

# The Long-Term Outlook for Federal Revenues

ederal 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.

Projecting future revenue collections is difficult because revenues are sensitive to economic developments and because policymakers often make changes to tax law. For this report, the Congressional Budget Office projected the future path of revenues under an extended baseline. That approach follows the agency's baseline budget projections for the next decade and then extends the baseline concept beyond that 10-year window. The revenues projected for the 10-year window are the same as those in CBO's March 2015 baseline, as adjusted for recently enacted legislation.<sup>1</sup>

In general, the extended baseline reflects current law and embodies two assumptions about future federal tax policy:

The rules governing individual income, payroll, excise, and estate and gift taxes will evolve as specified under current law (including the recent or scheduled expiration of temporary provisions lawmakers have routinely extended before); and

Revenues from corporate income taxes and other sources (such as receipts from the Federal Reserve) will grow as projected under current law through 2025 and then remain constant as a share of gross domestic product (GDP) thereafter.<sup>2</sup>

Not intended to predict budgetary outcomes, the projections instead represent CBO's general assessment of future revenues if current laws remained unchanged. (Chapter 6 discusses the consequences of fiscal policies other than those that the extended baseline incorporates.)

Under the extended baseline, federal revenues as a share of GDP are projected to rise from 17.7 percent in 2015 to 18.3 percent in 2025. That growth largely reflects structural features of the tax system, most significantly because of real bracket creep—the pushing of a growing share of income into higher tax brackets because of growth in real (inflation-adjusted) income and the interaction of the tax system with inflation.

After 2025, in the extended baseline, revenues continue rising faster than GDP, largely for two reasons: The effect of real bracket creep continues, and certain tax increases enacted in the Affordable Care Act (ACA) generate a growing amount of revenues in relation to the size of the economy. As a result, federal revenues are projected to

The baseline this chapter refers to is the baseline issued in March 2015, as adjusted to reflect legislation enacted after CBO prepared those projections. The only such legislation affecting revenues enacted before CBO made the current projections is Public Law 114-10, the Medicare Reauthorization and CHIP Extension Act of 2015, which became law on April 16, 2015. According to CBO's projections, that law will increase revenues by less than \$1 billion in any given year between 2015 and 2025. For details of CBO's March baseline, see Congressional Budget Office, *Updated Budget Projections: 2015 to 2025* (March 2015), www.cbo.gov/publication/49973. For details of Public Law 114-10, see Congressional Budget Office, cost estimate for H.R. 2, the Medicare Access and CHIP Reauthorization Act of 2015 (March 25, 2015), www.cbo.gov/publication/50053.

<sup>2.</sup> The sole exception to the current-law assumption during the 10-year 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**

Percentage of Gross Domestic Product



Under CBO's extended baseline, revenues as a share of GDP rise slowly after 2025 mainly because of real bracket creep and certain tax increases enacted in the Affordable Care Act.

Source: Congressional Budget Office.

Note: The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2025 and then extending the baseline concept for the rest of the long-term projection period.

reach 19.4 percent of GDP by 2040 (see Figure 5-1).<sup>3</sup> 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 2040 would be quite different from what they are 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**

Over the past 50 years, 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 about 3 percent of GDP to more than 6 percent during the past 50 years. (Those taxes consist primarily of payroll taxes credited to the Social Security and Medicare Hospital Insurance trust funds.) Corporate income taxes have fluctuated between about 1 percent of GDP and 3 percent since the 1960s, as have combined revenues from other sources.

Some of the variation in the amounts of revenue that different taxes generated 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 in relation to GDP. Also, because some parameters of the tax system are not indexed to increase with inflation, rising prices alone subject a greater share of income to higher effective tax

<sup>3.</sup> This chapter's revenue projections are based on CBO's benchmark projections of economic variables such as GDP, inflation, and interest rates. For the 2015-2025 period, the benchmark matches CBO's January 2015 economic forecast. For later years, the benchmark generally reflects the economic experience of the past few decades. The benchmark also incorporates two assumptions about fiscal policy-that debt held by the public is maintained at 78 percent of GDP, the level reached in 2025 in CBO's baseline budget projections, and that effective marginal tax rates on income from work and saving remain constant after that year. (Effective marginal tax rates on labor or capital income represent the percentage of an additional dollar of such income that is paid in federal taxes.) Thus, this chapter's economic benchmark and the revenue projections do not account for how the increase in marginal tax rates that would occur after 2025 under the extended baseline might affect people's behavior. Chapter 6 analyzes the economic impact of the debt levels and marginal tax rates that CBO projects under the extended baseline. For more about the economic benchmark, see Appendix A.

