

The Revenue Outlook

Overview

In the Congressional Budget Office's baseline projections, which incorporate the assumption that current laws generally remain unchanged, total revenues rise by 5.6 percent in 2019, to just over \$3.5 trillion. As a percentage of gross domestic product (GDP), revenues are expected to rise slightly this year but to remain below the average of 17.4 percent of GDP recorded over the past 50 years (see Figure 4-1). Over the next decade, revenues are projected to rise markedly—reaching a share of the nation's economic output that is almost 1 percentage point higher than the long-term average.

What Key Factors Explain Changes in Revenues Over Time?

Although revenues declined as a percentage of GDP between 2017 and 2018—from 17.2 percent in 2017 to 16.4 percent in 2018—CBO projects that, under current law, receipts would rise over the next decade, reaching 18.3 percent of GDP in 2029. The decline in receipts in 2018 resulted from the enactment in December 2017 of Public Law 115-97, referred to in this report as the 2017 tax act. That law made many significant changes to the individual and corporate income tax systems. Those changes, on net, lowered taxes owed by most individuals and businesses beginning in calendar year 2018.

Following that decline, CBO expects receipts to begin to rise again in 2019, growing slightly relative to the size of the economy, to 16.5 percent of GDP. After 2019, revenues are projected to continue to rise steadily through 2025, reaching 17.4 percent of GDP in 2025. In CBO's baseline, receipts 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. 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 the following movements among sources of revenues:

- *Individual income tax receipts* are projected to rise sharply between 2025 and 2027, following the expiration of temporary provisions enacted in the 2017 tax act, including lower statutory tax rates. In addition to those expirations, other factors are expected to cause receipts to grow throughout the next decade, primarily because 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.
- *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.

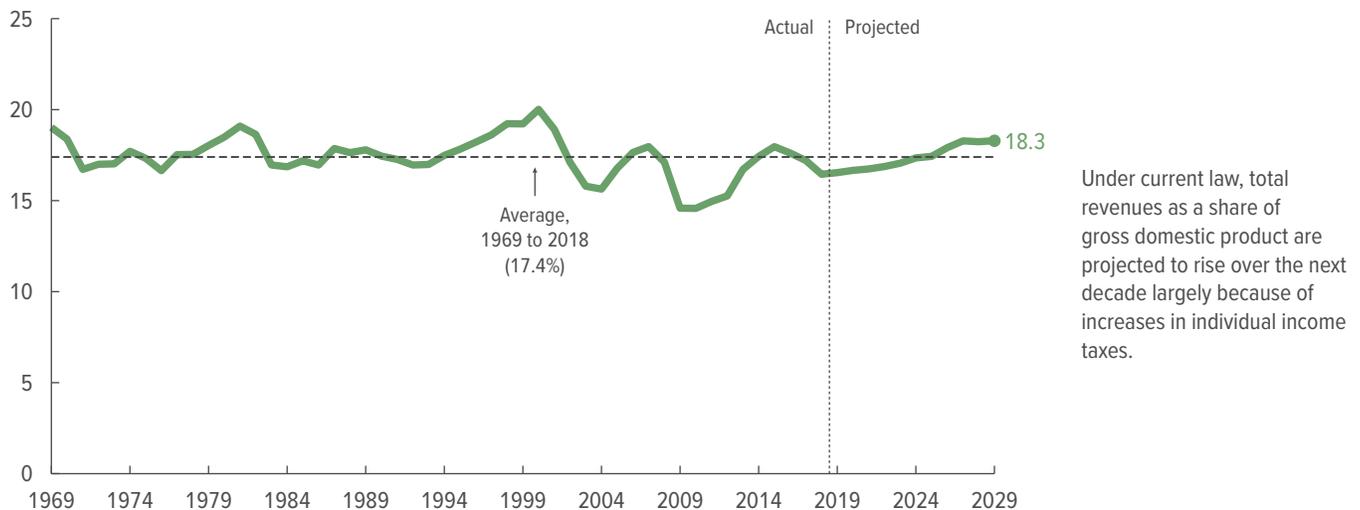
How Have CBO's Projections Changed Since the Spring of 2018?

CBO's revenue projections for the 2019–2028 period are lower than those the agency released in the spring of 2018 (that is, in CBO's adjusted April baseline). At that time, CBO published revenue projections for the 2018–2028 period; the projections in this report cover the 2019–2029 period. For the overlapping years—2019 through 2028—the current projections are below the

Figure 4-1.

Total Revenues

Percentage of Gross Domestic Product



Under current law, total revenues as a share of gross domestic product are projected to rise over the next decade largely because of increases in individual income taxes.

Source: Congressional Budget Office.

previous ones by \$173 billion (or 0.4 percent). That reduction stems from a number of technical revisions, which lowered projected receipts, on net. Although new tariffs imposed by the Administration during the past year boost projected receipts from customs duties, those increases are more than offset by lower projections of individual income, corporate income, and payroll taxes stemming from new data about past income and taxes. Those downward revisions are partially offset by changes to the agency's economic forecast, primarily to projections of GDP and the types of income that comprise GDP, such as wages and salaries, corporate profits, and proprietors' income. (For more information on changes to CBO's revenue projections since the spring of 2018, see Appendix A.)

How Much Revenue Is Forgone Because of Tax Expenditures?

The tax rules that form the basis of CBO's projections include an array of exclusions, deductions, preferential rates, and credits that reduce revenues for any given level of tax rates in both the individual and corporate income tax systems. Some of those provisions are called tax expenditures because, like government spending programs, they provide financial assistance for particular activities as well as to certain entities or groups of people.

Tax expenditures have a major impact on the federal budget. CBO estimates that in fiscal year 2019, the more than 200 tax expenditures in the income tax system will total more than \$1.6 trillion, including their effects on individual income, payroll, and corporate income taxes. That amount would equal 7.8 percent of GDP—almost half of all federal revenues received in that year.

How Uncertain Are CBO's Revenue Projections?

Revenue projections are inherently uncertain, and the agency attempts to construct its projections so that they fall in the middle of the distribution of possible outcomes. CBO's revenue projections in recent decades have, on average, been too high, owing mostly to the difficulty of forecasting when economic downturns will occur. Since 1982, the mean absolute error—that is, the average of all errors without regard for whether they were positive or negative—was about 5 percent for CBO's budget-year projections and 10 percent for the sixth-year projections. However, the overall accuracy of those projections has been similar to that of projections produced by others.

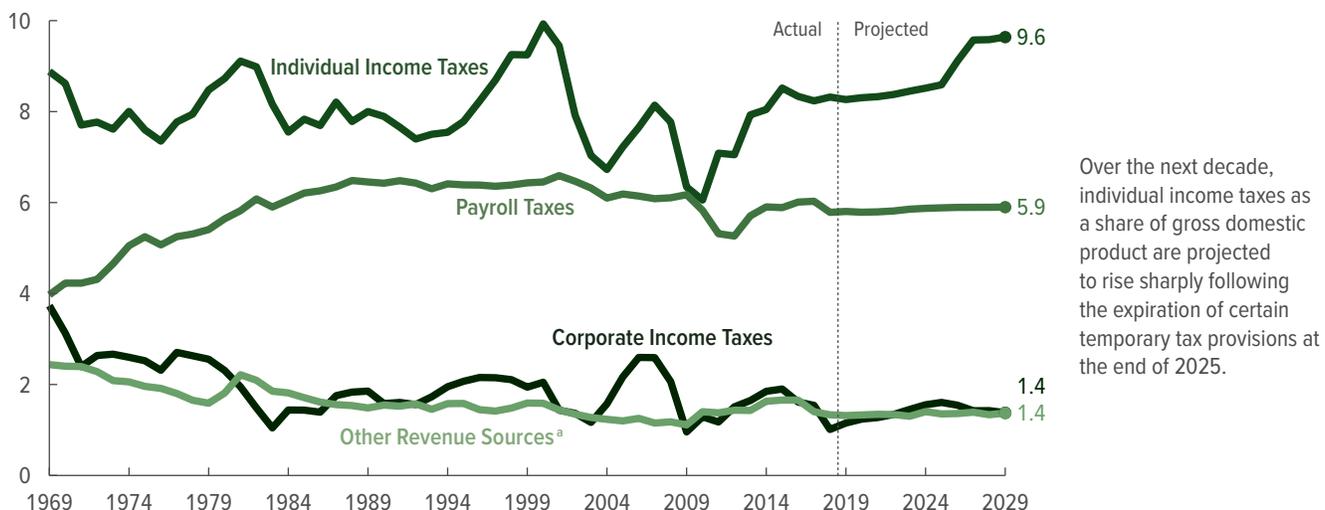
The Evolving Composition of Revenues

Federal revenues come from various sources: individual income taxes; payroll taxes, which are dedicated to certain social insurance programs; corporate income taxes;

Figure 4-2.

