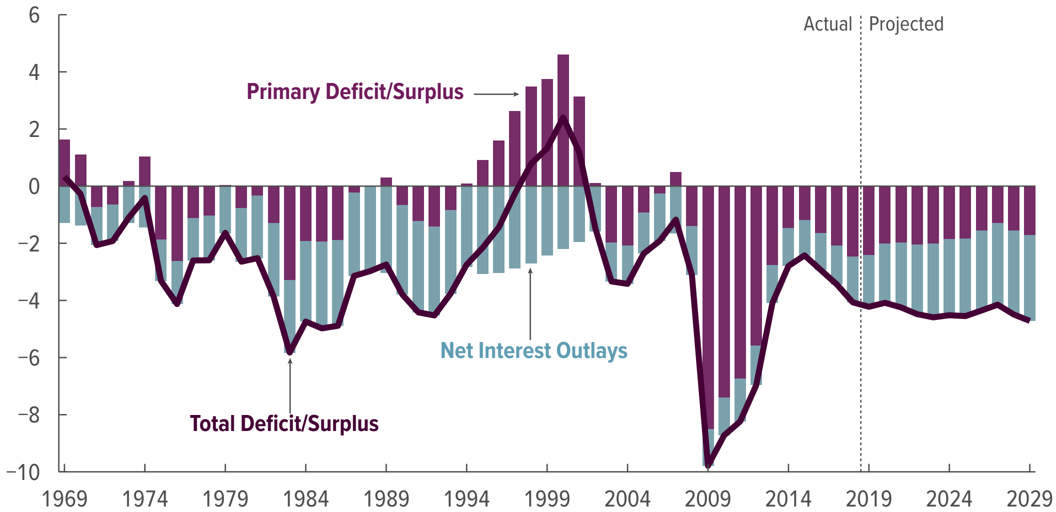
The projected growth in revenues over the next decade reflects increases in receipts from various sources:

- Individual income tax receipts are projected to rise sharply between 2025 and 2027, following the scheduled expiration of nearly all of the individual income tax provisions of the 2017 tax act. In addition to those expirations, other factors are expected to cause receipts to grow throughout the next decade: Wages are projected to grow faster than GDP, and real bracket creep (which occurs when income rises faster than inflation) is projected to cause income to be taxed at higher rates, boosting taxes relative to income.

Figure 3.

Total Deficit, Primary Deficit, and Net Interest

Percentage of Gross Domestic Product



Although primary deficits are projected to decrease as a percentage of gross domestic product from 2019 to 2029 as the result of rising revenues and shrinking discretionary spending, total deficits remain large because of rising net interest costs.

Source: Congressional Budget Office.

Primary deficits or surpluses exclude outlays for net interest.

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

- Corporate income tax receipts are projected to rise as a percentage of GDP after 2019 for two main reasons. First, changes in tax rules that are scheduled to occur over the next decade would gradually boost receipts, on net. Second, CBO expects that the factors responsible for recent unexplained weakness in corporate tax collections will gradually dissipate. A projected decline in domestic economic profits relative to the size of the economy would partially offset those factors.

- Receipts from all other sources are projected to rise at a modest rate after 2019. Revenues from payroll taxes, estate and gift taxes, and remittances from the Federal Reserve are each projected to edge up slightly as a share of the economy.

Outlays

In CBO's current baseline projections, federal outlays in 2019 total $4.4 trillion, or 20.7 percent of GDP. Outlays, also referred to as spending in this report, are projected to grow at an average annual rate of 4.8 percent over the coming decade, reaching $7.1 trillion in 2029 (adjusted to exclude the effects of timing shifts), or 22.8 percent of GDP. Outlays for Social Security, Medicare, and net interest account for about three-quarters of that $2.7 trillion increase.

Federal outlays over the 2020–2029 period are projected to average 21.8 percent of GDP, above the 50-year average of 20.3 percent. That increase over the historical average is largely attributable to significant growth in mandatory spending (net of offsetting receipts, which are credited against such outlays), which is expected to equal 12.7 percent of GDP in 2019 and grow to 14.9 percent of GDP by 2029, compared with an average of 9.9 percent over the 1969–2018 period. In contrast, from 2019 to 2029, discretionary outlays are projected to decline from 6.3 percent of GDP to 5.0 percent, compared with an average of 8.4 percent over the previous 50 years. CBO estimates that net outlays for interest in 2019 will be 1.8 percent of GDP, below their 50-year average of 2.0 percent, but will then grow significantly over the next 10 years, reaching 3.0 percent of GDP.

Mandatory Spending. Mandatory, or direct, spending includes outlays for some federal benefit programs and for certain other payments to people, businesses,

Table 3.

CBO's Baseline Projections of Federal Debt

Billions of Dollars

	Actual, 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Debt Held by the Public at the Beginning of the Year	14,665	15,750	16,621	17,576	18,589	19,748	20,910	22,021	23,253	24,476	25,684	27,116
Changes in Debt Held by the Public												
Deficit	785	896	892	962	1,116	1,122	1,071	1,189	1,179	1,162	1,399	1,310
Other means of financing[a]	299	-25	63	52	42	40	41	43	44	45	33	29
Total	1,084	872	954	1,014	1,158	1,162	1,112	1,232	1,223	1,207	1,432	1,339
Debt Held by the Public at the End of the Year												
In billions of dollars	**15,750**	**16,621**	**17,576**	**18,589**	**19,748**	**20,910**	**22,021**	**23,253**	**24,476**	**25,684**	**27,116**	**28,455**
As a percentage of GDP	**77.8**	**78.2**	**79.5**	**81.0**	**83.0**	**84.8**	**85.9**	**87.2**	**88.5**	**89.4**	**90.8**	**91.8**
Memorandum:												
Debt Held by the Public Minus Financial Assets[b]												
In billions of dollars	13,975	14,871	15,763	16,724	17,841	18,962	20,033	21,221	22,400	23,562	24,961	26,270
As a percentage of GDP	69.1	70.0	71.3	72.9	75.0	76.9	78.1	79.6	81.0	82.0	83.6	84.7
Gross Federal Debt[c] *	21,462	22,455	23,507	24,580	25,732	26,889	28,001	29,156	30,305	31,322	32,496	33,568
Debt Subject to Limit[d] *	21,475	22,468	23,522	24,595	25,749	26,906	28,019	29,176	30,325	31,344	32,518	33,591
Average Interest Rate on Debt Held by the Public (Percent)	2.3	2.6	2.9	3.0	3.2	3.3	3.4	3.4	3.4	3.4	3.5	3.5

Source: Congressional Budget Office.

GDP = gross domestic product.

a. Factors not included in budget totals that also affect the government's need to borrow from the public. Those factors include cash flows associated with federal credit programs such as student loans (because only the subsidy costs of those programs are reflected in the budget deficit), as well as changes in the government's cash balances.

b. Debt held by the public minus 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. Debt subject to limit differs from gross federal debt mainly in that it excludes debt issued by the Federal Financing Bank and includes certain other adjustments that are excluded from gross debt. On March 2, 2019, the debt limit was raised to $22.0 trillion, which was the amount of debt outstanding at that time. Therefore, to avoid a breach of the limit, the Treasury began employing extraordinary measures to allow continued borrowing. If the debt limit remains unchanged, those measures will be exhausted and the Treasury will run out of cash near the end of the current fiscal year, CBO estimates. However, the amount and timing of the government's outlays and revenue collections could vary from CBO's projections, and the extraordinary measures could run out earlier or later as a result. For more on the debt limit, see Congressional Budget Office, *Federal Debt and the Statutory Limit, February 2019* (February 2019), www.cbo.gov/publication/54987.

nonprofit institutions, and state and local governments. Such spending is generally governed by statutory criteria and is not normally constrained by the annual appropriation process.[3] Certain types of payments that federal agencies receive from the public and from other government agencies are classified as offsetting receipts and are accounted for in the budget as reductions in mandatory spending.