#### Figure 5-2.

### Revenues, by Source, 1965 to 2014

Over the past 50 years, total revenues averaged 17.4 percent of GDP; most of the variation around that average reflects variation in individual income tax receipts.

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

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

rates.<sup>4</sup> 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 in relation to GDP; losses in households' income also tend to push a greater share of total income into lower tax brackets, reducing individual income tax revenues in relation 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 in relation 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.

Tax revenues as a share of GDP have also varied with 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.

# **Revenue Projections Under CBO's Extended Baseline**

CBO's extended baseline follows the agency's March 2015 baseline budget projections, as adjusted for recently enacted legislation, for the next decade and then extends the baseline concept beyond that 10-year window.<sup>5</sup> The extended baseline reflects the assumptions that, after 2025, the rules governing the individual income, payroll, excise, and estate and gift taxes will evolve as specified under current law and that revenues from corporate income taxes and all other sources (such as receipts from the Federal Reserve) will remain constant as a share of GDP.

<sup>4.</sup> The parameters of the tax system include the amounts that define the various tax brackets; the amounts of the personal exemption, standard deductions, 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.

See Congressional Budget Office, Updated Budget Projections: 2015 to 2025 (March 2015), www.cbo.gov/publication/49973.

## Sources of Growth in Total Revenues as a Percentage of GDP Between 2015 and 2040 Under CBO's Extended Baseline

Source of Growth	Percentage of GDP
Structural Features of the Individual Income Tax System (Including real bracket creep) <sup>a</sup>	1.3
New and Expiring Tax Provisions	0.7
Aging and the Taxation of Retirement Income	0.3
Other Factors (Including remaining changes in individual income taxes and all changes in corporate, payroll, excise, and estate and gift taxes) <sup>b</sup>	-0.6
Growth in Total Revenues Over the 2015–2040 Period	1.7

Source: Congressional Budget Office.

Notes: The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2025 and then extending the baseline concept for the rest of the long-term projection period.

GDP = gross domestic product.

a. Real bracket creep refers to the phenomenon in which rising real (inflation-adjusted) income causes an ever-larger proportion of income to be subject to higher tax rates.

b. Excludes the effects on all those revenue sources of new and expiring tax provisions, which are accounted for in a preceding line of the table.

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, scheduled to go into effect in 2018 as a result of the ACA, will be implemented without modification.
- Certain tax provisions that recently expired will not be extended later, and provisions scheduled to expire over the next several years will do so, even if lawmakers have routinely extended them before. For example, tax credits for research and experimentation expired at the end of December 2014 and will not be extended, and certain individual income tax credits will expire or decline in value after 2017.

If current laws remained in place, tax revenues would rise from 17.7 percent of GDP in 2015 to 18.3 percent in 2025 and then to 19.4 percent in 2040, CBO estimates. Increases in receipts from individual income taxes more than account for the projected rise of 1.7 percentage points in total revenues as a percentage of GDP over the next 25 years; receipts from all the other sources, taken together, are projected to decline slightly as a share of GDP.

The projected increase in tax receipts reflects several factors, including structural features of the income tax system, new and expiring tax provisions (including scheduled

future tax changes enacted in the ACA), demographic trends, 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 revenue over time. It has two kinds of effects. Rising real income subjects an ever-larger proportion of income to higher tax rates, and 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 generates some increase in receipts in relation to GDP. For example, the ACA imposed an additional tax on the investment income of individuals with income exceeding \$200,000 and of families with income exceeding \$250,000. Those thresholds are not indexed for inflation, so the tax will affect an increasing share of investment income over time and will boost revenues by a small but growing share of GDP.<sup>6</sup>

<sup>6.</sup> The ACA also imposed an additional Medicare tax of 0.9 percent, paid entirely by the employee, on earnings (wages and salaries) exceeding \$200,000 for individuals and \$250,000 for families. 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 for Social Security.

