unusually small at the end of 2017 and the beginning of 2018 as a result of debt-ceiling constraints.

Second, the government's need for cash to finance new student loans and other credit programs will boost the debt by roughly $80 billion in 2018. The subsidy costs for those credit programs are part of the projected deficit for each year from 2019 to 2028, but the cash outlays needed to finance those programs each year are greater than the net subsidy costs, which are calculated on a present-value basis. (For more information on CBO's treatment of credit programs, see the section titled "Other Mandatory Programs" in Chapter 2.) As a result, CBO estimates that the government will need to borrow between $45 billion and $94 billion more per year during that period than the budget deficits would suggest.

Other Measures of Debt

Three other measures are sometimes used in reference to federal debt:

- *Debt held by the public minus financial assets* subtracts from debt held by the public the value of the government's financial assets, such as student loans. That measure provides a more comprehensive picture of the government's financial condition and its overall effect on credit markets than does debt held by the public. Calculating that measure is not straightforward, however, because neither the financial assets that are included nor the methods for evaluating them are well-defined. Under CBO's baseline assumptions, that measure is about 10 percent smaller than debt alone but varies roughly in line with it.

- *Gross federal debt* consists of debt held by the public and debt held by government accounts (for example, the Social Security trust funds). The latter type of debt does not directly affect the economy and has no net effect on the budget. In CBO's projections, debt held by the public increases by $13.0 trillion between the end of 2018 and the end of 2028, and debt held by government accounts falls by $0.5 trillion, reflecting declines in the balances of many trust funds.[8] As a result, gross federal debt is projected to rise by $12.5 trillion over that period and to total $33.9 trillion at the end of 2028. About 15 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; it differs from gross federal debt mainly in that it excludes most debt issued by agencies other than the Treasury and the Federal Financing Bank and includes certain other adjustments that are excluded from gross debt.[9] Currently, there is no statutory limit on the issuance of new federal debt because the Bipartisan Budget Act of 2018 (P.L. 115-123) suspended the debt ceiling from February 9, 2018, through March 1, 2019. In the absence of any legislative action on the debt limit before the suspension ends, the amount of borrowing accumulated during that period will be added to the previous debt limit of $20.5 trillion on March 2, 2019. In CBO's baseline projections, the amount of outstanding debt subject to limit increases from $21.4 trillion at the end of 2018 to $33.9 trillion at the end of 2028. (For the purpose of those projections, CBO assumes that increases in the statutory ceiling will occur as necessary.)

Alternative Assumptions About Fiscal Policy

CBO's baseline budget projections—which are constructed in accordance with provisions of law—are intended to show what would happen to federal spending, revenues, and deficits if current laws generally remained unchanged. 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 the effects on budgetary projections of some alternative assumptions about future policies (see Table 4-5 on page 90). The discussion below focuses on how those policy actions would directly affect revenues and outlays. (Those estimates do not incorporate any economic effects of changes in fiscal policies relative to current law.) Such changes also would

8. In keeping with the rules in section 257 of the Deficit Control Act, CBO's baseline incorporates the assumption that scheduled payments will continue to be made in full after a trust fund has been exhausted, even though there is no legal authority to make such payments.

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

influence the costs of servicing the federal debt (shown separately in the table).

Emergency Spending

Recently, lawmakers provided $102 billion in nondefense discretionary funding designated as emergency requirements related to Hurricanes Irma, Harvey, and Maria and wildfires in western states.[10] Such funding is not constrained by the caps and, following the rules governing CBO's baseline projections, is assumed to be provided each year, with adjustments for inflation. But those amounts are very large by historical standards. If, instead, lawmakers chose to provide $11 billion—the average annual amount of such funding declared an emergency requirement from 2012 through 2017—each year after 2018, with adjustments for inflation, discretionary outlays would be $577 billion lower between 2019 and 2028 than in CBO's baseline.

Other Discretionary Spending

Policymakers could vary discretionary funding in many ways from the amounts projected in the baseline. For example: If, after 2018, appropriations were to grow each year through 2028 at the same rate as inflation, rather than being constrained by the caps, discretionary spending during that period would be $1.7 trillion higher than it is in CBO's baseline. All told, discretionary outlays under that scenario would fall from 6.4 percent of GDP in fiscal year 2018 to 6.1 percent in 2028. By comparison, in the baseline such spending is projected to end up at 5.4 percent of GDP in 2028.

If, by contrast, lawmakers kept appropriations for 2019 through 2028 at the nominal 2018 amount, total discretionary outlays would be $0.2 trillion lower over that period than in the baseline. Under that scenario (sometimes called a freeze in regular appropriations), total discretionary spending would dip below the amount in CBO's baseline in 2019, exceed baseline amounts between 2020 and 2023, and then again drop below the baseline (by increasing amounts) between 2024 and 2028. That pattern reflects certain assumptions incorporated in CBO's baseline—specifically, that the caps on most new discretionary funding will fall sharply in 2020 (as scheduled under current law) and that such funding will increase with inflation after those caps expire in 2021. In 2028, discretionary outlays under that scenario would decline to 4.9 percent of GDP in 2028.

