

Revenue Options

In fiscal year 2016, the federal government collected \$3.3 trillion in revenues, equal to 17.8 percent of the nation's gross domestic product (GDP). Individual income taxes were the largest source of revenues, accounting for more than 47 percent of the total (see Figure 4-1). Payroll taxes (which primarily fund Social Security and Medicare's Hospital Insurance program) accounted for 34 percent. About 9 percent of the total was from corporate income taxes. Other receipts—from excise taxes, estate and gift taxes, earnings of the Federal Reserve System, customs duties, and miscellaneous fees and fines—made up the remaining 9 percent.

Revenues would be greater if not for the more than 200 tax expenditures—so called because they resemble federal spending to the extent that they provide financial assistance for specific activities, entities, or groups of people—in the individual and corporate income tax system. Those tax expenditures include exclusions, deferrals, deductions, exemptions, preferential tax rates, and credits in the individual and corporate income tax system that cause revenues to be lower than they would be otherwise for any given schedule of tax rates.¹

Trends in Revenues

Over the past 50 years, total federal revenues have averaged 17.4 percent of GDP—ranging from a high of 19.9 percent of GDP in 2000 to a low of 14.6 percent in 2009 and 2010 (see Figure 4-2). That variation over time in total revenues as a share of GDP is primarily the result of fluctuations in receipts of individual income tax payments and, to a lesser extent, fluctuations in collections of corporate income taxes.

From 2017 through 2026, total revenues are projected to gradually increase from 17.9 percent to 18.5 percent of GDP, if current tax laws generally remain unchanged. That growth in revenues as a share of GDP mainly

reflects an increase in individual income tax receipts as a share of GDP.

Individual and Corporate Income Taxes

Over the 1966–2016 period, revenues from individual income taxes have ranged from slightly more than 6 percent of GDP (in 2010) to slightly less than 10 percent of GDP (in 2000). Since the 1960s, corporate income taxes have fluctuated between about 1 percent and about 4 percent of GDP.

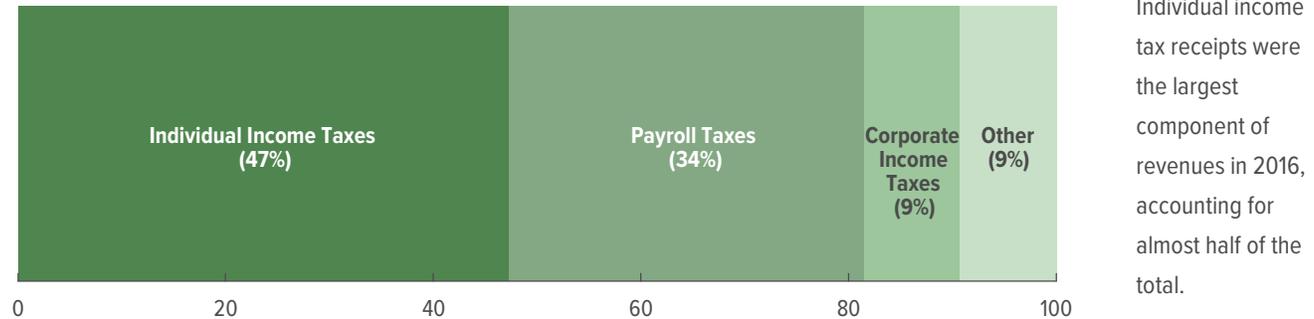
The variation in revenues generated by individual and corporate income taxes has stemmed in part from changes in economic conditions and from the way those changes interact with the tax code. For example, in the absence of legislated tax reductions, receipts from individual income taxes tend to grow relative to GDP because of a phenomenon known as real bracket creep, which occurs when income rises faster than prices,

-
1. The staff of the Joint Committee on Taxation (JCT) publishes estimates of tax expenditures each year. Tax expenditures, as defined under the Congressional Budget and Impoundment Control Act of 1974, are revenue losses attributable to provisions of federal tax laws that allow a special exclusion, exemption, or deduction from gross income or that provide a special credit, a preferential rate of tax, or a deferral of tax liability. Further, JCT designates as a tax expenditure any deviation from the normal individual or corporate income tax that results from a special provision reducing the tax liability of particular taxpayers. A normal individual income tax is considered to include the following major components: a personal exemption for each taxpayer and each dependent, the standard deduction, the existing tax rate structure, and deductions for investment and employee business expenses. For a more thorough discussion of tax expenditures, see Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2015–2019*, JCX-141R-15 (December 2015), <http://go.usa.gov/cVM89>; and Congressional Budget Office, *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/publication/43768.

Figure 4-1.

Composition of Revenues, by Source, 2016

Percentage of Total Revenues



Source: Congressional Budget Office.

Other sources of revenues include excise taxes, estate and gift taxes, earnings of the Federal Reserve System, customs duties, and miscellaneous fees and fines.

pushing an ever-larger share of income into higher tax brackets. Although certain parameters of the tax code—including tax brackets—are adjusted to include the effects of inflation, income can still be subject to higher tax rates if it grows faster than prices. In addition, because some parameters of the tax system are not indexed at all, income can be pushed into higher tax brackets even if it is not rising faster than prices.² During economic downturns, corporate profits generally fall as a share of GDP, causing corporate tax revenues to shrink; and losses in households' income tend to push a greater share of total income into lower tax brackets, resulting in lower revenues from individual income taxes. Thus, total income tax revenues automatically rise in relation to GDP when the economy is strong and decline in relation to GDP when the economy is weak.

Payroll Taxes

Payroll taxes, by contrast, have been a relatively stable source of federal revenues. Receipts from those taxes increased as a share of GDP from the 1960s through the 1980s because of rising tax rates, increases in the number of people paying those taxes, and growth in the share of wages subject to the taxes. For most of the past three decades, legislation has not had a substantial effect on payroll taxes, and the primary base for those taxes—

wages and salaries—has varied less as a share of GDP than have other sources of income. In 2011 and 2012, however, the temporary reduction in the Social Security tax rate caused receipts from payroll taxes to drop. When that provision expired at the end of 2012, payroll receipts as a share of GDP returned to their historical level—close to 6 percent of GDP.

Other Revenue Sources

Revenues from other taxes and fees declined in relation to the size of the economy over the 1966–2016 period mainly because receipts from excise taxes—which are levied on goods and services such as gasoline, alcohol, tobacco, and air travel—have decreased as a share of GDP over time. That decline is chiefly attributable to the fact that those taxes are usually levied on the quantity of goods sold rather than on their cost, and the rates and fees have generally not kept up with inflation.

Tax Expenditures

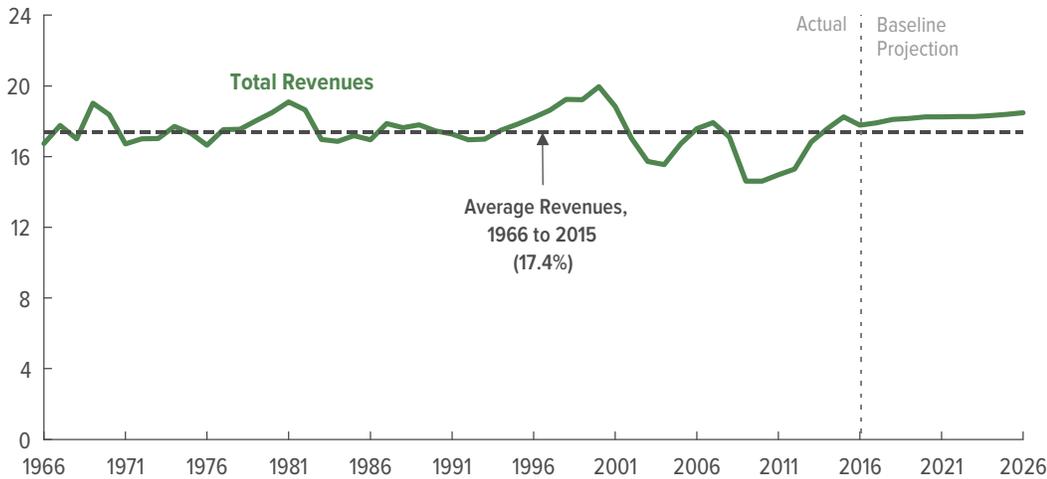
Unlike discretionary spending programs (and some mandatory programs), most tax expenditures are not subject to periodic reauthorization or annual appropriations. (However, a number of tax expenditures are enacted on a temporary basis. For a discussion of those tax provisions, see Box 4-1.) As is the case for mandatory programs, any person or entity that meets the provision's eligibility requirements can receive benefits. Because of the way tax expenditures are treated in the budget, however, they are

2. That effect was more pronounced before 1985, when the parameters of the individual income tax began to be indexed to include the effects of inflation.

Figure 4-2.

Total Revenues

Percentage of Gross Domestic Product



If current laws generally remained unchanged, revenues would gradually rise over the next decade—increasing from 17.9 percent of gross domestic product in 2017 to 18.5 percent by 2026.

Source: Congressional Budget Office.

much less transparent than is spending on mandatory programs.

Types of Tax Expenditures

There are five major categories of tax expenditures.

- *Tax exclusions* reduce the amount of income that filers must report on tax returns. Examples are the exclusions from taxable income of employment-based health insurance, net pension contributions and earnings, capital gains on assets transferred at death, and a portion of Social Security and Railroad Retirement benefits.
- In some situations, taxpayers can *defer* a portion of the taxes owed from one year to another. Some companies, for example, can defer taxes on income earned abroad from the operations of their foreign subsidiaries until that income is remitted (or “repatriated”) to the U.S. parent company.
- *Tax deductions* are expenses that are subtracted from reported income in the calculation of taxable income. Examples are itemized deductions for certain taxes paid to state and local governments, mortgage interest payments, and charitable contributions.
- Some types of income are taxed at *preferential tax rates*. An example is the lower rates applied to realizations of many forms of capital gains and qualifying dividends.

- *Tax credits* reduce a taxpayer’s tax liability. Credits can either be nonrefundable (the credit can only offset a taxpayer’s tax liability) or refundable (the taxpayer receives a payment from the government if the credit exceeds the taxpayer’s tax liability). An example of a nonrefundable tax credit is the foreign tax credit. Examples of refundable tax credits are the earned income tax credit and the additional child tax credit.

Major Tax Expenditures

Estimates of tax expenditures measure the difference between a taxpayer’s liability under current law and the tax liability without the benefit of a given tax expenditure. The estimates incorporate the assumption that if a tax expenditure was repealed, taxpayers would change how they file their taxes (for example, by claiming an alternative credit or deduction) to minimize their total tax liability, but all other taxpayer behavior would remain unchanged. Because the most recent estimates of tax expenditures were released by the staff of the Joint Committee on Taxation (JCT) in late 2015, they do not reflect provisions of the Consolidated Appropriations Act, 2016.³ That law, which was enacted in December 2015, reinstated or extended a number of temporary tax expenditures. The Congressional Budget Office

3. See Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2015–2019*, JCX-141R-15 (December 2015), <http://go.usa.gov/cVM89>.

Box 4-1.**Temporary Tax Provisions**

Although most provisions in the tax code are permanent, a number of them are scheduled to expire at the end of calendar year 2016. Enacting provisions on a temporary rather than a permanent basis allows policymakers to address short-term conditions, to regularly review the provisions' effectiveness, and to reduce their initial budgetary cost. Such tax provisions include various income tax credits for individuals and corporations, deductions or exclusions from income, and preferential tax rates. Currently, about 60 provisions in the tax code are scheduled to expire by the end of calendar year 2025. Most of those provisions are set to expire at the end of calendar year 2016.¹ However, some of those temporary provisions have been extended repeatedly and consequently resemble permanent provisions.

Use of Temporary Provisions

Policymakers may enact provisions on a temporary basis for several reasons. Some provisions are used to deliver assistance in response to temporary hardships, such as economic downturns or natural disasters. Additionally, temporary tax provisions provide policymakers with an opportunity to evaluate the effectiveness of those provisions periodically and make changes. In recent years, however, expiring provisions have been extended largely as a group. Furthermore, some tax provisions have been reinstated retroactively after they have expired, creating uncertainty and causing many taxpayers to no longer respond to the incentive provided by the provision. A final reason to enact provisions on a temporary basis is that a temporary tax cut has a smaller budgetary cost than a permanent one. The Congressional Budget Office's revenue projections are based on the assumption that current laws remain unchanged and that temporary provisions expire as scheduled. As a result, those revenue projections are higher than would be the case if the tax cuts were permanent.

In practice, temporary provisions can resemble permanent features of the tax code. Many temporary provisions have been extended multiple times, often for one to two years at a time, and are referred to as tax extenders. The Work Opportunity Tax Credit, for example, has been extended 10 times since it was enacted in 1996 (see the table). Other tax provisions that were originally enacted on a temporary basis have been made permanent. At the end of calendar year 2015, more than 20 temporary tax provisions were made permanent, including the research and experimentation tax credit.

Revenue Effects of Permanently Extending Temporary Provisions

The expiration of temporary provisions boosts revenue projections, even though many of those provisions are likely to be extended in the future. Their effect on projected revenues can be assessed by considering the revenue reductions that would occur if the provisions were extended. For example, the permanent extension of the largest of the temporary provisions, partial expensing of equipment property (known as bonus depreciation), would reduce revenues by \$240 billion between 2017 and 2026 if it was extended at a 50 percent rate, according to the staff of the Joint Committee on Taxation (JCT) and CBO (see the table).² JCT and CBO estimate that permanently extending all of the other provisions scheduled to expire by the end of calendar year 2025 would reduce revenues by \$173 billion between 2017 and 2026. Other temporary provisions that would result in large declines in revenues if they were made permanent include tax credits for biodiesel and renewable diesel, the lower floor for medical expense deductions for taxpayers age 65 or older, and the exclusion of mortgage debt forgiveness from gross income. Because those estimates compare permanent extension to a scenario in which the provision expires as scheduled, extending provisions with a later expiration date would cause a revenue reduction over a shorter period than extending provisions that expire in 2016.

1. For a complete list of temporary tax provisions, see Congressional Budget Office, "Budget Data: Detailed Revenue Projections" (supplemental material for *An Update to the Budget and Economic Outlook: 2016 to 2026*, August 2016), www.cbo.gov/publication/51908; and Joint Committee on Taxation, *List of Expiring Federal Tax Provisions 2016–2025* (January 2016), <http://go.usa.gov/x8XW5>.
2. Under current law, businesses can expense 50 percent of their investment in equipment and certain other property in 2017. The portion that can be expensed drops to 40 percent in 2018 and 30 percent in 2019, after which the provision expires. Alternatively, if bonus depreciation phases down to 30 percent as scheduled and was permanently extended at that rate beyond 2019, that extension would reduce revenues by \$140 billion between 2017 and 2026.

Continued

Box 4-1.

