

The Revenue Outlook

Overview

The Congressional Budget Office projects that, if current laws generally remain unchanged, total revenues will rise by less than 1 percent in 2018, to just over \$3.3 trillion. Revenues are expected to decline as a percentage of gross domestic product (GDP)—from 17.3 percent in 2017 to 16.6 percent in 2018—below the average of 17.4 percent of GDP recorded over the past 50 years (see Figure 3-1). In CBO’s baseline projections, after a further slight decline in 2019, revenues rise markedly as a share of the economy, growing to 18.5 percent of GDP by 2028. 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).

What Key Factors Explain Changes in Revenues Over Time?

The decline in revenues as a percentage of GDP in 2018, and to a lesser extent in 2019, results from the enactment in late December 2017 of Public Law 115–97, referred to here 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. Most of the provisions that directly affect the individual income tax are scheduled to expire at the end of 2025. (For additional details on the major provisions of that legislation, see Appendix B.)

After 2019, revenues are projected to rise steadily through 2025, reaching 17.5 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, they are projected to reach 18.1 percent in 2026, and 18.5 percent in 2027 and 2028.

The 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. In addition to those expirations, other factors would cause receipts to grow throughout the next decade, primarily the following: Wages are projected to grow faster than GDP; real bracket creep (which occurs when incomes rise faster than inflation) is projected to cause income to be taxed at higher rates, boosting taxes relative to income; and distributions from tax-deferred retirement accounts are expected to rise.

- *Corporate income tax receipts* are projected to rise as a percentage of GDP after 2018 for two reasons. First, changes in tax rules that are scheduled to occur over the next decade would gradually boost receipts. Second, CBO expects that the factors responsible for recent unexplained weakness in corporate tax collections will gradually dissipate. An anticipated 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 remain relatively stable over the next decade. Revenues from payroll taxes are projected to edge up slightly as a share of the economy and receipts from excise taxes to decline slightly.

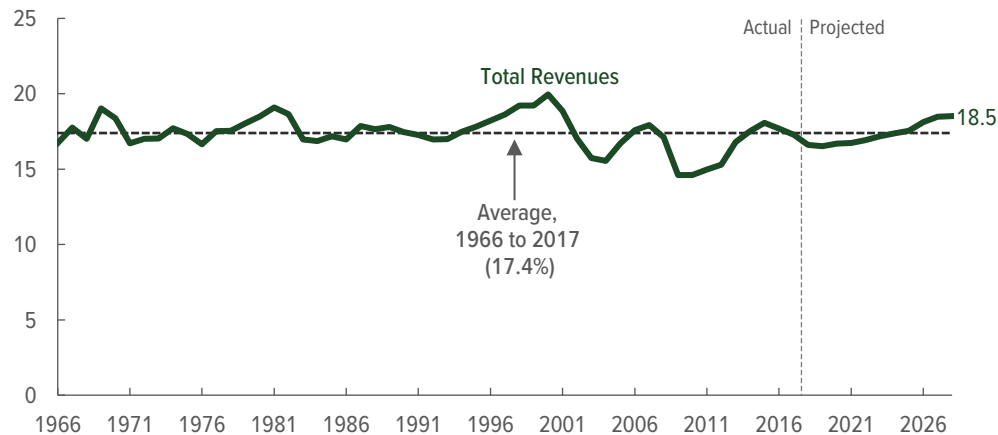
How Have CBO’s Projections Changed Since June 2017?

CBO’s revenue projections for the 2019–2028 period are lower than those the agency released in June 2017. At that time, CBO published revenue projections for the 2017–2027 period; the projections in this report cover the 2018–2028 period. For the overlapping years—2018 through 2027—the current projections are below the previous ones by \$1.0 trillion (or about 2 percent). That reduction stems from legislative changes, including those from the enactment of the 2017 tax act, as well as from technical revisions. Those downward revisions are partly offset by changes to the agency’s economic forecast, primarily to projections of GDP and the types of income

Figure 3-1.

Total Revenues

Percentage of Gross Domestic Product



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

Source: Congressional Budget Office.

GDP = gross domestic product.

that comprise GDP, such as wages and salaries, corporate profits, and proprietors' income. (For more information on changes to the revenue projections since June 2017, 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 2017, the more than 200 tax expenditures in the income tax system totaled almost \$1.7 trillion in forgone individual income tax, payroll tax, and corporate income tax revenues. That amount equaled 8.9 percent of GDP—more than half of all federal revenues received in that year. CBO estimates the magnitude of tax expenditures on the basis of the estimates prepared by the staff of the Joint Committee on Taxation (JCT), which has not yet released estimates incorporating the effects of the 2017 tax act and

subsequent legislation.¹ Those changes in law will generally reduce the magnitude of tax expenditures beginning in 2018.

How Uncertain Are CBO's Revenue Projections?

CBO's revenue projections since 1982 have, on average, been too high—more so for projections spanning six years than for those spanning two—owing mostly to the difficulty of predicting when economic downturns will occur. However, their overall accuracy has been similar to the accuracy of projections by other agencies.

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; excise taxes; earnings of the Federal Reserve System,

1. To arrive at an aggregate estimate of all tax expenditures in 2017, CBO began with the separate estimates of the individual and corporate income tax expenditures produced by the staff of the Joint Committee on Taxation. To those, CBO added the payroll tax effects of provisions that reduce the payroll tax base. Finally, because a simple total of the estimates for specific tax expenditures does not account for the interactions among them if they are considered together, CBO estimated the size of those interactions and included them to estimate the total budgetary impact of tax expenditures.

