CHAPTER

# 5

# The Long-Term Outlook for Federal Revenues

Federal revenues come from various sources, including individual and corporate income taxes, payroll (social insurance) taxes, excise taxes, estate and gift taxes, and other taxes and fees. Currently, proceeds from individual income taxes and payroll taxes account for about 80 percent of the federal government's revenues.

For this report, the Congressional Budget Office projected the future path of revenues under an extended baseline. That approach follows the agency's 10-year baseline budget projections through 2026 and then extends most of the concepts underlying those baseline projections for the rest of the long-term projection period. The revenues projected for the 10-year period are the same as those in CBO's March 2016 baseline.[1] The extended baseline incorporates the assumption that the rules governing all tax sources will evolve as specified under current law (including the scheduled expiration of temporary provisions lawmakers have routinely extended before).[2]

CBO's projections are not intended to predict budgetary outcomes; instead, they represent CBO's assessment of future revenues if current laws remained generally unchanged. (Chapter 6 discusses the consequences of fiscal policies other than those in the extended baseline.) Such projections are particularly difficult because revenues are very sensitive to economic developments, including the impact of rising federal debt on the economy.

Under the extended baseline, federal revenues relative to the size of the economy fluctuate in a narrow band, ranging from 18.0 percent to 18.2 percent of gross domestic product (GDP) from 2016 through 2026. That relative stability over the next 10 years mainly reflects offsetting movements in four sources of revenues:

- Individual income tax receipts are projected to increase by 0.8 percentage points relative to GDP, mainly because of real bracket creep—the pushing of a growing share of income into higher tax brackets as a result of growth in real (inflation-adjusted) income—as well as the interaction of the tax system with inflation, an expected continued increase in the share of wages and salaries earned by higher-income taxpayers, and rising distributions from tax-deferred retirement accounts.

- Remittances by the Federal Reserve System to the Treasury are projected to decline by 0.4 percentage points as a share of GDP to more typical amounts relative to the size of the economy.

- Corporate income tax receipts are projected to decline relative to GDP by 0.2 percentage points, largely because of an expected drop in domestic economic profits relative to the size of the economy.

- Payroll tax receipts are also projected to decline by 0.2 percentage points relative to GDP over the next decade, primarily because of the expected continued increase in the share of wages and salaries earned by higher-income taxpayers.

After 2026, in the extended baseline, revenues rise faster than GDP, largely for two reasons: The effect of real bracket creep would continue, and a new excise tax on certain employment-based health insurance plans would generate a growing amount of revenues relative to the size of the economy. As a result, federal revenues are projected to reach 19.4 percent of GDP by 2046 (see Figure 5-1). By comparison, revenues over the past 50 years have averaged 17.4 percent of GDP.

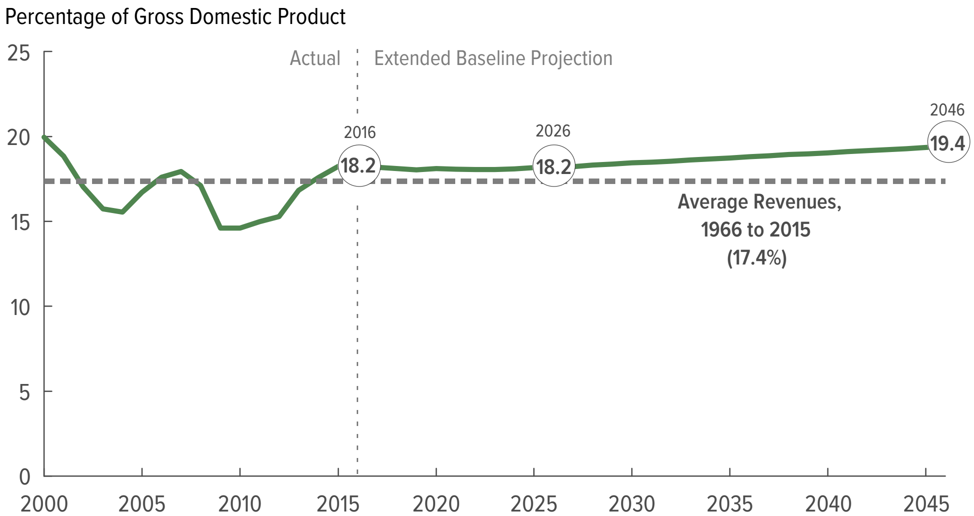
Without significant changes in tax law, the tax system's effects in 2046 would differ markedly from what they are

1. For details of CBO's March baseline, see Congressional Budget Office, *Updated Budget Projections: 2016 to 2026* (March 2016), www.cbo.gov/publication/51384.