Continued

Temporary Tax Provisions**Expiring Tax Provisions With the Largest Revenue Effects From Permanent Extension**

Provision	Revenue Effects From Permanent Extension, 2017–2026 (Billions of dollars)	Year Provision Went Into Effect	Number of Extensions
Expiring in Calendar Year 2016			
Biodiesel and renewable diesel credits	-23	2005	5
Exclusion of mortgage debt forgiveness	-23	2007	4
Deduction floor for itemized medical expenses for taxpayers 65 or older	-18	2013	0
Deductible premiums for mortgage insurance	-13	2007	5
Credit for residential energy-efficient property	-9	2006	1
Credit for certain nonbusiness energy property	-7	2006	5
Expiring Between Calendar Years 2017 and 2025			
Extend partial expensing of equipment property at a 50 percent rate (Bonus depreciation) ^a	-240	2008 ^b	4
Payments between related controlled foreign corporations	-17	2006	5
Work Opportunity Tax Credit	-11	1996	10
Credit for business energy property, beginning construction date	-7	2006	2

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

- a. The estimate includes provisions that allow businesses to accelerate alternative minimum tax credits instead of the partial-expensing provisions.
- b. Bonus depreciation at a 50 percent rate was also in effect from calendar years 2003 to 2005.

estimates that, excluding the effects of recently enacted legislation, the 10 largest tax expenditures would account for almost three-quarters of the total budgetary effects (including payroll tax effects) of all tax expenditures in fiscal year 2016 and would total 6.2 percent of GDP over the period from 2017 to 2026—more than the government spends on Social Security benefits (see Figure 4-3). The exclusion of employers' health insurance contributions and the exclusion of pension contributions and earnings are the two largest tax expenditures.

Analytic Method Underlying the Estimates of Revenues

Although CBO prepared or contributed to the revenue estimates of a few options in this chapter, nearly all of the revenue estimates were prepared by JCT, which provides CBO with revenue estimates for legislation dealing with income, estate and gift, excise, or payroll taxes when such legislation is being considered by the Congress. JCT and CBO estimate the budgetary savings relative

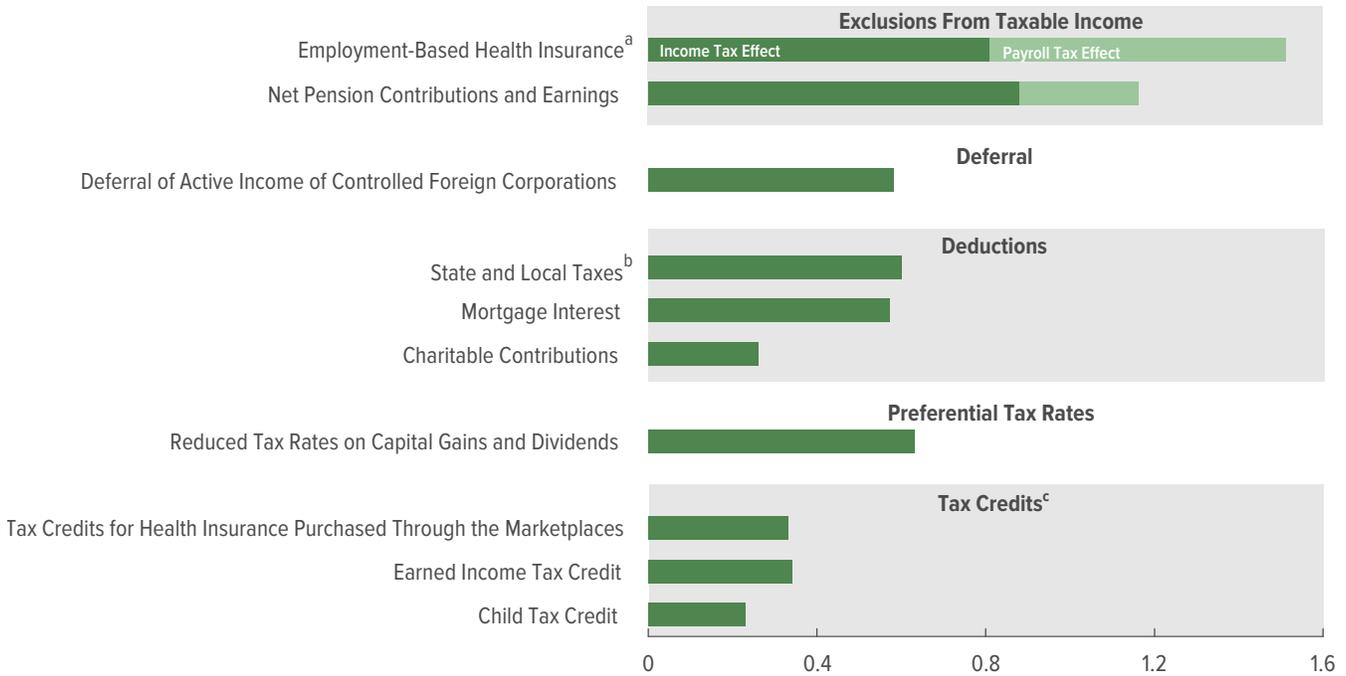
to the baseline used for budget enforcement purposes, which reflects the general assumption that current laws remain in effect—specifically, that scheduled changes in provisions of the tax code take effect and no additional changes to those provisions are enacted.⁴ If combined, the options might interact with one another in ways that could alter their revenue effects and their impact on households and the economy.

4. For more information on JCT's revenue estimating methodology see Joint Committee on Taxation, *Summary of Economic Models and Estimating Practices of the Staff of the Joint Committee on Taxation* (September 2011), <http://go.usa.gov/xkMyd>. As specified in the Balanced Budget and Emergency Deficit Control Act of 1985, CBO's baseline reflects the assumption that expiring excise taxes dedicated to trust funds will be extended (unlike other expiring tax provisions, which are assumed to follow the schedules set forth in current law). For more information on CBO's baseline, see Congressional Budget Office, *The Budget and Economic Outlook: 2016 to 2026* (January 2016), www.cbo.gov/publication/51129, and *Updated Budget Projections: 2016 to 2026* (March 2016), www.cbo.gov/publication/51384.

Figure 4-3.

Budgetary Effects of the Largest Tax Expenditures From 2017 to 2026

Percentage of Gross Domestic Product



Source: Congressional Budget Office, using estimates by the staff of the Joint Committee on Taxation, which were prepared before the enactment of the Consolidated Appropriations Act, 2016, and do not include the effects of that law.

These effects are calculated as the sum of the tax expenditures over the 2017–2026 period divided by the sum of gross domestic product over the same 10 years. 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.

- a. Includes employers’ contributions for health care, health insurance premiums, and long-term-care insurance premiums.
- b. Consists of nonbusiness income, sales, real estate, and personal property taxes paid to state and local governments.
- c. Includes effects on outlays.

Accounting for Changes in Behavior

The revenue estimates in this chapter generally reflect changes in the behavior of people and firms, except for behavioral changes that would affect total output in the economy. An impending increase in the tax rate applicable to capital gains in the following year, for example, would spur some investors to sell assets before the rate increase took effect. Or, when Social Security tax rates increased, employers would pay their employees less in salaries and benefits to offset the businesses’ share of higher payroll taxes. Revenue estimates for those options would incorporate such behavioral responses: In the first example, the acceleration of capital gains realizations would cause a temporary hike in taxable realizations in the year before the increase was implemented; and in the

second example, the change in compensation would cause individual income tax receipts to fall at the same time that payroll tax revenues rise. Revenue estimates for options presented here do not, however, incorporate macroeconomic effects such as changes in labor supply or private investment resulting from changes in fiscal policy.⁵

Accounting for Outlays

Some revenue options would affect outlays as well as receipts. For example, options that would change eligibility for, or the amount of, refundable tax credits would

5. Under some circumstances, cost estimates for legislation would take such effects into account. See Chapter 1 of this report.

generally cause a change in outlays because the amount of such credits that exceeds a person's income tax liability (before the tax credit is taken into account) is usually paid to that person and recorded in the budget as an outlay. In addition, changes in other tax provisions could affect the allocation of refundable credits between outlays and receipts. For instance, when tax rates are increased (with no changes in the amounts of refundable tax credits or eligibility requirements), the portion of the refundable credits that offsets tax liabilities increases (because the tax liabilities that can be offset are greater) and the outlay portion of the credits falls correspondingly; the total cost of the credit remains the same. For simplicity in presentation, the revenue estimates for options that affect refundable tax credits represent the net effects on revenues and outlays combined.

Options that would expand the base for Social Security taxes would affect outlays as well. When options would require some or all workers to contribute more to the Social Security system, those workers would receive larger benefits when they retired or became disabled. For nearly all such options in this report, CBO anticipates that a change in Social Security benefit payments would be small over the period from 2017 through 2026, and thus the estimates for those options do not include those effects on outlays. One exception, however, is Option 20, which would increase the amount of earnings subject to Social Security tax. In that case, the effects on Social Security outlays over the 10-year projection period would be more sizable; they are shown separately in the table for that option.

Options in This Chapter

This chapter presents 43 options that are grouped into several categories according to the part of the tax system they would target: individual income tax rates, the individual income tax base, individual income tax credits, payroll taxes, taxation of income from businesses and other entities, taxation of income from worldwide business activity, excise taxes, and other taxes and fees.

Options for Raising Revenues

The options presented in this chapter would increase revenues by raising tax rates; imposing a new tax on income, consumption, or certain activities; or broadening the tax base for an existing tax. The tax base is broadened when a tax is extended to more people or applied to additional types or amounts of income. That is generally achieved

by either eliminating or limiting exclusions, deductions, or credits. Some of the options presented in this chapter would eliminate current exclusions or deductions. Others would address the limits on such tax expenditures. There are three main types of limits on tax expenditures:

- A *ceiling*—or an upper bound—on the amount that can be deducted or excluded, such as the limit on contributions to certain types of retirement funds.
- A *floor*, wherein tax expenditures are provided only for expenses above a threshold—for example, taxpayers can claim medical and dental expenses that exceed 10 percent of their adjusted gross income, or AGI. (AGI includes income from all sources not specifically excluded by the tax code, minus certain deductions.)
- A *limit* on the set of filers who can receive the full benefit from tax expenditures. For example, taxpayers with income above a specified threshold cannot reduce their taxable income by the full amount of their itemized deductions. The total value of certain itemized deductions is reduced by 3 percent of the amount by which a taxpayer's AGI exceeds a specified threshold, up to a maximum reduction of 80 percent of total itemized deductions. That limit is often called the Pease limitation (after Congressman Donald Pease, who originally proposed it).

Some of the options presented in this chapter would create new limits on tax expenditures. Others would tighten existing limits on tax expenditures by, for example, lowering an existing ceiling or further limiting the set of filers who can receive any benefit from the tax expenditure.

For each option presented, there is a discussion of the advantages and disadvantages of increasing revenues through that approach. Although some advantages and disadvantages are specific to a given option, others apply more broadly to options that would increase revenues in the same manner. For example, a general advantage of increasing existing tax rates is that the change would be simpler to implement than most other changes to the tax code. Changes that would broaden the tax base through standardizing the treatment of similar activities generally increase economic efficiency because taxpayers' decisions would be less influenced by tax considerations.

Some general disadvantages also apply to options that would raise revenues in the same manner. For example, options that would increase individual income tax rates or payroll tax rates would reduce the returns from working (that is, after-tax wages), which would increase the return from other activities relative to working. Similarly, options that would increase taxes on business income would reduce the returns from business investment and thus result in decreased investment.

Distinctions Between the Options and Tax Reform Proposals

Some comprehensive approaches to changing tax policy—each with the potential to increase revenues substantially—that have received attention lately are not included in this report. One approach would eliminate or reduce the value of a broad array of tax expenditures. Another approach would fundamentally change the tax treatment of businesses, especially multinational corporations. Each approach would have significant consequences for the economy and for the federal budget:

- Limiting or eliminating a broad array of tax expenditures would influence many taxpayers' decisions to

engage in certain activities or to purchase favored goods.

- Changing the tax treatment of multinational corporations would, to some extent, affect businesses' choices about how and where to invest. Those changes also would affect incentives for engaging in various strategies that allow a business to avoid paying U.S. taxes on some income.

Although this chapter includes options that contain elements of various tax reform plans, none of the options is as comprehensive as those approaches. One reason the report does not contain options that entail comprehensive changes to the tax code is that such proposals often are combined with those that would reduce individual and corporate income tax rates, and therefore their effects are best assessed in the context of such broader packages. Moreover, the estimates would vary greatly depending on the particular proposal's specifications. Hence, the amount—and even the direction—of the budgetary impact of broad approaches to changing tax policy is uncertain.

Revenues—Option 1

Increase Individual Income Tax Rates

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues												
Raise all tax rates on ordinary income by 1 percentage point	43.4	64.1	67.1	70.2	73.2	76.3	79.7	83.3	86.9	90.0	318.0	734.2
Raise ordinary income tax rates in the following brackets by 1 percentage point:												
28 percent and over	8.6	12.7	13.4	14.3	15.0	15.7	16.5	17.4	18.3	18.9	64.0	150.8
Raise ordinary income tax rates in the following brackets by 1 percentage point:												
35 percent and over	5.3	7.9	8.3	8.8	9.3	9.7	10.1	10.6	11.2	11.6	39.6	92.9

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

The estimates include the effects on outlays resulting from changes in refundable tax credits.

Under current law, taxable ordinary income earned by most individuals is subject to the following seven statutory rates: 10 percent, 15 percent, 25 percent, 28 percent, 33 percent, 35 percent, and 39.6 percent. (Taxable ordinary income is all income subject to the individual income tax other than most long-term capital gains and dividends minus allowable adjustments, exemptions, and deductions.)

As specified by the tax code, different statutory tax rates apply to different portions of people's taxable ordinary income. Tax brackets—the income ranges to which the different rates apply—vary depending on taxpayers' filing status (see the table on the next page). In 2016, for example, a person filing singly with taxable income of \$40,000 would pay a tax rate of 10 percent on the first \$9,275 of taxable income, 15 percent on the next \$28,375, and 25 percent on the remaining \$2,350 of taxable income. The starting points for those income ranges are adjusted, or indexed, each year to include the effects of inflation.

Most income in the form of long-term capital gains and dividends is taxed under a separate rate schedule, with a maximum statutory rate of 20 percent. Income from both short-term and long-term capital gains and dividends, along with other investment income received by higher-income taxpayers, is also subject to an additional tax of 3.8 percent.

Taxpayers who are subject to the alternative minimum tax (AMT) face statutory rates of 26 percent and 28 percent. (The AMT is a parallel income tax system with fewer exemptions, deductions, credits, and rates than the regular income tax. Households must calculate the amount they owe under both the AMT and the regular income tax and pay the larger of the two amounts.) However, the AMT does not affect most of the highest-income taxpayers because the highest statutory rate under the AMT is only 28 percent, and many deductions allowed under the regular income tax are still allowed under the AMT.

Starting Points for Tax Brackets (2016 dollars)		Statutory Tax Rate on Ordinary Taxable Income (Percent)
Single Filers	Joint Filers	2016
0	0	10
9,275	18,550	15
37,650	75,300	25
91,150	151,900	28
190,150	231,450	33
413,350	413,350	35
415,050	466,950	39.6

This option includes three alternative approaches for increasing statutory rates under the individual income tax. Those approaches are as follows:

- Raise all tax rates on ordinary income (income subject to the regular rate schedule) by 1 percentage point.
- Raise all tax rates on ordinary income in the top four brackets (28 percent and over) by 1 percentage point.
- Raise all tax rates on ordinary income in the top two brackets (35 percent and over) by 1 percentage point.

If implemented, the first approach—*raising all statutory tax rates on ordinary income by 1 percentage point*—would increase revenues by a total of \$734 billion from 2017 through 2026, according to estimates by the staff of the Joint Committee on Taxation (JCT). Under this alternative, for example, the top rate of 39.6 percent would increase to 40.6 percent. Because the AMT would remain the same as under current law, some taxpayers would not face higher taxes under the option.