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 33 percent of total revenues (equal to 5.8 percent of GDP) over the same period. Corporate income taxes constituted 11 percent of revenues (or 2.0 percent of GDP) over the past 50 years, and all other sources combined contributed about 9 percent of revenues (or 1.7 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 50 percent of total revenues (and from 6.1 percent to 9.9 percent of GDP) between 1966 and 2017. 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 3-2).
- 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 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.

- 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.

If current law generally remained in effect—an assumption underlying CBO’s baseline—individual income taxes would generate a growing share of revenues over the next decade, CBO projects. By 2026, they would account for more than half of total revenues, and by 2028 they would reach 9.8 percent of GDP, well above the average of 8.0 percent over the past 50 years. Receipts from payroll taxes are projected to remain relatively stable over the next decade. They would decline slightly relative to GDP, from 6.1 percent in 2017 to 5.8 percent in 2019, before rising gradually to 6.0 percent by 2028. Corporate income taxes would make a slightly smaller contribution than they have made on average for the past 50 years, supplying about 8.6 percent of total revenues and averaging about 1.5 percent of GDP over the 2018–2028 period. Taken together, the remaining sources of revenue are projected to average about 1.2 percent of GDP from 2018 through 2028.

Individual Income Taxes

In 2017, receipts from individual income taxes totaled nearly \$1.6 trillion, or 8.3 percent of GDP. Under current law, individual income taxes will rise by 3 percent, to over \$1.6 trillion in 2018, CBO estimates. That percentage increase would be smaller than the 5 percent increase expected for GDP, and individual income tax receipts would edge down to 8.2 percent of GDP.

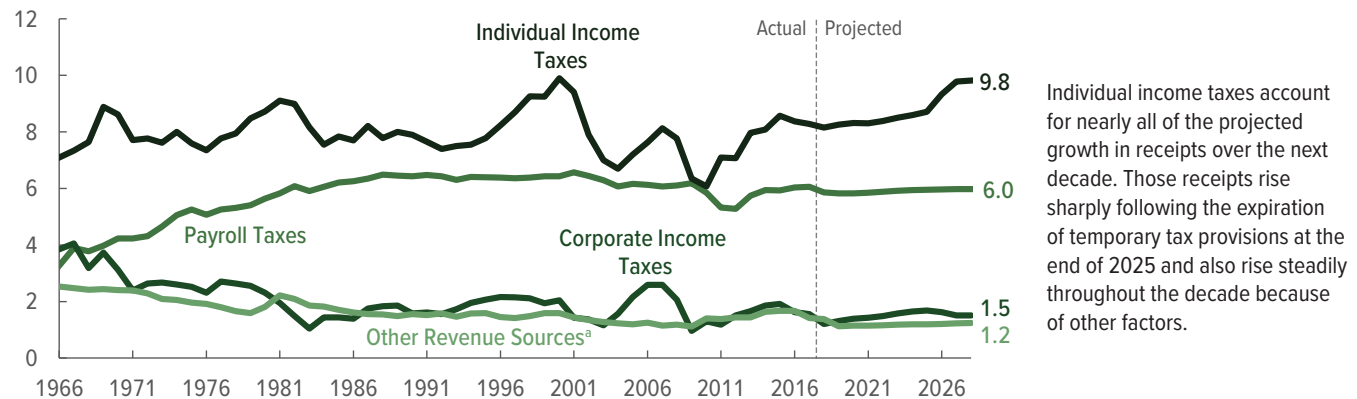
The projected decline in individual income tax receipts as a share of the economy results from changes in tax law that take effect beginning in 2018. CBO estimates that the effect of the changes, including those stemming from enactment of the 2017 tax law, will reduce individual income tax receipts relative to GDP by 0.4 percentage points in 2018. Those changes are partially offset by other factors. The most significant factor boosting receipts in 2018 in CBO’s baseline is the expectation of strong growth in realizations of capital gains following rising values in the stock market over the past year; that growth is expected to boost receipts relative to GDP by 0.2 percentage points.

If current laws remained unchanged, CBO projects that individual income tax receipts would rise by

Figure 3-2.

Revenues, by Major Source

Percentage of Gross Domestic Product



Individual income taxes account for nearly all of the projected growth in receipts over the next decade. Those receipts rise sharply following the expiration of temporary tax provisions at the end of 2025 and also rise steadily throughout the decade because of other factors.

Source: Congressional Budget Office.

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

1.7 percentage points as a share of the economy over the next decade, reaching 9.8 percent of GDP by 2028, which would be the highest percentage since 2000 and well above the 50-year average of 8.0 percent (see Table 3-1).

In CBO's baseline, receipts climb in 2019 and beyond, in part as a result of projected growth in taxable personal income. (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 4.4 percent per year over the next decade, largely as a result of growth in wages and salaries. That income growth is faster than the expected growth in nominal GDP and would boost receipts relative to GDP by 0.3 percentage points.

Moreover, receipts from individual income taxes are projected to rise even faster than taxable personal income—boosting receipts relative to GDP by an additional 1.4 percentage points from 2018 to 2028. More than half of that projected increase results from the expiration of provisions included in the 2017 tax law that temporarily lower receipts relative to taxable personal income. The remainder results from real bracket creep, rising

taxable distributions from retirement accounts, and other factors.