Revenues, by Major Source

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

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

excise taxes; earnings of the Federal Reserve System, which are remitted to the Treasury; customs duties; estate and gift taxes; and miscellaneous fees and fines. Individual income taxes constitute the largest source of federal revenues, having contributed, on average, about 46 percent of total revenues (equal to 8.0 percent of GDP) over the past 50 years. Payroll taxes—mainly for Social Security and Medicare Part A (the Hospital Insurance program)—are the second-largest source of revenues, averaging 34 percent of total revenues (equal to 5.9 percent of GDP) over the same period. Corporate income taxes constituted 11 percent of revenues (or 1.9 percent of GDP) over the past 50 years, and all other sources combined accounted for about 9 percent of revenues (or 1.6 percent of GDP).

Although that broad picture has remained roughly the same over the past several decades, the details have varied.

- Receipts from individual income taxes have fluctuated significantly over the past five decades, ranging from 42 percent to 51 percent of total revenues (and from 6.1 percent to 9.9 percent of GDP) between 1969 and 2018. Those fluctuations are attributable to changes in the economy and changes in law over that

period but show no consistent trend over time (see Figure 4-2).

- Receipts from payroll taxes rose as a share of revenues from the 1960s through the 1980s—largely because of an expansion of payroll taxes to finance the Medicare program (which was established in 1965) and because of legislated increases in tax rates for Social Security and in the amount of income to which those taxes applied. Those receipts accounted for about 37 percent of total revenues (and about 6.5 percent of GDP) by the late 1980s. Since 2001, payroll tax receipts have fallen slightly relative to the size of the economy, averaging 6.0 percent of GDP. That period includes two years, 2011 and 2012, when receipts fell because certain payroll tax rates were temporarily cut.
- Revenues from corporate income taxes declined as a share of total revenues and GDP from the 1960s to the mid-1980s, mainly because profits declined relative to the size of the economy. Those revenues have fluctuated widely since then, the result both of changes in the economy and changes in law, with no consistent trend observed.

- Revenues from the remaining sources, particularly excise taxes, have slowly fallen relative to total revenues and GDP. However, that downward trend has reversed in the past several years because of the increase in remittances from the Federal Reserve System and more receipts from fees and fines.

If current tax laws generally remained in effect—an assumption underlying CBO’s baseline—individual income taxes would generate a growing share of revenues and account for most of the projected increase in revenues as a share of GDP over the next decade, CBO projects. By 2029, they would reach 9.6 percent of GDP, an amount that was exceeded only once over the past 50 years and that is well above the average of 8.0 percent over that period. Receipts from payroll taxes are projected to remain relatively stable over the next decade, rising gradually from 5.8 percent in 2018 to 5.9 percent by 2029. Corporate income taxes would make a slightly smaller contribution than they have made on average for the past 50 years, supplying about 8.0 percent of total revenues and averaging about 1.4 percent of GDP over the 2019–2029 period. Taken together, the remaining sources of revenue are projected to average about 1.4 percent of GDP from 2019 through 2029, slightly more than their percentage in 2018.

Individual Income Taxes

In 2018, receipts from individual income taxes totaled nearly \$1.7 trillion, or 8.3 percent of GDP. Under current law, individual income taxes are expected to rise by 4 percent, to over \$1.7 trillion in 2019, CBO projects. That percentage increase would be slightly smaller than the 5 percent increase expected for nominal GDP, and individual income tax receipts would remain close to 8.3 percent of GDP. The projected stability in individual income tax receipts as a share of the economy in 2019 reflects offsetting factors. Changes in tax law, enacted in December of 2017, reduced receipts in 2018 and are estimated to further reduce receipts relative to GDP by 0.3 percentage points in 2019, the first full fiscal year following enactment. However, those changes are offset by other factors in 2019, including real bracket creep.

CBO projects that, if current laws remained unchanged, individual income tax receipts would rise by 1.4 percentage points as a share of economic output over the next decade (see Table 4-1). More than two-thirds of that projected increase results from the expiration of provisions

of the 2017 tax law that have temporarily lowered receipts relative to taxable personal income. The remainder results from real bracket creep and other factors.

Expiration of Temporary Tax Provisions After 2025

The most significant factor pushing up taxes relative to income is the scheduled expiration, after tax year 2025, of nearly all the individual income tax law changes made by the 2017 tax act. The provisions that are scheduled to expire include lower statutory tax rates, the higher standard deduction, the repeal of personal exemptions, and the expansion of the child tax credit. Those expirations would cause tax liabilities to rise in calendar year 2026, boosting receipts in subsequent fiscal years. CBO projects that the expiration of those tax provisions would boost individual income tax receipts relative to GDP by 0.8 percentage points over the next decade (see Figure 4-3). (For estimates of the effect on the budget of extending those and other temporary tax provisions, see Chapter 5.)

Real Bracket Creep and Related Factors

The next most significant factor increasing taxes relative to income arises from the way certain parameters of the tax system are scheduled to change over time in relation to growth in income, which reflects the effects of both real (inflation-adjusted) economic activity and inflation. The most important component of that effect, real bracket creep, occurs because income tax brackets are indexed to inflation. If income grows faster than inflation, as generally occurs when the economy is growing, more income is pushed into higher tax brackets. In addition to the income thresholds for tax brackets, many other parameters of the tax system are indexed to inflation, including the amounts of the standard deduction and of certain tax credits, such as the earned income tax credit. Still other parameters of the tax system, including the amount of the child tax credit, are fixed in nominal dollars and are not adjusted for inflation. Together, those factors cause projected revenues measured as a percentage of GDP to rise in CBO’s baseline by 0.5 percentage points from 2019 to 2029. (Beginning in 2018, the measure of inflation used to index many parameters of the tax system changed to an alternative measure that grows more slowly. Consequently, for a given amount of inflation in the economy, the effect of real bracket creep and related factors will tend to be slightly greater than in previous years.)

Table 4-1.

CBO's Baseline Projections of Revenues

	Actual, 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
													2020– 2024	2020– 2029
In Billions of Dollars														
Individual Income Taxes	1,684	1,756	1,837	1,910	1,992	2,085	2,184	2,290	2,521	2,752	2,861	2,989	10,007	23,420
Payroll Taxes	1,171	1,233	1,280	1,330	1,383	1,444	1,506	1,568	1,631	1,694	1,761	1,830	6,943	15,426
Corporate Income Taxes	205	245	274	292	319	358	399	428	427	409	426	428	1,642	3,760
Other														
Excise taxes	95	98	108	111	114	106	133	123	127	132	119	137	571	1,208
Federal Reserve remittances	71	50	47	52	58	63	70	75	80	81	87	89	290	703
Customs duties	41	74	79	82	85	88	90	93	97	100	102	105	424	921
Estate and gift taxes	23	17	18	19	20	21	22	23	24	36	39	42	100	265
Miscellaneous fees and fines	40	41	43	44	42	43	45	46	48	50	51	53	217	467
Subtotal	270	280	294	308	318	321	360	361	377	400	399	426	1,602	3,564
Total	3,329	3,515	3,686	3,841	4,012	4,208	4,448	4,647	4,956	5,254	5,446	5,672	20,195	46,170
On-budget	2,474	2,613	2,745	2,862	2,997	3,153	3,350	3,506	3,770	4,023	4,168	4,345	15,108	34,921
Off-budget ^a	855	902	940	978	1,015	1,055	1,098	1,141	1,185	1,231	1,278	1,327	5,087	11,249
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														
Individual Income Taxes	8.3	8.3	8.3	8.3	8.4	8.4	8.5	8.6	9.1	9.6	9.6	9.6	8.4	8.9
Payroll Taxes	5.8	5.8	5.8	5.8	5.8	5.9	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														
Excise taxes	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5
Federal Reserve remittances	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Customs duties	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3
Estate and gift taxes	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Miscellaneous fees and fines	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Subtotal	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	16.4	16.5	16.7	16.7	16.9	17.1	17.3	17.4	17.9	18.3	18.2	18.3	16.9	17.5
On-budget	12.2	12.3	12.4	12.5	12.6	12.8	13.1	13.2	13.6	14.0	14.0	14.0	12.7	13.3
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

Source: Congressional Budget Office.

a. Receipts from Social Security payroll taxes.