2. The sole exception to the current-law assumption during the baseline period applies to expiring excise taxes dedicated to trust funds. The Balanced Budget and Emergency Deficit Control Act of 1985 requires CBO's baseline to reflect the assumption that those taxes would be extended at their current rates. That law does not stipulate that the baseline include the extension of other expiring tax provisions, even if lawmakers have routinely extended them before.

Figure 5-1.

## Total Revenues




Under CBO's extended baseline, revenues rise slowly after 2026 mainly because of real bracket creep and an excise tax on employment-based health insurance that is scheduled to take effect in 2020.

Source: Congressional Budget Office.

The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2026 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

Real bracket creep refers to the process in which, as real (inflation-adjusted) income rises, an ever-larger proportion becomes subject to higher tax rates.

today. A larger share of each additional dollar of income that households earned would go to taxes, and households throughout the income distribution would pay more of their total income in taxes than households in similar places in that distribution pay today.

## Revenues Over the Past 50 Years

Revenues have varied significantly over the past 50 years because of changes in tax laws and interactions between tax law and economic conditions. Total federal revenues have been as high as 20.0 percent of GDP (in 2000) and as low as 14.6 percent (in 2009 and 2010), with no evident trend (see Figure 5-2). The composition of total revenues during that period has varied as well. Individual income taxes, which account for about half of all revenues now, have ranged from slightly less than 10 percent of GDP (in 2000) to slightly more than 6 percent (in 2010). Payroll taxes, which generate about one-third of total revenues now, have varied from well under 4 percent of GDP to more than 6 percent during the past 50 years. (Those taxes are credited mainly to the Social Security and Medicare Hospital Insurance trust funds.) Corporate income taxes have fluctuated between about 1 percent and 4 percent of GDP since the mid-1960s, and combined revenues from other sources have fluctuated between 1 percent and 3 percent of GDP over that same period.

Some of that variation is the result of legislative changes: In the past 50 years, at least a dozen changes in law have raised or lowered annual revenues by at least 0.5 percent of GDP. But most of the variation in the amounts of revenue generated by different taxes has stemmed from changes in economic conditions and from how those changes interact with the tax code. For example, without legislated tax reductions, real bracket creep tends to cause receipts from individual income taxes to grow relative to GDP, because as taxpayers' income rises faster than inflation a larger share of income is taxed at higher rates. Also, because some parameters of the tax system do not increase with inflation, rising prices alone subject a greater share of income to higher effective tax rates.[3]