Expiration of Temporary Tax Provisions

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 law. Those expirations would cause tax liabilities to rise in calendar year 2026, boosting receipts in subsequent fiscal years. In addition, rules that allow 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 non-corporate businesses, whose owners' income is subject to the individual income tax. Altogether, CBO projects that the expiration of those tax provisions would boost individual income tax receipts relative to GDP by 0.7 percentage points over the next decade. (For further details about the new tax law, see Appendix B. For estimates of the effect on the budget of extending those and other temporary tax provisions, see Chapter 4.)

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 economic activity and inflation). The most

Table 3-1.

Revenues Projected in CBO's Baseline

	Actual, 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total	
													2019– 2023	2019– 2028
In Billions of Dollars														
Individual Income Taxes	1,587	1,639	1,744	1,833	1,900	1,990	2,092	2,199	2,316	2,574	2,804	2,924	9,558	22,376
Payroll Taxes	1,162	1,178	1,231	1,284	1,337	1,395	1,456	1,519	1,583	1,646	1,712	1,780	6,704	14,944
Corporate Income Taxes	297	243	276	307	327	353	388	421	447	449	431	448	1,651	3,847
Other														
Excise taxes	84	102	88	106	109	113	117	119	121	123	126	129	532	1,149
Federal Reserve remittances	81	66	44	39	45	52	61	68	74	80	82	88	240	632
Customs duties	35	38	41	43	46	47	49	51	52	54	56	58	227	499
Estate and gift taxes	23	26	19	19	20	21	21	23	24	25	37	40	100	249
Miscellaneous fees and fines	48	47	46	45	44	42	44	46	47	49	51	52	221	466
Subtotal	270	278	238	253	263	275	291	306	318	332	352	368	1,320	2,995
Total	3,316	3,338	3,490	3,678	3,827	4,012	4,228	4,444	4,663	5,002	5,299	5,520	19,234	44,162
On-budget	2,466	2,477	2,590	2,736	2,845	2,990	3,164	3,338	3,513	3,807	4,058	4,230	14,327	33,273
Off-budget ^a	851	860	899	941	981	1,022	1,063	1,106	1,150	1,194	1,241	1,290	4,907	10,889
Memorandum:														
Gross Domestic Product	19,178	20,103	21,136	22,034	22,872	23,716	24,621	25,583	26,595	27,608	28,677	29,803	114,379	252,646
As a Percentage of Gross Domestic Product														
Individual Income Taxes	8.3	8.2	8.3	8.3	8.3	8.4	8.5	8.6	8.7	9.3	9.8	9.8	8.4	8.9
Payroll Taxes	6.1	5.9	5.8	5.8	5.8	5.9	5.9	5.9	6.0	6.0	6.0	6.0	5.9	5.9
Corporate Income Taxes	1.5	1.2	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.6	1.5	1.5	1.4	1.5
Other														
Excise taxes	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5
Federal Reserve remittances	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2
Customs duties	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
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	1.4	1.4	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Total	17.3	16.6	16.5	16.7	16.7	16.9	17.2	17.4	17.5	18.1	18.5	18.5	16.8	17.5
On-budget	12.9	12.3	12.3	12.4	12.4	12.6	12.9	13.0	13.2	13.8	14.2	14.2	12.5	13.2
Off-budget ^a	4.4	4.3	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.

important component of that effect, real bracket creep, occurs because the income tax brackets are indexed only 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 only 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 2018 to 2028. (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 level of inflation in the economy, the effect of real bracket creep and related factors will tend to be slightly greater than in prior years.)

Retirement Income

As the population ages, 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 0.2 percentage points over the next decade.

Other Factors

CBO anticipates that over the next decade, other factors would have smaller, roughly offsetting effects on individual income tax revenues. Realizations of capital gains have been relatively high recently, and CBO anticipates 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 2020–2028 period—would reduce individual income taxes relative to GDP by about 0.2 percentage points.

Other factors would boost receipts relative to GDP. In CBO's baseline projections, earnings from wages and salaries are expected to increase faster for higher-income people than for others during the next decade—as has been the case for the past several decades. That faster growth in earnings for higher-income people 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.²

Finally, recent receipts of individual income taxes have been slightly lower than can be explained by current economic data. CBO expects that weakness to gradually dissipate over the next several years, boosting receipts by about 0.1 percentage points as a share of GDP. Both the relationship of taxable income to other economic indicators and total taxes as a percentage of taxable income can fluctuate significantly from year to year, sometimes

leading to temporarily higher or lower receipts. Over time—taking into account current tax law and long-term trends in income components and demographics—the relationship of taxable income to the economy and the ratio of taxes to income tend to return to more typical levels.

Payroll Taxes

Receipts from payroll taxes, which fund social insurance programs, totaled about \$1.2 trillion in 2017, or 6.1 percent of GDP. Under current law, CBO projects those receipts would fall to 5.8 percent of GDP by 2019 before slowly rising to 6.0 percent of GDP by 2025. The decline from 2017 to 2019 is caused in part by the expectation that wages and salaries will continue to grow faster for higher-earning taxpayers than for other taxpayers, which will push an increasing share of such earnings above the maximum amount per taxpayer that is subject to Social Security taxes (that amount, which is indexed to growth in average earnings for all workers, is \$128,400 in 2018). This trend is expected to slow after 2019 as the demand for labor weakens. (Historically, the share of wages and salaries accruing to higher earners has risen in tight labor markets.) The yearly growth in payroll taxes as a percentage of GDP from 2019 to 2028 is consistent with growth in wages as a share of GDP over this period.