Other Factors

CBO anticipates that over the next decade, other factors would have smaller and partially offsetting effects on individual income tax revenues, boosting those receipts by 0.1 percent of GDP, on net. One factor underlying that increase is projected growth in taxable components of personal income in relation to growth in GDP. (That measure of income includes wages, salaries, dividends, interest, rental income, and proprietors' income—each of which is defined by the Bureau of Economic Analysis

for use in its national income and product accounts.)

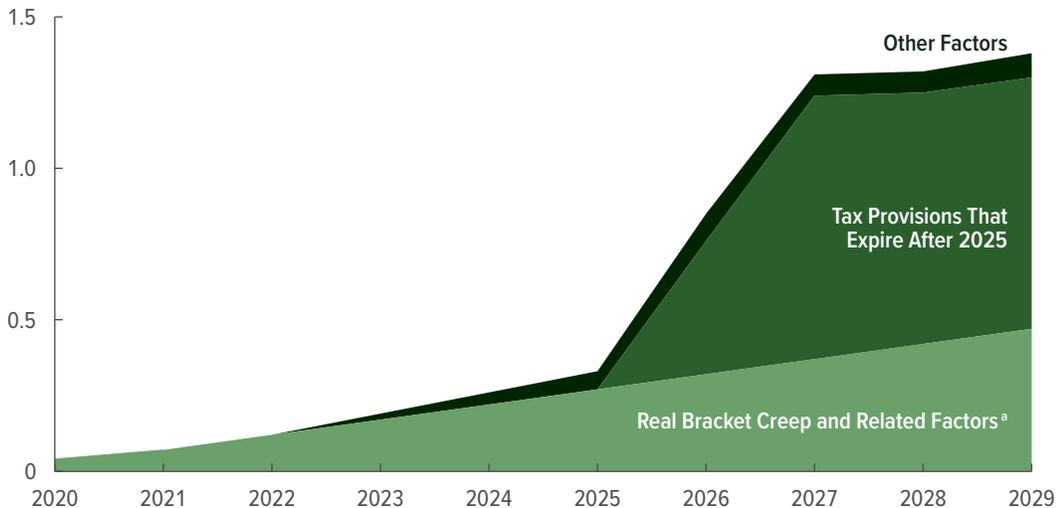
According to CBO's projections, taxable personal income would grow at a rate of 4.0 percent per year over the next decade, largely as a result of increases in wages and salaries. That income growth is faster than the expected growth in nominal GDP and would boost receipts relative to GDP by 0.1 percentage point.

In CBO's baseline projections, earnings from wages and salaries are expected to increase faster for people

Figure 4-3.

Growth of Individual Income Tax Receipts in CBO's Baseline Projections

Percentage of Gross Domestic Product



Individual income tax revenues are projected to rise sharply following the expiration of certain temporary provisions of the 2017 tax act at the end of 2025.

Source: Congressional Budget Office.

a. Real bracket creep is the process in which, as income rises faster than inflation, an ever-larger proportion of income becomes subject to higher tax rates.

with higher earnings than for others during the next decade—as has been the case for the past several decades. That faster growth in earnings for people with higher wages and salaries would push a larger share of income into higher tax brackets and boost estimated individual income tax revenues relative to GDP by about 0.1 percentage point; that increase would be partially offset by a projected decrease in payroll tax receipts, as explained in the section about payroll taxes.¹

Furthermore, as the population continues to age, taxable distributions from tax-deferred retirement accounts will tend to grow more rapidly than GDP. CBO expects the retirement of members of the baby-boom generation to cause a gradual increase in distributions from tax-deferred retirement accounts, including individual retirement accounts, 401(k) plans, and traditional

defined benefit pension plans. Under current law, CBO projects, those growing taxable distributions would boost revenues relative to GDP by 0.1 percentage point over the next decade.

Finally, in addition to the individual tax provisions that are scheduled to expire after 2025, rules allowing accelerated depreciation deductions for certain business investments are scheduled to phase out between 2022 and 2027. That expiration would not affect corporations alone; it would also affect noncorporate businesses, whose owners' business income is subject to the individual income tax, boosting receipts by 0.1 percent of GDP by 2029.

In the other direction, a decline in realizations of capital gains would lower receipts relative to GDP over the next decade, CBO estimates. Those realizations have been relatively high recently, and CBO anticipates that they will slowly return to levels consistent with their historical average share of GDP (after accounting for differences in applicable tax rates). That anticipated decline in those realizations relative to the size of the economy—most of which occurs in CBO's baseline over the 2020–2025 period—would reduce individual

1. CBO projects that the shares of overall taxable income accruing to taxpayers at different points in the income distribution will remain mostly unchanged over the next decade despite the rising share of earnings going to higher-income taxpayers. In addition to wages and salaries, taxable income includes income from Social Security benefits and pensions, which are more broadly distributed, as well as income from investments and business activity, which tend to accrue to higher-income taxpayers.

Table 4-2.

CBO's Baseline Projections of Payroll Tax Revenues

Billions of Dollars

	Actual,												Total	
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020–2024	2020–2029
Social Security	855	902	940	978	1,015	1,055	1,098	1,141	1,185	1,231	1,278	1,327	5,087	11,249
Medicare	261	278	292	305	317	330	344	359	374	389	406	423	1,587	3,537
Unemployment Insurance	45	43	37	35	38	46	50	54	56	58	61	63	207	499
Railroad Retirement	6	6	6	6	6	6	7	7	7	7	7	7	31	66
Other Retirement ^a	5	5	5	6	6	7	7	8	8	9	9	10	30	74
Total	1,171	1,233	1,280	1,330	1,383	1,444	1,506	1,568	1,631	1,694	1,761	1,830	6,943	15,426

Source: Congressional Budget Office.

a. Consists largely of federal employees' contributions to the Federal Employees Retirement System and the Civil Service Retirement System.

income taxes relative to GDP by about 0.3 percentage points.²

Payroll Taxes

Receipts from payroll taxes, which fund social insurance programs, totaled about \$1.2 trillion in 2018, or 5.8 percent of GDP. In CBO's projections, those receipts remain at 5.8 percent of GDP in 2019 and slowly rise to 5.9 percent of GDP in 2029. The yearly growth in payroll taxes as a percentage of GDP from 2019 through 2029 is consistent with growth in wages as a share of GDP over that period.

Sources of Payroll Tax Receipts

The two largest sources of payroll taxes are those that are dedicated to Social Security and Medicare Part A. Much smaller amounts come from unemployment insurance taxes (most of which are imposed by states but produce amounts that are classified as federal revenues); employers' and employees' contributions to the Railroad Retirement system; and other contributions to federal retirement programs, mainly those made by federal employees (see Table 4-2). The premiums that Medicare enrollees pay for Part B (Medical Insurance) and Part D (prescription drug benefits) are voluntary payments and thus are not counted as tax revenues; rather, they are considered offsets to spending and appear on the spending side of the budget as offsetting receipts.

Social Security and Medicare payroll taxes are calculated as a percentage of a worker's earnings. Almost all workers

are employed in jobs covered by Social Security, and the associated tax is usually 12.4 percent of earnings, with the employer and employee each paying half. It applies only up to a certain amount of a worker's annual earnings (that amount, which is indexed to growth in average earnings for all workers, is \$132,900 in 2019). The Medicare tax applies to all earnings (with no taxable maximum) and is levied at a rate of 2.9 percent; the employer and employee each pay half of that amount. An additional Medicare tax of 0.9 percent is levied on the amount of an individual's earnings over \$200,000 (or \$250,000 for married couples who file a joint income tax return), bringing the total Medicare tax on such earnings to 3.8 percent.