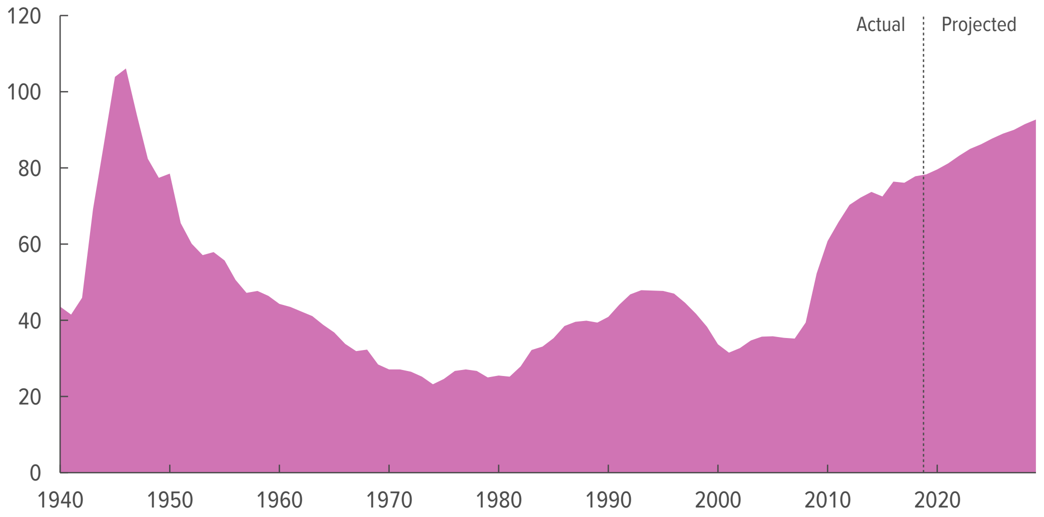
3. Each year, some mandatory programs are modified by provisions in annual appropriation acts. Such changes may increase or decrease spending for the affected programs for one or more years. In addition, some mandatory programs, such as Medicaid, the Supplemental Nutrition Assistance Program, and benefits for Coast Guard retirees and annuitants are considered mandatory but require benefits to be paid from amounts provided in appropriation acts. Section 257 of the Deficit Control Act requires CBO to project outlays for those programs as if they were fully funded, regardless of the amounts actually appropriated.

[* Values corrected on May 8, 2019]

Figure 4.

Federal Debt Held by the Public

Percentage of Gross Domestic Product



By 2029, debt relative to the size of the economy would be the largest since 1947 and more than twice the 50-year average.

Sources: Congressional Budget Office and Office of Management and Budget.

The Deficit Control Act requires CBO to construct baseline projections for most mandatory spending under the assumption that current laws continue unchanged.[4] Therefore, CBO's baseline projections for mandatory spending reflect the estimated effects of economic influences, growth in the number of beneficiaries, and other factors related to the cost of those mandatory programs, even for those that are set to expire under current law. The projections also incorporate a set of across-the-board reductions in budgetary resources (known as sequestration) that are required under current law for certain mandatory programs.

In 2019, CBO estimates, mandatory outlays (net of offsetting receipts) will amount to $2.7 trillion, or 12.7 percent of GDP (see Table 5). From 2020 to 2029, outlays for mandatory programs are projected to rise by an average of 5.5 percent per year, reaching $4.6 trillion by the end of the period. As a share of GDP, mandatory outlays are projected to increase slightly through 2020—to 12.8 percent—and then rise steadily, to 14.9 percent in 2029.[5] By comparison, mandatory outlays averaged 12.9 percent of GDP over the past 10 years and 9.9 percent over the past 50 years.

Much of the projected growth in mandatory spending over the coming decade is attributable to two factors. First, the population age 65 or older has been growing significantly—more than doubling over the past 50 years—and is expected to rise by about one-third by 2029.

Second, the costs of health care (adjusted to account for the aging of the population) are projected to grow faster than the economy over the long term. Although growth in health care spending has slowed in recent years, such spending has still grown faster than the economy, on average. The reasons for that slowdown are not clear. In CBO's projections, per-enrollee spending in federal health care programs grows more rapidly over the

4. Section 257 of the Deficit Control Act also requires CBO to assume that certain mandatory programs will continue beyond their scheduled expiration and that entitlement programs, including Social Security and Medicare, will be fully funded and thus will be able to make all scheduled payments. Other rules that govern the construction of CBO's baseline have been developed by the agency in consultation with the House and Senate Committees on the Budget. For further details, see Congressional Budget Office, *How CBO Prepares Baseline Budget Projections* (February 2018), www.cbo.gov/publication/53532.

5. Mandatory outlays as a share of GDP are projected to grow more slowly in the near term, largely because GDP is projected to grow faster in 2019 and 2020 than later in the projection period. The growth in nominal mandatory outlays is slightly slower in the first two years of the period than it is in most of the later years.

Table 4.

Key Projections in CBO's Baseline

Percentage of Gross Domestic Product

			Projected Annual Average	
	2019	2020	2021–2024	2025–2029
Revenues				
Individual income taxes	8.2	8.3	8.4	9.3
Payroll taxes	5.8	5.8	5.8	5.9
Corporate income taxes	1.2	1.2	1.4	1.5
Other	1.3	1.3	1.3	1.4
Total Revenues	**16.5**	**16.6**	**17.0**	**18.0**
Outlays				
Mandatory				
Social Security	4.9	5.0	5.3	5.7
Major health care programs[a]	5.2	5.2	5.6	6.3
Other	2.6	2.6	2.5	2.3
Subtotal	12.7	12.8	13.4	14.4
Discretionary	6.3	5.8	5.5	5.1
Net interest	1.8	2.1	2.5	2.8
Total Outlays	**20.7**	**20.7**	**21.4**	**22.3**
Deficit	**-4.2**	**-4.0**	**-4.4**	**-4.3**
Debt Held by the Public at the End of the Period	**78**	**79**	**86**	**92**
Memorandum:				
Social Security				
Revenues[b]	4.4	4.4	4.5	4.5
Outlays[c]	4.9	5.0	5.3	5.7
Contribution to the Federal Deficit[d]	-0.5	-0.5	-0.8	-1.2
Medicare				
Revenues[b]	1.4	1.4	1.5	1.5
Outlays[c]	3.6	3.7	4.0	4.7
Offsetting receipts	-0.6	-0.6	-0.7	-0.8
Contribution to the Federal Deficit[d]	-1.5	-1.6	-1.9	-2.4
Gross Domestic Product at the End of the Period (Trillions of dollars)	21.3	22.1	25.6	31.0

Source: Congressional Budget Office.

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

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

b. Includes payroll taxes other than those paid by the federal government on behalf of its employees; those payments are intragovernmental transactions. Also includes income taxes paid on Social Security benefits, which are credited to the trust funds.

c. Does not include outlays related to administration of the program, which are discretionary. For Social Security, outlays do not include intragovernmental offsetting receipts stemming from the employer's share of payroll taxes paid to the Social Security trust funds by federal agencies on behalf of their employees.

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

Box 1.