Sources of Payroll Tax Receipts

The two largest sources of payroll taxes are those that are dedicated to Social Security and Part A of Medicare. 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 3-2). The premiums that Medicare enrollees pay for Part B (the Medical Insurance program) 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 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 (the taxable

2. CBO projects 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 3-2.

Payroll Tax Revenues Projected in CBO's Baseline

Billions of Dollars

	Actual,													Total	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2019–2023	2019–2028	
Social Security	851	860	899	941	981	1,022	1,063	1,106	1,150	1,194	1,241	1,290	4,907	10,889	
Medicare	256	263	279	295	309	322	335	349	364	380	396	413	1,540	3,442	
Unemployment Insurance	46	44	42	37	35	39	45	50	54	57	59	61	198	479	
Railroad Retirement	5	6	6	6	6	6	6	6	7	7	7	7	30	64	
Other Retirement ^a	4	5	5	5	6	6	7	7	8	8	9	10	29	71	
Total	1,162	1,178	1,231	1,284	1,337	1,395	1,456	1,519	1,583	1,646	1,712	1,780	6,704	14,944	

Source: Congressional Budget Office.

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

maximum). 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 filing a joint income tax return), bringing the total Medicare tax on such earnings to 3.8 percent.

Projected Receipts

Wages and salaries, the main tax bases for payroll taxes, are projected to rise as a share of GDP over the next decade. As a result, after an initial decline, payroll taxes in CBO's baseline rise as a share of GDP in every year from 2019 to 2028. The decline from 2017 to 2019 occurs in part because the share of earnings above the taxable maximum amount for Social Security taxes is projected to rise from 18 percent in 2017 to 20 percent in 2019. After 2019, however, that share is estimated to remain at 20 percent through 2028.³

In addition, receipts from unemployment insurance taxes are projected to decline slightly relative to wages and salaries and GDP between 2017 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. 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 2017, receipts from corporate income taxes totaled \$297 billion, or 1.5 percent of GDP. CBO expects corporate tax receipts to fall by \$54 billion in 2018, to 1.2 percent of GDP, largely because of the enactment of the 2017 tax act. That law made significant changes to the corporate income tax system beginning in 2018, including reducing the corporate tax rate for most businesses from 35 percent to 21 percent. (For more details on the provisions of that legislation, see Appendix B.) After 2018, those receipts begin to rise in CBO's baseline projections, reaching 1.7 percent of GDP in 2025, and then decline to 1.5 percent in 2027. That pattern reflects several offsetting factors, including the changing effects of the 2017 tax act over time and an expected decline in profits relative to GDP.

Receipts in 2018

CBO expects corporations' income tax payments, net of refunds, to decline by \$54 billion in 2018, to \$243 billion. That decline would occur despite projected increases in domestic economic profits and GDP. Because revenues from corporate income taxes are

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.

projected to fall even as GDP rises, those revenues are projected to decline relative to GDP.

The projected decline in corporate income tax receipts relative to domestic economic profits results from changes made by the 2017 tax act. The largest part of the projected revenue decline stems from the corporate tax rate reduction itself. In addition, the prospective reduction in the corporate tax rate in January 2018 provided an opportunity for some firms to accelerate expenses, such as employees' compensation, into the 2017 tax year in order to claim deductions at the 35 percent rate in effect for that year, thus lowering their tax liabilities in fiscal year 2018. Furthermore, the 2017 tax act allows businesses to fully expense (immediately deduct from their taxable income) equipment they purchased and put into service beginning in the fourth quarter of calendar year 2017. The ability to deduct the full value of such investments will also lower taxable income in fiscal year 2018. The lower taxes resulting from those provisions are partly offset by new revenues stemming from a onetime tax on previously untaxed foreign profits, expected to be paid from 2018 through 2026.

Receipts After 2018

In CBO's baseline, receipts from corporate income taxes begin to increase in 2019, rising as a share of GDP by 0.3 percentage points by 2028. Two factors cause receipts to rise as a share of GDP relative to 2018: Corporate tax receipts, which have been lower than can be explained by currently available data on business activity, are projected to recover; and the provisions allowing businesses to fully expense certain investments are scheduled to phase out under current law between 2022 and 2027. In CBO's projections, those increases are partially offset over the next decade by other factors: an expected decline in domestic economic profits relative to GDP, and the net effects of other provisions of the 2017 tax act that are projected to further reduce receipts after 2018.

Temporary Weakness in 2017 and 2018 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 the factors that are responsible (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 this temporary decline in receipts would increase projected tax revenues as a

share of GDP by about 0.4 percentage points from 2019 to 2028.

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 after those provisions expired. For tax years 2013 through 2017, companies were allowed to immediately deduct 50 percent of such investments. The rules enacted in the 2017 tax act allow businesses to fully expense equipment purchased and put into service beginning in the fourth quarter of calendar year 2017 through the end of 2022, after which the share of investments that business may 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.

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 0.2 percentage points over the next decade.

Other Provisions of the 2017 Tax Act. In addition to provisions allowing for full expensing of investment, the 2017 tax act included a number of other provisions that will affect corporate taxes over time. Following the initial decline in receipts the law causes in 2018, those provisions are projected to further reduce receipts relative to GDP by an additional 0.1 percentage points, on net.