The second two approaches would target specific individual income tax rates. Because these approaches would affect smaller groups of taxpayers, they would raise significantly less revenue. For example, *boosting rates only on ordinary income in the top four brackets (28 percent and over) by 1 percentage point* would raise revenues by \$151 billion over the 10-year period, according to JCT—much less than the first alternative. *Boosting rates only on ordinary income in the top two brackets (35 percent and*

over) by 1 percentage point would raise even less revenue—\$93 billion over the 10-year period, according to JCT. Because most people who are subject to the top rate in the regular income tax are not subject to the alternative minimum tax, the AMT would not significantly limit the effect of that increase in regular tax rates.

As a way to boost revenues, an increase in tax rates would offer some administrative advantages over other types of tax increases because it would require only minor changes to the current tax system. Furthermore, by boosting rates only on income in higher tax brackets, both the second and third alternative approaches presented here would increase the progressivity of the tax system. Those approaches would impose, on average, a larger burden on people with more significant financial resources than on people with fewer resources.

Rate increases also would have drawbacks, however. Higher tax rates would reduce people's incentive to work and save. In addition, higher rates would encourage taxpayers to shift income from taxable to nontaxable forms (by substituting tax-exempt bonds for other investments, for example, or opting for more tax-exempt fringe benefits instead of cash compensation) and to increase spending on tax-deductible items relative to other items (by paying more in home mortgage interest, for example, and less for other things). In those ways, higher tax rates would cause economic resources to be allocated less efficiently than they would be under current law.

The estimates shown here incorporate the effect of taxpayers' shifting their income from taxable forms to non-taxable or tax-deferred forms. However, the estimates do not incorporate changes in how much people would work

or save in response to higher tax rates. Such changes would depend in part on whether the federal government used the added tax revenues to reduce deficits or to finance increases in spending or cuts in other taxes.

RELATED OPTIONS: Revenues, Options 2, 3

RELATED CBO PUBLICATIONS: *The Distribution of Household Income and Federal Taxes, 2013* (June 2016), www.cbo.gov/publication/51361; *Average Federal Tax Rates in 2007* (June 2010), www.cbo.gov/publication/42870; *The Individual Alternative Minimum Tax* (January 2010), www.cbo.gov/publication/41810; *Analyzing the Economic and Budgetary Effects of a 10 Percent Cut in Income Tax Rates* (December 2005), www.cbo.gov/publication/17507

Revenues—Option 2

Implement a New Minimum Tax on Adjusted Gross Income

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	18.1	-11.6	6.2	6.5	6.8	7.3	7.6	8.0	8.4	8.9	26.0	66.2

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Under current law, individual taxpayers are subject to statutory tax rates on ordinary income (all income subject to the individual income tax other than most long-term capital gains and dividends) of up to 39.6 percent. Higher-income taxpayers are also subject to an additional tax of 3.8 percent on investment earnings. However, people in the highest tax brackets generally may pay a smaller share of their income in income taxes than those brackets might suggest, for at least two reasons. First, income realized from capital gains and received in dividends—which represents a substantial share of income for many people in the highest brackets—is generally subject to income tax rates of 20 percent or less (before the application of the 3.8 percent additional tax). Second, taxpayers can claim exemptions and deductions (both subject to limits) to reduce their taxable income, and they can further lower their tax liability by using credits.

Taxpayers may also be liable for an alternative minimum tax (AMT), which was intended to impose taxes on higher-income individuals who use tax preferences to greatly reduce or even eliminate their liability under the regular income tax. The AMT allows fewer exemptions, deductions, and tax credits than are allowed under the regular income tax, and taxpayers are required to pay the higher of their regular tax liability or their AMT liability. However, the AMT does not affect most of the highest-income taxpayers because the highest statutory rate under the AMT is only 28 percent, and many deductions allowed under the regular income tax are still allowed under the AMT.

In addition to the individual income tax, taxpayers are subject to payroll tax rates of up to 7.65 percent on their earnings: 6.2 percent for Social Security (Old-Age, Survivors and Disability Insurance) and 1.45 percent for Medicare Part A (Hospital Insurance). Employers also pay 7.65 percent of their employees' earnings to help finance those benefits. Higher-earning taxpayers are also

subject to an additional tax of 0.9 percent on all earnings above \$200,000 for single taxpayers and \$250,000 for joint filers. However, the majority of those payroll taxes—specifically, those that fund Social Security benefits—are levied only on the first \$118,500 of a worker's earned income. Therefore, as a share of income, payroll taxes have a smaller effect on higher-income taxpayers than on many lower-income taxpayers.

This option would impose a new minimum tax equal to 30 percent of a taxpayer's adjusted gross income, or AGI. (AGI includes income from all sources not specifically excluded by the tax code, minus certain deductions.) The new minimum tax would take effect beginning in 2017. It would not apply to taxpayers with AGI of less than \$1 million and would fully apply to taxpayers with AGI of more than \$2 million. Between those thresholds, the tax would gradually increase. The thresholds for its application would be adjusted, or indexed, to include the effects of inflation thereafter.

To reduce the liability associated with the new minimum tax, taxpayers could use just one credit equal to 28 percent of their charitable contributions. Taxpayers would pay whichever was higher: the new minimum tax or the sum of individual income taxes owed by the taxpayer and the portion of payroll taxes he or she paid as an employee. (When calculating individual income taxes, the taxpayer would include the 3.8 percent surtax on investment income and any liability under the current AMT.) If implemented, the option would raise \$66 billion from 2017 through 2026, according to estimates by the staff of the Joint Committee on Taxation.

One argument in favor of this option is that it would enhance the progressivity of the tax system. The various exclusions, deductions, credits, and preferential tax rates on certain investment income under the individual income tax—combined with the cap on earnings that

are taxed for Social Security—allow some higher-income taxpayers, especially those whose income is primarily in the form of capital gains and dividends, to pay a smaller share of their income in taxes than many lower-income taxpayers, especially those whose income is primarily in the form of wages or salaries. By creating a new minimum tax with no deductions and just one tax credit, the option would increase the share of income paid in taxes by some higher-income taxpayers.

One argument against this option is that, by effectively imposing a second AMT, it would increase the complexity of the tax code—reducing the transparency of the tax system and making tax planning more difficult. Raising taxes on higher-income people through the existing tax system (for example, by increasing the top statutory rates or by limiting or eliminating certain tax deductions or exclusions) would be simpler to implement.

Furthermore, the option would alter the affected taxpayers' incentives to undertake certain activities. Under

current law, for example, the tax subsidy rate for charitable contributions can be as high as 39.6 percent. For taxpayers subject to the minimum tax, this option would cap the subsidy rate at 28 percent of contributions. That reduction in the tax subsidy for charitable contributions would reduce donations to charities.

The option would also raise the marginal tax rates that some taxpayers face. (The marginal tax rate is the percentage of an additional dollar of income from labor or capital that is paid in taxes.) For example, the option would impose a minimum tax rate of 30 percent on most income realized from capital gains or received in dividends. In contrast, the highest tax rate on most capital gains and dividends is 23.8 percent under current law. Raising the marginal tax rate on capital gains and dividends would reduce taxpayers' incentives to save. In addition, the higher marginal tax rates on earnings that some higher-income taxpayers face would lessen their incentive to work.

RELATED OPTIONS: Revenues, Options 1, 3, 6

RELATED CBO PUBLICATION: *The Individual Alternative Minimum Tax* (January 2010), www.cbo.gov/publication/41810

Revenues—Option 3

Raise the Tax Rates on Long-Term Capital Gains and Qualified Dividends by 2 Percentage Points

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	6.7	-2.8	6.0	6.1	6.4	6.5	6.7	6.9	7.1	7.5	22.4	57.1

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

When individuals sell an asset for more than the price at which they obtained it, they generally realize a capital gain that is subject to taxation. Most taxable capital gains are realized from the sale of corporate stocks, other financial assets, real estate, and unincorporated businesses. Since the adoption of the individual income tax in 1913, long-term gains (those realized on assets held for more than a year) have usually been taxed at lower rates than other sources of income, such as wages and interest. Since 2003, qualified dividends, which include most dividends, have been taxed at the same rates as long-term capital gains. Generally, qualified dividends are paid by domestic corporations or certain foreign corporations (including, for example, foreign corporations whose stock is traded in one of the major securities markets in the United States).

The current tax rates on long-term capital gains and qualified dividends depend on several features of the tax code:

- The statutory tax rates on long-term capital gains and qualified dividends depend on the statutory tax rates that would apply if they were considered to be ordinary income—that is, all income subject to the individual income tax from sources other than long-term capital gains and qualified dividends. A taxpayer does not pay any taxes on long-term capital gains and qualified dividends that otherwise would be taxed at a rate of 10 percent or 15 percent if those earnings were treated as ordinary income. Long-term capital gains and qualified dividends become taxable when they would be taxed at a rate that ranged from 25 percent through 35 percent if they were treated as ordinary income; those gains and dividends are taxed, instead, at a rate of 15 percent. All other long-term capital gains and qualified dividends are subject to a tax rate of 20 percent—nearly 20 percentage points lower than the rate that would apply if they were considered ordinary income.

- Certain long-term capital gains and qualified dividends are included in net investment income, which is subject to the Net Investment Income Tax (NIIT) of 3.8 percent. Taxpayers are subject to the NIIT if their modified adjusted gross income is greater than \$200,000 for unmarried filers and \$250,000 for married couples filing joint tax returns. (Adjusted gross income, or AGI, includes income from all sources not specifically excluded by the tax code, minus certain deductions. Modified AGI includes foreign income that is normally excluded from AGI.) The additional tax is applied to the smaller of two amounts: net investment income or the amount by which modified AGI exceeds the thresholds. Therefore, for taxpayers subject to the NIIT, the marginal tax rate (that is, the percentage of an additional dollar of income that is paid in taxes) on long-term capital gains and qualified dividends effectively increases from 20 percent to 23.8 percent.

- Other provisions of the tax code—such as those that limit or phase out other tax preferences—may further increase the tax rate on long-term capital gains and dividends. For example, for each dollar by which taxpayers' AGI exceeds certain high thresholds, the total value of certain itemized deductions is reduced by 3 cents. As a result, the amount of income that is taxable will increase: For example, for taxpayers in the 39.6 percent tax bracket for ordinary income, taxable income will effectively rise by \$1.03 for each additional dollar of long-term capital gains. That increase in taxable income will cause their marginal tax rate to rise by more than 1 percentage point (0.396 times 3 percent).

With all of those provisions taken into account, the tax rate on long-term capital gains and dividends is nearly 25 percent for most people in the top income tax bracket. Although that bracket applies to less than 1 percent of all

taxpayers, the income of those taxpayers accounts for roughly two-thirds of income from dividends and realized long-term capital gains.

This option would raise the statutory tax rates on long-term capital gains and dividends by 2 percentage points. Those rates would then be 2 percent for taxpayers in the 10 percent and 15 percent brackets for ordinary income, 17 percent for taxpayers in the brackets ranging from 25 percent through 35 percent, and 22 percent for taxpayers in the top bracket. The option would not change other provisions of the tax code that also affect taxes on capital gains and dividends. The staff of the Joint Committee on Taxation estimates that this option would raise federal revenues by \$57 billion over the 2017–2026 period.

One advantage of raising tax rates on long-term capital gains and dividends, rather than raising tax rates on ordinary income, is that it would reduce the incentive for taxpayers to try to mischaracterize labor compensation and profits as capital gains. Such strategizing occurs under current law even though the tax code and regulations governing taxes contain numerous provisions that attempt to limit it. Reducing the incentive to mischaracterize compensation and profits as capital gains would reduce the resources devoted to circumventing the rules.

Another rationale for raising revenue through this option is that it would be progressive with respect to people's wealth and income. Most capital gains are received by people with significant wealth and income, although some are received by retirees who have greater wealth but less income than some younger people who are still working. Overall, raising tax rates on long-term capital gains would impose, on average, a larger burden on people with significant financial resources than on people with fewer resources.

A disadvantage of the option is that raising tax rates on long-term capital gains and dividends would influence investment decisions by increasing the tax burden on

investment income. By lowering the after-tax return on investments, the increased tax rates would reduce the incentive to invest in businesses. Another disadvantage is that the option would exacerbate an existing bias that favors debt-financed investment by businesses over equity-financed investment. That bias is greatest for investors in firms that pay the corporate income tax because corporate profits are taxed once under the corporate income tax and a second time when those profits are paid out as dividends or reinvested and taxed later as capital gains on the sale of corporate stock. In contrast, profits of unincorporated businesses, rents, and interest are taxed only once. That difference distorts investment decisions by discouraging investment funded through new issues of corporate stock and encouraging, instead, either borrowing to fund corporate investments or the formation and expansion of noncorporate businesses. The bias against equity funding of corporate investments would not expand if the option exempted dividends and capital gains on corporate stock—limiting the tax increase to capital gains on those assets that are not taxed under both the corporate and the individual income taxes. That modification, however, would also reduce the revenue gains from the option.

Another argument against implementing the option is related to the fact that taxation of capital gains encourages people to defer the sale of their capital assets, sometimes even leading them to never sell some of the assets during their lifetime. In the former case, the taxation of capital gains is postponed; in the latter case, it is avoided altogether because if an individual sells an inherited asset, the capital gain is the difference between the sale price and the fair-market value as of the date of the previous owner's death. By raising tax rates on long-term capital gains and dividends, this option could further encourage people to hold on to their investments only for tax reasons, which could reduce economic efficiency by preventing some of those assets from being put to more productive uses.

RELATED OPTIONS: Revenues, Options 1, 2, 9, 12, 41

RELATED CBO PUBLICATIONS: *The Distribution of Asset Holdings and Capital Gains* (August 2016), www.cbo.gov/publication/51831; *The Distribution of Household Income and Federal Taxes, 2013* (June 2016), www.cbo.gov/publication/51361; *Taxing Capital Income: Effective Marginal Tax Rates Under 2014 Law and Selected Policy Options* (December 2014), www.cbo.gov/publication/49817; *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/publication/43768; Tim Dowd, Robert McClelland, and Athiphat Muthitacharoen, *New Evidence on the Tax Elasticity of Capital Gains*, Working Paper 2012-09 (June 2012), www.cbo.gov/publication/43334

Revenues—Option 4

Use an Alternative Measure of Inflation to Index Some Parameters of the Tax Code

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	2.9	4.0	5.5	7.6	13.3	17.6	20.3	24.0	29.2	32.2	33.3	156.7

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

The estimates include the effects on outlays resulting from changes in refundable tax credits.

Each year, the Internal Revenue Service (IRS) adjusts some parameters of the tax code on the basis of changes in the prices of goods and services, which generally increase over time, using the consumer price index for all urban consumers (CPI-U). The CPI-U, which is produced by the Bureau of Labor Statistics (BLS), is a monthly price index that is based on average prices for a broad basket of goods and services (including food and energy). It is designed to approximate a cost-of-living index. Adjusting, or indexing, certain tax parameters every year by the percentage change in the CPI-U is intended to keep their values relatively stable in real (inflation-adjusted) terms. (Inflation—an increase in the average price level—is a significant component in changes in the cost of living.) Among the tax parameters adjusted are the amounts of the personal and dependent exemptions; the size of the standard deductions; the income thresholds that divide the rate brackets for the individual income tax; the amount of annual gifts exempt from the gift tax; and the income thresholds and phase-out boundaries for the earned income tax credit and several other credits. Parameters for the individual alternative minimum tax (AMT) are also adjusted, including the exemption amounts, the income thresholds at which those exemptions phase out, and the income threshold at which the second AMT rate bracket begins.¹

Indexing is accomplished by adjusting a tax parameter's value in a base year by the percentage change in the CPI-U between that base year and the most recent year for which the CPI-U is available. The annual period used for the calculation is not a calendar year but the

12 months that elapse from September to August. The value of the CPI-U in August becomes available in September, which allows the IRS enough time to index the tax parameters and prepare the necessary forms for the coming tax year. Adjustments in parameters of the tax code are calculated as follows: In the base year of 1987, for example, the standard deduction for a single tax filer was \$3,000. Between 1987 and 2015, the CPI-U increased by 111.4 percent; correspondingly, the standard deduction (rounded to the lowest \$50 increment) increased to \$6,300 for 2016.