Projected Receipts

Payroll taxes in CBO's baseline rise as a share of GDP from 2019 through 2029 because wages and salaries, the main tax bases for those taxes, are projected to rise as a share of GDP, from 43.0 percent in 2019 to 43.9 percent in 2029. Partially offsetting that increase in wages and salaries is a small expected increase in the share of earnings above the taxable maximum amount for Social Security taxes. That share is projected to rise from 19 percent in 2019 to 20 percent in 2029 because earnings from wages and salaries are expected to increase faster for people with higher earnings than for others during the next decade.³

2. Additional detail on CBO's projections of realizations of capital gains are included with the supplemental materials that accompany this report at www.cbo.gov/publication/54918.

3. Because of the progressive rate structure of the income tax, the increase in the share of earnings above the Social Security taxable maximum is projected to produce an increase in individual income tax receipts that will more than offset the decrease in payroll tax receipts.

In addition, receipts from unemployment insurance taxes are projected to decline slightly relative to wages and salaries and GDP between 2018 and 2021. Those receipts grew rapidly from 2010 through 2012, as states raised their tax rates and expanded their tax bases to replenish unemployment insurance trust funds that had been depleted because of high unemployment following the recession that began in 2008. Unemployment insurance receipts have fallen in each year since 2012, and CBO expects the pattern of decline to continue in the near future, although many states will need to increase revenues in the future in order to maintain historic ratios of trust fund balances relative to wages and salaries.

Corporate Income Taxes

In 2018, receipts from corporate income taxes totaled \$205 billion, or 1.0 percent of GDP. CBO expects corporate tax receipts to rise by \$40 billion in 2019, to 1.2 percent of GDP. After 2019, in CBO's baseline projections, those receipts rise through 2025, reaching 1.6 percent of GDP. After 2025, receipts begin to decline, falling to 1.4 percent of GDP from 2027 through 2029. That pattern reflects several factors, including an anticipated recovery from unexplained weakness in recent receipts, the varying effects on receipts of the 2017 tax act over time (including the phaseout of the full-expensing provisions), and a projected decline in domestic economic profits relative to GDP over the next decade.

Receipts in 2019

CBO expects corporations' income tax payments, net of refunds, to increase by \$40 billion (or 20 percent) in 2019, to \$245 billion. That increase is larger than the projected increases in domestic economic profits and GDP in that year; they are projected to grow by 10 percent and 5 percent, respectively. Consequently, those revenues are projected to increase relative to both profits and GDP.

The projected increase in corporate income tax receipts relative to domestic economic profits in 2019 results in part from provisions of the 2017 tax act. One effect of the reduction in January 2018 of the corporate tax rate to 21 percent was an incentive for some firms to accelerate expenses. By accelerating expenses, such as employee compensation, they could claim deductions at higher tax rates, thus lowering their tax liabilities in fiscal year 2018. That opportunity, which probably temporarily reduced corporate receipts in 2018, no longer exists.

Receipts After 2019

In CBO's baseline projections, receipts from corporate income taxes rise as a share of GDP, on net, by 0.2 percentage points between 2019 and 2029. Two factors cause receipts to rise as a share of GDP relative to 2019. First, corporate tax receipts, which for the past several years were lower than can currently be explained by available data, are projected to recover. Second, the full-expensing provisions of the 2017 tax act are scheduled to phase out by 2027. Those factors are partially offset by two other factors that each work to lower the share by 2029: the net effect of other provisions of the 2017 tax act, most significantly the onetime tax on previously untaxed foreign profits, and an expected decline in domestic economic profits relative to GDP.

Temporary Weakness in 2017 and 2018 Tax Collections.

Corporate tax collections in 2017 and early 2018 were weaker than can be explained by currently available data on business activity. CBO anticipates that factors responsible for that weakness (which will not become apparent until information from tax returns becomes available over the next two years) will gradually dissipate over the next several years. Recovery from that temporary decline in receipts would increase projected tax revenues as a share of GDP by about 0.3 percentage points from 2020 through 2029.

Phaseout of Full-Expensing Provisions. For more than a decade, temporary but repeatedly extended provisions have allowed businesses to immediately deduct from their taxable income a higher fraction of their expenses for investment in equipment than would have been allowed if those provisions had expired. For tax years 2013 through 2017, companies were permitted to immediately deduct 50 percent of such investments. Beginning in the fourth quarter of 2017, businesses could fully expense equipment purchased and put into service through the end of 2022, after which the share of investments that businesses are allowed to immediately expense falls to 80 percent in 2023, 60 percent in 2024, 40 percent in 2025, and 20 percent in 2026. At that point, those "bonus depreciation" provisions are scheduled to expire. In CBO's baseline, the phaseout causes the associated deductions to decline relative to the size of the economy, boosting taxable income and raising corporate tax receipts as a share of GDP by 0.2 percentage points.

Other Provisions of the 2017 Tax Act. The 2017 tax act included a number of other provisions that will affect corporate taxes over time. Those provisions include a onetime tax on previously untaxed foreign profits, the last payment for which is due in 2026, as well as scheduled changes to the way in which businesses calculate tax liability over the next decade. On net, those provisions are expected to reduce corporate receipts as a share of GDP by 0.1 percentage point over the next decade.

Beginning in 2018, businesses are required to pay a new onetime tax on previously untaxed foreign profits, also known as deemed repatriation. Taxes on those earnings, which are based on the value of those profits as of late 2017 (and which are unrelated to future business activity), can be paid in installments over the next eight years. Because the required installments are not equal in size, the effect of those receipts in CBO's baseline varies over the 2018–2026 period. As a result, those payments are projected to boost receipts to varying degrees from 2019 through 2026 but not in subsequent years, thereby contributing to the reduction in receipts in relation to GDP through 2029.

Partially offsetting the end of the payments for the onetime tax on previously untaxed foreign profits are provisions that will change the way in which businesses calculate their tax liability over the next decade. Among those provisions is a change to the calculation of income that is attributable to the new limits on the deductibility of interest expenses, which occurs in 2022. Also in 2022, firms will be required to capitalize and amortize certain expenditures for research and experimentation as they are incurred over a five-year period, rather than immediately deducting them. The effects of those provisions increase revenues in CBO's baseline after 2022. The rules related to the taxation of profits abroad will also change in 2026, boosting revenues in subsequent years. Provisions that have changing rules include the tax on Global Intangible Low-Taxed Income, the deduction for Foreign-Derived Intangible Income, and the Base Erosion and Anti-Abuse Tax.⁴

Decline in Domestic Economic Profits Relative to GDP. CBO projects that domestic economic profits will decline relative to GDP over the next decade. They are expected to decline in part because of rising labor costs

and rising interest payments on businesses' debt over the next several years. By itself, the anticipated decline in profits causes projected corporate income tax revenues in CBO's baseline to fall relative to GDP by about 0.1 percentage point over the next decade.

Smaller Sources of Revenues

The remaining sources of federal revenues are excise taxes, remittances from the Federal Reserve System to the Treasury, customs duties, estate and gift taxes, and miscellaneous fees and fines. Revenues from those sources totaled \$270 billion in 2018, or 1.3 percent of GDP (see Table 4-3). In CBO's projections, those receipts remain at 1.3 percent of GDP in 2019 as a result of offsetting movements in customs duties and remittances from the Federal Reserve. Customs duties, which have remained close to 0.2 percent of GDP for the past two decades are projected to rise above 0.3 percent of GDP as a result of new tariffs imposed by the Administration during the past year. Remittances from the Federal Reserve, which averaged 0.5 percent of GDP in the years following the 2008 financial crisis, are expected to decline and move closer to amounts observed before the crisis.

CBO projects that, under current law, receipts from those smaller sources of revenues would remain between 1.3 percent and 1.4 percent of GDP from 2019 through 2029. The small changes over that period result mostly from changes in the amounts received in remittances from the Federal Reserve and from changes in estate and gift taxes.

Excise Taxes

Unlike taxes on income, excise taxes are levied on the production or purchase of a particular type of good or service. In CBO's baseline projections, over 90 percent of excise tax receipts come from taxes related to highways, health care, tobacco and alcohol, and aviation.