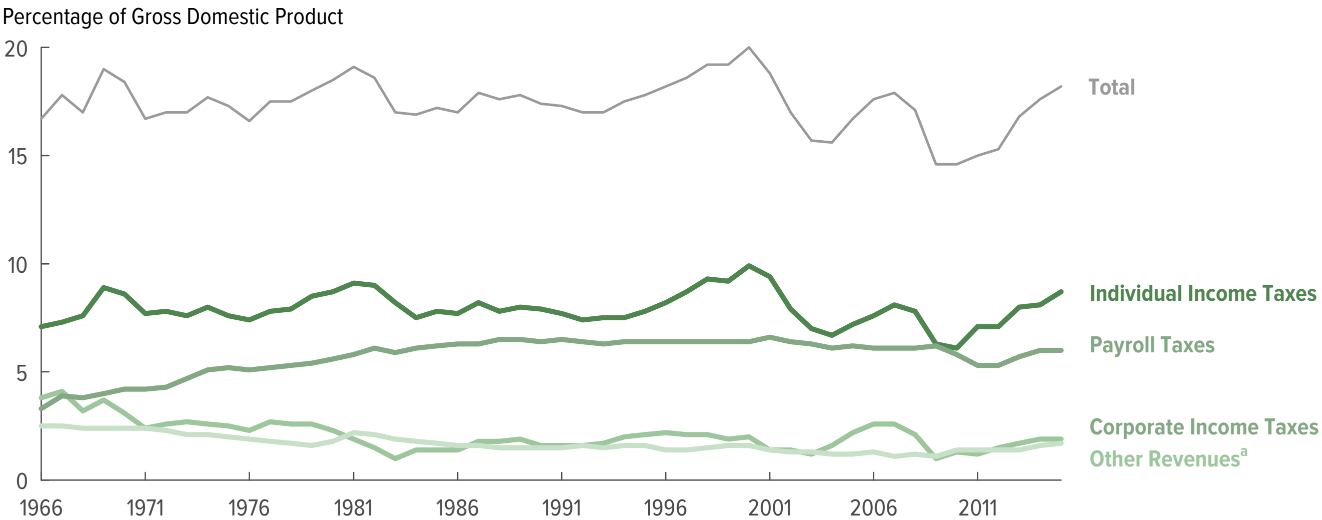
Cyclical developments in the economy also affect revenues. During economic downturns, for example, taxable corporate profits generally fall faster than the nation's output, shrinking corporate tax revenues relative to GDP; losses in households' income also tend to push a greater

3. The parameters of the tax system include the amounts that define the various tax brackets; the amounts of the personal exemption, standard deduction, and credits; and tax rates. Although many of the parameters—including the personal exemption, standard deduction, and tax brackets—are indexed for inflation, some, such as the amount of the maximum child tax credit, are not. The effect of price increases on tax receipts was much more significant before 1984, when none of the parameters of the individual income tax were indexed for inflation.

Figure 5-2.

## Revenues, by Source, 1966 to 2015

Over the past 50 years, movement in individual income tax receipts has accounted for most of the variation in total revenues.




Source: Congressional Budget Office.

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

share of total income into lower tax brackets, reducing individual income tax revenues relative to GDP. Thus, total tax revenues as a share of GDP automatically decline when the economy is weak and rise when the economy is strong.

By contrast, revenues derived from excise taxes have declined over time relative to GDP because many excise taxes are levied on the unit quantity of a good purchased (such as a gallon of gasoline) as opposed to a percentage of the price paid. Because those levies are not indexed for inflation, the revenues they generate have declined as a share of GDP as prices have risen.

## Revenue Projections Under CBO's Extended Baseline

During the next decade, under current law, some new provisions of tax law will go into effect and certain provisions will expire. Reflecting those scheduled changes, the extended baseline incorporates the following assumptions:

- A new tax on certain employment-based health insurance plans with high premiums, currently scheduled to go into effect in 2020, will be implemented without further modification.

- Certain tax provisions scheduled to expire over the next decade will do so, even if lawmakers have routinely extended them before. For example, the rules that allow businesses with large amounts of investment to accelerate their deductions for those investments are assumed to phase out, as scheduled, by the end of December 2019.

If current laws remained in place, tax revenues would rise from 18.2 percent of GDP in both 2016 and 2026 to 19.4 percent in 2046, CBO estimates.[4] Increases in receipts from individual income taxes more than account

4. According to CBO and the staff of the Joint Committee on Taxation, extending expiring tax provisions, including the partial expensing of equipment property at a 50 percent rate, and repealing certain postponed taxes related to health insurance would reduce revenues by 0.3 percent of GDP in 2026. For further information, see Table 1-5 of Congressional Budget Office, *The Budget and Economic Outlook: 2016 to 2026* (January 2016), www.cbo.gov/publication/51129.

Table 5-1.

**Sources of Growth in Total Revenues Between 2016 and 2046 Under CBO's Extended Baseline**

| Source of Growth | Percentage of GDP |
|---|---|
| Structural Features of the Individual Income Tax (Including real bracket creep)[a] | 1.1 |
| New and Expiring Tax Provisions | 0.8 |
| Aging and the Taxation of Retirement Income | 0.3 |
| Changes in the Distribution of Income | 0.1 |
| Other Factors | -1.0 |
| **Growth in Total Revenues Between 2016 and 2046** | **1.2** |

Source: Congressional Budget Office.