The CPI-U, however, overstates changes in the cost of living by not fully accounting for the extent to which households substitute one product for another when the relative prices of products change. To address that “substitution bias,” BLS created another measure of changes in consumer prices—the chained CPI-U. Whereas the standard CPI-U uses a basket of products reflecting consumption patterns that are as much as two years old, the chained CPI-U incorporates adjustments that people make in the types of products they buy from one month to the next (thus “chaining” the months together). In addition, the standard CPI-U overstates increases in the cost of living because of a statistical bias related to the limited amount of price data that BLS can collect, which is known as “small-sample bias.” The chained CPI-U does not have the same statistical bias. However, even though the chained CPI-U corrects for the substitution bias in the standard CPI-U and does not suffer from small-sample bias, neither the chained nor the standard CPI-U perfectly captures changes in the cost of living because neither fully accounts for increases in the quality of existing products, the value of new products entering consumers' baskets, or changes in where consumers make their purchases.

1. The AMT is a parallel income tax system with fewer exemptions, deductions, credits, and rates than the regular income tax. Taxpayers must calculate the amount they owe under both the AMT and the regular income tax and pay the larger of the two amounts.

Under this option, the chained CPI-U would be used instead of the standard CPI-U to adjust various parameters of the tax code. The Congressional Budget Office estimates that the chained CPI-U is likely to grow at an average annual rate that is 0.25 percentage points less than the standard CPI-U over the next decade. Therefore, using the chained CPI-U to index tax parameters would increase the amount of income subject to taxation and result in higher tax revenues. Furthermore, the effects of instituting such a policy would grow over time. The net revenue increase would be about \$3 billion in 2017 but would reach \$32 billion in 2026, the staff of the Joint Committee on Taxation estimates. Net additional revenues would total about \$157 billion from 2017 through 2026.

An argument in favor of using the chained CPI-U to adjust tax parameters is that this approach would more accurately reflect changes in the cost of living and modify each taxpayer's liability accordingly. The chained CPI-U provides a better measure of changes in the cost of living in two ways: by more quickly capturing the extent to which households adjust their consumption in response to changes in relative prices and by using a formula that essentially eliminates the statistical bias that can occur when estimates of aggregate price changes are calculated on the basis of relatively small samples of prices.

An argument against implementing this option is that only an initial estimate of the chained CPI-U is available on a monthly basis; a final and more accurate estimate is delayed because it is more complicated and time-consuming to compute than the standard CPI-U. (Details of that approach are available in a web-only technical appendix that CBO released with its February 2010 issue brief *Using a Different Measure of Inflation for Indexing Federal Programs and the Tax Code*.) At the start of every year, all of the initial estimates for the prior year are revised, and one year later those interim estimates are further revised and made final. Because of those delays, the initial and interim estimates of the chained CPI-U, which typically contain errors, would need to be used to index the parameters in the tax code. Since the chained CPI-U was first published in 2002, however, the changes between the initial and final values have been relatively small. If the adjustment for each year was based on the index value from an earlier base year, those small errors would not accumulate beyond the current year. Furthermore, because the initial and interim estimates of the chained CPI-U have been closer to the final version of the chained CPI-U than the standard CPI-U has been, those estimates still reflect the basic improvement attributable to the chained CPI-U.

RELATED OPTION: Mandatory Spending, Option 26

RELATED CBO PUBLICATIONS: Testimony of Jeffrey Kling, Associate Director for Economic Analysis, before the Subcommittee on Social Security of the House Committee on Ways and Means, *Using the Chained CPI to Index Social Security, Other Federal Programs, and the Tax Code for Inflation* (April 18, 2013), www.cbo.gov/publication/44083; *Using a Different Measure of Inflation for Indexing Federal Programs and the Tax Code* (February 2010), www.cbo.gov/publication/21228

Revenues—Option 5

Convert the Mortgage Interest Deduction to a 15 Percent Tax Credit

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	0.1	0.7	1.7	4.0	5.5	9.4	19.0	20.3	21.5	22.8	12.0	105.0

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

The estimates include the effects on outlays resulting from changes in refundable tax credits.

The tax code treats investments in owner-occupied housing more favorably than it does other types of investments. For example, landlords can deduct certain expenses—such as mortgage interest, property taxes, depreciation, and maintenance—from their income, but they have to pay taxes on rental income, net of those expenses, and on any capital gain realized when their property is sold. In contrast, homeowners can deduct mortgage interest and property taxes if they itemize deductions, even though they do not pay tax on the net rental value of their home. (Other housing-related expenses, however, cannot be deducted from homeowners' income.) In addition, in most circumstances, homeowners can exclude from taxation capital gains of up to \$250,000 (\$500,000 for married couples who file joint tax returns) when they sell their primary residence.

Under current law, the deduction for mortgage interest is restricted in two ways. First, the amount of mortgage debt that can be included when calculating the interest deduction is limited to \$1.1 million: \$1 million for debt that a homeowner incurs to buy, build, or improve a first or second home; and \$100,000 for debt for which the borrower's personal residence serves as security (such as a home-equity loan), regardless of the purpose of that loan. Second, the total value of certain itemized deductions—including the deduction for mortgage interest—is reduced if the taxpayer's adjusted gross income is above specified thresholds. (Adjusted gross income includes income from all sources not specifically excluded by the tax code, minus certain deductions.) Those thresholds are adjusted, or indexed, every year to include the effects of inflation. For 2016, the thresholds were set at \$259,400 for taxpayers filing as single and \$311,300 for married couples who file jointly.

This option would gradually convert the tax deduction for mortgage interest to a 15 percent nonrefundable tax credit. The option would be phased in over six years, beginning in 2017. From 2017 through 2021, the deduction would still be available, but the maximum amount of the mortgage deduction would be reduced by \$100,000 each year—to \$1 million in 2017, \$900,000 in 2018, and so on, until it reached \$600,000 in 2021. In 2022 and later years, the deduction would be replaced by a 15 percent credit; the maximum amount of mortgage debt that could be included in the credit calculation would be \$500,000; and the credit could be applied only to interest on debt incurred to buy, build, or improve a first home. (Other types of loans, such as home-equity lines of credit and mortgages for second homes, would be excluded.) Because the credit would be nonrefundable, people with no income tax liability before the credit was taken into account would not receive any credit, and people whose precredit income tax liability was less than the full amount of the credit would receive only the portion of the credit that offset the amount of taxes they otherwise would owe. The option would raise \$105 billion in revenues from 2017 through 2026, according to estimates by the staff of the Joint Committee on Taxation.

One argument in favor of the option is that it would make the tax system more progressive by distributing the mortgage interest subsidy more evenly across households with different amounts of income. Relative to other taxpayers, lower-income people receive the least benefit from the current itemized deduction, for three reasons. First, lower-income people are less likely than higher-income people to have sufficient deductions to make itemizing worthwhile; for taxpayers with only small amounts of deductions that can be itemized, the standard deduction, which is a flat dollar amount, provides a larger tax benefit. Second, the value of itemized deductions is greater for

people in higher income tax brackets. And third, the value of the mortgage interest deduction is greater for people who have larger mortgages. Unlike the current mortgage interest deduction, a credit would be available to taxpayers who do not itemize and would provide the same subsidy rate to all recipients, regardless of income. However, taxpayers with larger mortgages—up to the \$500,000 limit specified in this option—would still receive a greater benefit from the credit than would households with smaller mortgages. Altogether, many higher-income people would receive a smaller tax benefit for housing than under current law, and many lower- and middle-income people would receive a larger tax benefit. (The credit could be made available to more households by making it refundable, although doing so would significantly reduce the revenue gain.)

Another argument in favor of the option is that it would increase the tax incentive for home ownership for lower- and middle-income taxpayers who might otherwise rent. Research indicates that when people own rather than rent their homes, they maintain their properties better and participate more in civic affairs. However, because people are unlikely to consider those benefits to the community when deciding whether to buy or rent a personal residence, a subsidy that encourages home ownership can help align their choices with the community's interest. Increased home ownership can also put people in a better position for retirement because they can tap into their home equity for any unexpected expenses. In addition, expenses associated with home ownership remain relatively stable, which matches well with retirees' typically fixed income.

A further rationale for such a change is that it probably would improve the overall allocation of resources in the economy. With its higher subsidy rates for taxpayers in higher tax brackets and its high \$1.1 million limit on loans, the current mortgage interest deduction encourages higher-income taxpayers who would buy houses anyway to purchase more expensive dwellings than they otherwise might. That reduces the savings available for productive investment in businesses. Reducing the tax subsidy for owner-occupied housing would probably redirect some capital, which would moderate that effect. In principle, this option could induce low- and middle-income taxpayers to spend more on housing, which could create an offsetting reduction in business investment.

However, on net, the option probably would increase investment in businesses for two reasons. First, the total mortgage interest subsidy would be lower under the option, which would most likely result in lower aggregate spending on housing. Second, a larger fraction of increases in spending on housing by low- and middle-income taxpayers would probably be financed by a reduction in other expenditures rather than by a reduction in business investment. Because investment in owner-occupied housing is boosted by the current tax subsidy, and investment in many businesses is held down by taxes on their profits, the before-tax return on the additional business investment that would occur under this option would generally be higher than the forgone return from housing, indicating a better allocation of resources.

One disadvantage of the option is that, by providing a larger tax benefit to lower- and middle-income people than they receive under current law and thereby encouraging more of them to buy houses and to buy more expensive houses than they otherwise would, the option would increase the risk that some people assume. Principal residences tend to be the largest asset that people own and the source of their largest debt. When housing prices rise, homeowners' wealth can rise significantly. However, when prices drop, people can lose their homes and much of their wealth, especially if their income falls at the same time and they cannot keep up with their mortgage payments. The collapse of the housing market during the late 2000s demonstrated that risk vividly.

Another disadvantage of the option is that it would adversely affect the housing industry and people who currently own their own homes—especially in the short term. Many homeowners have taken out long-term mortgages under the assumption that they would be able to deduct the interest on their loans. Many financial institutions have been willing to lend homebuyers higher amounts than they otherwise might have under the assumption that the mortgage interest deduction would help those buyers repay their loans. Reducing the tax subsidy for housing would make it more difficult for some homeowners to meet their mortgage obligations. Such a change would also reduce the amount that new homebuyers would be willing to pay, which would lower the prices of homes, on average. Lower housing prices would create further stress on the finances of existing owners and lead to reduced new construction. Over time, as the

supply of housing declined, prices would rise again, but probably not to the levels they would reach under current law. Most of those hardships could be eased by phasing in restrictions on the mortgage interest deduction. Because

of the lengthy terms of mortgages, however, and the slowness with which the stock of housing changes, substantial adjustment costs would still occur even with a six-year phase-in period.

RELATED OPTIONS: Revenues, Options 7, 8; Mandatory Spending, Option 7

RELATED CBO PUBLICATIONS: *Federal Housing Assistance for Low-Income Households* (September 2015), www.cbo.gov/publication/50782; *Taxing Capital Income: Effective Marginal Tax Rates Under 2014 Law and Selected Policy Options* (December 2014), www.cbo.gov/publication/49817; *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/publication/43768; Larry Ozanne, *Taxation of Owner-Occupied and Rental Housing*, Working Paper 2012-14 (November 2012), www.cbo.gov/publication/43691; *An Overview of Federal Support for Housing* (November 2009), www.cbo.gov/publication/41219

Revenues—Option 6

Curtail the Deduction for Charitable Giving

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	4.2	21.2	22.2	23.1	24.1	25.0	25.9	26.9	27.9	28.9	94.8	229.4

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Current law allows taxpayers who itemize to deduct the value of their contributions to qualifying charitable organizations. By lowering the after-tax cost of donating to charities, the deduction provides an added incentive to donate. In calendar year 2014 (the most recent year for which data are available), taxpayers claimed \$211 billion in charitable contributions on 36 million tax returns.

The deduction is restricted in two ways. First, charitable contributions may not exceed 50 percent of a taxpayer's adjusted gross income (AGI) in any one year. (AGI includes income from all sources not specifically excluded by the tax code, minus certain deductions.) Second, the total value of certain itemized deductions—including the deduction for charitable donations—is reduced if the taxpayer's AGI is above \$259,400 for taxpayers filing as single or \$311,300 for taxpayers filing jointly in 2016. The thresholds are adjusted, or indexed, to include the effects of inflation.

This option would further curtail the deduction for charitable donations while preserving a tax incentive for donating. Only contributions in excess of 2 percent of AGI would be deductible for taxpayers who itemize. That amount would still be subject to the additional reduction described above for higher-income taxpayers. Limiting the deduction to contributions in excess of 2 percent of AGI would match the treatment that now applies to unreimbursed employee expenses, such as job-related travel costs and union dues. Such a policy change would increase revenues by \$229 billion from 2017 through 2026, the staff of the Joint Committee on Taxation (JCT) estimates.

An argument in favor of this option is that, even without a deduction, a significant share of charitable donations

would probably still be made. Therefore, allowing taxpayers to deduct contributions is economically inefficient because it results in a large loss of federal revenue for a very small increase in charitable giving. For taxpayers who contribute more than 2 percent of their AGI to charity, this option would maintain the current incentive to donate but at much less cost to the federal government. People who make large donations often are more responsive to that tax incentive than people who make small contributions. Moreover, deductions of smaller contributions are more likely to be fraudulent because donations that are less than \$250 do not require the same degree of documentation as those that are larger.

A potential disadvantage of this option is that total charitable giving would decline, albeit by only a small amount, JCT and the Congressional Budget Office estimate. People who contribute less than 2 percent of their AGI would no longer have a tax incentive to donate, and many of them could reduce their contributions. Although people who make larger donations would still have an incentive to give, they would have slightly lower after-tax income because of the smaller deduction and thus might reduce their contributions as well (although by a lesser percentage than people making smaller donations). Another effect of creating the 2 percent floor is that it would encourage taxpayers who had planned to make gifts over several years to combine donations into a single tax year to qualify for the deduction. As a result, some taxpayers would devote more resources to tax planning than they otherwise would have in an effort to best time their contributions and thereby minimize the amount of taxes they owe over a multiyear period.

RELATED OPTION: Revenues, Option 8

RELATED CBO PUBLICATIONS: *Options for Changing the Tax Treatment of Charitable Giving* (May 2011), www.cbo.gov/publication/41452; *The Estate Tax and Charitable Giving* (July 2004), www.cbo.gov/publication/15823; *Effects of Allowing Nonitemizers to Deduct Charitable Contributions* (December 2002), www.cbo.gov/publication/14230

Revenues—Option 7

Limit the Deduction for State and Local Taxes

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	44.1	86.6	87.1	91.2	95.5	99.7	104.5	110.0	115.7	121.0	404.5	955.4

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

In determining their taxable income, taxpayers may choose the standard deduction when they file their tax returns, or they may itemize and deduct certain expenses (including state and local taxes on income, real estate, and personal property) from their adjusted gross income, or AGI. (AGI includes income from all sources not specifically excluded by the tax code, minus certain deductions.) Under current law, taxpayers who itemize may also choose to deduct state and local sales taxes instead of state and local income taxes. The total value of certain itemized deductions—including the deduction for state and local taxes—is reduced if the taxpayer’s AGI is above \$259,400 for taxpayers filing as single or \$311,300 for married taxpayers filing jointly in 2016. The thresholds are adjusted, or indexed, to include the effects of inflation.