The Effect of Primary Deficits on the Outlook for Federal Debt

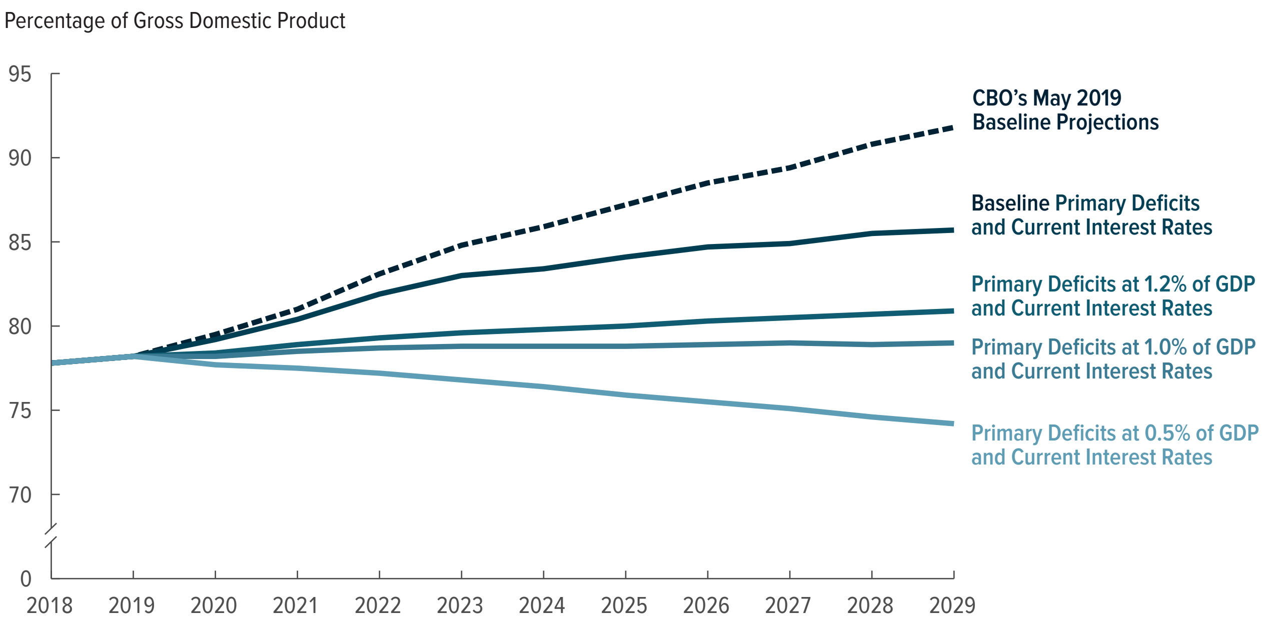
Primary deficits—deficits excluding outlays for net interest—are one driver of federal debt held by the public. In the Congressional Budget Office's baseline projections, which reflect the assumption that current laws generally remain in place, continued primary deficits and rising interest rates combine to boost debt from 77.8 percent of gross domestic product (GDP) in 2019 to 91.8 percent in 2029.

If the average interest rate on federal debt remains below the rate of GDP growth, as it is projected to do, the federal government could run a small primary deficit each year and still put debt as a share of GDP on a downward path. However, the primary deficits projected under current law are much too large for that to occur. Moreover, primary deficits are projected to be even larger if certain tax increases and discretionary spending cuts do not take place as scheduled.

To show the separate roles played by primary deficits and interest rates, CBO used illustrative paths for those two factors to generate estimates of debt that could be compared with the agency's baseline projections. In each path, the average interest rate on the debt remains at its 2019 value (instead of rising, as it does in CBO's baseline projections). In the first path, primary deficits are the same as they are projected to be under current law, totaling $4.4 trillion over the 2020–2029 period and averaging 1.7 percent of GDP. In the other illustrative paths, primary deficits are smaller than they are in CBO's baseline projections starting in 2020.

The resulting estimates of debt under the illustrative paths account only for the reduction in interest payments from lower interest rates and the reduction in federal borrowing from smaller primary deficits. They do not account for the economic effects that would result from lower interest rates or less federal borrowing. Nor do they account for the effects of any specific changes in tax or spending policy that could lead to primary deficits smaller than those in CBO's baseline

Federal Debt Held by the Public Under Illustrative Paths for Primary Deficits and Interest Rates



Source: Congressional Budget Office.

Continued

Box 1. Continued

The Effect of Primary Deficits on the Outlook for Federal Debt

projections or for any of the economic changes that could lead to a reduction in interest rates.

One clear takeaway emerged from the analysis: Even if the average interest rate on federal debt remained at its relatively low 2019 level of 2.6 percent, primary deficits would have to average less than 1.0 percent of GDP—significantly less than CBO projects they would average under current law—to keep debt from rising as a share of GDP (see the figure).

Projected outcomes for debt under the illustrative paths are as follows:

- If the average interest rate on the federal debt remained unchanged at its 2019 level, net interest costs would be smaller than CBO projects, yet debt as a share of GDP would still rise over the next decade—by almost 8 percentage points.
- If the average interest rate did not change and the primary deficit for each year equaled 1.2 percent of GDP—the lowest level in CBO's baseline projections—debt as a share of GDP would rise by about 3 percentage points over the next decade. If primary deficits followed such a path, the cumulative primary deficit for the period would be nearly $1.3 trillion less over the 2020–2029 period than it is in CBO's baseline projections.
- If the average interest rate did not change and the primary deficit for each year equaled 1.0 percent of GDP, debt as a share of GDP would be roughly stable, and the cumulative reduction in primary deficits relative to CBO's baseline projections would be about $1.8 trillion.
- If the average interest rate remained unchanged and the primary deficit equaled 0.5 percent of GDP every year, debt as a share of GDP would fall by 4 percentage points over the projection period, and primary deficits for the period would be a total of about $3.1 trillion less than those in CBO's baseline projections.

The last path illustrates that if the average interest rate on federal debt remained at its current low level, persistent primary deficits would not automatically preclude debt from declining as a share of GDP (but those deficits would have to be relatively small to lower debt). That is because the current average interest rate on debt (2.6 percent) is lower than the projected average growth rate of GDP over the next decade (3.8 percent).

Even interest rates close to those projected in CBO's baseline along with persistent primary deficits would not preclude debt from declining in relation to the size of the economy, but those primary deficits would have to be significantly smaller than they are projected to be under current law. The agency projects that the interest rate on federal debt will rise and average about 3.3 percent over the next decade. Although that rate is higher than the 2.6 percent rate in the illustrative paths, it is still below projected GDP growth. If interest rates equaled those underlying CBO's baseline projections, primary deficits that averaged about 0.4 percent of GDP would keep federal debt as a share of GDP at its current level, and primary deficits that were, on average, smaller than that would reduce debt. However, attaining primary deficits of that magnitude would require a cumulative reduction of $3.4 trillion in those deficits, relative to CBO's baseline projections, over the 2020–2029 period.

Thus, if interest rates remained below the rate of GDP growth and primary deficits were small relative to GDP, continued growth in the economy would lead to a reduction in debt as a share of GDP. But the primary deficits in CBO's current baseline projections are too large to meet that condition. Even if interest rates ended up being well below projected rates, the projected primary deficits are still too large for debt as a share of GDP to decline. Indeed, if the interest rate on federal debt *fell* by one-half of one percentage point and remained at that low rate over the next decade, primary deficits of the size projected under current law would still result in rising debt as a share of GDP. Moreover, primary deficits could be larger and interest rates could be higher under current law than CBO projects, in which case reducing debt as a share of GDP, or even keeping it at its current level, would be more challenging than this analysis suggests.

Table 5.