The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2026 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

GDP = gross domestic product.

a. Real bracket creep refers to the process in which, as real (inflation-adjusted) income rises, an ever-larger proportion becomes subject to higher tax rates.

for the projected rise of 1.2 percentage points in total revenues as a percentage of GDP over the next 30 years; receipts from all other sources of revenues, taken together, are projected to decline slightly as a share of GDP.

The projected increase in total revenues reflects several factors: structural features of the income tax system, new and expiring tax provisions, demographic trends, changes in the distribution of income, and other factors (see Table 5-1).

### Structural Features of the Individual Income Tax System

Real bracket creep is the most important structural feature of the tax system contributing to growth in revenues over time. It has two kinds of effects. First, rising real income subjects an ever-larger proportion of income to higher tax rates, and second, it further increases taxes by reducing taxpayers' eligibility for various credits, such as the earned income tax credit and the child tax credit.

Also, some provisions of the tax code are not indexed for inflation, so cumulative inflation boosts receipts relative to GDP. For example, the additional tax on the investment income of individuals that went into effect in 2013 is not indexed for inflation. The income thresholds for that tax ($200,000 for single individuals and $250,000 for married couples) do not increase as prices rise, so the tax will affect an increasing share of investment income over time, boosting revenues by a small but growing share of GDP.[5] If current laws remained in place, faster growth in people's income than in parameters of the tax code would push up income tax revenues as a portion of GDP by 1.1 percentage points between 2016 and 2046, CBO estimates.

### New and Expiring Tax Provisions

Under the extended baseline, CBO assumes that tax provisions will take effect or expire as specified under current law. Two new tax provisions will begin to raise significant amounts of revenue over the next several years. Certain other provisions are scheduled to expire, also boosting revenues.

The most significant new provision is an excise tax on employment-based health insurance whose value exceeds certain thresholds. The implementation of that new tax, originally scheduled for 2018, was delayed until 2020 by the Consolidated Appropriations Act, 2016 (Public Law 114-113). That tax is expected to increase revenues in two ways:

- First, in those cases in which the tax applied, it would generate additional excise tax revenues.

5. An additional Medicare tax of 0.9 percent, paid entirely by the employee, applies to annual earnings (wages and salaries) exceeding $200,000 for single individuals and $250,000 for married couples. Because those thresholds are not indexed for inflation, the tax will apply to an increasing share of earnings over time and thereby raise payroll tax revenues as a share of GDP by larger amounts over time. However, a decline in the share of earnings subject to the Social Security tax will more than offset that effect, CBO projects, because a further slight increase in earnings inequality will cause more earnings to be above the taxable maximum amount for Social Security.

- Second, many individuals and employers will probably shift to lower-cost health insurance plans to either reduce the excise tax paid or avoid it altogether. As a result, total payments of health insurance premiums for those individuals—and the associated tax-exempt contributions from their employers—will be smaller than they would have been without the tax. However, CBO expects that total compensation paid by employers (including wages and salaries, contributions to health insurance premiums, pensions, and other fringe benefits) will not be affected over the long term.[6] Thus, smaller expenditures for health insurance will mean higher taxable wages and salaries for employees and, as a result, higher payments of income and payroll taxes.[7]

Thus, regardless of whether individuals and employers decide to pay the excise tax or to avoid it by switching to lower-cost plans, total tax revenues would ultimately rise compared with what they would have been without the tax. Although the thresholds for the tax on high-premium health insurance plans will be adjusted for changes in overall consumer prices, health care costs will grow faster than prices over the long term, CBO projects, causing the tax to affect more people over time. Under the extended baseline, the excise tax is projected to increase total revenues by 0.6 percent of GDP in 2046.

The other new provision that will increase revenues relative to GDP after 2016 penalizes certain employers that do not offer their employees health insurance coverage meeting certain criteria. That provision was implemented in 2015 and will increase revenues starting in 2017, CBO projects.