Excise tax revenues are projected to rise from \$98 billion in 2019 to \$137 billion in 2029. Nevertheless, declines are expected to occur in some years because of the timing of payments of the health insurance providers' fee. In addition, taxes on gasoline and tobacco would continue to decline over the 10-year period. Excise taxes are projected to decrease slightly as a share of GDP, from 0.5 percent in 2019 to 0.4 percent in 2029, primarily because many excise taxes are imposed as a fixed dollar amount per unit sold and the number of units is growing slowly or declining.

4. For additional explanation of tax provisions included in the 2017 tax act, see Congressional Budget Office, *The Budget and Economic Outlook: 2018 to 2028* (April 2018), pp. 108–110, www.cbo.gov/publication/53651.

Table 4-3.

CBO's Baseline Projections of Smaller Sources of Revenues

Billions of Dollars

	Actual,												Total	
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020–2024	2020–2029
Excise Taxes														
Highway	41	42	42	42	41	41	41	41	41	41	41	41	207	410
Health care	9	12	21	23	25	17	44	33	36	41	26	44	129	309
Aviation	16	17	18	18	19	20	20	21	22	22	23	24	95	208
Tobacco	13	13	13	13	12	12	12	12	11	11	11	11	62	118
Alcohol	8	9	9	11	11	11	11	11	12	12	12	12	53	113
Other	6	5	5	5	5	5	5	5	5	5	5	5	25	51
Subtotal	95	98	108	111	114	106	133	123	127	132	119	137	571	1,208
Federal Reserve Remittances	71	50	47	52	58	63	70	75	80	81	87	89	290	703
Customs Duties	41	74	79	82	85	88	90	93	97	100	102	105	424	921
Estate and Gift Taxes	23	17	18	19	20	21	22	23	24	36	39	42	100	265
Miscellaneous Fees and Fines														
Universal Service Fund fees	9	9	10	10	10	10	11	11	11	11	11	11	52	107
Other fees and fines	30	32	33	34	32	33	34	36	38	39	40	42	165	360
Subtotal	40	41	43	44	42	43	45	46	48	50	51	53	217	467
Total	270	280	294	308	318	321	360	361	377	400	399	426	1,602	3,564

Memorandum:

Projected revenues from excise taxes that are assumed to be extended after expiration

0	0	1	1	1	35	55	56	56	57	58	59	93	379
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Source: Congressional Budget Office.

This table shows all projected sources of revenues other than individual and corporate income taxes and payroll taxes.

In general, CBO's baseline reflects the assumption that expiring tax provisions will follow the schedules set forth in current law. However, the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99–177) requires that CBO's baseline incorporate the assumption that expiring excise taxes dedicated to trust funds will be extended. Revenues from excise taxes that are assumed to be extended after expiration total nearly one-third of excise tax revenues projected over the next decade (see Table 4-3). Trust funds financed in part by excise taxes that are scheduled to expire include the Highway, Airport and Airway, Patient-Centered Outcomes Research, Oil Spill Liability, Sport Fish Restoration and Boating, and Leaking Underground Storage Tank trust funds.

Highway Taxes. About 40 percent of excise tax receipts currently come from highway taxes—primarily taxes on the consumption of gasoline, diesel fuel, and blends of those fuels with ethanol, as well as on the retail sale of trucks. Annual receipts from highway taxes, which are largely dedicated to the Highway Trust Fund, are projected to decrease by an average of 0.3 percent per year from 2019 through 2029. Over that period, annual receipts average slightly more than \$40 billion.

CBO's projection of a slight decline in highway tax revenues is the net effect of falling receipts from taxes on fuel and rising receipts from taxes on trucks. Gasoline consumption is expected to decline because improvements in vehicles' fuel economy are expected to more than offset the increase in the number of miles that people

drive.⁵ CBO expects that increased fuel economy would likewise reduce the consumption of diesel fuel per mile driven over the 10-year period. Under current law, most of the federal excise taxes used to fund highway programs are scheduled to expire on September 30, 2022. CBO's baseline incorporates the assumption that those expiring taxes would be extended because they are dedicated to a trust fund.

Health Care Taxes. In CBO's baseline projections, receipts from health care taxes grow from \$12 billion in 2019 to \$44 billion in 2029. The largest of those taxes is the excise tax imposed on many health insurers under the Affordable Care Act (P.L. 111-148). The law specifies the total amount of the tax to be assessed in 2018 and the formula used to compute that amount in subsequent years. That total is then divided among insurers according to their share of total premiums. The tax was suspended for 2019, but a portion of the tax payments for 2018 were received in fiscal year 2019 because the due date for payment of the 2018 tax, the last day of fiscal year 2018, fell on a weekend. (The deadline will also fall on a weekend in 2023, 2028, and 2029, significantly affecting the expected pattern of receipts for the tax over the next decade.) In 2019, revenues from the tax are projected to total \$9 billion; they are projected to rise to \$25 billion in 2029.

Other health care taxes that were also instituted by the Affordable Care Act include an annual fee imposed on manufacturers and importers of brand-name drugs, a tax on manufacturers and importers of certain medical devices, and a tax on certain health insurance plans with high premiums. The tax on manufacturers of brand-name drugs is projected to raise \$3 billion each year from 2019 through 2029. A moratorium on the medical-devices tax is in effect until calendar year 2020, so the tax is not projected to generate revenues until that year. In 2029, that tax is projected to generate about \$4 billion in revenues. The excise tax on high-cost

employment-based health plans is not scheduled to be implemented until 2022. Revenues from that tax are projected to total \$12 billion in 2029 under current law.

Tobacco and Alcohol Taxes. In CBO's baseline projections, revenues from taxes on tobacco products total \$13 billion in 2019. That amount is projected to decrease by roughly 2 percent a year over the next decade to \$11 billion in 2029 as tobacco consumption continues to decline. Receipts from taxes on alcoholic beverages are expected to total \$9 billion in 2019 and 2020. A provision the 2017 tax act that lowered taxes on most types of alcohol expires after that, so those receipts are projected to climb by more than 15 percent in 2021. Beginning in 2022, receipts would grow at about 2 percent per year, reaching \$12 billion by 2029.

Aviation Taxes. In CBO's baseline, receipts from taxes on airline tickets, aviation fuels, and various aviation-related transactions increase from \$17 billion in 2019 to \$24 billion in 2029, yielding an average annual rate of growth of about 4 percent. That growth is close to the projected increase of GDP over the period. The largest component of aviation excise taxes (a tax on airline tickets) is levied not on the number of units transacted (as gasoline taxes are, for example) but as a percentage of the dollar value of transactions. As a result, receipts increase as both real economic activity and prices increase. Under current law, aviation taxes are scheduled to expire in 2023. As in the case with highway taxes, CBO's baseline incorporates the assumption that those expiring taxes would be extended because they are dedicated to a trust fund.

Other Excise Taxes. Other excise taxes are projected to generate a total of about \$5 billion in revenues in 2019 and \$56 billion in revenues from 2019 through 2029. The category consists of other taxes dedicated to trust funds, including the Federal Aid in Wildlife Restoration trust fund (which is financed by taxes on firearms and bows and arrows), the Oil Spill Liability Trust Fund, and the Patient-Centered Outcomes Research Trust Fund, as well as other smaller excise taxes.

Remittances From the Federal Reserve System

The income produced by the various activities of the Federal Reserve System, minus the cost of generating that income and the cost of the system's operations, is remitted to the Treasury and counted as revenue. The

5. In August 2018, the Administration proposed freezing existing Corporate Average Fuel Economy standards at their 2020 levels through 2026 (see <https://go.usa.gov/xEWpR>). Following CBO's usual practice, the baseline incorporates a 50 percent probability that the proposed rule will be finalized and implemented. If that occurred, CBO anticipates average fuel economy would continue to improve, albeit at a slower rate, because older, less fuel-efficient vehicles would be replaced by newer models more slowly than otherwise.

largest component of such income is what the Federal Reserve earns as interest on its holdings of securities.