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

Billions of Dollars

	Actual, 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total 2020–2024	Total 2020–2029
Social Security														
Old-Age and Survivors Insurance	838	893	952	1,013	1,079	1,147	1,217	1,291	1,366	1,445	1,533	1,621	5,408	12,663
Disability Insurance	144	145	147	153	159	166	174	182	190	199	204	211	799	1,785
Subtotal	982	1,038	1,099	1,166	1,238	1,313	1,391	1,472	1,556	1,644	1,737	1,832	6,206	14,448
Major Health Care Programs														
Medicare[a,b]	728	765	814	877	949	1,013	1,088	1,166	1,250	1,341	1,449	1,552	4,740	11,499
Medicaid	389	405	418	438	464	492	521	552	585	619	655	694	2,334	5,439
Health insurance subsidies and related spending[c]	49	58	55	55	58	61	63	67	69	71	72	75	292	646
Children's Health Insurance Program	17	18	16	14	14	15	16	16	17	18	18	19	76	164
Subtotal[b]	1,184	1,246	1,304	1,384	1,486	1,581	1,688	1,801	1,921	2,049	2,195	2,340	7,441	17,748
Income Security Programs														
Earned income, child, and other tax credits	81	93	93	94	94	94	94	95	96	84	85	85	470	915
Supplemental Nutrition Assistance Program	68	65	64	64	64	65	65	66	67	68	70	71	322	664
Supplemental Security Income[a]	55	56	57	58	60	62	64	66	68	70	73	74	301	652
Unemployment compensation	29	28	29	38	45	47	49	51	53	55	57	59	208	483
Family support and foster care[d]	32	32	33	33	33	34	34	34	34	35	35	35	166	339
Child nutrition	24	25	26	27	28	29	30	31	33	34	36	37	139	311
Subtotal	290	299	301	313	325	330	336	343	351	346	355	362	1,606	3,364
Federal Civilian and Military Retirement														
Civilian[e]	103	105	109	114	118	122	126	130	133	137	141	145	588	1,274
Military[a]	59	60	63	65	67	69	70	72	74	76	78	80	333	712
Other	6	4	6	6	7	8	9	5	10	7	7	7	35	72
Subtotal	168	170	177	185	191	198	205	207	217	220	226	232	956	2,057
Veterans' Programs[a,f]														
Income security	93	99	104	107	110	115	120	123	128	132	136	142	556	1,217
Other	16	15	19	17	18	18	17	19	19	20	21	21	88	188
Subtotal	109	114	123	124	128	132	137	142	147	152	157	163	644	1,405
Other Programs														
Agriculture	16	25	14	15	14	16	16	16	16	16	16	16	75	155
Deposit insurance	-16	-9	-7	-7	-7	-7	-7	-7	-8	-8	-8	-9	-34	-74
MERHCF	10	10	11	11	12	13	13	14	15	15	16	17	60	137
Fannie Mae and Freddie Mac[g]	4	*	2	2	3	3	3	4	4	4	4	4	13	33
Higher education	-6	35	4	5	6	7	7	7	7	7	7	6	29	62
Other	82	52	70	70	72	70	69	69	68	68	70	71	351	696
Subtotal	90	114	94	96	100	102	102	102	101	102	105	106	493	1,009
Mandatory Outlays, Excluding the Effects of Offsetting Receipts[a]	**2,822**	**2,980**	**3,098**	**3,267**	**3,468**	**3,656**	**3,859**	**4,068**	**4,293**	**4,513**	**4,775**	**5,035**	**17,347**	**40,032**

Source: Congressional Budget Office.

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

MERHCF = Department of Defense Medicare-Eligible Retiree Health Care Fund (including TRICARE for Life); n.a. = not applicable;
* = between -$500 million and $500 million.

Continued

Table 5. Continued

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

Billions of Dollars

	Actual, 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total 2020–2024	Total 2020–2029
Offsetting Receipts														
Medicare[h]	-123	-134	-143	-151	-161	-173	-187	-202	-217	-235	-254	-274	-816	-1,999
Federal share of federal employees' retirement														
Social Security	-18	-18	-18	-19	-20	-20	-21	-22	-22	-23	-24	-25	-99	-215
Military retirement	-18	-20	-22	-22	-23	-23	-24	-24	-25	-25	-26	-26	-113	-240
Civil service retirement and other	-36	-37	-39	-41	-42	-44	-46	-47	-49	-50	-52	-53	-212	-463
Subtotal	-72	-75	-79	-82	-85	-88	-90	-93	-96	-99	-102	-104	-424	-918
Receipts related to natural resources[a]	-11	-14	-12	-12	-13	-12	-12	-13	-13	-13	-13	-13	-62	-127
MERHCF	-8	-8	-8	-9	-9	-10	-10	-11	-11	-12	-12	-13	-45	-104
Fannie Mae and Freddie Mac[g]	-13	-24	0	0	0	0	0	0	0	0	0	0	0	0
Other	-32	-28	-31	-33	-33	-32	-31	-44	-32	-32	-22	-21	-159	-310
Subtotal	-259	-284	-273	-287	-301	-315	-331	-362	-369	-390	-404	-426	-1,506	-3,458
Total Mandatory Outlays, Net of Offsetting Receipts[a]	**2,563**	**2,696**	**2,825**	**2,980**	**3,167**	**3,342**	**3,528**	**3,705**	**3,924**	**4,124**	**4,371**	**4,608**	**15,841**	**36,574**
Mandatory Outlays That Are Shifted in CBO's Baseline														
Medicare	-24	0	0	0	38	4	-41	0	0	0	64	-64	n.a.	n.a.
Supplemental Security Income	-4	0	0	0	5	*	-5	0	0	0	5	-5	n.a.	n.a.
Military retirement	-5	0	0	0	5	*	-5	0	0	0	6	-6	n.a.	n.a.
Veterans' programs	-7	0	0	0	10	1	-11	0	0	0	12	-12	n.a.	n.a.
Outer Continental Shelf	*	0	0	0	0	*	*	0	0	0	*	*	n.a.	n.a.
Total	-40	0	0	0	57	5	-63	0	0	0	88	-87	n.a.	n.a.
Total Mandatory Outlays Projected in CBO's Baseline	**2,523**	**2,696**	**2,825**	**2,980**	**3,225**	**3,347**	**3,465**	**3,705**	**3,924**	**4,124**	**4,459**	**4,521**	**15,841**	**36,574**
Memorandum:														
Outlays Adjusted to Remove the Effects of Timing Shifts, Net of Offsetting Receipts														
Medicare[a]	605	630	671	725	788	839	900	964	1,032	1,107	1,195	1,278	3,924	9,500
Major health care programs	1,061	1,111	1,161	1,232	1,324	1,408	1,500	1,599	1,704	1,814	1,941	2,065	6,625	15,749

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

b. Excludes the effects of Medicare premiums and other offsetting receipts. (Net Medicare spending, which includes those offsetting receipts, is shown in the memorandum section of the table.)

c. Consists of outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and provided through the Basic Health Program, as well as spending to stabilize premiums for health insurance purchased by individuals and small employers.

d. Includes Temporary Assistance for Needy Families, Child Support Enforcement, Child Care Entitlements to States, and other programs that benefit children.

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

f. Income security includes veterans' compensation, pensions, and life insurance programs. Most outlays for veterans' health care are classified as discretionary.

g. Cash payments from Fannie Mae and Freddie Mac to the Treasury are recorded as offsetting receipts in 2018 and 2019. Beginning in 2020, CBO's estimates reflect the net lifetime costs—that is, the subsidy costs adjusted for market risk—of the guarantees that those entities will issue and of the loans that they will hold. CBO counts those costs as federal outlays in the year of issuance.