In addition, several dozen tax provisions are slated to expire over the next decade. The most significant of those is the option for certain businesses to immediately deduct from their taxable income 50 percent of the cost of new investments in equipment. That provision is scheduled to be phased out by the end of 2019.

The scheduled implementation of new tax provisions and the expiration of certain existing tax provisions, taken together, would raise receipts by 0.8 percent of GDP between 2016 and 2046, CBO projects.

### Aging and the Taxation of Retirement Income

During the next few decades, members of the baby-boom generation (people born between 1946 and 1964) will continue to retire. They will withdraw money from retirement accounts—such as 401(k) plans and individual retirement accounts—and receive pension benefits, boosting income tax revenues as a share of GDP. Some or all of the amounts withdrawn will be taxable, depending on the specific characteristics of the retirement plans. Likewise, compensation deferred under employer-sponsored defined benefit plans is taxed when benefits are paid.[8] Thus, the Treasury will receive significant tax revenues that have been deferred for years. Payment of those deferred taxes will boost revenues as a share of GDP by about 0.3 percentage points, CBO projects, between 2016 and 2046. That upward trend is expected to end around 2035, when almost all baby boomers will have reached retirement.

### Changes in the Distribution of Income

Revenues from individual income and payroll taxes also depend on the distribution of income. CBO's projections reflect an expectation that earnings will grow faster for higher-income people than for others during the next decade—as they have over the past several decades—and that the income of all taxpayers will grow at similar rates thereafter. That differential growth will cause a larger share of income to be subject to higher tax rates. For example, the share of wages earned by the top one-fifth of workers is projected to increase by about 4 percentage points, from 57 percent to 61 percent, between 2015 and 2026. That faster growth in earnings for higher-income people would elevate estimated individual income tax revenues relative to GDP by about 0.3 percentage points over the next 10 years.

Partially offsetting that increase in individual income taxes would be a corresponding decrease in payroll tax receipts. Those receipts would decline because greater earnings inequality would cause more earnings to be above the taxable maximum amount for Social Security

6. In the past, rising premiums have been an important cause of slow wage growth. See Paul Ginsburg, *Alternative Health Spending Scenarios: Implications for Employers and Working Households* (Brookings Institution, April 2014), http://tinyurl.com/ksh9p47.

7. Even if the excise tax caused employers to shift to lower-cost health insurance plans without increasing employees' wages by a corresponding amount, other taxes (such as those on corporate profits) would tend to rise. The resulting revenues would be similar to the amounts projected in CBO's extended baseline.

8. A defined benefit pension plan is an employment-based plan that promises employees a certain regularly recurring benefit upon retirement. Typically, the benefit is based on a formula that takes into account an employee's length of service and salary.

taxes. The share of covered earnings above the taxable maximum amount is projected to rise to more than 20 percent in 2026, 4 percentage points more than the share in 2015. That effect would reduce payroll tax revenues relative to GDP by about 0.2 percentage points over the next decade, CBO projects. Altogether, if current laws remained in place, faster growth in earnings of higher-income people would increase tax revenues as a portion of GDP by 0.1 percentage point between 2016 and 2026, CBO estimates, and by no additional amount after 2026.

### Other Factors

Under the extended baseline, factors besides those already discussed would cause revenues to decline by a combined 1.0 percent of GDP between 2016 and 2046. More than four-fifths of that decline would occur by 2026. In particular, remittances to the Treasury from the Federal Reserve—which have been very large since 2010 because the central bank's portfolio has grown and changed in composition—are projected to decline to more typical levels and remain constant as a share of GDP after 2026. Corporate income taxes are also expected to decline over the next decade because of a projected decrease in domestic economic profits relative to GDP and an expected increase in the use of certain strategies that some corporations employ to reduce their tax liabilities. (In CBO's extended baseline, corporate income taxes remain constant as a share of GDP after 2026.)

Excluding the excise tax on high-premium health insurance plans, CBO projects that excise taxes would decline as a share of GDP over time. Because many excise taxes are assessed as a fixed dollar amount per unit quantity of a good purchased (not as a percentage of the price paid), receipts from excise taxes as a share of GDP tend to fall as overall prices rise over time. Moreover, payroll taxes for unemployment insurance are expected to decline to more typical levels over the next few years, further reducing receipts as a share of GDP.