This option would limit the deductibility of state and local tax payments by capping the deduction at 2 percent of AGI. That change would increase federal revenues by \$955 billion from 2017 through 2026, the staff of the Joint Committee on Taxation estimates.

The deduction for state and local taxes is effectively a federal subsidy to state and local governments; that means the federal government essentially pays a share of people’s state and local taxes. Therefore, the deduction indirectly finances spending by those governments when federal revenues could be used to fund the activities of the federal government. It also creates an incentive for state and local governments to raise taxes and increase spending—although some research indicates that total spending by

state and local governments is not sensitive to that incentive.

An argument in favor of capping the deduction is that the federal government should not provide a tax deduction that subsidizes the spending of state and local governments because revenues from state and local taxes are largely paid in return for services provided to the public. When used to pay for public services, such taxes are analogous to spending on other types of consumption that are nondeductible. Another argument is that the deduction largely benefits wealthier localities, where many taxpayers itemize, are in the upper income tax brackets, and enjoy more abundant state and local government services. Because the value of an additional dollar of itemized deductions increases with the marginal tax rate (the percentage of an additional dollar of income from labor or capital that is paid in federal taxes), the deductions are worth more to taxpayers in higher income tax brackets than they are to those in lower income brackets. Additionally, the unlimited deductibility of taxes could deter states and localities from financing some services with nondeductible fees, which could be more efficient.

An argument against capping the current deduction involves the equity of the tax system as a whole. A person who must pay relatively high state and local taxes has less money with which to pay federal taxes than does someone with the same total income and smaller state and local tax bills. The validity of that argument, however, depends at least in part on whether people who pay higher state and local taxes also benefit more from goods and services provided by states and localities.

RELATED OPTIONS: Revenues, Options 8, 10

RELATED CBO PUBLICATIONS: Testimony of Frank Sammartino, Assistant Director for Tax Analysis, before the Senate Committee on Finance, *Federal Support for State and Local Governments Through the Tax Code* (April 25, 2012), www.cbo.gov/publication/43047; *The Deductibility of State and Local Taxes* (February 2008), www.cbo.gov/publication/41647

Revenues—Option 8

Limit the Value of Itemized Deductions

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total		
											2017–2021	2017–2026	
Change in Revenues													
Limit the tax benefits of itemized deductions to 28 percent of their total value	7.2	14.9	15.8	16.6	17.4	18.2	19.0	19.9	20.7	21.6	71.9	171.5	
Limit the tax value of itemized deductions to 6 percent of AGI	5.2	10.6	11.2	11.6	11.9	12.5	13.2	13.8	14.3	14.9	50.5	119.2	
Eliminate all itemized deductions	93.2	193.8	206.4	216.7	227.0	237.0	247.5	258.7	270.4	281.1	937.1	2,231.8	

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

AGI = adjusted gross income.

When preparing their income tax returns, taxpayers may either choose the standard deduction—which is a flat dollar amount—or choose to itemize and deduct certain expenses, such as state and local taxes, mortgage interest, charitable contributions, and some medical expenses. Taxpayers benefit from itemizing when the value of their deductions exceeds the amount of the standard deduction. The fact that those expenses are deductible reduces the cost of incurring them; so, in effect, the itemized deductions serve as subsidies for undertaking deductible activities. The tax savings from itemized deductions, and thus the amount of the subsidies, generally depend on a taxpayer’s marginal tax rate (the percentage of an additional dollar of income that is paid in taxes). For instance, \$10,000 in deductions reduces tax liability by \$1,500 for someone in the 15 percent tax bracket and by \$2,800 for someone in the 28 percent tax bracket. Most of those tax savings constitute a “tax expenditure” by the federal government. (Tax expenditures resemble federal spending in that they provide financial assistance for specific activities, entities, or groups of people.)

The tax code imposes some limits on the amount of itemized deductions that taxpayers can claim. For some types of expenses (such as medical expenses), only the amount that exceeds a certain percentage of the taxpayer’s adjusted gross income (AGI) can be deducted. (AGI includes income from all sources not specifically excluded

by the tax code, minus certain deductions.) Moreover, taxpayers cannot deduct home mortgage interest on loan amounts in excess of \$1.1 million. In addition, the total value of certain itemized deductions is reduced by 3 percent of the amount by which a taxpayer’s AGI exceeds a specified threshold. That reduction can reduce a taxpayer’s itemized deductions by up to 80 percent (that is, taxpayers retain no less than 20 percent of their deductions). That limit, originally proposed by Congressman Donald Pease, is often called the Pease limitation.

This option considers three alternative approaches to broadly restrict the total amount of itemized deductions that taxpayers can take:

- The first alternative would limit the tax benefits of itemized deductions to 28 percent of the deductions’ total value while removing the Pease limitation. As a result, taxpayers in tax brackets with statutory rates above 28 percent would receive less benefit from itemized deductions than under current law, whereas taxpayers in tax brackets with statutory rates that are equal to or less than 28 percent would be unaffected by the change. The staff of the Joint Committee on Taxation (JCT) estimates that this approach would increase revenues by \$172 billion from 2017 through 2026.

- The second alternative would limit the tax benefits of itemized deductions to 6 percent of a taxpayer's AGI while removing the Pease limitation. As a result, taxpayers whose savings from itemized deductions exceeded 6 percent of their AGI would receive less benefit from itemized deductions than under current law, whereas taxpayers whose savings from itemized deductions were 6 percent or less of their AGI would be unaffected by the change. This approach would raise revenues by \$119 billion from 2017 through 2026, according to JCT's estimates.
- The third alternative would eliminate all itemized deductions. As a result, all taxpayers who currently itemize deductions would have to claim the standard deduction, which generally would be of less value to them. Taxpayers who would have claimed the standard deduction under current law would be unaffected by the change. JCT estimates that this approach would raise revenues by \$2.2 trillion from 2017 through 2026.

A major argument for reducing or eliminating itemized deductions is that their availability encourages taxpayers to spend more on deductible activities in order to receive the tax benefits those activities provide; that tendency can lead to an inefficient allocation of economic resources. For example, the mortgage interest deduction distorts the housing market, prompting people to take out larger mortgages and buy more expensive houses, and pushing up home prices. People therefore invest less in other assets than they would if all investments were treated equally. Reducing the tax benefits of itemized deductions would diminish taxpayers' incentive to spend more on specified goods or activities than they would under current law. That would improve the allocation of resources because taxpayers would make spending decisions based on the benefit they derive from the specified goods or activities, rather than based on tax considerations. Doing less of some activities for which expenses can be deducted under current law—in particular, activities that primarily benefit the taxpayers undertaking the activities—would improve the allocation of resources. However, doing less of other activities for which expenses can be deducted—in particular, those activities that offer widespread benefits—could worsen the allocation of resources. An oft-cited example of tax-deductible spending in the latter category is contributions to charitable organizations.

Each of the three alternatives in this option would reduce the incentives for taxpayers to spend on tax-deductible items in different ways and to different degrees. Limiting the tax benefit of deductions to 28 percent of their total value would reduce the incentives created by the existing system only for taxpayers in rate brackets above 28 percent, who would see their subsidy rate fall from as high as 39.6 percent to 28 percent. Those taxpayers would continue to receive a tax benefit for each additional dollar they spent on tax-preferred items, but the amount of that benefit would be less than under current law. Other taxpayers would not experience any change in their incentives to spend money on tax-deductible items. In contrast, limiting the tax value of itemized deductions to 6 percent of AGI would eliminate the tax incentives for some taxpayers to spend more on tax-preferred items because taxpayers would not receive any tax benefit for each additional dollar spent above that threshold. Eliminating every itemized deduction would remove the tax incentives for all taxpayers to spend more on deductible items. Among all itemizers, limiting the tax subsidy to 28 percent would have the smallest effect on incentives to spend on tax-deductible items. Eliminating itemized deductions would have the largest effect on incentives.

If policymakers wanted to maintain the current tax subsidy for certain activities while reducing the tax subsidy for others, they could adopt one of the approaches described in this option but exempt certain deductions entirely from the restrictions or limit certain deductions in a less constraining way. For example, policymakers could limit most itemized deductions in one of the ways offered above but allow taxpayers to fully deduct at their marginal tax rates any charitable contributions that are *greater* than some specified percentage of AGI (see Option 6). Imposing a floor on the amount of charitable contributions that could be deducted would reduce the tax expenditure for such contributions while continuing to encourage additional contributions by taxpayers who would give charities the threshold amount anyway.

Another argument for reducing or eliminating itemized deductions is that higher-income taxpayers benefit more from those deductions than do taxpayers with lower income because people with higher income typically have more deductions and because the per-dollar tax benefit of those deductions depends on a taxpayer's marginal tax rate, which rises with income. In calendar year 2013, CBO estimates, more than 80 percent of the tax expenditures resulting from the three largest itemized

deductions—for state and local taxes, mortgage interest, and charitable contributions—accrued to households with income in the highest quintile (or one-fifth) of the population (with 30 percent going to households in the top 1 percent of the population). In 2013, the tax benefit of those three deductions equaled less than 0.05 percent of after-tax income for households in the lowest income quintile, 0.4 percent for the middle quintile, 2.5 percent for the highest quintile, and 3.9 percent for the top percentile. Hence, reducing or eliminating them would increase the progressivity of the tax code. Capping the tax value of deductions at 28 percent would increase taxes primarily on taxpayers in the top 10 percent of the before-tax household-income distribution. In contrast, limiting the tax value of deductions to 6 percent of AGI or eliminating itemized deductions altogether would, to some extent, increase taxes on taxpayers throughout the top half of the income distribution because even some taxpayers in the middle quintile have deductions that are a large share of their income.

The three variants would affect the complexity of the tax code in different ways. Eliminating itemized deductions would simplify the tax code. Taxpayers would no longer have to keep records of their deductible expenses or enumerate them on the tax form. In contrast, the other two alternatives would increase the complexity of the tax code to some extent. Capping the tax benefit of itemized deductions—either at 28 percent of itemized deductions or at 6 percent of AGI—would require taxpayers to do more complicated calculations to determine their tax liability. They would essentially have to compute their taxes twice—once with their itemized deductions and once without those deductions—to determine whether the tax benefits of their itemized deductions exceeded the relevant threshold.

An argument against any of the alternatives described in this option is that some deductions are intended to yield a measure of taxable income that more accurately

reflects a person's ability to pay taxes. For example, the deductions for payments of investment interest and unreimbursed employee business expenses allow people to subtract the costs of earning the income that is being taxed. And taxpayers with high medical expenses, casualty and theft losses, or state and local taxes have fewer resources than taxpayers with the same amount of income and smaller expenses or losses (all else being equal). Under this option, taxpayers subject to the limitations on deductions would not be able to fully subtract those expenses from their taxable income.

Another argument against these alternatives is that reducing the value of itemized deductions would disrupt many existing financial arrangements, especially in the housing market. Many homeowners have purchased homes under the assumption that they would be able to deduct the interest on their mortgages and their property taxes. Reducing the value of those deductions would make it more difficult for some homeowners to meet their obligations. And such a change would also reduce the amount new homebuyers would be willing to pay, which would lower the prices of homes, on average. Lower housing prices would create further stress on the finances of existing owners.

Each of these approaches could be expanded by subjecting more tax provisions to the limits or by tightening the limits on itemized deductions described above. For example, the President's budget for 2017 proposed that a 28 percent limit be applied not only to itemized deductions but also to a broader set of tax provisions, including the exclusion for interest earned on tax-exempt state and local bonds, employment-based health insurance paid for by employers or with before-tax employee dollars, and employee contributions to defined contribution retirement plans and individual retirement plans. That proposal, which also retains the Pease limitation, would increase revenues by \$542 billion from 2017 to 2026, according to JCT's estimates.

RELATED OPTIONS: Revenues, Options 5, 6, 7

RELATED CBO PUBLICATIONS: *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/publication/43768; Larry Ozanne, *Taxation of Owner-Occupied and Rental Housing*, Working Paper 2012-14 (November 2012), www.cbo.gov/publication/43691; *Options for Changing the Tax Treatment of Charitable Giving* (May 2011), www.cbo.gov/publication/41452; *The Deductibility of State and Local Taxes* (February 2008), www.cbo.gov/publication/41647

Revenues—Option 9

Change the Tax Treatment of Capital Gains From Sales of Inherited Assets

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	0.6	4.2	5.2	6.0	6.8	7.5	8.2	8.9	9.8	10.9	22.8	68.0

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

When people sell an asset for more than the price at which they obtained it, they realize a net capital gain. That net gain is generally calculated as the sales price minus the asset's adjusted basis. The adjusted basis is generally the price of the asset at the time it was initially acquired plus the cost of any subsequent improvements and minus any deductions for depreciation. Net capital gains are included in taxable income in the year in which the sale occurs.

The tax treatment of capital gains resulting from the sale of inherited assets is different. Taxpayers who inherit assets generally use the asset's fair-market value at the time of the owner's death to determine their basis—often referred to as stepped-up basis—instead of the adjusted basis derived from the time the decedent initially acquired the asset. As a result, when the heir sells the asset, capital gains taxes are assessed only on the change in the asset's value that accrued after the owner's death. Any appreciation in value that occurred while the decedent owned the asset is not included in taxable income and therefore is not subject to capital gains taxation. (However, the estate may be subject to the estate tax.)

Under this option, taxpayers would generally adopt the adjusted basis of the decedent—known as carryover basis—on assets they inherit. As a result, the decedent's unrealized capital gains would be taxed at the heirs' tax rate when they eventually sell the assets. (For bequeathed assets that would be subject to both the estate tax and capital gains tax, this option would adjust the basis of some of those assets to minimize the extent to which both taxes would apply to the appreciation in value.) If implemented, this option would increase revenues by \$68 billion from 2017 through 2026, the staff of the Joint Committee on Taxation estimates.

Under the option, most gains accrued between the date a person initially acquired the asset and the date of that person's death would eventually be taxed. As a result, the tax treatment of capital gains realized on the sale of inherited assets would be more similar to the tax treatment of capital gains from the sale of other assets.

One advantage of this approach is that it would encourage people to shift investments to more productive uses during their lifetimes, rather than retaining them so that their heirs could benefit from the tax advantages offered by the stepped-up basis. The option, however, would not completely eliminate the incentive to delay the sale of assets solely for the tax advantages. For an asset that rose in value before the owner's death, replacing stepped-up basis with carryover basis would increase the total amount of taxable capital gains realized when the asset is sold by the heir (unless the asset's value dropped after the owner's death by an amount equal to or greater than the appreciation that occurred while the owner was alive). As a result, heirs might choose to delay sales to defer capital gains taxes (as they might for assets they purchased themselves). An alternative approach would be to treat transfers of assets through bequest as a sale at the time of the transfer, making the capital gains taxable in that year. However, that method might force the owner to sell some portion of the assets at an inopportune time to pay the tax and could be particularly problematic for nonliquid assets.

Another advantage is that using carryover basis to determine capital gains would decrease the incentive for people to devote resources to tax planning rather than to more productive activities. For example, it would lessen the advantages of using certain tax shelters that allow people to borrow against their assets for current consumption and for the loan to be repaid after their death by using the proceeds from the sale of their assets.