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

coming decade, although it does not return to the higher rates of growth that were experienced previously.

The effects on federal spending of those two long-term trends are already apparent over the 10-year baseline period—especially for Social Security and Medicare—and will continue to grow beyond that period (see Figure 5).

Discretionary Spending. Discretionary spending is funded or controlled through annual appropriations and includes most spending on national defense, elementary and secondary education, housing assistance, international affairs, and the administration of justice, as well as outlays for highways and other programs. Depending on the activity or program, federal outlays that stem from the budget authority provided through appropriations can occur quickly (to pay salaries, for example) or slowly (to pay for long-term research-and-development projects, for example).[6] In any year, some discretionary outlays arise from budget authority provided in the same year, and some arise from appropriations made in previous years.

In CBO's baseline, most discretionary funding is limited by caps on annual budget authority that were originally specified in the Budget Control Act of 2011 (P.L. 112-25) and modified by subsequent legislation. Under current law, separate caps exist for defense and nondefense discretionary budget authority through 2021. For years after 2021, CBO's baseline reflects the assumption that discretionary funding keeps pace with inflation. In addition, some or all of the discretionary funding related to several activities is not constrained by the caps established under the Budget Control Act (as modified). Instead, for most of those activities, the caps are adjusted to accommodate such funding (up to certain limits).[7]

CBO's updated projections of discretionary spending incorporate the full-year appropriations for 2019 that were provided in the Consolidated Appropriations Act, 2019 (P.L. 116-6). If no further appropriations are provided, discretionary funding for 2019 is now estimated to total $1,354 billion (see Table 6).

In CBO's updated baseline, both budget authority and outlays for defense activities increase in 2019 compared with last year's amounts. Defense funding totals $716 billion, $15 billion more than in 2018. In total, excluding the effects of timing shifts, outlays for defense programs in 2019 are estimated to rise by $39 billion (or 6 percent), to $666 billion. As a share of GDP, discretionary defense outlays are projected to total 3.1 percent in 2019, significantly less than the average percentage over the past 50 years (4.6 percent).

For nondefense activities, CBO estimates, funding is lower but outlays are higher in 2019 than in 2018. Budget authority for nondefense activities in 2019 is estimated to total $638 billion, $84 billion less than in 2018. Despite a 12 percent reduction in budget authority, nondefense outlays are projected to increase by $25 billion (or 3.9 percent) this year, as agencies continue to spend the relatively large increases in nondefense funding provided last year. Altogether, nondefense outlays are estimated to total $664 billion this year, or 3.1 percent of GDP, less than the 50-year historical average of 3.8 percent.

In CBO's projections, discretionary budget authority for 2020 and 2021 falls sharply because the statutory limits on most such funding in those years are much lower than they are for the current year. That drop in budget authority causes total discretionary outlays to decrease by 3 percent in 2020 and remain about the same in 2021.

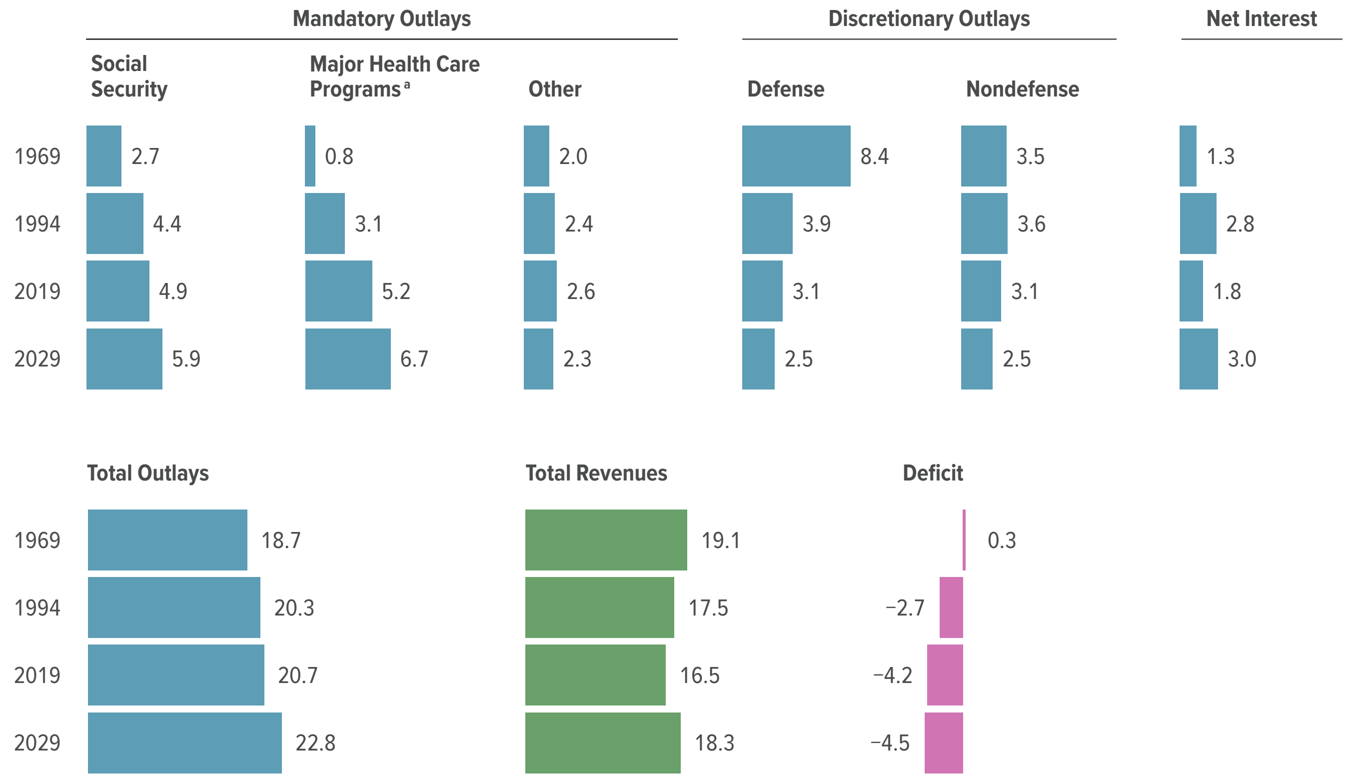
6. Budget authority is authority provided by federal law to incur financial obligations that will result in immediate or future outlays of federal government funds. Budget authority may be provided in an appropriation act or authorization act and may take the form of a direct appropriation of funds from the Treasury, borrowing authority, contract authority, entitlement authority, or authority to obligate and expend offsetting collections or receipts. Offsetting collections and receipts are classified as negative budget authority.

7. Specifically, appropriations designated for overseas contingency operations and activities designated as emergency requirements are assumed to grow with inflation, and the caps would be increased accordingly. For two other activities—disaster relief and certain efforts to reduce overpayments in benefit programs—the extent to which the caps can be adjusted is subject to annual constraints, as specified in law. (Beginning in 2020, funding for wildfire suppression also will lead to an increase in the nondefense caps, subject to specified limits.) In CBO's baseline, funding for those activities is first projected to grow with inflation and, if necessary, adjusted to comply with those annual constraints. CBO follows a similar approach in projecting a portion of funding provided to carry out the 21st Century Cures Act (P.L. 114-255), which requires that discretionary funding for certain authorized activities—up to amounts specified in law—be excluded from calculations of appropriations constrained by the caps. Obligation limitations also are not constrained by the caps on discretionary funding and are assumed to grow with inflation.

Figure 5.