Revenues from the individual income tax also depend on the distribution of income. CBO's projections reflect an expectation that earnings will grow faster for higherincome people than for others during the next decade as they have over the past several decades—and that the incomes of all taxpayers will grow at similar rates thereafter. Altogether, if current laws remained in place, growth in people's income would increase income tax revenues as a portion of GDP by 1.3 percentage points between 2015 and 2040, 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 tax provisions enacted in the ACA will go into effect over the next several years. Those new provisions will begin to raise revenues as a share of GDP after 2015. Certain other provisions—mainly providing tax credits are scheduled to expire, also boosting revenue.

The most significant new provision, an excise tax on employment-based health insurance whose value exceeds certain thresholds, is scheduled to go into effect in 2018. 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.
- Second, many individuals and employers will probably shift to lower-cost insurance plans to either reduce the excise tax paid or avoid paying 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 less 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.<sup>7</sup> 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.<sup>8</sup>

Thus, whether policyholders decided 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 threshold for the tax on high-premium health insurance plans is indexed for changes in overall consumer prices, health care costs will grow faster than prices over the long term, CBO projects. Consequently, more people will be affected over time.<sup>9</sup> Under the extended baseline, the excise tax is projected to increase total revenues by 0.5 percent of GDP in 2040.

The other ACA provision that will increase revenues in relation to GDP after 2015 penalizes certain employers that do not offer their employees health insurance coverage meeting certain criteria. That provision will be phased in over the 2015–2016 period and will increase revenues starting in 2016, CBO estimates.

In addition, several tax provisions either recently expired or are slated to expire over the next several years. Recently expired provisions include tax credits for research and experimentation as well as a deferral of tax payments on certain types of foreign-earned income, both of which had been in effect for many years. And after 2017, several credits in the individual income tax system are scheduled to expire or to be scaled back.<sup>10</sup>

Together, under the extended baseline, the scheduled introduction of new tax provisions and the expiration of certain existing tax provisions would raise receipts by 0.7 percent of GDP between 2015 and 2040, CBO projects.

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.

Even if the excise tax caused employers to shift to lower-cost health insurance plans without a corresponding increase in wages, 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.

The thresholds will be indexed to general inflation plus

 percentage point for 2019 and to general inflation for 2020 and
 later years.

<sup>10.</sup> A provision allowing businesses to immediately deduct 50 percent of new investments in equipment from their taxable income expired at the end of calendar year 2014. That expiration causes significant movements in receipts over the next few years but contributes little to the growth of revenues as a share of GDP over the 2015–2025 or 2015–2040 period. Projected receipts in 2016, the first fiscal year that fully reflects the less favorable depreciation rules in effect under current law for 2015 and later years, are higher because of the smaller initial deductions for new investments. Over time, however, that effect diminishes as taxpayers take deductions for investments made under the less favorable rules.

#### 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 and receive pension benefits, boosting income tax revenues as a share of GDP. Depending on the specific characteristics of retirement plans-such as 401(k) plans and individual retirement accountssome or all of the amounts withdrawn will be taxable. Likewise, compensation deferred under employersponsored defined benefit plans is taxed when benefits are paid.<sup>11</sup> Thus, the U.S. Treasury will receive significant tax revenues that have been deferred for years. As a result, under the extended baseline, revenues as a share of GDP are projected to climb by about 0.3 percentage points between 2015 and 2040. That upward trend is expected to end around 2040, when almost all baby boomers will have reached retirement.

#### **Other Factors**

Under the extended baseline, factors besides those already discussed would cause revenues to decline by a combined 0.6 percent of GDP between 2015 and 2040. (The estimate reflects current law but does not consider scheduled changes to law and the structural and demographic effects of individual income taxes, which are accounted for separately.) About two-thirds of that decline would occur by 2025. 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.

CBO also projects that, excluding the excise tax on highpremium health insurance plans, excise taxes would decline as a share of GDP over time. 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. Therefore, as overall prices rise over time, receipts from excise taxes as a share of GDP tend to fall. 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. Partly offsetting the declines in receipts is a small projected rise in individual income taxes for reasons other than structural features, scheduled changes in law, or aging and the taxation of retirement income.