Revenues

A number of tax provisions have recently expired or are scheduled to expire over the next decade. They include many provisions of the 2017 tax act, most of which expire at the end of 2025 (see Appendix B). The expiring provisions affect major elements of the individual income tax, including provisions that specify tax rates and brackets, the amount of deductions that are allowed, the size and refundability of the child tax credit, and the reach of the alternative minimum tax.[11] In addition, the act's expansion of the estate and gift tax exemption expires at the end of 2025. According to estimates by the staff of the Joint Committee on Taxation (JCT), if those and certain other expiring elements of the 2017 tax act were extended, deficits would be larger than those in CBO's baseline, on net, by $650 billion over the 2019–2028 period (excluding added debt-service costs); most of those effects would occur in 2027 and 2028.

The 2017 tax act also temporarily expanded the ability of businesses to immediately deduct the cost of their investments. That bonus depreciation was expanded to 100 percent of the cost of such investments through 2022; it then phases down over the 2023–2026 period. Extending expensing at 100 percent, thus averting the phasedown, would increase deficits by $122 billion (excluding added debt-service costs) over the 2019–2028 period.

Deficits also would increase if delays in implementing certain taxes established by the Affordable Care Act were extended or made permanent. The Extension of Continuing Appropriations Act, 2018 (P.L. 115-120), temporarily suspended or delayed the medical device excise tax, the excise tax on high-cost employment-based health care coverage, and the annual fee on health insurance providers. Permanently repealing those taxes would reduce revenues by a total of $324 billion over the 2019–2028 period, JCT estimates.

10. Lawmakers have also provided $6 billion in defense funding that was declared an emergency requirement for 2018 and an additional $7 billion in funding designated as disaster funding (as defined in the Budget Control Act of 2011). Both types of funding have been extrapolated in CBO's baseline, although the disaster funding is subject to constraints in future years.

11. The alternative minimum tax is similar to the regular income tax, but its calculation 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.

Table 4-5.

Budgetary Effects of Selected Policy Alternatives Not Included in CBO's Baseline

Billions of Dollars

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total 2019–2023	Total 2019–2028
Policy Alternatives That Affect Discretionary Outlays													
Provide Emergency Nondefense Funding at the Average Historical Amount[a]													
Decrease in the deficit[b]	0	14	30	40	49	58	66	73	79	81	86	192	577
Debt service	0	*	1	2	4	6	8	10	13	16	20	14	82
Increase Discretionary Appropriations at the Rate of Inflation After 2018[c]													
Increase (-) in the deficit[b]	0	-9	-104	-153	-176	-189	-200	-207	-213	-220	-225	-631	-1,696
Debt service	0	*	-2	-7	-14	-21	-27	-33	-40	-48	-59	-44	-252
Freeze Discretionary Appropriations at the 2018 Amount[d]													
Increase (-) or decrease in the deficit[b]	0	10	-56	-68	-52	-27	1	36	72	109	149	-193	175
Debt service	0	*	-1	-3	-6	-7	-7	-7	-5	-2	3	-16	-34
Policy Alternatives That Affect the Tax Code[e]													
Extend Certain Expiring Revenue Provisions													
Extend Certain Provisions of the 2017 Tax Act[f]	0	*	-3	-4	-4	-5	-5	-11	-103	-248	-266	-16	-650
Extend Expensing of Equipment and Property at a Rate of 100 Percent[g]	0	0	0	0	0	-6	-14	-21	-26	-29	-25	-6	-122
Repeal Certain Postponed or Suspended Health Taxes[h]	0	0	-15	-16	-24	-32	-37	-41	-47	-53	-60	-86	-324
Extend Other Expiring Revenue Provisions[i]	-1	-4	-5	-5	-6	-8	-9	-10	-11	-12	-13	-28	-85
Total increase (-) in the deficit[b]	-1	-5	-22	-25	-34	-51	-66	-84	-187	-343	-364	-137	-1,180
Debt service	*	*	-1	-2	-3	-4	-6	-9	-13	-22	-37	-9	-96

Continued

The Bipartisan Budget Act of 2018 extended a number of expiring tax provisions through December 31, 2017. If roughly 30 of those provisions, plus a number of trade programs that are scheduled to expire between 2020 and 2026, were permanently extended, JCT and CBO estimate that revenues would be lower by a total of $85 billion over the 2019–2028 period.

In total, if all of those tax provisions were permanently extended, CBO and JCT estimate, revenues would be lower by a total of $1.2 trillion over the 2019–2028 period.

An Alternative Fiscal Scenario

If a combination of those changes to current law was made so as to maintain major policies that are currently in place and also to provide more typical levels of funding for emergencies, far larger deficits and much greater debt would result than are shown in CBO's current baseline. Relative to the baseline projections for the 2019–2028 period, deficits would be larger by a total of $2.6 trillion (including debt-service costs), causing cumulative deficits of nearly $15 trillion over that period if the following policy decisions were made:

- More than 50 expiring revenue provisions were extended, including the individual income tax provisions of the 2017 tax act.
- Delays in implementing certain taxes established by the Affordable Care Act were extended or made permanent.