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

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

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

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

They grow by an average of 2 percent a year thereafter—keeping pace with inflation—and total $1.5 trillion in 2029. As a share of GDP, however, discretionary outlays gradually decline from 5.8 percent in 2020 to 5.0 percent in 2029 (excluding the effects of timing shifts). Over the past 50 years, discretionary outlays have never been less than 6.0 percent of GDP, and they have averaged 8.4 percent.

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

In CBO's projections, outlays for net interest increase from $382 billion (or 1.8 percent of GDP) in 2019 to more than double that—$921 billion—by 2029. As a result, under current law, outlays for net interest are projected to reach 3.0 percent of GDP in 2029, 1 percentage point higher than their 50-year average as a share of economic output. The primary factors that affect the

Table 6.

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

Billions of Dollars

	Actual, 2018[a]	2019[a]	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total 2020–2024	Total 2020–2029
Budget Authority														
Defense	701	716	647	662	678	695	712	729	747	765	784	803	3,394	7,224
Nondefense	722	638	568	580	594	609	624	640	656	672	689	706	2,975	6,337
Total	**1,423**	**1,354**	**1,214**	**1,242**	**1,273**	**1,304**	**1,336**	**1,369**	**1,403**	**1,437**	**1,473**	**1,509**	**6,369**	**13,561**
Outlays														
Defense[b]	627	666	648	652	663	675	691	706	723	741	758	777	3,329	7,034
Nondefense	639	664	644	647	651	664	678	693	709	725	742	761	3,283	6,914
Total[b]	**1,266**	**1,330**	**1,292**	**1,299**	**1,313**	**1,340**	**1,368**	**1,399**	**1,432**	**1,466**	**1,501**	**1,538**	**6,613**	**13,948**
Memorandum:														
Caps on Budget Authority Specified in the Budget Control Act (As Amended), Including Automatic Reductions to the Caps														
Defense	629	647	576	590	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nondefense	579	597	543	555	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total	**1,208**	**1,244**	**1,119**	**1,145**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Adjustments to the Caps[c]														
Defense	72	69	70	72	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nondefense	125	24	25	25	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total	**197**	**93**	**95**	**97**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Discretionary Outlays That Are Shifted in CBO's Baseline	-4	0	0	0	5	*	-5	0	0	0	6	-6	n.a.	n.a.

Source: Congressional Budget Office.

CBO's current baseline projections incorporate the assumption that the caps on discretionary budget authority and the automatic enforcement procedures specified in the Budget Control Act of 2011 (as amended) remain in effect through 2021.

Nondefense discretionary outlays are usually greater than budget authority because of spending from the Highway Trust Fund and the Airport and Airway Trust Fund that is subject to obligation limitations set in appropriation acts. The budget authority for such programs is provided in authorizing legislation and is considered mandatory.

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

a. The amount of budget authority for 2018 and 2019 in CBO's baseline does not match the sum of the caps on funding plus adjustments to the caps, mostly because changes to mandatory programs included in appropriation acts for those years (including those assumed to be enacted for 2019) are credited against the caps. In the baseline, those changes (which reduce mandatory budget authority in both years) appear in their normal mandatory accounts.

b. When October 1 (the first day of the fiscal year) falls on a weekend, certain payments—mainly for military pay—that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year.

c. Some or all of the discretionary funding related to five types of activities is not constrained by the caps; for most of those activities, the caps are adjusted to accommodate such funding, up to certain limits. Specifically, appropriations designated for overseas contingency operations and activities designated as emergency requirements are assumed to grow with inflation after 2019, and the caps are adjusted accordingly. For two other activities—disaster relief and certain efforts to reduce overpayments in benefit programs—the extent to which the caps can be adjusted is subject to annual constraints, as specified in law. (Beginning in 2020, funding for wildfire suppression also will lead to an increase in the nondefense caps, subject to specified limits.) Finally, CBO follows a similar approach in projecting a portion of funding to carry out the 21st Century Cures Act (P.L. 114-255), which requires that discretionary funding for certain authorized activities—up to amounts specified in law—be excluded from calculations of the caps.

federal government's net interest costs are the amount of debt held by the public and interest rates on Treasury securities.

The increase in federal borrowing projected in the baseline is the most significant factor affecting the projected growth in net interest costs. In addition, overall interest costs rise as debt that was issued at relatively low rates matures and is reissued at the relatively higher rates in CBO's projection; the average interest rate on debt held by the public would be 3.5 percent in 2029 compared with 2.3 percent in 2018.[8]

Uncertainty in Budget Projections

Even if federal laws remained unchanged for the next decade, actual budgetary outcomes would differ from CBO's baseline projections because of unanticipated changes in economic conditions and in a host of other factors that affect federal spending and revenues. CBO's projections of outlays and revenues and therefore of deficits and debt depend in part on the agency's economic projections for the coming decade, which include forecasts for such variables as interest rates, inflation, and the growth in productivity. Discrepancies between those forecasts and actual economic outcomes can cause significant differences between baseline budget projections and budgetary outcomes. Those differences might also be caused by unanticipated developments such as new trends in spending on health care or a crisis in the financial sector. The agency aims for its projections to be in the middle of the distribution of possible outcomes, given the baseline assumptions about federal tax and spending policies, while recognizing that actual outcomes will typically differ to some degree from any such projections.

Historical experience gives some indication of the magnitude of the uncertainty of budget projections. After an analysis of its past projections, CBO estimates that there is approximately a two-thirds chance that the deficit under current law would be between 3.0 percent and 5.1 percent of GDP in 2020. For 2024, the sixth year of the projection period, the range is larger: CBO estimates that there is approximately a two-thirds chance that the deficit would be between 1.6 percent and 6.7 percent of GDP.

For CBO's debt projections, estimates for the sixth year of a baseline have been much less accurate than budget-year estimates. For projections made since 1984, the average absolute error in budget-year projections of debt held by the public was 1.8 percent of GDP, but the average absolute error in sixth-year projections was 7.4 percent of GDP. That much larger error occurs because errors in the projections of debt tend to compound over time, thereby increasing the uncertainty surrounding those projections. For example, in CBO's baseline, federal debt held by the public is projected to equal 86 percent of GDP in 2024. After analyzing its past projections, CBO estimates that there is approximately a two-thirds chance that, under current law, federal debt would be between 76 percent and 96 percent of GDP in that year.

Alternative Assumptions About Fiscal Policy

CBO's baseline budget projections are intended to show what would happen to federal spending, revenues, and deficits if current laws governing spending and taxes generally remained unchanged. Fiscal policies that differed from those underlying CBO's baseline projections could lead to budget outcomes that are considerably different from those in the baseline.

To assist policymakers and analysts who may hold differing views about the most useful benchmark against which to consider possible changes to laws, CBO has estimated how its budget projections would change under alternative assumptions about future policies. For example, CBO's baseline projections of discretionary spending reflect the assumption that substantial funding cuts will take place in 2020 to comply with the existing caps on discretionary appropriations currently set in law. If those cuts did not occur, outlays would be higher than they are in the baseline. (The amount of that increase would depend on the chosen funding path.) Similarly, CBO's projections of revenues reflect assumptions that substantial tax increases will take place as scheduled under current law. If lawmakers decided to prevent such increases, revenues would be lower than those in the baseline. Lawmakers could also pursue trade policies that differed from those assumed in CBO's baseline,

8. For more information on CBO's latest economic forecast, including projected interest rates, see Congressional Budget Office, *The Budget and Economic Outlook: 2019 to 2029* (January 2019), www.cbo.gov/publication/54918.

resulting in tariffs that were higher or lower than those projections.