A disadvantage of this option is that heirs would find it difficult to determine the original value of the asset when the decedent had not adequately documented the basis of the asset. Additional provisions could be enacted to make it easier to value an asset. For example, heirs could have the choice of using carryover basis or setting the basis of

an inherited asset at a specified percentage of the asset's value at the time they inherit it. Alternatively, appreciated assets in estates that are valued below a certain threshold could be exempt from the carryover basis treatment to minimize the costs of recordkeeping.

RELATED OPTION: Revenues, Option 3

RELATED CBO PUBLICATIONS: *The Distribution of Asset Holdings and Capital Gains* (August 2016), www.cbo.gov/publication/51831; *Federal Estate and Gift Taxes* (December 2009), www.cbo.gov/publication/41851

Revenues—Option 10

Eliminate the Tax Exemption for New Qualified Private Activity Bonds

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	*	0.4	0.8	1.4	2.1	2.9	3.7	4.6	5.4	6.2	4.7	27.5

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

* = between zero and \$50 million.

The U.S. tax code permits state and local governments to finance certain projects by issuing bonds whose interest payments are exempt from federal income taxes. As a result, those bonds pay lower rates of interest than they would if the interest payments were taxable. For the most part, proceeds from tax-exempt bonds finance public projects, such as the construction of highways and schools. In some cases, however, state and local governments issue tax-exempt bonds to finance private-sector projects. The issuance of such bonds—which are known as qualified private activity bonds—is authorized by the tax code to fund private projects that provide at least some public benefits. Eligible projects include the construction or repair of infrastructure and certain activities, such as building schools and hospitals, undertaken by nonprofit organizations. (Those organizations are sometimes called 501(c)(3)s after the section of the tax code that authorizes them.)

This option would eliminate the tax exemption for new qualified private activity bonds beginning in 2017. The option would increase revenues by \$28 billion through 2026, according to estimates by the staff of the Joint Committee on Taxation.

One rationale for this option is that eliminating the tax exemption for new qualified private activity bonds would improve economic efficiency in some cases. For example, the owners of some of the infrastructure facilities that benefit from the tax exemption can capture—through fees and other charges—much of the value of the services they provide. Therefore, such investments probably would take place without a subsidy. In those instances, providing a tax exemption for such investments would be inefficient because the tax exemption would shift resources from taxpayers to private investors without generating any additional public benefits. As another

example, in cases in which the public benefits from a private-sector facility would be small relative to the existing tax exemption, the subsidy sometimes would lead to investment in projects whose total value (counting private as well as public benefits) was less than their costs.

Another argument in favor of this option is that it would encourage nonprofit organizations to be more selective when choosing projects and, in general, to operate more efficiently. Nonprofit organizations do not pay federal income tax on their investment income. Many nonprofit universities, hospitals, and other institutions use tax-exempt debt to finance projects that they could fund by selling their own assets. By holding on to those assets, they can earn an untaxed return that is higher than the interest they pay on their tax-exempt debt. Eliminating the tax exemption for the debt-financed projects of nonprofit organizations would put those projects on an even footing with the projects financed by selling assets. Further, the tightening of nonprofit organizations' financial constraints that would result from eliminating the tax exemption would encourage those organizations to operate more cost-effectively, although some nonprofits with small asset bases, or endowments, could be forced to cut back or even cease operations.

A disadvantage of this option is that some projects that would not be undertaken without a tax exemption would provide sufficient public benefits to warrant a subsidy. For example, some roads can have broad social benefits (because they are part of a larger transportation network) and, at the same time, be appealing to private owners (because those owners and operators could collect tolls from users). State and local governments are increasingly looking to the private sector to undertake projects of that sort, and supporters of qualified private activity bonds

argue that eliminating the tax exemption would remove an important source of funding for them.

If lawmakers wished to continue to support infrastructure investment and other projects undertaken by the private sector, they could do so more efficiently by subsidizing them directly rather than doing so through the tax system. Tax-exempt financing is inefficient for two reasons: First, the reduction in borrowing costs for issuers of those bonds is less than the federal revenues forgone through the tax exemption. (The interest rate on tax-exempt debt is determined by the market-clearing tax-exempt bond buyer, who will typically be in a lower marginal income tax bracket—and hence be willing to accept a lower

tax-free rate of return—than the average tax-exempt bond buyer, who determines the amount of federal revenue forgone as a result of the tax exemption.) Second, the amount of the subsidy delivered is determined by the tax code and so does not vary across projects according to federal priorities. Lawmakers could, instead, provide a direct subsidy for certain projects by guaranteeing loans or making loans available to the private sector at below-market rates of interest. By offering a direct subsidy rather than one provided through the tax system, the federal government would be better able both to select the types of projects receiving support and to determine the amount of the subsidy.

RELATED OPTION: Revenues, Option 7

RELATED CBO PUBLICATIONS: Testimony of Joseph Kile, Assistant Director for Microeconomic Studies, before the Senate Committee on Finance, *The Status of the Highway Trust Fund and Options for Paying for Highway Spending* (June 18, 2015), www.cbo.gov/publication/50297; Testimony of Joseph Kile, Assistant Director for Microeconomic Studies, before the Panel on Public-Private Partnerships, House Committee on Transportation and Infrastructure, *Public-Private Partnerships for Highway Projects* (March 5, 2014), www.cbo.gov/publication/45157; *Federal Grants to State and Local Governments* (March 2013), www.cbo.gov/publication/43967; Testimony of Frank Sammartino, Assistant Director for Tax Analysis, before the Senate Committee on Finance, *Federal Support for State and Local Governments Through the Tax Code* (April 25, 2012), www.cbo.gov/publication/43047; *Using Public-Private Partnerships to Carry Out Highway Projects* (January 2012), www.cbo.gov/publication/42685; *Tax Arbitrage by Colleges and Universities* (April 2010), www.cbo.gov/publication/21198; *Subsidizing Infrastructure Investment With Tax-Preferred Bonds*, A Joint CBO/JCT Study (October 2009), www.cbo.gov/publication/41359; *Nonprofit Hospitals and Tax Arbitrage* (attachment to a letter to the Honorable William “Bill” M. Thomas, December 6, 2006), www.cbo.gov/publication/18257

Revenues—Option 11

Expand the Base of the Net Investment Income Tax to Include the Income of Active Participants in S Corporations and Limited Partnerships

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	8.3	12.8	13.9	15.3	16.1	16.8	17.7	18.7	19.8	20.6	66.4	160.0

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

The Affordable Care Act of 2010 (ACA) includes two new taxes on income above specified thresholds. One of those—the “Additional Medicare Tax” of 0.9 percent—applies to wages and self-employment income in excess of \$250,000 for married taxpayers who file joint returns, \$125,000 for married taxpayers who file separate returns, and \$200,000 for people whose filing status is “single” or “head of household.” In combination with the Hospital Insurance (HI) tax of 2.9 percent, which predates the ACA and applies to all wages and self-employment income, high-income employees and self-employed individuals are now subject to a total Medicare-related payroll tax of 3.8 percent. The other new tax—the Net Investment Income Tax (NIIT) of 3.8 percent—applies to investment income such as interest, dividends, capital gains, rents, royalties, and other passive business income of taxpayers whose modified adjusted gross income (MAGI) exceeds \$250,000 for married taxpayers who file joint returns, \$125,000 for married taxpayers who file separate returns, and \$200,000 for everybody else.¹ If qualifying investment income is greater than the amount by which MAGI exceeds the applicable threshold, then the tax applies only to the excess MAGI.

In combination, the Additional Medicare Tax and the NIIT cover virtually all labor and capital income derived from the activities of sole proprietorships, general partnerships, and C corporations (those businesses subject to the corporate income tax). Net profits received by sole proprietors and general partners are considered earnings and are subject to the HI tax and the Additional Medicare Tax; and the interest, dividends, and capital gains paid by C corporations to their bondholders or shareholders are subject to the NIIT. Income generated by

other forms of businesses, however, can escape both taxes under certain circumstances. In particular, income earned by people actively involved in limited partnerships (wherein certain partners are not liable for the debts of the business in excess of their initial investment) or in S corporations (which are not subject to the corporate income tax if they meet certain criteria defined in subchapter S of the tax code) falls into that category. If a taxpayer is a passive investor (not actively participating in the operations of such businesses), his or her share of the firm’s net profits is subject to the NIIT. Most limited partners are passive investors and thus potentially liable for the NIIT. But if a taxpayer is actively involved in running such a business (as many owners of S corporations are), the taxpayer’s share of the firm’s net profits is not subject to either the Additional Medicare Tax or the NIIT. (If the taxpayer receives a salary from the firm, however, that income would be subject to the Additional Medicare Tax.)

This option would impose the NIIT on all income derived from business activity that is subject to the individual income tax but not to the Additional Medicare Tax, regardless of the business’s organizational form or the taxpayer’s level of activity. If implemented, the staff of the Joint Committee on Taxation estimates, the option would increase revenues by \$160 billion between 2017 and 2026.

An advantage of this option is that, for tax purposes, it would treat businesses with different organizational structures in a more uniform way. Entrepreneurs would be more likely to select the form of organization that best suits the business rather than the form that minimizes their tax liability. The option would also reduce the incentive for high-income owners of S corporations to reduce their HI tax and Additional Medicare Tax by accepting a salary that is less than the value of the labor

1. For purposes of the NIIT, AGI is modified by adding back any excluded foreign earned income.

they contribute. Finally, decisions about actively participating in running an S corporation or limited partnership would be based on whether such participation would strengthen the business, not on whether it would avoid an additional tax liability.

A disadvantage of the option is that it would probably reduce total investment by businesses. Some investments may be attractive only if the organization is structured in a way that allows owners to avoid the NIIT. For example, two identical businesses—one organized as a general partnership and the other as an S corporation—could consider an expansion that would result in the same before-tax rate of return for each company. Under current law, the general partners whose income exceeds the specified thresholds must pay the Additional Medicare Tax, as well as the HI tax, on their profits. If that tax lowered the rate of return on an investment to less than it would have been if the partners had invested in 10-year Treasury bonds, the partners would buy bonds instead of expanding the business. Because the owners of the S corporation are not subject to the HI tax, the Additional Medicare

Tax, or the NIIT, their after-tax income—after expansion—would be higher than the general partners would have received if they had also chosen to expand their business. However, if the owners of the S corporation were subject to the NIIT, the after-tax return they could realize by expanding the company would be the same as that the general partners would get with a comparable expansion, and the S corporation would also forgo expansion. That argument implies that the NIIT should apply to fewer (or no) sources of income, not more.

An alternative approach would subject net business income that is currently not subject to either the Additional Medicare Tax or the NIIT to the Self-Employment Contributions Act tax (of which the HI tax is a part) and the Additional Medicare Tax. In other words, the owners of all businesses except C corporations would be deemed self-employed and would be taxed in the same manner. If that approach was enacted, the goal of this option would be accomplished and there would be no reason to subject that income to the NIIT. (See Option 23.)

RELATED OPTION: Revenues, Option 23

RELATED CBO PUBLICATION: *Taxing Businesses Through the Individual Income Tax* (December 2012), www.cbo.gov/publication/43750

Revenues—Option 12

Tax Carried Interest as Ordinary Income

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	1.6	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	9.8	19.9

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Investment funds—such as private equity, real estate, and hedge funds—are often organized as partnerships. Those partnerships typically have two types of partners: general partners and limited partners. General partners determine investment strategy; solicit capital contributions; acquire, manage, and sell assets; arrange loans; and provide administrative support for all of those activities. Limited partners contribute capital to the partnership but do not participate in the fund’s management. General partners can invest their own capital in the partnership as well, but such investments usually represent a small share (between 1 percent and 5 percent) of the total capital invested.

General partners typically receive two types of compensation for managing a fund: a fee tied to some percentage of the fund’s assets; and a profit share, or “carried interest,” tied to some percentage of the profits generated by the fund. In a common compensation agreement, general partners receive a management fee equal to 2 percent of the invested assets plus a 20 percent share in profits as carried interest. The fee, less the fund’s expenses, is subject to ordinary income tax rates and the self-employment tax. (All income that is subject to the individual income tax, other than most long-term capital gains and dividends, is taxed at ordinary income tax rates.) In contrast, the carried interest that general partners receive is taxed in the same way as the investment income received by the limited partners. For example, if that investment income consists solely of capital gains, the carried interest is taxed only when those gains are realized and at the lower capital gains rate. Aside from the capital contributions general partners make to the fund, they typically are not exposed to fund losses.

This option would treat the carried interest that general partners receive for performing investment management services as labor income, taxable at ordinary income tax rates and subject to the self-employment tax. Income

those partners received as a return on their own capital contribution would not be affected. If implemented, the change would produce an estimated \$20 billion in revenues from 2017 through 2026, according to the staff of the Joint Committee on Taxation.¹

An argument in favor of this option is that carried interest could be considered performance-based compensation for management services rather than a return on the capital invested by the general partner. By taxing carried interest as ordinary income, this option would make the treatment of carried interest consistent with that of many other forms of performance-based compensation, such as bonuses and most stock options. In particular, this option would equalize the tax treatment of income that general partners receive for performing investment management services and the income earned by corporate executives who do similar work. (For example, many corporate executives direct investment, arrange financing, purchase other companies, or spin off components of their enterprises, yet profits from those investment activities are not counted as individual capital gains for those executives and are therefore not taxed at preferential rates.)

An argument against the option is that a general partner’s investment decisions could be considered more analogous to those of an entrepreneur than to those of a corporate executive. This option, however, would treat the income of general partners who manage investment funds differently from income earned by entrepreneurs when they sell their businesses. (Profits from such sales generally are taxed as capital gains, even though some portion of those profits represents a return on labor services provided by the entrepreneur.) Another argument against such a

1. Essentially all of the additional labor income would be above the maximum amount subject to the Social Security portion of the self-employment tax; therefore, the estimates shown here do not include any effects on social security taxes or future outlays.

policy change is that it would reduce a general partner's expected after-tax return on his or her investments. That reduced incentive, in turn, could possibly diminish innovation and make private equity markets—and consequently businesses—less efficient. It is not clear, however, to what extent the lower tax rate on capital gains promotes innovation and market efficiency or whether promoting risky investment offers greater benefits than costs.

Some partnerships would probably respond to such a policy change by restructuring their compensation agreements so that the general partner's share of profits—often 20 percent—continues to be taxed at the preferential tax rates. For example, to make an investment requiring \$100 million, limited partners could contribute \$80 million to the fund and advance \$20 million to the general partner as an interest-free, nonrecourse loan with the requirement that the borrowed capital be invested in the fund. If the assets of the investment fund were eventually sold for a profit, the gains realized by the general partner

on the \$20 million loan would equal 20 percent of the fund's total gains. The general partner would then claim that income as a capital gain subject to lower tax rates, which is similar to the way carried interest is treated under current law. If the investment was sold for a loss and the general partner could not repay the loan in full, he or she would not be liable for the unpaid loan: Under the terms of a nonrecourse loan, a borrower is not liable for any amount beyond the pledged collateral, which in this case would be the underlying assets in the investment fund originally purchased with the loan. However, even if the compensation agreement between limited partners and the general partner was restructured in that manner, federal receipts would still rise, although by less than they would if restructuring was not feasible. That is because, under current law, the general partner is required to treat the forgone interest on the nonrecourse loan as income and pay tax on it at the higher ordinary rate. The revenue estimates shown above reflect the likelihood and consequences of such restructuring.