## Long-Term Implications for Tax Rates and the Tax Burden

Even if legislators enacted no future changes in tax law, the effects of the tax system that would be in place in the future would differ significantly from the effects of today's tax system. Increases in real income over time would push more income into higher tax brackets in the individual income tax system, raising people's effective marginal tax rates and average tax rates. (The effective marginal tax rate is the percentage of an additional dollar of income from labor or capital that is paid in federal taxes. The average tax rate is total taxes paid divided by total income.) Moreover, fewer taxpayers would qualify for certain tax credits because rising real income would push taxpayers above the income limits for eligibility. Inflation would also raise tax rates, but to a much lesser extent, because most of the tax code's key parameters are indexed for inflation. Slightly more taxpayers would become subject to the alternative minimum tax (AMT) over time, although the American Taxpayer Relief Act of 2012 greatly limited the share of taxpayers who would pay that tax.[9] Thus, in the long run, people throughout the income distribution would pay a larger share of their income in taxes than people at the same points in the distribution pay today, and many taxpayers would face diminished incentives to work and save.

### Marginal Federal Tax Rates on Income From Labor and Capital

Under CBO's extended baseline, marginal tax rates on income from labor and capital would rise over time. The effective marginal tax rate on income from labor would increase from 30 percent in calendar year 2016 to 33 percent in 2046, CBO projects (see Table 5-2). (The effective marginal tax rate on labor income is calculated by averaging labor income across taxpayers, using weights proportional to their income from labor.) The effective marginal tax rate on capital income (returns on investment) is projected to rise from 14 percent to 18 percent over that period.

The projected increase in the effective marginal tax rate on labor income reflects three primary factors:

- *Real bracket creep under the regular income tax.* As households' inflation-adjusted income rose over time, they would be pushed into higher marginal tax brackets. (Because the thresholds for taxing income at different rates are indexed for inflation, increases in income that just kept pace with inflation would not

9. The AMT is a parallel income tax system with fewer exemptions, deductions, and rates than the regular income tax system. Households must calculate the amount they owe under both tax systems and pay whichever is larger. The American Taxpayer Relief Act raised the exemption amounts for the AMT for 2012 and, beginning in 2013, permanently indexed those amounts for inflation. The law also indexed for inflation the income thresholds at which those exemptions phase out and the income threshold at which the second rate bracket for the AMT begins. Although rising real income will gradually subject more taxpayers to the AMT, many of those newly affected taxpayers will owe only slightly more than their regular income tax liability.

**Table 5-2.**

### Effective Marginal Federal Tax Rates Under CBO's Extended Baseline

Percent

| | 2016 | 2026 | 2046 |
|---|---|---|---|
| Marginal Tax Rate on Labor Income | 29.7 | 31.0 | 33.1 |
| Marginal Tax Rate on Capital Income | 14.4 | 17.5 | 18.2 |

Source: Congressional Budget Office.

The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2026 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

The effective marginal tax rate on labor income is the share of an additional dollar of such income that is paid in federal individual income taxes and payroll taxes, averaged among taxpayers with weights proportional to their labor income. The effective marginal tax rate on capital income is the share of the return on an additional dollar of investment made in a particular year that will be paid in taxes over the life of that investment. Rates are calculated for different assets and industries and then averaged over all assets and industries with the shares of total asset values used as weights.

generally raise households' marginal tax rates.) One consequence is that the share of ordinary income subject to the top tax rate of 39.6 percent would rise from 13 percent in 2016 to 16 percent by 2046, CBO estimates.[10]

- *The structure of premium subsidies in the health insurance marketplaces.* Those subsidies are conveyed in the form of tax credits that phase out as income rises over a certain range, increasing taxpayers' marginal rates on income in that range. Under current law, the income range over which the subsidies phase out would expand with inflation, but the subsidies would grow faster than inflation. As a result, over time, for each extra dollar of income someone earned, the subsidy would be reduced by a larger fraction of that dollar, thereby raising that person's effective marginal tax rate.

- *The additional 0.9 percent tax on earnings above certain thresholds that went into effect in 2013.* Over time, that tax would apply to a growing share of labor income because the thresholds are not indexed for inflation.