Two provisions of the new tax law are projected to reduce receipts from corporate income taxes between 2018 and 2028. First, businesses are required to pay a new onetime tax on previously untaxed foreign profits. Corporations must pay the tax regardless of whether they actually repatriate the earnings to the United States—a requirement often called deemed repatriation. Prior to the 2017 tax act, those profits were not subject to U.S.

taxation until they were brought back to the United States. Taxes on those earnings, which are based on the value of those profits at the end of a corporation's 2017 tax year and unrelated to future business activity, must now be paid in installments over the next eight years. Because the required installments are not equal in size, the effect of those receipts on CBO's baseline varies over the period. Those payments are projected to boost receipts to varying degrees during the years 2018 through 2026, but not in subsequent years.

Second, the full effect of the 2017 tax act's reduction in the corporate tax rate phases in over two fiscal years. That provision was effective in January 2018, so it generally covers only three-quarters of fiscal year 2018, which began in October 2017. Furthermore, the tax years for some corporations do not align with the calendar year. Those corporations will face a blended tax rate, prorated between 35 percent and 21 percent, for one year as they transition to the new lower tax rate. Both of those factors limit the effect of the rate cut on revenues in fiscal year 2018 compared with subsequent years and contribute to a further decline in corporate tax revenues as a share of GDP between 2018 and subsequent years.

Partly offsetting those factors are provisions that seek to expand the domestic corporate tax base and limit allowable deductions, thereby boosting receipts over the next decade. For example, beginning in tax year 2018, companies will generally no longer be able to generate a current year refund by deducting their net operating loss from prior tax liabilities and instead will only be permitted to deduct those losses from income in future years. In addition, the value of those "carryforwards" is reduced under the 2017 tax act, lowering the amount corporations can deduct from taxable income. As a result of those changes, CBO projects revenues to increase gradually over time. Additionally, beginning in 2022, corporations 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. In CBO's baseline, that change further boosts corporate receipts in 2022 and beyond.

Smaller Sources of Revenues

The remaining sources of federal revenues are excise taxes, remittances from the Federal Reserve to the Treasury, customs duties, estate and gift taxes, and miscellaneous fees and fines. Revenues from those sources totaled \$270 billion in 2017, or 1.4 percent of GDP (see

Table 3-3). Under current law, CBO projects that those receipts would decline to 1.1 percent of GDP by 2019 and gradually rise to over 1.2 percent of GDP by 2028.

Among the smaller sources of revenues, the changes from 2018 to 2028 result mostly from changes in the amounts received in remittances from the Federal Reserve and from 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. Excise taxes are projected to rise from \$102 billion in 2018 to \$129 billion in 2028. From 2018 to 2019, projected receipts fall significantly because the annual fee on health insurance providers is suspended in 2019. After the decline in 2019, excise taxes are projected to increase each year but still to slightly decrease as a share of GDP, from 0.5 percent in 2018 to 0.4 percent in 2028, primarily because prices are projected to increase at a faster rate than the excise tax base. In addition, taxes on gasoline and tobacco would continue to decline over the 10-year period. In CBO's baseline projections, over 90 percent of excise tax receipts come from taxes related to highways, tobacco and alcohol, aviation, and health care.

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 slightly over the 10-year period, averaging an annual decline of 0.1 percent but remaining close to \$40 billion a year.

CBO's projection of a slight decline in highway revenues is the net effect of falling receipts from taxes on gasoline and rising receipts from taxes on diesel fuel and trucks. Gasoline consumption is expected to decline because improvements in vehicles' fuel economy (spurred by increases in the government's fuel-economy standards) is expected to more than offset the increase in the number of miles people drive. Miles driven largely reflects projected population growth. Increased fuel economy will likewise reduce the consumption of diesel fuel per mile driven over the 10-year period. However, from 2018 through 2021, the decrease in diesel consumption from fuel economy is projected to be offset by the increase in

Table 3-3.

Smaller Sources of Revenues Projected in CBO's Baseline

Billions of Dollars

	Actual,												Total	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2019–2023	2019–2028
Excise Taxes														
Highway	35	39	40	41	40	40	40	40	40	39	39	39	202	399
Health Care	4	18	3	21	22	25	29	31	32	34	36	39	99	272
Aviation	15	16	17	17	18	19	19	20	20	21	22	22	90	196
Tobacco	14	14	13	13	13	12	12	12	12	11	11	11	64	121
Alcohol	10	9	9	10	11	11	11	12	12	12	12	12	52	112
Other	5	6	5	5	5	5	5	5	5	5	5	5	25	50
Subtotal	84	102	88	106	109	113	117	119	121	123	126	129	532	1,149
Federal Reserve Remittances	81	66	44	39	45	52	61	68	74	80	82	88	240	632
Customs Duties	35	38	41	43	46	47	49	51	52	54	56	58	227	499
Estate and Gift Taxes	23	26	19	19	20	21	21	23	24	25	37	40	100	249
Miscellaneous Fees and Fines														
Universal Service Fund fees	10	10	11	11	11	12	12	12	12	12	12	12	57	116
Other fees and fines	38	37	36	34	33	30	32	34	35	37	39	40	165	350
Subtotal	48	47	46	45	44	42	44	46	47	49	51	52	221	466
Total	270	278	238	253	263	275	291	306	318	332	352	368	1,320	2,995

Source: Congressional Budget Office.