Using a selection of those policy alternatives, CBO developed an alternative fiscal scenario that illustrates the effects of deviations from current law that would keep some major current policies in place. Under such an alternative fiscal scenario, far larger deficits and greater debt would result than are shown in CBO's current baseline. Over the 2020–2029 period, deficits would be larger by a total of $4.0 trillion (including debt-service costs), causing cumulative deficits of $15.4 trillion. Debt held by the public would reach about 105 percent of GDP by the end of 2029—just 1 percentage point below the highest percentage ever recorded (106 percent of GDP in 1946).[9]

The Long-Term Outlook for the Budget

Beyond the coming decade, the fiscal outlook is significantly more challenging. Although long-term budget projections are highly uncertain, the aging of the population and growth in per capita spending on health care would almost certainly boost federal outlays significantly relative to GDP after 2029 if current laws generally remained in effect. Federal revenues also would continue to increase relative to GDP under current law, but they would not keep pace with outlays. As a result, CBO estimates, public debt would reach a higher percentage of GDP by 2049 (taking into account the effects on the economy of the rising debt) than has been previously recorded in the United States.[10] Moreover, debt is on track to grow even larger after that. To put debt on a sustainable path, lawmakers will have to make significant changes to tax and spending policies—increasing revenues more than they would under current law, reducing spending for large benefit programs below the projected amounts, or adopting some combination of those approaches.

9. For the budgetary effects of some alternative tax and spending policies, including the alternative fiscal scenario, see the supplemental material that accompanies this report on CBO's website (www.cbo.gov/publication/55151).

10. For more information, see Congressional Budget Office, *The Budget and Economic Outlook: 2019 to 2029* (January 2019), p. 20, www.cbo.gov/publication/54918.

Changes in CBO's Baseline Projections Since January 2019

By CBO's estimate, in the absence of further legislation affecting spending and revenues, the budget deficit for fiscal year 2019 will total $896 billion. That amount is $1 billion smaller than the $897 billion deficit estimate in CBO's January 2019 baseline. CBO's updated baseline projections for the 2020–2029 period show a cumulative deficit that is $0.2 trillion (or 2 percent) smaller than the $11.6 trillion deficit that the agency projected in January (see Table 7).

CBO's updated budget projections are based on the same economic forecast that the agency developed for its January 2019 baseline, and legislation enacted since January has had only a small effect on the budget totals projected for the 2019–2029 period. Therefore, nearly all of the changes that CBO has made to its baseline since January are categorized as technical—revisions that are made for reasons other than revised economic information or the enactment of new laws. Technical changes include, for example, updated estimates of how quickly programs will obligate and expend funds, incorporating year-end data for various program activities; updated population data; and changes related to new administrative actions such as rule changes.

Legislative Changes

Legislation enacted after CBO issued its January 2019 projections had only a modest effect on the agency's projections of revenues and outlays, almost all of which is related to enactment of the Consolidated Appropriations Act, 2019, in February 2019.

Revenues. In CBO's projections, the Consolidated Appropriations Act, 2019, reduces revenues by $124 million in 2019 but raises revenues by $115 million over the 2020–2029 period, largely because of a provision of the new law that affects the timing of remittances from the Federal Reserve to the Treasury.

Outlays. Newly enacted legislation led CBO to increase projected outlays by $5 billion in 2019 and by a total of $16 billion for the 2020–2029 period. Those increased outlays stem almost entirely from enactment of the Consolidated Appropriations Act, 2019, which added $8 billion in discretionary budget authority to the

Table 7.

Changes in CBO's Baseline Projections of the Deficit Since January 2019

Billions of Dollars

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total 2020–2024	Total 2020–2029
Deficit in CBO's January 2019 Baseline	-897	-903	-974	-1,128	-1,139	-1,091	-1,212	-1,204	-1,192	-1,435	-1,370	-5,235	-11,648
Legislative Changes													
Changes in Revenues	*	*	*	*	*	*	*	*	*	*	*	*	*
Changes in Outlays													
Mandatory outlays	*	*	*	*	*	*	*	*	*	*	*	*	1
Discretionary outlays													
Defense	*	*	*	*	*	*	*	*	*	*	*	*	*
Nondefense	4	3	1	*	1	1	1	1	1	1	2	5	11
Subtotal, discretionary	5	3	1	*	1	1	1	1	1	1	2	5	12
Debt service	*	*	*	*	*	*	*	*	*	1	1	1	4
Total Changes in Outlays	5	3	1	1	1	1	1	2	2	2	2	7	16
Increase (-) in the Deficit From Legislative Changes	**-5**	**-3**	**-1**	**-1**	**-1**	**-1**	**-1**	**-1**	**-2**	**-2**	**-2**	**-7**	**-16**
Technical Changes													
Changes in Revenues													
Individual income taxes	-4	-4	-4	-6	-7	-8	-9	-8	-9	-10	-11	-29	-75
Corporate income taxes	0	0	0	0	0	0	0	0	0	0	0	0	0
Payroll taxes	0	0	0	-1	-1	-2	-2	-2	-2	-3	-2	-4	-14
Other	*	-1	-3	-2	*	*	*	1	1	3	5	-5	5
Total Changes in Revenues	-4	-5	-7	-8	-9	-9	-10	-10	-10	-9	-9	-37	-85
Changes in Outlays													
Mandatory outlays													
Social Security	-1	-3	-5	-7	-10	-12	-15	-18	-20	-22	-24	-37	-135
Health insurance subsidies and related spending	1	*	-5	-10	-9	-9	-8	-5	-6	-7	-8	-33	-67
Medicaid	-1	-2	-2	-3	-4	-5	-5	-6	-7	-7	-8	-16	-49
Medicare	-2	-4	1	9	2	-1	1	*	*	1	-17	7	-9
Other	5	-1	-4	-5	-4	-2	-4	-4	-5	-6	-6	-14	-39
Subtotal, mandatory	1	-10	-15	-16	-24	-28	-31	-33	-37	-41	-63	-93	-298
Discretionary outlays	-9	-6	-1	-1	1	*	*	*	*	*	*	-6	-6
Net interest													
Debt service	*	-1	-1	-2	-2	-3	-4	-5	-6	-7	-9	-9	-38
Other	-2	-4	-3	-2	-1	*	*	1	1	1	1	-9	-6
Subtotal, net interest	-2	-4	-4	-3	-3	-3	-4	-4	-5	-6	-8	-18	-45
Total Changes in Outlays	-9	-20	-20	-20	-27	-31	-35	-37	-42	-47	-71	-118	-349
Decrease in the Deficit From Technical Changes	**6**	**15**	**14**	**12**	**18**	**22**	**25**	**27**	**32**	**38**	**62**	**80**	**265**
All Changes													
Total Decrease in the Deficit	**1**	**12**	**12**	**11**	**17**	**21**	**24**	**26**	**30**	**36**	**60**	**73**	**249**
Deficit in CBO's May 2019 Baseline	-896	-892	-962	-1,116	-1,122	-1,071	-1,189	-1,179	-1,162	-1,399	-1,310	-5,162	-11,399
Memorandum:													
Changes in Revenues	-4	-5	-7	-8	-9	-9	-10	-10	-10	-9	-9	-37	-84
Changes in Outlays	-5	-17	-19	-20	-26	-30	-34	-35	-40	-45	-68	-110	-333

Source: Congressional Budget Office.

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

amounts in CBO's January baseline.[11] Legislative changes to mandatory programs increased estimated outlays by $1 billion over the 10-year period.

The net effect of legislative changes on CBO's projections of revenues and outlays led CBO to raise its estimate of debt-service costs by $4 billion over the 2020–2029 period.