In CBO's baseline projections, the Federal Reserve's remittances in 2019 amount to \$50 billion (or 0.2 percent of GDP). Remittances are projected to decrease between 2019 and 2020, and then to increase steadily through 2029. The decline in 2020 results from the Federal Reserve's rising interest expenses and a reduction in the amount of assets that it holds. CBO also projects that the anticipated increase in interest rates on Treasury securities over the projection period would boost earnings for the Federal Reserve—but only gradually—as it purchases new securities that earn higher yields. (See Chapter 2 for a discussion of CBO's forecasts of monetary policy and interest rates in the coming decade.) Overall, remittances in CBO's baseline range between 0.2 percent and 0.3 percent of GDP over the 2019–2029 period, which is close to the Federal Reserve's average remittance of 0.2 percent of GDP from 2000 through 2009, before the central bank dramatically boosted its asset holdings in response to the 2008 financial crisis.

Customs Duties, Estate and Gift Taxes, and Miscellaneous Fees and Fines

Receipts from all other sources are projected to remain relatively stable over the next decade, together continuing to account for about 0.6 percent of GDP between 2019 and 2029.

Customs Duties. Customs duties, which are assessed on certain imports, have totaled about 0.2 percent of GDP in recent years, amounting to \$41 billion in 2018. CBO projects that those receipts would increase to 0.3 percent of GDP in 2019 and remain between 0.3 percent and 0.4 percent of GDP through the next decade. The increase in duties relative to GDP reflects new tariffs implemented by the Administration during 2018. Those include tariffs on imports of solar panels and certain appliances, which took effect on February 7, 2018; on steel and aluminum imports from most countries, which took effect on March 23, 2018; and on a range of products imported from China, the first of which took effect on July 6, 2018. The additional taxes levied on affected imports varies from 10 percent to 30 percent of the assessed customs values. CBO's baseline incorporates the assumption that those recently imposed tariffs continue throughout the projection period at the rates currently in

effect.⁶ However, the Administration has broad authority to modify tariff policy without legislative action.⁷ (For a detailed discussion of the effects of recent changes in trade policy on the economy, see Chapter 2.)

Estate and Gift Taxes. In 2018, revenues from estate and gift taxes totaled \$23 billion, or just above 0.1 percent of GDP. As a result of a provision in the 2017 tax act that temporarily doubles the estate and gift tax exemption amount through tax year 2025, revenues from that source are projected to drop in 2019 to less than 0.1 percent of GDP before rising again to just above 0.1 percent in 2027 and subsequent years.

Miscellaneous Fees and Fines. Receipts from other fees and fines totaled \$40 billion (0.2 percent of GDP) in 2018. Under current law, those fees and fines would continue to average 0.2 percent of GDP from 2019 through 2029, CBO projects.

Tax Expenditures

Many exclusions, deductions, preferential rates, and credits in the individual income tax, payroll tax, and corporate income tax systems cause revenues to be much lower than they would otherwise be for any underlying structure of tax rates. Many of those provisions are called tax expenditures because they are similar to government spending programs in that they supply financial assistance for particular activities or to certain entities or groups of people. Unlike many spending programs, tax expenditures are not subject to annual appropriations. Because of that budgetary treatment, tax expenditures are much less transparent than discretionary spending or spending on benefit programs. In fact, most tax expenditures are not explicitly recorded in the federal budget.

6. Specifically, the baseline projections incorporate the assumption that, in cases in which the Administration exercises its broad authority to impose tariffs without legislative action, the tariffs in effect at the time the analysis was completed would continue permanently without planned or unplanned changes. Most significantly, the tariffs imposed on imports from China under section 301 of the Trade Act of 1974 are assumed to continue indefinitely at a rate of 10 percent throughout the projection period. When initially imposed in September 2018, those tariffs were scheduled to increase to 25 percent on January 1, 2019. However, in December 2018, the Administration delayed that scheduled increase until March 2, 2019.

7. The Administration's recent tariff actions were taken under authority granted in section 232 of the Trade Expansion Act of 1962, section 201 of the Trade Act of 1974, and section 301 of the Trade Act of 1974.

The one exception is the portion of refundable tax credits that exceeds a taxpayer's tax liability; that amount is recorded as mandatory spending in the budget.

As with conventional federal spending, tax expenditures contribute to the federal budget deficit. They also influence people's choices about working, saving, and investing, and they affect the distribution of income. The Congressional Budget Act of 1974 (P.L. 93-344) defines tax expenditures as "those revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability."⁸ That law requires the federal budget to list tax expenditures, and every year the staff of the Joint Committee on Taxation (JCT) and the Treasury's Office of Tax Analysis each publish estimates of individual and corporate income tax expenditures.⁹

Magnitude of Tax Expenditures

Tax expenditures have a major impact on the federal budget. On the basis of estimates prepared by JCT, CBO estimates that in fiscal year 2019, the more than 200 tax expenditures in the individual and corporate income tax systems will total more than \$1.6 trillion—or 7.8 percent of GDP—if their effects on payroll taxes as well as on income taxes are included.¹⁰ That amount

equals almost half of all federal revenues projected to be received in 2019 and exceeds projected outlays for all discretionary outlays combined (see Figure 4-4).

A simple total of the estimates for specific tax expenditures does not account for the interactions among them if they are considered together. For instance, the total tax expenditure for all itemized deductions would be smaller than the sum of the separate tax expenditures for each deduction. That is because all taxpayers would claim the standard deduction if there were no itemized deductions; but if only one or a few deductions were removed, many taxpayers would still choose to itemize. However, the progressive structure of the tax brackets ensures that the opposite would be the case with income exclusions; that is, the tax expenditure for all exclusions considered together would be greater than the sum of the separate tax expenditures for each exclusion. In 2019, those and other factors are expected to be approximately offsetting, so the total amount of tax expenditures roughly equals the sum of all of the individual tax expenditures.

Nonetheless, the total amount of tax expenditures does not represent the increase in revenues that would occur if all tax expenditures were eliminated because repealing a tax provision would change incentives and lead taxpayers to modify their behavior in ways that would diminish the impact of the repeal on revenues. For example, if the preferential tax rates on realizations of capital gains were eliminated, taxpayers would reduce the amount of capital gains they realized; as a result, the amount of additional revenues that would be produced by eliminating the preferential rates would be smaller than the estimated size of the tax expenditure.

The Largest Tax Expenditures in 2019

CBO estimates that the 10 largest tax expenditures account for nearly three-quarters of the total budgetary effects of all tax expenditures in fiscal year 2019, totaling 5.6 percent of GDP.¹¹ Those 10 tax expenditures fall into four categories: exclusions from taxable income, deductions, preferential tax rates, and tax credits.

Exclusions From Taxable Income. Exclusions of certain types of income from taxation account for the greatest

8. Sec. 3(3) of the Congressional Budget and Impoundment Control Act of 1974 (codified at 2 U.S.C. §622(3) (2006)).

9. For this analysis, CBO followed JCT's definition of tax expenditures as deviations from a "normal" income tax structure. For the individual income tax, that structure incorporates existing regular tax rates, the standard deduction, personal exemptions, and deductions of business expenses. For the corporate income tax, that structure includes the top statutory tax rate, defines income on an accrual basis, and allows for cost recovery according to a specified depreciation system. For more information, see Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2018–2022*, JCX-81-18 (October 2018), <https://go.usa.gov/xEWpf>. Unlike JCT, CBO includes estimates of the largest payroll tax expenditures. As defined by CBO, a normal payroll tax structure includes the existing payroll tax rates as applied to a broad definition of compensation—which consists of cash wages and fringe benefits. The Treasury's definition of tax expenditures is broadly similar to JCT's. See Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 2019: Analytical Perspectives* (February 2018), pp. 153–194, <https://go.usa.gov/xQ3gV> (PDF, 4.2 MB).

10. Most estimates of tax expenditures include only their effects on individual and corporate income taxes. However, tax expenditures can also reduce the amount of income subject to payroll taxes. Tax expenditures that reduce the tax base for payroll taxes will

eventually decrease spending for Social Security by reducing the earnings base on which Social Security benefits are calculated.