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

total miles driven by diesel-powered trucks as the economy expands. After 2021, consumption is expected to decline as fuel economy continues to improve.

Under current law, most of the federal excise taxes used to fund highway programs are scheduled to expire on September 30, 2022. In general, CBO's baseline incorporates 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 (including most of the highway taxes) will be extended.

Health Care Taxes. CBO projects receipts from health care taxes to grow from \$18 billion in 2018 to \$39 billion in 2028. The largest of those taxes is the excise tax imposed on many health insurers under the Affordable Care Act. 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. In 2018, revenues are projected to total \$14 billion. Recent legislation suspended the tax for 2019, but receipts are projected to rise steadily thereafter, reaching \$24 billion by 2028.

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 to 2028. A moratorium on the medical devices tax was extended in recent legislation and so will not generate revenue until calendar year 2020. In 2028, CBO estimates that it will raise about \$4 billion in revenues. Recent legislation also delayed the implementation of the excise tax on high-cost employment-based health plans until 2022. Revenues from that tax are projected to total \$7 billion in 2028 under current law.

Tobacco and Alcohol Taxes. CBO projects that taxes on tobacco products will generate \$14 billion in revenues in 2018. That amount is projected to decrease by roughly 2 percent a year over the next decade, as tobacco consumption continues to decline. Receipts from taxes on alcoholic beverages are expected to total \$9 billion in 2018. Projected revenues over the 2018–2020 period are lower because of the effects of the 2017 tax act, which lowered taxes on most types of alcohol. Beginning in 2022, receipts would grow at about 2 percent per year to reach \$12 billion by 2028.

Aviation Taxes. In CBO’s baseline, receipts from taxes on airline tickets, aviation fuels, and various aviation-related transactions increase from \$16 billion in 2018 to \$22 billion in 2028, yielding an average annual rate of growth of about 3 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 (inflation-adjusted) economic activity and prices increase. Under current law, aviation taxes are scheduled to expire in 2019. In the same manner as highway taxes described above, CBO’s baseline incorporates the assumption that these expiring taxes will be extended because they are dedicated to a trust fund.

Other Excise Taxes. Other excise taxes are projected to generate a total of about \$6 billion in revenues in 2018 and \$55 billion in revenues from 2018 to 2028. They include two new excise taxes established by the 2017 tax act: an excise tax on the investment income of private colleges and universities and a tax on executive compensation of tax-exempt organizations. The category also consists of other taxes dedicated to trust funds, including the Federal Aid in Wildlife Restoration trust fund (taxes on firearms and bows and arrows), the Oil Spill Liability Trust Fund, and the Patient-Centered Outcomes Research Trust Fund.

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

CBO projects the Federal Reserve’s remittances in 2018 to be \$66 billion (or 0.3 percent of GDP). That amount was boosted by \$2 billion, CBO estimates, by the Federal Reserve’s transfer of its surplus account to the Treasury as required by the Bipartisan Budget Act of 2018 (P.L. 115–123). Subsequently, CBO projects that remittances will decrease over the 2018–2020 period because of the Federal Reserve’s rising interest expenses and a reduction in the amount of assets that it holds. CBO also projects an increase in interest rates on Treasury securities over the projection period, which will increase earnings for the Federal Reserve—but only gradually—as it purchases new securities that earn higher yields. (See Chapter 1 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 2019–2028 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 remaining near 0.5 percent of GDP between 2018 and 2028.

Customs Duties. The duties, which are assessed on certain imports, have totaled 0.2 percent of GDP in recent years, amounting to \$35 billion in 2017. CBO projects that, under current law, those receipts would continue at that level relative to GDP throughout the next decade.⁴

Estate and Gift Taxes. In 2017, revenue from the 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, taxes 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 2028.

Miscellaneous Fees and Fines. Receipts from other fees and fines totaled \$48 billion (0.2 percent of GDP) in 2017. Under current law, those fees and fines would

4. CBO’s baseline for customs duties was completed before the implementation of new tariffs on steel and aluminum and does not incorporate any effects of those policies.

continue to average 0.2 percent of GDP from 2018 through 2028, 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.

Like 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.”⁵ That law requires the federal budget to list tax expenditures, and every year JCT and the Treasury's Office of Tax Analysis each publish estimates of individual and corporate income tax expenditures.⁶

Tax expenditures are more similar to the largest benefit programs than they are to discretionary spending programs: Tax expenditures are not subject to annual appropriations, and any person or entity that meets the legal requirements can receive the benefits. Because of their budgetary treatment, however, tax expenditures are much less transparent than spending on benefit programs.

Magnitude of Tax Expenditures

Tax expenditures have a major impact on the federal budget. CBO estimates that in fiscal year 2017, before the 2017 tax act and subsequent legislation took effect, the more than 200 tax expenditures in the individual and corporate income tax systems totaled almost \$1.7 trillion—or 8.9 percent of GDP—if their effects on payroll taxes as well as on income taxes are included.⁷ That amount equaled more than half of all federal revenues received in 2017 and exceeded spending on Social Security, defense, or Medicare (see Figure 3-3).

Tax expenditures are likely to be smaller beginning in 2018 as a result of the 2017 tax act—but estimates of their magnitude are not yet available. CBO projects those amounts on the basis of estimates prepared by JCT, and JCT's estimates incorporating the effects of the 2017 tax act and subsequent legislation have not yet been released.