Technical Changes

Technical changes—changes other than those directly related to the enactment of new laws or changes to CBO's economic forecast—led CBO to reduce its estimate of the deficit by $6 billion in 2019 and by $265 billion (or 2 percent) over the 2020–2029 period, largely because of lower estimates of mandatory spending.

Outlays. Technical updates to CBO's spending projections resulted in a decrease in estimated outlays of $9 billion for 2019, mostly in discretionary spending, and a decrease of $349 billion for the 2020–2029 period, mostly because of lower projected outlays for Social Security, the major health care programs, and net interest.

Social Security. CBO's 10-year projection of spending for Social Security is $135 billion (or 1 percent) lower than the agency last projected. That change arises largely from a reduction in projected outlays for Old-Age and Survivors Insurance. The availability of more detailed data on the number of beneficiaries and average benefit amounts for calendar year 2018 led CBO to reduce its projections of growth in both caseload and average benefits.

11. CBO's January 2019 baseline projections of discretionary spending were made in mid-December 2018, reflecting laws that were then in place. At that time, only five of the 12 regular annual appropriation acts for 2019 (and one supplemental appropriation for disaster relief) had been enacted, and many federal agencies were operating under a continuing resolution (the Continuing Appropriations Act, 2019, which had been extended through December 21, 2018, by P.L. 115-298). Some agencies experienced a lapse in appropriations when the authorities provided by that continuing resolution (as extended by P.L. 115-298) expired on December 22, 2018. For those agencies, CBO's January baseline projections incorporated the amount of fiscal year 2019 funding that was provided before that expiration, annualized (that is, as if it had been provided for entire fiscal year).

Health Insurance Subsidies and Related Spending. CBO and the staff of the Joint Committee on Taxation (JCT) reduced their projections of outlays for subsidies for health insurance purchased through the marketplaces established under the Affordable Care Act and related spending by $67 billion (or 9 percent), on net, over the 2020–2029 period. That decrease in outlays is mostly related to two factors, each of which explains roughly half of the total change. First, the current projections reflect lower projected premiums for health insurance purchased through the marketplaces in 2021 and later years; the revision is based on additional information about how insurers set premiums for 2019 and lower projections of future growth in health care costs per person. Those lower estimates of premiums led to a reduction in the estimated costs to the government of subsidizing premiums over the 10-year period. Second, the estimated share of the premium tax credits recorded as reductions in tax liability rather than outlays for refundable tax credits has been increased. However, that change is fully offset by a reduction in net receipts (see the discussion below about technical changes to revenue projections).[12]

Medicaid. Technical updates led CBO to lower its 10-year projection of spending for Medicaid by $49 billion (or 1 percent) from January estimates. That reduction is largely the net result of three changes. First, lower projections of enrollment in the Supplemental Security Income (SSI) program reduced projected Medicaid enrollment (because enrollment in SSI confers automatic enrollment in Medicaid). Second, slower projected growth in per capita prescription drug costs reduced projected spending. Third, data on activity in 2018 showed more spending in faster-growing service categories than CBO projected in January, leading the agency to increase its projections of outlays in future years, partially offsetting the reductions described above.

Medicare. For technical reasons, CBO decreased its projection of Medicare outlays by a net of $9 billion (or

12. For more information about CBO's and JCT's projections of subsidies for health insurance purchased through the marketplaces and other related spending and revenues, see Congressional Budget Office, *Federal Subsidies for Health Insurance Coverage for People Under Age 65: 2019 to 2029* (May 2019), www.cbo.gov/publication/55085. (However, that report compares the agencies' current projections with those from May 2018; the changes in projections presented here are relative to January 2019.)

0.1 percent) over the 2020–2029 period. That net reduction is the result of a decrease in spending for Part A (Hospital Insurance) and Part B (Medical Insurance), partly offset by an estimated increase in costs for prescription drugs covered under Part D. Actual spending for the first half of 2019 was less than CBO projected in January; in response, CBO revised downward its projections of Medicare spending for Parts A and B over the next decade by $39 billion (net of offsetting receipts), or less than 0.5 percent. Conversely, CBO increased its estimates of spending for Part D (prescription drug coverage) by $30 billion. That increase includes the effect of a proposed rule that would require the prices pharmacies charge beneficiaries to reflect discounts that pharmacy benefit managers had negotiated for particular drugs.[13]

Discretionary Spending. Because of technical updates, CBO's estimates of discretionary outlays in 2019 are $9 billion smaller than they were previously, and projected outlays over the 2020–2029 period decreased by $6 billion (or less than 1 percent). Those changes generally result from adjustments to better reflect the recent rates at which discretionary budget authority has translated into outlays.

Net Interest. CBO reduced its estimate of net interest outlays by $45 billion (or 0.6 percent) for the 2020–2029 period. Most of that reduction, $38 billion, stems from smaller projections of debt-service costs, because the technical updates to CBO's projections of revenues and outlays, on net, reduced the cumulative deficit. The remaining reduction of $6 billion—less than 0.1 percent—results from a slight increase in the proportion of short-term securities that CBO expects the government to issue to finance future deficits.

Revenues. CBO did not fully update its revenue projections for this baseline; such a revision typically would occur in conjunction with an updated economic forecast, which the agency expects to complete later this year. However, because of revisions to CBO's projections of health insurance coverage, the agency reduced its revenue projections by $4 billion for 2019 and by $85 billion for the 2020–2029 period.

Most significantly, CBO has lowered its projections of collections of penalty payments from employers that do not offer coverage meeting the Affordable Care Act's standards as a result of new data from the Treasury showing less reported penalty liability for 2015 and 2016 than previously projected. That change, along with much smaller revisions to collections for risk adjustment and reinsurance, reduces projected revenues in the category of other miscellaneous receipts by $33 billion over the 2020–2029 period.

In addition, CBO has revised its projections of subsidies for insurance purchased through the marketplaces established under the Affordable Care Act. The estimated share of premium tax credits recorded as reductions in tax liability rather than outlays for refundable tax credits has been increased. That change reduces projections of net receipts from individual income taxes by $33 billion over the 2020–2029 period; the difference in receipts is offset by correspondingly lower outlays for the credits, as discussed above.

CBO and JCT also revised their projections for the effects on the budget of the excise tax on high-premium insurance plans. When that tax goes into effect, it is expected to increase revenues in two ways. First, some health plans will pay the excise tax. Second, the tax is expected to cause some employers and workers to shift to health plans with lower premiums to avoid paying the tax or to reduce their tax liability. Those shifts will generally increase income tax revenues, CBO and JCT estimate, because affected workers will receive less of their income in nontaxable health benefits and more in taxable wages.

Updates to projections of health insurance coverage resulted in an upward revision of $38 billion to gross collections of the excise tax on high-premium insurance plans over the 2020–2029 period, boosting CBO's projections of excise taxes. (That amount is included in the "other" category of revenues in Table 7.) However, CBO and JCT also reduced their estimate of the amount of additional taxable wages that would result from shifts to health plans with lower premiums, reducing income and payroll taxes by $56 billion over the projection period.

13. See Congressional Budget Office, "Incorporating the Effects of the Proposed Rule on Safe Harbors for Pharmaceutical Rebates in CBO's Budget Projections," supplemental material that accompanies this report on CBO's website (www.cbo.gov/publication/55151).

List of Tables and Figures

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About This Document

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

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

Wendy Edelberg, Mark Hadley, Jeffrey Kling, and Robert Sunshine reviewed the report; Rebecca Lanning and Bo Peery edited it; and Jorge Salazar prepared it for publication. An electronic version is available on CBO's website (www.cbo.gov/publication/55151).

Keith Hall
Director
May 2019