Table 4-5. Continued

Budgetary Effects of Selected Policy Alternatives Not Included in CBO's Baseline

Billions of Dollars

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total 2019–2023	Total 2019–2028
					Policy Alternatives That Affect Spending and Revenues								
Changes in Deficits From the Alternative Fiscal Scenario[j]													
Increase (-) in the deficit[b]	-1	*	-96	-138	-160	-182	-200	-218	-321	-481	-503	-576	-2,300
Debt service	*	*	-2	-6	-12	-19	-25	-31	-40	-54	-77	-39	-267
Memorandum:													
Alternative Fiscal Scenario													
Revenues	3,336	3,485	3,656	3,802	3,978	4,177	4,379	4,579	4,802	4,973	5,173	19,097	43,003
Outlays	4,142	4,465	4,761	5,069	5,427	5,650	5,847	6,181	6,484	6,824	7,279	25,372	57,987
Deficit in CBO's April 2018 Baseline	-804	-981	-1,008	-1,123	-1,276	-1,273	-1,244	-1,352	-1,320	-1,316	-1,526	-5,660	-12,418

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

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

a. For this alternative, CBO does not extrapolate the $102 billion in budget authority for nondefense discretionary programs related to Hurricanes Harvey, Irma, and Maria and wildfires in western states that was designated as an emergency requirement. Rather, the alternative incorporates the assumption that such funding will fall to $11 billion in 2019—the average annual amount of nondefense discretionary funding declared an emergency requirement from 2012 through 2017—and will grow at the rate of inflation from that 2019 level.

b. Excludes debt service.

c. These estimates reflect the assumption that appropriations will not be constrained by caps set by the Budget Control Act of 2011 (as amended) and will instead grow at the rate of inflation from their 2018 amount. Discretionary funding related to federal personnel is inflated using the employment cost index for wages and salaries; other discretionary funding is inflated using the gross domestic product price index.

d. This option reflects the assumption that appropriations would generally be frozen at the 2018 level through 2028.

e. The estimates are mainly from the staff of the Joint Committee on Taxation and are preliminary. The estimates include some effects on outlays for refundable tax credits. The option includes the effects of extending several expiring trade provisions that affect customs duties.

f. This alternative incorporates the assumption that lawmakers will permanently extend many provisions of Public Law 115-97 (called the 2017 tax act in this report). Most significantly, this alternative includes extension of the provisions that lower individual income tax rates, expand the income tax base, expand the child credit, reduce the amount of income subject to the alternative minimum tax, and increase the estate and gift tax exemption. It does not incorporate the assumption that the expensing of equipment and property is extended; the effects of that alternative are shown separately.

g. This alternative would extend the provisions that allow businesses with large amounts of investment to expense (immediately deduct from their taxable income) the cost of their investment in equipment and certain other property. Under current law, the portion that can be expensed is 100 percent through 2022, 80 percent in 2023, 60 percent in 2024, 40 percent in 2025, and 20 percent in 2026, after which the provisions expire. The option would extend the 100 percent allowance permanently beyond 2022.

h. This alternative would repeal the health insurance provider tax, the medical device excise tax, and the excise tax on certain health insurance plans with high premiums. All were postponed for either one or two years in the Extension of Continuing Appropriations Act, 2018. The component of the estimate from repealing the high-premium excise tax does not include largely offsetting effects that would result because some people who would otherwise have been enrolled in insurance through Medicaid or the marketplaces established by the Affordable Care Act would instead enroll in employment-based coverage.

i. This alternative would extend about 30 tax provisions that generally expired on December 31, 2017, and were extended by the Bipartisan Budget Act of 2018. It also includes the extension of a number of trade provisions scheduled to expire between 2020 and 2026 that affect customs duties. It does not include an extension of the expensing provisions or a repeal of certain health-related provisions; those effects are shown separately.

j. The alternative fiscal scenario incorporates all of the policy alternatives in this table except the one labeled "Freeze Discretionary Appropriations at the 2018 Amount."

- The caps on discretionary appropriations did not take effect and appropriations instead grew each year from their 2018 amount at the rate of inflation.

- Lawmakers provided $11 billion in appropriations designated as an emergency requirement for nondefense discretionary programs each year between 2019 and 2028 (with adjustments for inflation), rather than the roughly $100 billion a year projected in the baseline.

Under that scenario, revenues from 2019 through 2028 would average 17.0 percent of GDP, almost 0.5 percentage points below their 50-year average, and outlays would average 23.0 percent, roughly 3 percentage points above their 50-year average. Deficits would average nearly 6 percent of GDP through 2028, a full percentage point higher than under CBO's baseline. Debt held by the public would reach about 105 percent of GDP by the end of 2028—the largest share since 1946—and would rise even more sharply in subsequent decades.