# 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 those 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 be eligible for certain tax credits, such as the earned income and child credits, because rising real income would push taxpayers above the income limits for eligibility. Inflation would also raise tax rates, although 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.<sup>12</sup> 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 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 federal tax rate on labor income would,

<sup>11.</sup> A defined benefit plan is an employment-based plan that promises employees a certain benefit upon retirement. Typically, the benefit is based on a formula that takes into account an employee's length of service and salary.

<sup>12.</sup> 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 exemption amounts for inflation. Also indexed for inflation were 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 will owe only slightly more than their regular income tax liability.

#### Table 5-2.

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

Percent			
	2015	2025	2040
Marginal Tax Rate on Labor Income	28.8	31.1	32.2
Marginal Tax Rate on Capital Income	18.0	18.4	18.5

Source: Congressional Budget Office.

Notes: The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2025 and then extending the baseline concept for the rest of the long-term projection period.

The effective marginal federal tax rate on income from labor is the share of an additional dollar of such income that is paid in federal individual income taxes and payroll taxes, averaged across taxpayers by using weights proportional to their labor income. The effective marginal federal tax rate on income from capital 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 types of assets and industries and then averaged over all types of assets and industries, using the share of asset values as weights.

CBO projects, increase from 28.8 percent in calendar year 2015 to 32.2 percent in 2040 (see Table 5-2). (The effective marginal tax rate on labor income reflects labor income averaged across taxpayers by using weights proportional to their labor income.) By contrast, the effective marginal federal tax rate on capital income (returns on investment) is projected to rise only from 18.0 percent to 18.5 percent over that period.

The projected increase in the effective marginal tax rate on labor income reflects four 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 generally raise households' marginal tax rates.) One consequence is that the share of ordinary income subject to the top rate of 39.6 percent would rise from 12 percent in 2015 to 16 percent by 2040, CBO estimates.<sup>13</sup>

- The structure of premium subsidies in health insurance exchanges (or marketplaces). Those subsidies are conveyed in the form of tax credits that phase out as income rises over a certain range, increasing marginal rates on income in that range. Under current law, the income range over which the subsidies are phased 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 earns, the subsidy would be reduced by a larger fraction of that dollar, thereby raising the effective marginal tax rate.
- Rising health care costs. Rising health care costs tend to reduce marginal tax rates by reducing the taxable share of compensation. However, CBO expects that the excise tax on certain high-premium health insurance plans would more than offset this effect over the next few decades. That tax would affect a growing share of compensation over time because health care costs are expected to rise faster than the threshold for the tax.
- The additional 0.9 percent tax on earnings above an established threshold that was enacted in the ACA. Over time, that tax would apply to a growing share of labor income because the \$250,000 threshold is not indexed for inflation.

The effective marginal tax rate on capital income would rise only slightly over the next 25 years, CBO projects. CBO estimates that real bracket creep would not raise that rate very much because a large share of capital income is already being taxed at top rates in 2015. Moreover, the other key factors that would push up the effective marginal tax rate on labor income would not affect the tax rate on capital income.

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. However, the reduced earnings and savings because of the higher taxes would also 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

<sup>13.</sup> Ordinary income is all income subject to the income tax except long-term capital gains and dividends.

marginal tax rates discourage economic activity.<sup>14</sup> (The overall effect of federal taxes on economic activity depends not only on marginal tax rates but also on the amount of revenues raised in relation to federal spending and thereby on the resulting federal deficits and debt.) This chapter's analysis does not reflect those macro-economic effects, which are discussed in Chapter 6.

# Average Tax Rates for Some Representative Households

Some parameters of the tax code are not indexed for inflation, and most are not indexed for real income growth. As a result, the personal exemption, the standard deduction, the amount of the child tax credit, and the thresholds for taxing income at different rates all would tend to decline in relation to income over time under current law. One consequence is that, under the extended baseline, average federal tax rates would increase over time.

The cumulative effect of rising prices would significantly reduce the value of some parameters of the tax system that are not indexed for inflation, CBO projects. For example, CBO estimates that 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 \$600,000 in 2040 measured in today's dollars. As another example, the portion of Social Security benefits that is taxable would increase from about 35 percent now to over 50 percent by 2040, CBO estimates, because the thresholds for taxing benefits are not indexed for inflation.