The effective marginal tax rate on capital income would also rise over the next 30 years, CBO projects. That increase reflects two primary factors:

- *The expiration of certain accelerated depreciation provisions.* The option for certain businesses to immediately deduct from their taxable income 50 percent of the cost of new investments in equipment is scheduled to be phased out by the end of 2019.

- *A declining share of investment income in retirement accounts.* CBO projects that as members of the baby-boom generation continue to retire and draw down the assets in their retirement accounts, the share of investment income earned in those nontaxable accounts will decline relative to the share of investment income earned in taxable accounts.

CBO estimates that real bracket creep would not raise the rate on capital income very much (unlike its effect on the marginal tax rate on labor income) because a large share of capital income is already being taxed at the top rates applicable to ordinary income or to long-term capital gains and dividends.

The increase in the marginal tax rate on labor income would reduce people's incentive to work, and the increase in the marginal tax rate on capital income would reduce their incentive to save. Conversely, the reduced after-tax earnings and savings resulting from those higher taxes would encourage people to work and save more in order to maintain the same amount of after-tax income and savings. Evidence suggests that the former behavioral responses typically prevail and that, on balance, higher marginal tax rates discourage economic activity.[11] (The overall effect of federal taxes on economic activity depends not only on marginal tax rates but also on the amount of revenues raised relative to federal spending and thereby on the resulting federal deficits and debt.)

## Average Tax Rates for Some Representative Households

Because some parameters of the tax code are not indexed for inflation and most are not indexed for real income growth, average federal tax rates would increase over time under the extended baseline.

The cumulative effect of rising prices would significantly reduce the value of parameters of the tax system that are

10. Ordinary income is all income subject to the income tax except long-term capital gains and dividends.

11. For additional discussion, see Congressional Budget Office, *How the Supply of Labor Responds to Changes in Fiscal Policy* (October 2012), www.cbo.gov/publication/43674, and *Taxing Capital Income: Effective Marginal Tax Rates Under 2014 Law and Selected Policy Options* (December 2014), www.cbo.gov/publication/49817.

not indexed for inflation, CBO projects. For example, the amount of mortgage debt eligible for the mortgage interest deduction, which is not indexed for inflation, would fall from $1 million today to about $550,000 in 2046 measured in today's dollars, CBO estimates. And the portion of Social Security benefits that is taxable would increase from about 36 percent now to over 50 percent by 2046, CBO estimates, because the thresholds for taxing benefits are not indexed for inflation. In addition, the maximum values of certain tax credits, such as the child tax credit, are not adjusted for inflation and thus would diminish in value over time.

Under the extended baseline, even tax parameters that are indexed for inflation would lose value over time when compared with income. The thresholds for taxing income at different rates rise with inflation, but because incomes tend to rise faster than inflation, those thresholds still decline relative to income over time. Similarly, according to CBO's projections, the current $4,050 personal exemption amount would double by 2046 because it is indexed for inflation. But income per household will probably almost triple during that period, so the value of the exemption relative to income would decline by almost one-third. That decline would tend to boost average tax rates of lower-income taxpayers, for whom the personal exemption is larger relative to income, by more than those for higher-income taxpayers, for whom the personal exemption is smaller relative to income. And without legislative changes, the proportion of taxpayers claiming the earned income tax credit would fall from 16 percent this year to 12 percent in 2046, CBO projects, as growth in real income made more taxpayers ineligible for the credit.

Those developments and others would cause individual income taxes as a share of income to grow by different amounts for households at different points in the income distribution.

- According to CBO's analysis, a married couple with two children earning the *median total income* of $108,700 (including both cash income and other compensation) in 2016 and filing a joint tax return will pay about 5 percent of their income in individual income taxes (see Table 5-3).[12] By 2046, under current law, a similar couple earning the median income would pay 8 percent of their income in individual income taxes.

- For a married couple with two children earning *half the median total income*, the change in individual income taxes as a share of income would be much greater, CBO estimates: In 2016, such a family will typically receive a net payment from the federal government equal to 8 percent of its income in the form of refundable tax credits, but by 2046 the family would become a net taxpayer, paying about 2 percent of its income in income taxes.