RELATED OPTION: Revenues, Option 3

RELATED CBO PUBLICATION: Testimony of Peter R. Orszag, Director, before the House Committee on Ways and Means, *The Taxation of Carried Interest* (September 6, 2007), www.cbo.gov/publication/19113

Revenues—Option 13

Include Disability Payments From the Department of Veterans Affairs in Taxable Income

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total		
											2017–2021	2017–2026	
Change in Revenues													
Include all disability payments	0.8	8.3	8.3	9.2	9.9	10.5	11.7	11.7	11.3	12.2	36.5	93.8	
Include disability payments only for veterans with a disability rating of 20 percent or less	0.3	3.4	3.4	3.7	4.0	4.3	4.8	4.8	4.6	5.0	14.8	38.3	

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

The goal of the Department of Veterans Affairs' (VA) disability system is to compensate veterans for earnings lost as a result of their service-connected disabilities. According to statute, the amount of lost earnings is meant to be equal to the average reduction of earnings capacity experienced by civilian workers with similar medical conditions or injuries.

Compensable service-connected disabilities are medical problems incurred or aggravated during active duty, although not necessarily during the performance of military duties. Conditions range widely in severity and type, including scars, hypertension, and the loss of one or more limbs. The amount of a veteran's base payment is linked to his or her composite disability rating, which is expressed from zero to 100 percent in increments of 10 percentage points. Lower VA ratings generally reflect that a disability is less severe; in 2015 about one in three recipients of disability compensation had a rating of 20 percent or less. Veterans do not have to demonstrate that their condition has reduced their earnings or interferes with daily functioning. Disability compensation is not means-tested, and payments are exempt from federal and state income taxes. Veterans who have a job are eligible for benefits, and most working-age veterans who receive disability benefits are employed. Payments are in the form of monthly annuities and typically continue until death. Because disability benefits are based on VA's calculation of average earnings lost as a result of specific conditions, payments do not reflect disparities in earnings that are attributable to differences in veterans' education, training, occupation, or motivation to work.

This option considers two alternative approaches to taxing VA disability benefits under the individual income tax. The first alternative would include all such disability payments in taxable income. The staff of the Joint Committee on Taxation (JCT) estimates that, if implemented, this alternative would increase federal revenues by \$94 billion from 2017 through 2026. The second alternative would include disability payments in taxable income only for veterans with a disability rating of 20 percent or less. That alternative would raise federal revenues by a smaller amount—\$38 billion over the 2017–2026 period—according to JCT's estimates.

An argument in favor of the option is that including disability payments in taxable income would increase the equity of the tax system. Taxing disability payments would lead to taxpayers with comparable combined income—that is, from disability payments, earnings, and other sources—incurring similar tax liabilities. Eliminating income exclusions in the tax system moves the system toward one in which people in similar financial and family circumstances face similar tax rates. Furthermore, because higher-income taxpayers face higher tax rates than lower-income taxpayers, this option would result in taxpayers with higher combined income paying a larger share of their income in taxes than taxpayers with less income.

An argument against this option is that VA disability payments are connected to military service, which is not like civilian employment; instead, it confers unique benefits to society and imposes extraordinary risks on service members. By that logic, the pay and benefits that service members receive—such as the current exclusion of

disability compensation from taxation—should reflect the hardships of military life. Veterans, however, are entitled to disability payments even for non-work-related medical conditions, as long as those conditions were

incurred during the period when the individuals were serving on active duty. In contrast, disability benefits received by civilian workers for non-work-related injuries are taxable if the employer paid the premiums.

RELATED OPTIONS: Revenues, Option 14; Mandatory Spending, Option 24

RELATED CBO PUBLICATION: *Veterans' Disability Compensation: Trends and Policy Options* (August 2014), www.cbo.gov/publication/45615

Revenues—Option 14

Include Employer-Paid Premiums for Income Replacement Insurance in Employees' Taxable Income

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	19.2	36.1	35.6	34.6	33.2	33.7	34.4	35.3	36.3	37.5	158.7	335.9

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

To the extent that the option would affect Social Security payroll taxes, a portion of the revenues would be off-budget. In addition, the option would increase outlays for Social Security by a small amount. The estimates do not include those effects on outlays.

Benefits that replace income for the unemployed, injured, or disabled are currently subject to different tax treatments. Whereas unemployment benefits are fully taxable, benefits paid under workers' compensation programs (for work-related injuries or illnesses) are tax-exempt. Disability benefits (for non-work-related injuries) may be taxable, depending on who paid the premiums for the disability insurance. If the employer paid the premiums, the benefits are taxable (although the recipient's tax liability can be offset partly by special income tax credits for the elderly or disabled). If the employee paid the premiums out of after-tax income, the benefits are generally not taxed.

This option would gradually eliminate any tax on income replacement benefits over a five-year period but would immediately include in employees' taxable income the value of several taxes, insurance premiums, and other contributions paid by employers. Specifically, all of the following would be subject to the individual income tax and the payroll taxes for Social Security and Medicare: the taxes that employers pay under the Federal Unemployment Tax Act and to various state unemployment programs; 50 percent of the premiums that employers pay for workers' compensation (excluding the portion covering medical expenses); and the portion of insurance premiums or contributions to pension plans that employers pay to fund disability benefits. Together, those changes would increase revenues by \$336 billion over the 2017–2026 period, the staff of the Joint Committee on Taxation estimates. Over the long term, the gain in revenues would result almost entirely from adding workers' compensation premiums to taxable income. Including those various items in employees' taxable earnings, and thus in the wage base from which Social Security benefits are calculated, also would increase federal spending for

Social Security. Between 2017 and 2026, the option would increase federal spending very slightly, but the effect on spending would continue to increase after 2026 as more people whose premiums were taxed retired and began collecting Social Security benefits. The estimates shown above do not include any such effects on outlays.

An advantage of this option is that it would treat different kinds of income replacement insurance similarly and thereby eliminate many of the somewhat arbitrary disparities that currently exist. For example, people who are unable to work because of an injury would not be taxed differently on the basis of whether their injury was related to a previous job. Another advantage of the option is that it would spread the tax burden among all workers covered by such insurance rather than placing the burden solely on beneficiaries, as is now the case with unemployment insurance and employer-paid disability insurance. The effect on covered workers would be relatively small: Their after-tax earnings would fall, on average, by less than one-half of one percent. However, the effect would be greatest among low-wage workers, some of whom would be less likely to seek work as a result.

A disadvantage of the option is that it would discourage unemployed individuals from accepting available work because, with unemployment benefits no longer taxable, their disposable income would be higher while they were unemployed than is the case under current law. Research shows that higher after-tax unemployment benefits tend to lengthen periods of unemployment, particularly among those who have no savings and cannot obtain loans after they lose their job. (However, the increase in disposable income would also allow unemployed people more time to find a job that best matches their skill set.)

Another argument against the option is that it would not eliminate all disparities in the way income replacement benefits are treated. For example, the income replacement portion of adjudicated awards and out-of-court settlements for injuries not related to work and not covered by insurance would remain entirely exempt from taxation.

Likewise, extended unemployment benefits that the federal government sometimes provides during economic downturns would never be taxed because no amount corresponding to an employer's contribution would ever have been included in the recipients' taxable income.

RELATED OPTIONS: Revenues, Options 13, 24

RELATED CBO PUBLICATION: *Unemployment Insurance in the Wake of the Recent Recession* (November 2012), www.cbo.gov/publication/43734

Revenues—Option 15

Further Limit Annual Contributions to Retirement Plans

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	5.4	7.8	7.8	8.2	8.4	9.4	10.2	10.7	11.2	12.7	37.6	91.7

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

To the extent that the option would affect Social Security payroll taxes, a portion of the revenues would be off-budget. In addition, the option would increase outlays for Social Security by a small amount. The estimates do not include those effects on outlays.

Current law allows taxpayers to make contributions to certain types of tax-preferred retirement plans up to a maximum annual amount that varies depending on the type of plan and the age of the taxpayer. The most common such vehicles are defined contribution plans (any plan that does not guarantee a particular benefit amount upon retirement) and individual retirement accounts (IRAs). Defined contribution plans are sponsored by employers. Some—most commonly, 401(k) plans—accept contributions by employees; others are funded entirely by the employer. IRAs are established by the participants themselves.

Most of the tax savings associated with retirement plans arise because the investment income that accrues in the account is either explicitly or effectively exempt from taxation. That is clearest in the case of Roth retirement plans—both IRAs and 401(k)s. Contributions to such plans cannot be excluded from taxable income; instead, the participant benefits by not paying tax on the investment income, either as it accrues or when it is withdrawn. More traditional types of tax-preferred retirement plans allow participants to exclude contributions from their taxable income and defer the payment of taxes until they withdraw funds. If the taxpayer is subject to the same tax rate that applied when contributions were made, the value of the deduction is offset by the tax on withdrawals. The actual tax benefit is equivalent to that provided by Roth plans—effectively exempting investment income from taxation. (In the traditional structure, however, the tax benefit can be higher or lower than under a Roth plan, depending on the difference between the participant's tax bracket at the time contributions are made and when withdrawals are made.)

The value of the tax exemption for investment earnings increases with the participant's income tax rate. Thus, a worker in the 15 percent tax bracket saves 15 cents on each dollar of investment income accrued in his or her retirement plan; however, an employee in the 35 percent tax bracket avoids taxes equal to 35 cents per dollar of investment income. (For some forms of investment income such as capital gains, lower tax rates apply in each tax bracket, and the savings are smaller.)

People under the age of 50 may contribute up to \$18,000 to 401(k) and similar employment-based plans in 2016; participants ages 50 and above are also allowed to make "catch-up" contributions of up to \$6,000, enabling them to make as much as \$24,000 in total contributions in 2016. In general, the limits on a person's contributions apply to all defined contribution plans combined. However, contributions to 457(b) plans, available primarily to employees of state and local governments, are subject to a separate limit. As a result, employees enrolled in both 401(k) and 457(b) plans can contribute the maximum amount to both plans, thereby allowing some people to make tax-preferred contributions of as much as \$48,000 in a single year. Employers may also contribute to their workers' defined contribution plans, up to a maximum of \$53,000 per person in 2016, less any contributions made by the employee.

In 2016, combined contributions to Roth and traditional IRAs are limited to \$5,500 for taxpayers under the age of 50 and \$6,500 for those ages 50 and above. The tax deduction for contributions to a traditional IRA is phased out above certain income thresholds if either the taxpayer or the taxpayer's spouse is covered by an employment-based plan (but nondeductible contributions—which still enable a taxpayer to defer taxes on investment gains until

they are withdrawn—are allowable at any income level). Allowable contributions to Roth IRAs are phased out above certain income levels, and no contributions are permitted at incomes above \$194,000 for married taxpayers filing joint returns, \$10,000 for married taxpayers filing separate returns, and \$132,000 for unmarried taxpayers. However, that limit can be circumvented by making a nondeductible contribution to a traditional IRA and then converting the traditional IRA to a Roth IRA before any investment income can accrue.¹ Annual contribution limits for all types of plans are adjusted, or indexed, to include the effects of inflation but only in \$500 increments (\$1,000 increments in the case of the overall limit on contributions to defined contribution plans).

Under this option, a participant's maximum allowable contributions would be reduced to \$16,000 per year for 401(k)-type plans and \$5,000 per year for IRAs, regardless of the person's age. The option would also require that all contributions to employment-based plans—including 457(b) plans—be subject to a single combined limit. Total allowable employer and employee contributions to a defined contribution plan would be reduced from \$53,000 per year to \$47,000. Finally, conversions of traditional IRAs to Roth IRAs would not be permitted for taxpayers whose income is above the top threshold for making Roth contributions.

The lower limits on contribution amounts would increase revenues by \$96 billion from 2017 through 2026, the staff of the Joint Committee on Taxation estimates. The constraints on Roth conversions would reduce revenues by \$4 billion over that period, for a combined total of \$92 billion.

The revenue reduction associated with constraining Roth conversions largely reflects the loss of tax payments that would otherwise be due at the time of conversion. But the longer-term effects on revenues of that aspect of the option would probably be different. The loss of Roth benefits for those above the threshold would result in the taxation of more investment income—whether the nondeductible contributions remained in the traditional IRA or were diverted to a taxable account. Because balances

can be converted only once, the tax consequences of disallowing some conversions would begin to decline as the demand for conversions was gradually satisfied. Over the longer term, revenues gained by taxing more investment income would probably outweigh those lost from disallowing conversions.

The option would also affect federal outlays, but by much smaller sums. Reducing the amount that employers are allowed to contribute would lead to an increase in taxable wages, the base from which Social Security benefits are calculated, and thus would increase spending for Social Security by a small amount. (The estimates shown here do not include any effects on such outlays.) The changes in contributions by employees would not affect the wage base for Social Security.

One argument in favor of this option centers on fairness. The option would reduce the disparity in tax benefits that exists between higher- and lower-income taxpayers in two ways. First, those directly affected by the option would make fewer contributions and accrue less tax-preferred investment income, so the greater benefit of the exemption to those in higher tax brackets would be reduced. Second, the option would affect more higher-income taxpayers than lower-income taxpayers. The limits on 401(k) contributions affect few taxpayers—only 9 percent of participants in calendar year 2010 (the most recent year for which such data are available)—but of those affected, 42 percent had income in excess of \$200,000 that year. The option also would level the playing field between those who currently benefit from higher contribution limits (people ages 50 and over and employees of state and local governments) and those subject to lower limits.

In addition to enhancing fairness, the contribution limits imposed under the option would improve economic efficiency. A goal of tax-preferred retirement plans is to increase private saving (although at the cost of some public saving). However, the higher-income taxpayers who are constrained by the current limits on contributions are most likely to be those who can fund the tax-preferred accounts by using money they have already saved or would save anyway; in that case, the tax preference provides benefits to the people involved without boosting aggregate saving. Thus, the option would increase public saving—by reducing the deficit—at the cost of very little private saving.

1. Note that the first use of such a conversion would create a tax liability on amounts already in the traditional IRA. Once those pre-existing amounts were taxed, however, subsequent nondeductible contributions and immediate conversions would be tax-free.

Finally, the option's constraints on Roth conversions would reduce the complexity and improve the transparency of the tax system, making it easier for participants and nonparticipants alike to understand the tax ramifications of Roth accounts. Furthermore, the financial institutions managing the accounts would incur, and pass on to participants, fewer administrative costs. (Even greater transparency could be realized by eliminating the income thresholds and allowing everybody to contribute directly to a Roth IRA, but that would reduce revenue over the long term.)

The main argument against this option is that it would reduce the retirement saving of some lower- and moderate-income people. Eliminating the extra allowance for catch-up contributions in particular would

adversely affect those ages 50 and over who might have failed to save enough for a comfortable retirement while raising their families. The amount that they could contribute to tax-preferred retirement accounts would be cut at precisely the time when reduced family obligations and impending retirement make them more likely to respond to tax incentives to save more.

Finally, further limiting total contributions to a defined contribution plan would create an incentive for some small businesses to terminate their plans if the tax benefits to the owners of providing such plans were outweighed by the cost of administering them. To the extent that such plans were terminated, employees would then have to rely on IRAs, which would lead some to save less because of the lower contribution limits.

RELATED OPTION: Revenues, Option 16

RELATED CBO PUBLICATION: *Use of Tax Incentives for Retirement Saving in 2006* (October 2011), www.cbo.gov/publication/42731

Revenues—Option 16

Tax Social Security and Railroad Retirement Benefits in the Same Way That Distributions From Defined Benefit Pensions Are Taxed

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	17.9	36.7	38.5	40.5	42.6	44.7	46.9	49.3	51.7	54.2	176.2	423.1

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Under current law, less than 30 percent of the benefits paid by the Social Security and Railroad Retirement programs are subject to the federal income tax. Recipients with income below a specified threshold pay no taxes on those benefits. Most recipients fall into that category, which constitutes the first tier of a three-tiered tax structure. If the sum of their adjusted gross income, their non-taxable interest income, and one-half of their Social Security and Tier I Railroad Retirement benefits exceeds \$25,000 (for single taxpayers) or \$32,000 (for couples who file jointly), up to 50 percent of the benefits are taxed. Above a higher threshold—\$34,000 for single filers and \$44,000 for joint filers—as much as 85 percent of the benefits are taxed.