Under the extended baseline, even tax parameters that are indexed for inflation would lose value over time in comparison with income. For example, according to CBO's projections, the current \$4,000 personal exemption would rise by almost 80 percent by 2040 because it is indexed for inflation. But income per household will probably almost triple during that period, so the value of the exemption in relation to income would decline by almost 40 percent. If income grew at similar rates for higher-income and lower-income taxpayers, that decline would tend to boost the average tax rates of lower-income JUNE 2015

taxpayers more than the average tax rates of other taxpayers because, for lower-income taxpayers, the personal exemption is larger in relation to income. For another example, CBO projects that without legislative changes, the proportion of taxpayers claiming the earned income tax credit would fall from 16 percent this year to 11 percent in 2040 as growth in real income made more taxpayers ineligible for the credit.<sup>15</sup>

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

- According to CBO's analysis, a married couple with two children earning the median income of \$105,600 (including both cash income and other compensation) in 2015 and filing a joint tax return will pay about 4 percent of their income in individual income taxes (see Table 5-3).<sup>16</sup> By 2040, 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 income, the change in individual income taxes as a share of income would be much greater, CBO estimates: In 2015, such a family will typically receive a net payment from the federal government equal to 10 percent of its income in the form of refundable tax credits, but by 2040 it would become a net taxpayer, paying about 1 percent of its income in income taxes.
- By comparison, for a married couple with two children earning four times the median income, CBO projects that the share of income that they would pay in individual income taxes would be much higher in both 2015 and 2040 but rise much less—from 19 percent to 22 percent—between those years.

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.

<sup>15.</sup> In CBO's projections, future family structures are similar to those today. If marriage rates among families with earnings near the eligibility range for the credit were to decline, for instance, the proportion of the population receiving the earned income tax credit would probably be higher than it would be otherwise, and vice versa.

<sup>16.</sup> 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 (2015 dollars) <sup>a</sup>		Taxes as a Share of Total Income (Percent)		
	Cash	Total	Income Taxes <sup>b</sup>	Income and Payroll Taxes <sup>c</sup>	
	Taxpayer Filing a Single Return				
Half the Median Total Income					
2015	11,300	18,300	-1	9	
2040	17,600	29,600	2	11	
Median Total Income					
2015	28,300	36,500	6	18	
2040	45,100	59,200	7	19	
Twice the Median Total Income					
2015	62,200	73,100	10	23	
2040	100,100	118,400	12	25	
Four Times the Median Total Income					
2015	130,800	146,100	15	27	
2040	212,100	236,700	16	29	
	Marr	ied Couple (With Two	o Children) Filing a Jo	oint Return <sup>d</sup>	
Half the Median Total Income			, -		
2015	32,900	52,800	-10	0	
2040	52,900	85,500	1	11	
Median Total Income					
2015	81,900	105,600	4	16	
2040	132,300	171,000	8	19	
Twice the Median Total Income					
2015	180,000	211,200	11	24	
2040	291,100	342,000	14	28	
Four Times the Median Total Income					
2015	384,700	422,400	19	29	
2040	624,500	683,900	22	32	

Source: Congressional Budget Office based on data from the March 2014 Current Population Survey.

Notes: The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2025 and then extending the baseline concept for the rest of the long-term projection period.

Cash income includes compensation from wages. Total income includes cash income, the employer's costs for employment-based health insurance, and the employer's share of payroll taxes. For 2040, the premium on employment-based health insurance is assumed not to exceed the excise tax threshold in the Affordable Care Act.

Taxpayers are assumed to itemize if itemized deductions are greater than the standard deduction. State and local taxes are assumed to equal 8 percent of wages; other deductions are assumed to equal 15 percent of wages.

a. Income amounts have been rounded to the nearest \$100. Inflation adjustments are made using the personal consumption expenditures price index.

b. Negative tax rates result when refundable tax credits, such as the earned income and child tax credits, exceed the tax owed by people in an income group. (Refundable tax credits are not limited to the amount of income tax owed before they are applied.)

c. Payroll taxes include the share paid by employers.

d. The examples for a married couple reflect the assumption that the spouses earn the same amount.

By contrast, under current law, payroll taxes as a share of income would differ only slightly in 2040 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 25 years in the sum of income and payroll taxes as a share of income would be quite 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 2015 to 2040, CBO projects that real after-tax income for a couple earning the median income would grow by over 50 percent under the extended baseline.