- A married couple with two children earning *four times the median total income* would pay 22 percent of their income in individual income taxes in 2046, CBO projects, much higher than the amount paid by families with lower earnings. But the change in that share—up 3 percentage points from 2016—is much smaller than the 10 percentage-point increase in the share of taxes paid by similar families earning half the median total income.

By contrast, under current law, payroll tax rates across the income distribution would differ only slightly in 2046 from what they are today. Those taxes are principally levied as a flat rate on earned income below a certain threshold, which is indexed for both inflation and overall growth in real earnings. Thus, the changes over the next 30 years in the sum of income and payroll taxes as a share of income would be similar to the changes in income taxes as a share of income.

Although rising real income would contribute to rising average tax rates under current law, that real income growth would also mean that future households would have higher after-tax income than similar households at the same point in the income distribution have today. For example, from 2016 to 2046, real after-tax income for a couple earning the median income would grow by more than 75 percent under the extended baseline, CBO projects.

12. The examples incorporate the assumption that all income that taxpayers receive is from labor compensation. Furthermore, median income is assumed to grow with average income, so income at each multiple of the median grows at the same rate. For details about the calculations, see Table 5-3.

Table 5-3.

## Individual Income and Payroll Taxes as a Share of Total Income Under CBO's Extended Baseline

| | Income (2016 dollars) | | Taxes as a Share of Total Income (Percent) | |
|---|---|---|---|---|
| | Cash[a] | Total[b] | Income Taxes[c] | Income and Payroll Taxes[d] |
| | | **Taxpayer Filing a Single Return** | | |
| Half the Median Total Income | | | | |
| 2016 | 11,600 | 18,800 | -1 | 9 |
| 2046 | 19,900 | 37,100 | 2 | 10 |
| Median Total Income | | | | |
| 2016 | 29,100 | 37,600 | 6 | 18 |
| 2046 | 50,100 | 69,700 | 7 | 18 |
| Twice the Median Total Income | | | | |
| 2016 | 64,000 | 75,200 | 10 | 23 |
| 2046 | 110,500 | 134,700 | 12 | 25 |
| Four Times the Median Total Income | | | | |
| 2016 | 134,800 | 150,400 | 15 | 27 |
| 2046 | 233,800 | 265,300 | 16 | 28 |
| | | **Married Couple (With Two Children) Filing a Joint Return** | | |
| Half the Median Total Income | | | | |
| 2016 | 35,400 | 54,400 | -8 | 2 |
| 2046 | 58,800 | 104,000 | 2 | 10 |
| Median Total Income | | | | |
| 2016 | 85,900 | 108,700 | 5 | 17 |
| 2046 | 145,400 | 197,200 | 8 | 19 |
| Twice the Median Total Income | | | | |
| 2016 | 186,900 | 217,400 | 11 | 25 |
| 2046 | 318,500 | 384,400 | 15 | 28 |
| Four Times the Median Total Income | | | | |
| 2016 | 398,100 | 435,500 | 19 | 29 |
| 2046 | 681,900 | 758,700 | 22 | 31 |

Source: Congressional Budget Office, using data from the March 2015 Current Population Survey.

The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2026 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

CBO converted income amounts for 2046 into 2016 dollars by using the price index for personal consumption expenditures. All income amounts have been rounded to the nearest $100.

Underlying these calculations are several assumptions: that premiums for employment-based health insurance in 2046 will not exceed the excise tax threshold in the Affordable Care Act; that taxpayers itemize their deductions if those deductions are greater than the standard deduction; that their deduction for state and local taxes equals 9 percent of their wages; that their other deductions equal 12 percent of their wages; and that in each example involving a married couple, the spouses earn the same amount.

a. Cash income consists of a taxpayer's wages.

b. Total income consists of a taxpayer's cash income, the costs that the taxpayer's employer pays for employment-based health insurance, and the employer's share of payroll taxes.

c. Negative tax rates result when the people in an income group receive more in refundable tax credits, such as the earned income and child tax credits, than they owe in taxes.

d. Payroll taxes include the share paid by employers.