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

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

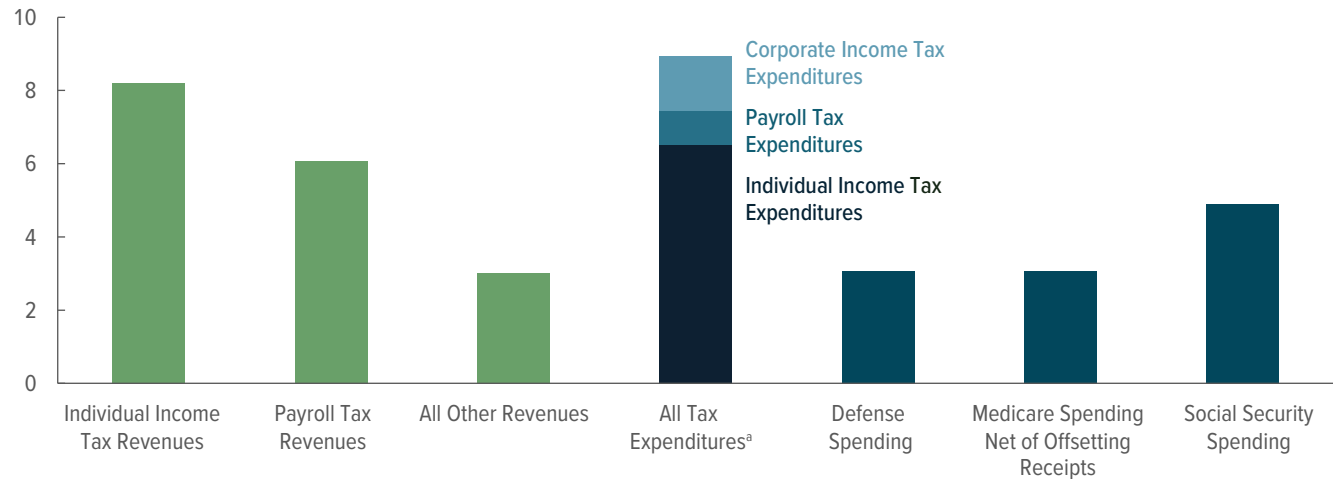
6. For this analysis, CBO follows JCT's definition of tax expenditures as deviations from a “normal” income tax structure. For the individual income tax, that structure incorporates existing regular tax rates, the standard deduction, personal exemptions, and deductions of business expenses. For the corporate 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 2016–2020*, JCX-3–17 (January 2017), <https://go.usa.gov/xQ3gn>. 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).

7. 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. JCT has previously estimated the effect on payroll taxes of the provision that excludes employers' contributions for health insurance premiums from their workers' taxable income. See Joint Committee on Taxation, *Background Materials for Senate Committee on Finance Roundtable on Health Care Financing*, JCX-27–09 (May 2009), <https://go.usa.gov/xQaa9>. 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.

Figure 3-3.**Revenues, Tax Expenditures, and Selected Components of Spending in 2017**

Tax expenditures, estimated to have been \$1.7 trillion in 2017, cause revenues to be lower than they would be otherwise and, like spending programs, contribute to the federal deficit.

Percentage of Gross Domestic Product



Source: Congressional Budget Office, using estimates by the staff of the Joint Committee on Taxation. Estimates incorporating the effects of the 2017 tax act have not yet been released. Those changes in law will generally reduce the magnitude of tax expenditures beginning in 2018.

a. 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 2017, 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, the estimates do not reflect the amount of revenue that would be raised if those provisions of the tax code were eliminated and taxpayers adjusted their activities in response to the changes. The outlay portions of refundable tax credits are included in tax expenditures. Those payments would be reported in the budget as "other mandatory spending," a category not shown in this figure.

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 2017, those and other factors were approximately offsetting, so the total amount of tax expenditures roughly equaled 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 2017

CBO estimates that the 10 largest tax expenditures accounted for almost three-quarters of the total budgetary effects of all tax expenditures in fiscal year 2017, totaling 6.1 percent of GDP.⁸ Those 10 tax expenditures fell into four categories: exclusions from taxable income, itemized deductions, preferential tax rates, and tax credits.

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

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

and earnings of pension funds (minus pension benefits that are included in taxable income); and profits earned abroad, which certain corporations may exclude from their taxable income until those profits are returned to the United States.⁹

- 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 have equaled 1.5 percent of GDP in 2017.
- The exclusion of pension plan contributions and earnings has the next largest impact, resulting in tax expenditures that are estimated to have totaled 1.2 percent of GDP last year, including effects on payroll taxes.¹⁰
- Tax expenditures for the deferral of corporate profits earned abroad are estimated to have equaled 0.6 percent of GDP in 2017.

Itemized Deductions. Itemized deductions for certain types of payments allow taxpayers to further reduce their taxable income.

- Tax expenditures for deductions for state and local taxes (on nonbusiness income, sales, real estate, and personal property) are estimated to have equaled 0.5 percent of GDP in 2017.
- Tax expenditures for interest paid on mortgages for owner-occupied residences are estimated to have been 0.3 percent of GDP last year.
- Tax expenditures for charitable contributions are also estimated to have equaled 0.3 percent of GDP in 2017.

9. JCT previously also considered the exclusion for Medicare benefits (net of premiums paid) to be a tax expenditure but no longer does so. For a more detailed explanation, see Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2015–2019*, JCX-141R-15 (December 2015), p. 20, <https://go.usa.gov/xQ3gT>.