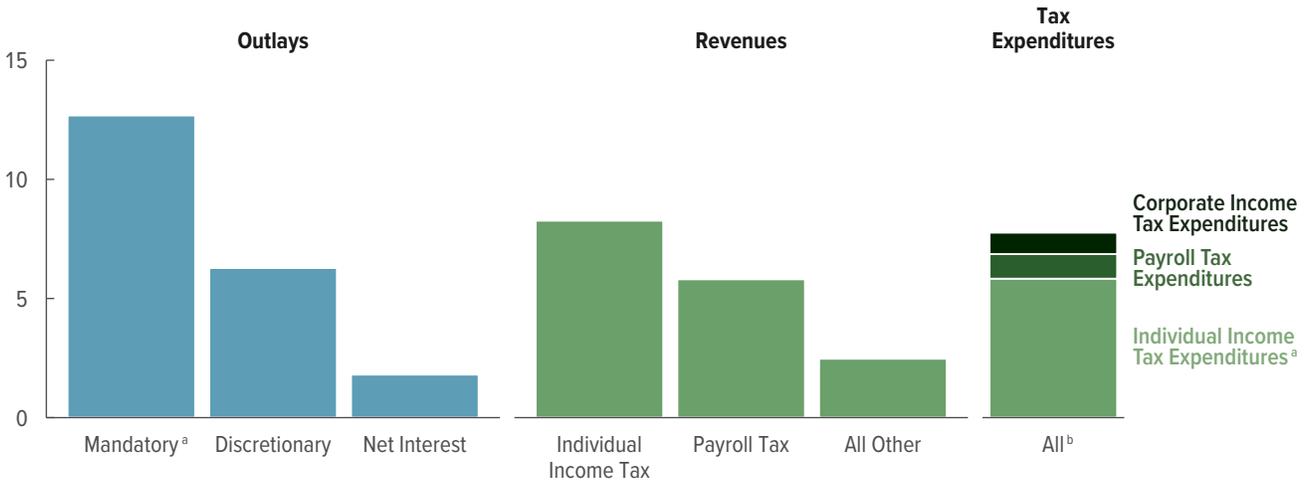
11. CBO combined the components of certain tax expenditures that JCT reported separately, such as tax expenditures for different types of charitable contributions.

Figure 4-4.

Outlays, Revenues, and Tax Expenditures in 2019

Tax expenditures, which are projected to total more than \$1.6 trillion in 2019, cause revenues to be lower than they would be otherwise and, like spending programs, contribute to the deficit.

Percentage of Gross Domestic Product



Source: Congressional Budget Office, using estimates by the staff of the Joint Committee on Taxation.

- a. The outlay portions of refundable tax credits are included in tax expenditures as well as mandatory outlays. In 2019, they are estimated to total 0.7 percent of gross domestic product.
- b. This total is the sum of the estimates for all of the separate tax expenditures and does not account for any interactions among them. However, CBO estimates that in 2019, the total of all tax expenditures roughly equals the sum of each considered separately. Furthermore, because estimates of tax expenditures are based on people’s behavior with the tax expenditures in place, they do not reflect the amount of revenues that would be raised if those provisions of the tax code were eliminated and taxpayers adjusted their activities in response to the changes.

share of total tax expenditures. The largest items in that category are employers’ contributions to their employees’ health care, health insurance premiums, and premiums for long-term-care insurance; and contributions to and earnings of pension funds (minus pension benefits that are included in taxable income).

- The exclusion of employers’ health insurance contributions is the single largest tax expenditure in the tax code; including effects on payroll taxes, that exclusion is estimated to equal 1.4 percent of GDP in 2019 (see Figure 4-5).
- The exclusion of pension plan contributions and earnings has the second largest impact, resulting in tax expenditures that are estimated to total 1.4 percent of GDP this year, including effects on payroll taxes.¹²

Deductions From Income. Deductions for certain types of payments allow taxpayers to further reduce their taxable income. For instance, businesses are generally able to deduct the cost of an investment over a measure of the life of that investment. Some provisions of law allow businesses to deduct those expenses from their taxable income over a shorter period of time; that “accelerated depreciation” is considered a tax expenditure. In addition, many owners of pass-through businesses can take a deduction equal to 20 percent of qualified business income, which includes reasonable compensation of owners for services rendered to the business.¹³ And itemized deductions allow taxpayers to deduct more than the fixed standard deduction on the basis of expenses they have incurred.

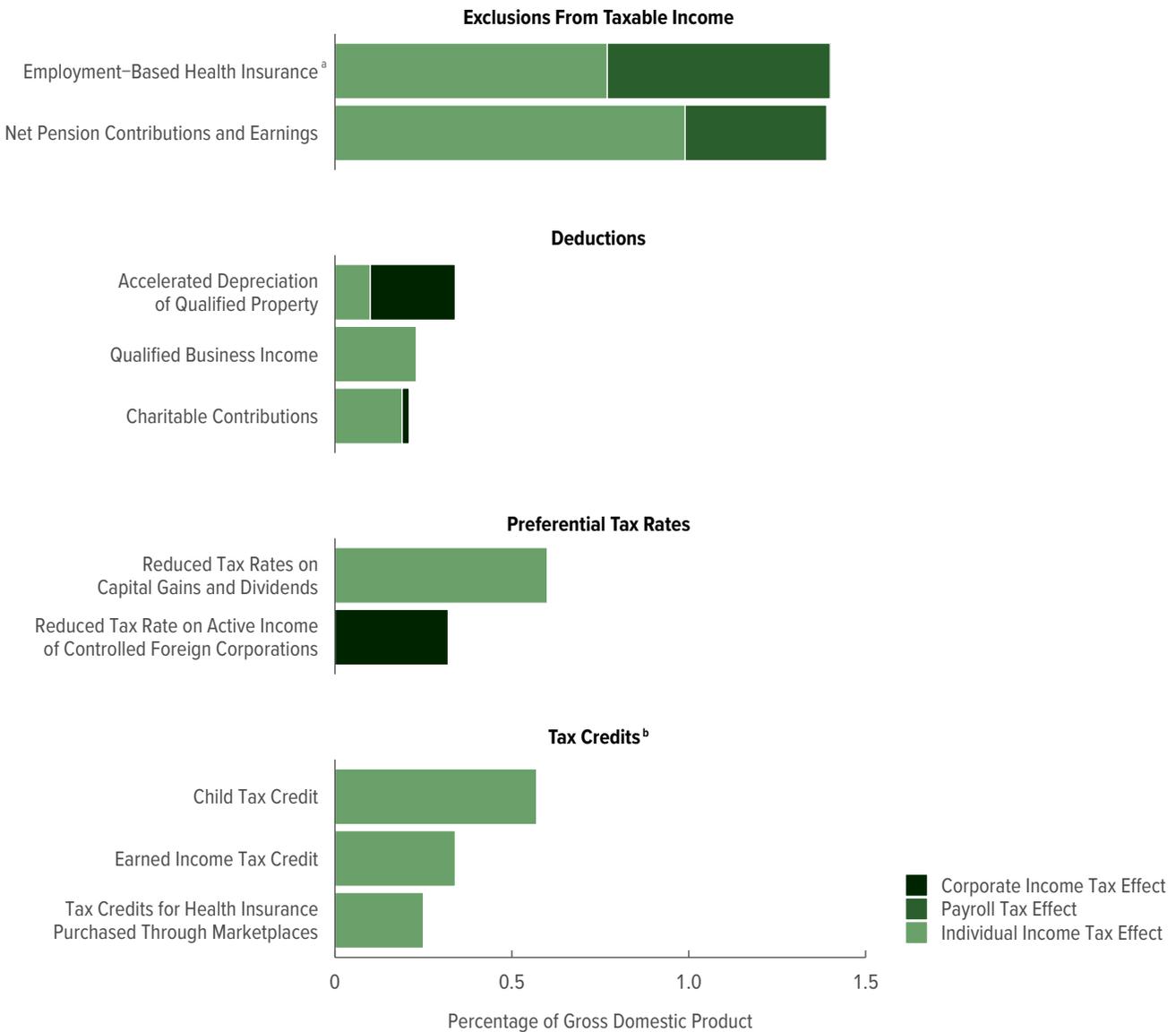
12. That total includes amounts from defined benefit and defined contribution plans offered by employers; it does not include amounts from self-directed individual retirement arrangements or from Keogh plans that cover partners and sole proprietors,

although contributions to and earnings accrued in those plans are also excluded from taxable income until withdrawal.