10. 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.

Preferential Tax Rates and Tax Credits. Under the individual income tax, preferential tax rates apply to some forms of income, including dividends and long-term capital gains.¹¹ 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.

- Tax expenditures for the preferential tax rates on dividends and long-term capital gains are estimated to have totaled 0.7 percent of GDP in 2017.¹²
- The Affordable Care Act provides a refundable tax credit, called the premium tax credit, to help low- and moderate-income people purchase health insurance through exchanges. Tax expenditures for those credits are estimated to have totaled 0.3 percent of GDP in 2017.
- The tax expenditure for the earned income tax credit is estimated to have been 0.4 percent of GDP last year.
- The tax expenditure for the child tax credit was also estimated to have been 0.3 percent of GDP in 2017.

Effect of the 2017 Tax Act on Tax Expenditures

The 2017 tax act made many changes that affect the magnitude of tax expenditures, though in many cases those changes are temporary. Some of those changes modify the rules for eligibility or the amount of tax expenditures. But the 2017 tax act also contained changes to other provisions in the tax code with indirect consequences for the total amount of tax expenditures. Neither JCT nor the Treasury Department has estimated tax expenditures under the new law, so a comprehensive

11. Not all analysts agree that lower tax rates on investment income constitute tax expenditures. Although such tax preferences are tax expenditures relative to a pure income tax, which is the benchmark used by JCT and the Treasury Department in calculating tax expenditures, they are not tax expenditures relative to a pure consumption tax because investment income generally is excluded from taxation under a consumption tax.

12. Taxpayers with income over certain thresholds—\$200,000 for single filers and \$250,000 for married couples filing 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.

evaluation of the size of tax expenditures is not possible at this time. CBO expects that, on balance, the changes made by the tax act will reduce tax expenditures. But even with those reductions, tax expenditures will continue to have a substantial impact on the federal budget.

Ways in Which Tax Expenditures Will Be Reduced.

The 2017 tax act directly limited some of the largest tax expenditures for calendar years 2018 through 2025, broadening the tax base. For example, a new limit was placed on the itemized deduction for state and local taxes (including income, sales, and property taxes), and the limit on the amount of debt for owner-occupied housing for which the mortgage interest is deductible was lowered.

Some changes made by the 2017 act will indirectly reduce tax expenditures. The act almost doubled the standard deduction, which will significantly curtail tax expenditures for itemized deductions. That change will reduce 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. CBO expects that the larger standard deduction, in conjunction with the limits on itemized deductions, will reduce the number of taxpayers who itemize deductions by more than half.

Furthermore, by lowering both individual and corporate statutory tax rates, the act will reduce the size of most tax expenditures. That effect occurs because tax expenditures are measured as the revenue loss from special exclusions and deductions and preferential rates, and the revenue loss generally falls as the statutory rates fall. (Tax expenditures for tax credits, however, are largely unchanged by rate structure.)

Ways in Which Tax Expenditures Will Be Increased.

The 2017 tax act expanded other tax expenditures. For example, for the years 2018 through 2025, the nonrefundable child credit is doubled, the refundable portion of the child tax credit is increased, and a smaller credit is broadened to cover dependents who were not previously eligible for the credit.¹³ And the act also allows for a

13. For some taxpayers, the tax reduction provided by those larger tax credits will be more than offset by the temporary repeal of personal exemptions, which will raise taxable income. However, personal exemptions, along with the standard deduction and tax rates on ordinary income, are not considered tax expenditures.

more generous capital recovery, which will increase the tax expenditures for depreciation of property.

Economic Effects of Tax Expenditures

Tax expenditures are generally designed to further societal goals. For example, the tax expenditures for health insurance costs, pension contributions, and mortgage interest payments may help promote a healthier population, adequate financial resources for retirement and greater national saving, and stable communities of homeowners. However, tax expenditures have a broad range of effects that do not always further societal goals.

First, tax expenditures may lead to an inefficient allocation of economic resources. They do so by subsidizing activity—such as buying a home—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; to reallocate existing savings from accounts that are not tax-preferred to retirement accounts, rather than add to their savings; and to purchase more expensive homes, investing too much in housing and too little elsewhere relative to what they would do if all investments were treated equally.

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 makes 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 work effort by some people.

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 itemized 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 capital gains on assets transferred at death, taxpayers would need to calculate the appreciation in the value of their assets since the original purchase—a calculation that would require records of the purchase of assets acquired by deceased benefactors, perhaps many decades earlier.

Fifth, tax expenditures affect the distribution of the tax burden in ways that may not always be recognized, both among people at different income levels and among people who have similar income but differ in other ways.

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 11-year revenue projections 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 began about six months after the projections were released) and the sixth year were too high, on average, mainly because of the difficulty of predicting when economic downturns would occur. The overall accuracy of CBO's revenue projections has been similar to that of the projections of other government agencies. Since 1982, the mean absolute error—that is, the average of all errors without regard for whether they were positive or negative—has been 5.0 percent for CBO's budget-year projections and 10.0 percent for the sixth-year projections.¹⁴ Percentage errors of those amounts would equal about \$175 billion in 2019 and \$425 billion in 2023.

14. Those errors include CBO's projections that were prepared from 1982 through the most recent fiscal years for which actual receipts are available for each projection horizon: 2016 for the budget-year projections and 2012 for the sixth-year projections. For a more detailed analysis, 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.