13. Pass-through businesses are businesses whose income is taxed under the individual income tax rather than the corporate income tax.

Figure 4-5.

Budgetary Effects of the Largest Tax Expenditures in 2019



Source: Congressional Budget Office, using estimates by the staff of the Joint Committee on Taxation.

These effects are calculated by dividing the sum of the tax expenditures in 2019 by the sum of gross domestic product that year. Because estimates of tax expenditures are based on people’s behavior with the tax expenditures in place, they do not reflect the amount of revenues that would be raised if those provisions of the tax code were eliminated and taxpayers adjusted their activities in response to the changes.

a. Includes employers’ contributions for health care, health insurance premiums, and long-term-care insurance premiums.

b. Includes effect on outlays.

- Tax expenditures for accelerated depreciation of qualified property purchased by businesses are estimated to equal 0.3 percent of GDP in 2019.
- Tax expenditures for the 20 percent deduction for qualified business income available to pass-through businesses are estimated to equal 0.2 percent of GDP in 2019.
- Tax expenditures for the itemized deduction for charitable contributions are estimated to equal 0.2 percent of GDP in 2019.

Preferential Tax Rates. Under the individual income tax, preferential tax rates apply to some forms of income, including dividends and long-term capital gains. Under the corporate income tax, income in controlled foreign subsidiaries is taxed at a lower rate than profits of domestic corporations.

- Tax expenditures for the preferential tax rates on dividends and long-term capital gains are estimated to total 0.6 percent of GDP in 2019.¹⁴
- Tax expenditures for the reduced tax rate on active income of controlled foreign corporations are estimated to equal 0.3 percent of GDP in 2019.¹⁵

Tax Credits. Tax credits also reduce eligible taxpayers' tax liability. Nonrefundable tax credits cannot reduce a taxpayer's income tax liability to less than zero, whereas refundable tax credits may result in direct payments to taxpayers who do not owe any income taxes.

- The tax expenditure for the credit for children and other dependents is estimated to total 0.6 percent

14. Taxpayers with income over certain thresholds—\$200,000 for single filers and \$250,000 for married couples who file joint returns—face a surtax equal to 3.8 percent of their investment income (including capital gains and dividend income, as well as interest income and some passive business income). That surtax reduces the preferential treatment of dividends and capital gains. JCT treats the surtax as a negative tax expenditure—that is, as a deviation from the tax system that increases rather than decreases taxes—and it is not included in the figures presented here.

15. Although current and future income of controlled foreign corporations is subject to a lower tax rate, there is also a onetime tax on their previously accumulated deferred income, which taxpayers can elect to pay over the course of eight years. The estimated tax expenditure does not include any offset with respect to the onetime tax on prior-year income.

of GDP in 2019. About one-quarter of those expenditures are recorded as mandatory spending in the federal budget because they are paid to people who do not owe any income taxes.

- The tax expenditure for the earned income tax credit is estimated to total 0.3 percent of GDP in 2019. Most of those expenditures are recorded as mandatory spending in the federal budget.
- Tax expenditures for the premium tax credit—which helps people with low and moderate income purchase health insurance through marketplaces—are estimated to total 0.3 percent of GDP in 2019. Most of those expenditures are recorded as mandatory spending in the federal budget.

Effect of the Future Expiration of the 2017 Tax Act on Tax Expenditures

The 2017 tax act made many changes that affect tax expenditures. In particular, the act included temporary provisions that, on balance, reduce the amount of tax expenditures through 2025. If those provisions expire as scheduled, CBO expects that tax expenditures will rise in later years.

Among those changes, the 2017 tax act curtailed itemized deductions that are considered to be tax expenditures. For example, a new limit was placed on the itemized deduction for state and local taxes (including income, sales, and property taxes). In addition, the limit on the amount of debt for owner-occupied housing for which the mortgage interest is deductible was lowered. At the same time, the act almost doubled the standard deduction. Those changes reduced the value of claiming itemized deductions relative to claiming the standard deduction for all taxpayers. In many cases, the reduction will cause taxpayers to switch from itemizing their deductions to claiming the standard deduction.

Economic Effects of Tax Expenditures

Many tax expenditures may further societal goals. For example, the tax expenditures for health insurance costs and pension contributions may help promote a healthier population, adequate financial resources for retirement, and greater national saving. However, some tax expenditures may have effects beyond the societal goals they were intended to advance.

First, tax expenditures may lead to an inefficient allocation of economic resources. They do so by subsidizing activity that might have taken place without the tax incentives and by encouraging more consumption of the goods and services that receive preferential treatment. For example, the tax expenditures mentioned above may prompt people to be less cost-conscious in their use of health care services than they would be in the absence of the tax expenditure for health insurance costs and to reallocate existing savings from accounts that are not tax-preferred to retirement accounts, rather than add to their savings.

Second, by providing benefits related to specific activities, entities, or groups of people, tax expenditures increase the size and scope of federal involvement in the economy. Indeed, adding tax expenditures to conventional federal outlays would make the expenditures of the federal government appear notably larger relative to GDP.

Third, tax expenditures reduce the amount of revenue that is collected for any given set of statutory tax rates—and thereby require higher rates to collect a chosen amount of revenue. All else being equal, those higher tax rates lessen people's incentives to work and save, and therefore decrease output and income. At the same time, some tax expenditures more directly affect output and income. For example, the preferential rate on capital gains and dividends raises the after-tax return on some forms of saving, which tends to increase saving and boost future output. As another example, the increase in take-home pay arising from the earned income tax credit appears to encourage some people to work more.

Fourth, tax expenditures have mixed effects on the societal goal of limiting the complexity of the tax code. On the one hand, most tax expenditures, such as deductions and tax credits, require that taxpayers keep additional records and make additional calculations, increasing the complexity of the tax code. On the other hand, some exclusions from taxable income simplify the tax code by eliminating recordkeeping requirements and the need for certain calculations. For example, in the absence of the exclusion for earnings of pension funds, taxpayers would need to calculate the appreciation in the value of their holdings in such funds.

Fifth, tax expenditures affect the distribution of the tax burden. Some tax expenditures, such as the preferential

tax rates on capital gains and dividend income, primarily benefit high-income taxpayers. Others, such as the earned income tax credit, primarily benefit those with lower income. Tax expenditures can also lead to an uneven distribution of the tax burden among people who have similar income.¹⁶

Uncertainty Surrounding the Revenue Outlook

Revenue projections are inherently uncertain, and even if no changes were made to current law, actual outcomes would undoubtedly differ in some ways from CBO's projections. The agency attempts to construct its revenue projections for the current year and the subsequent 10 years so that they fall in the middle of the distribution of possible outcomes. Hence, actual revenues could turn out to be higher or lower than CBO projects.

In analyzing its previous baseline projections of revenues since 1982, CBO found that projected revenues for the second year (which is often called the budget year and usually begins about six months after the projections are released) and the sixth year were generally too high, on average, mainly because of the difficulty of forecasting when economic downturns will occur. The overall accuracy of CBO's revenue projections has been similar to that of the projections of others. Since 1982, the mean absolute error—that is, the average of all errors without regard for whether they were positive or negative—was 5.0 percent for CBO's budget-year projections and 10.1 percent for the sixth-year projections.¹⁷ In CBO's current baseline projections, percentage errors of those amounts would equal about \$180 billion (or 0.8 percent of GDP) in 2020 and \$450 billion (or 1.8 percent of GDP) in 2024.

16. For a detailed analysis, see Congressional Budget Office, *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/publication/43768.

17. Those errors include CBO's projections from 1982 through the most recent fiscal years for which actual receipts are available for each projection horizon—2017 for the budget-year projections and 2013 for the sixth-year projections. The complete series of past errors is included with the supplemental materials that accompany this report at www.cbo.gov/publication/54918. For a more detailed analysis of past errors, see Congressional Budget Office, *CBO's Revenue Forecasting Record* (November 2015), www.cbo.gov/publication/50831. That analysis encompassed actual results through fiscal year 2013. For a more detailed analysis of errors in 2018, see Congressional Budget Office, *The Accuracy of CBO's Baseline Estimates for Fiscal Year 2018* (December 2018), www.cbo.gov/publication/54872.