By contrast, distributions from defined benefit plans are taxable except for the portion that represents the recovery of an employee’s “basis”—that is, his or her after-tax contributions to the plan. In the year that distributions begin, the recipient determines the percentage of each year’s payment that is considered to be the nontaxable recovery of previous after-tax contributions, based on the cumulative amount of those contributions and projections of his or her life expectancy. Once the recipient has recovered his or her entire basis tax-free, all subsequent pension distributions are fully taxed. (Distributions from traditional defined contribution plans and from individual retirement accounts, to the extent that they are funded by after-tax contributions, are also taxed on amounts exceeding the basis.)

This option would treat the Social Security and Railroad Retirement programs in the same way that defined benefit pensions are treated—by defining a basis and taxing only those benefits that exceed that amount. For employed individuals, the basis would be the payroll taxes they paid out of after-tax income to support those programs (but not the equal amount that employers paid

on their workers’ behalf). For self-employed people, the basis would be the portion (50 percent) of their self-employment taxes that is not deductible from their taxable income. Under this option, revenues would increase by \$423 billion from 2017 through 2026, the staff of the Joint Committee on Taxation estimates.

An argument in favor of this option concerns equity. Taxing benefits from the Social Security and Railroad Retirement programs in the same way as those from defined benefit pensions would make the tax system more equitable in at least two ways. First, it would eliminate the preferential treatment given to Social Security benefits but not to pension benefits. For low- and middle-income taxpayers especially, that preference can cause elderly people with similar income to face very different tax liabilities depending on the mixture of retirement benefits they receive. Second, it would treat elderly and nonelderly taxpayers with comparable income the same way. For people who pay taxes on Social Security benefits under current law, the option could also simplify the preparation of tax returns. Instead of taxpayers’ calculating the taxable portion themselves, the Social Security Administration—which would have information on their lifetime contributions and life expectancy—could compute the taxable amount of benefits and provide that information to beneficiaries each year.

This option also has drawbacks. It would have the greatest impact on people with the lowest income: People with income below \$44,000, including some who depend solely on Social Security or Railroad Retirement for their support, would see their taxes increase by the greatest percentage. In addition, raising taxes on Social Security and Railroad Retirement benefits would be equivalent to reducing those benefits and could be construed as violating the implicit promises of those programs, especially because the option would provide little or no

opportunity for current retirees and people nearing retirement to adjust their saving or retirement strategies to mitigate the impact. Finally, more elderly people would have to file tax returns than do so now, and calculating

the percentage of each recipient's benefits that would be excluded from taxation would impose an additional burden on the Social Security Administration.

RELATED OPTION: Revenues, Option 15

RELATED CBO PUBLICATION: *Social Security Policy Options, 2015* (December 2015), www.cbo.gov/publication/51011

Revenues—Option 17

Eliminate Certain Tax Preferences for Education Expenses

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	4.0	20.1	20.2	20.5	20.8	21.0	21.4	21.8	22.3	22.9	85.6	195.0

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

The estimates include the effects on outlays resulting from changes in refundable tax credits.

Federal support for higher education takes many forms, including grants, subsidized loans, and tax preferences. Those tax preferences include several types of tax-advantaged accounts that allow families to save for their child’s postsecondary education as well as education-related credits and deductions. The major credits and deductions in effect in 2016 are the following:

- The American Opportunity Tax Credit (AOTC) replaced and expanded the Hope tax credit starting in 2009. Although it was scheduled to expire at the end of 2017, the AOTC was permanently extended by the Consolidated Appropriations Act, 2016. Unlike the Hope tax credit, which was nonrefundable, the AOTC is partially refundable—that is, families whose income tax liability (before the credit is applied) is less than the total amount of the credit may receive all or a portion of the credit as a payment. The AOTC is available to cover qualifying educational expenses for up to four years of postsecondary education. In 2016, the AOTC can total as much as \$2,500 (100 percent of the first \$2,000 in qualifying expenses and then 25 percent of the next \$2,000). Up to 40 percent of the credit (or \$1,000) is refundable. The amount of the AOTC gradually declines (is “phased out”) for higher-income tax filers. In 2016, the AOTC is reduced for married couples who file jointly and have modified adjusted gross income (MAGI) between \$160,000 and \$180,000 and for single filers with MAGI between \$80,000 and \$90,000.¹ Neither the credit amount nor

the income thresholds are adjusted, or indexed, to include the effects of inflation.

- The nonrefundable Lifetime Learning tax credit provides up to \$2,000 for qualifying tuition and fees. (The credit equals 20 percent of each dollar of qualifying expenses up to a maximum of \$10,000.) Only one Lifetime Learning credit may be claimed per tax return per year, but the expenses of more than one family member (a taxpayer, spouse, or dependent) may be included in the calculation. The Lifetime Learning credit can be used beyond the first four years of postsecondary education and by students who attend school less than half-time. Taxpayers may not claim the Lifetime Learning credit and the AOTC for the same student in the same year. In 2016, the Lifetime Learning tax credit is gradually reduced for joint filers whose MAGI is between \$111,000 and \$131,000 and for single filers whose MAGI is between \$55,000 and \$65,000. Those income thresholds are indexed.
- Tax filers may deduct from their taxable income up to \$2,500 per year for interest payments on student loans. That deduction is available regardless of whether a tax filer itemizes deductions. In 2016, the interest deduction for student loans phases out for joint filers with MAGI between \$130,000 and \$160,000 and for single filers with MAGI between \$65,000 and \$80,000. Although the maximum deduction amount is not indexed to change with price levels, the income thresholds for the phaseout ranges are indexed.
- Taxpayers (regardless of whether they claim the standard deduction or itemize their deductions) can deduct up to \$4,000 from their taxable income for

1. Certain foreign income and foreign housing allowances that are excluded from taxable income are added to adjusted gross income (AGI) to calculate the modified AGI measure used to determine eligibility for education-related tax credits. (AGI includes income from all sources not specifically excluded by the tax code, minus certain deductions.)

qualifying tuition and fees instead of taking a credit. The deduction is gradually reduced for joint filers whose MAGI is between \$130,000 and \$160,000 and for single filers whose MAGI is between \$65,000 and \$85,000. Those income thresholds are indexed. That deduction is scheduled to expire at the end of 2016.

This option would eliminate the AOTC and the Lifetime Learning tax credit beginning in 2017. (The \$4,000 deduction for qualifying tuition and fees described above would have already expired by 2017.) The option would also gradually eliminate the deductibility of interest expenses for student loans. Because students would have borrowed money with the expectation that a portion of the interest would be deductible over the life of the loan, the interest deduction for student loans would be phased out in annual increments of \$250 over a 10-year period. If implemented, the option would raise revenues by \$195 billion over the 2017–2026 period, the staff of the Joint Committee on Taxation estimates.

An argument in favor of the option is that the current tax benefits are not targeted to those who need assistance the most. Many low-income families do not have sufficient income tax liability to claim all—or in some cases, any—of the education-related tax benefits. However, the cost of higher education may impose a greater burden on those families as a proportion of their income. Further, some research indicates that lower-income individuals and families may be more sensitive to the cost of higher education than those with higher income and thus more likely to

enroll in higher education programs if tuition and fees are subsidized.

A second rationale in favor of the option concerns the administration of education benefits through the income tax system. Education benefits administered through the tax system are poorly timed because families must pay tuition and fees before they can claim the benefits on their tax returns. In contrast, federal spending programs such as the Pell grant program are designed to provide assistance when the money is needed—at the time of enrollment. Further, providing education assistance through various credits and deductions, each with slightly different eligibility rules and benefit amounts, makes it difficult for families to determine which tax preferences provide the most assistance. As a result, some families may not choose the most advantageous educational benefits for their particular economic circumstances.

A drawback of this option is that some households would not receive as much assistance for educational expenses unless federal outlays for education assistance were increased. The option would increase the financial burden on families with postsecondary students—particularly middle-income families who do not qualify for current federal spending programs. Another drawback is that despite the current system’s complexity—which creates overlapping tax benefits—some families may find it easier to claim benefits on their tax returns (on which they already provide information about their family structure and income) than to fill out additional forms for assistance through other federal programs.

RELATED OPTIONS: Mandatory Spending, Options 8, 10; Discretionary Spending, Option 21

RELATED CBO PUBLICATIONS: *Options to Change Interest Rates and Other Terms on Student Loans* (June 2013), www.cbo.gov/publication/44318; *Refundable Tax Credits* (January 2013), www.cbo.gov/publication/43767; *Costs and Policy Options for Federal Student Loan Programs* (March 2010), www.cbo.gov/publication/21018; *Private and Public Contributions to Financing College Education* (January 2004), www.cbo.gov/publication/15178

Revenues—Option 18

Lower the Investment Income Limit for the Earned Income Tax Credit and Extend That Limit to the Refundable Portion of the Child Tax Credit

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	*	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	2.9	6.5

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

The estimates represent the change in the overall budget balance that would result from the sum of changes to revenues and outlays.

* = between zero and \$50 million.

Low- and moderate-income people are eligible for certain refundable tax credits under the individual income tax if they meet the specified criteria. Refundable tax credits differ from other tax preferences, such as deductions, in that their value may exceed the amount of income taxes that the person owes. Refundable tax credits thus can result in net payments from the government to a taxpayer: If the amount of a refundable tax credit exceeds a taxpayer’s tax liability before that credit is applied, the government pays the excess to that person. Two refundable tax credits are available only to workers: the earned income tax credit (EITC) and the refundable portion of the child tax credit (referred to in the tax code as the additional child tax credit).

To qualify for the EITC and the refundable portion of the child tax credit, people must meet several income tests. First, they must have income from wages, salaries, or self-employment. Second, their adjusted gross income cannot exceed thresholds that vary with family characteristics.¹ (Adjusted gross income includes income from all sources not specifically excluded by the tax code, minus certain deductions.) For the EITC, the income thresholds for 2016 range from \$14,880 for an unmarried worker who does not live with a child to \$53,505 for a married couple that files jointly and has three or more children. For the child tax credit, the income thresholds for 2016 are \$95,000 for an unmarried person with one child and \$130,000 for joint filers with one child; the income thresholds increase with the number of children in the

family. Finally, eligibility for the EITC is restricted to filers with investment income that is \$3,400 or less in 2016. Investment income includes interest (counting tax-exempt interest), dividends, capital gains, royalties and rents from personal property, and returns from passive activities (business pursuits in which the person is not actively involved). For the EITC, the limitations on adjusted gross income and investment income are adjusted, or indexed, to include the effects of inflation. The income cutoff for the child tax credit, however, is not indexed.

This option would lower the threshold for the EITC investment income test from \$3,400 to \$1,700. As under current law, that threshold would be indexed to include the effects of inflation. Moreover, the option would extend that requirement to the refundable portion of the child tax credit. If implemented, the option would raise \$7 billion from 2017 through 2026, according to estimates by the staff of the Joint Committee on Taxation.

The main rationale for the option is that it would better target the credits to people without substantial means by denying the credits to people who have low earnings but have other resources to draw upon. Asset tests—requirements that recipients do not have savings in bank accounts, stocks, and other types of investments whose value is above a specified threshold—serve a similar role in some spending programs that provide benefits to lower-income populations. However, asset tests would be very difficult for the Internal Revenue Service (IRS) to administer because the agency does not collect information on the amount of assets held by individuals. By contrast, the IRS does have extensive information on the income from most of those investments, and much of

1. A special rule applies to the EITC when filers’ earnings are higher than their adjusted gross income (because of business or investment losses). In that instance, eligibility for the EITC is denied if the filers’ *earnings* exceed the specified thresholds.

that information is accurate because it is reported independently to the agency by financial institutions as well as by taxpayers on their returns.

An argument against the option is that it would reduce the incentive to save, especially among people whose income from investments is near the threshold amount and who could become (or remain) eligible for the credits under the option by making small reductions in their assets. However, some people would not respond to the

lower thresholds by reducing their saving but instead by shifting their investments to less liquid forms (such as cars) that are not subject to the investment test or by changing the timing of the return from their investments (for example, by retaining stocks for longer periods in order to avoid realizing capital gains). For people with very low income, the investment test would probably have little effect because they have little means to save and invest.

RELATED OPTION: Revenues, Option 19

RELATED CBO PUBLICATIONS: *Effective Marginal Tax Rates for Low- and Moderate-Income Workers in 2016* (November 2015), www.cbo.gov/publication/50923; *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/publication/43768; *Growth in Means-Tested Programs and Tax Credits for Low-Income Households* (February 2013), www.cbo.gov/publication/43934; *Refundable Tax Credits* (January 2013), www.cbo.gov/publication/43767

Revenues—Option 19

Require Earned Income Tax Credit and Child Tax Credit Claimants to Have a Social Security Number That Is Valid for Employment

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	0.2	4.7	4.4	4.3	4.2	4.1	4.0	3.9	3.7	3.7	17.8	37.4

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

The estimates represent the change in the overall budget balance that would result from the sum of changes to revenues and outlays.

The earned income tax credit (EITC) and the child tax credit provide assistance to low- and moderate-income workers. Both credits are refundable: If the amount of the credit is greater than the amount of income taxes owed by the taxpayer before the credit is applied, the government pays the excess to that person. Eligibility for the EITC and the refundable portion of the child tax credit is limited to people with income from wages, salaries, or self-employment.

Eligibility requirements for the two credits differ for non-citizens, however—especially the rules governing the provision of Social Security numbers. For purposes of determining eligibility for the EITC, a noncitizen’s Social Security number is considered invalid if it was issued by the Social Security Administration (SSA) solely to allow that individual to obtain benefits from a program entirely or partly financed by the federal government. In contrast, noncitizens can claim the child tax credit if they and their children have either Social Security numbers (including those issued to individuals for the sole purpose of receiving government benefits) or individual taxpayer identification numbers (ITINs), which are issued by the Internal Revenue Service (IRS) to anyone (including unauthorized residents) who is required to file a tax return but cannot obtain a Social Security number.

Some people who are not authorized to work in the United States can receive the EITC under current law. Those individuals were issued Social Security numbers before 2003 because they needed them to obtain drivers’ licenses and to open bank accounts. SSA no longer issues Social Security numbers for such purposes, but the agency was not able to rescind the numbers obtained before the ban. Because those numbers were provided to people who were not applying for federal benefits, their

Social Security numbers are considered valid for purposes of receiving the EITC.

Under this option, people who are not authorized to work in the United States would not be entitled to either the EITC or the child tax credit. The option would change the definition of a valid Social Security number for the EITC and extend that requirement to the child tax credit. For both credits, taxpayers, spouses, and qualifying children would be required to have Social Security numbers issued to U.S. citizens and noncitizens authorized to work in the United States. If enacted, the option would raise \$37 billion from 2017 through 2026, the staff of the Joint Committee on Taxation estimates.

Under current law, the IRS can use a procedure known as “mathematical and clerical error” authority (often referred to simply as math error authority) to deny the EITC when neither the taxpayer nor qualifying children have valid Social Security numbers. With math error authority, the IRS can prevent the credit from being paid to the taxpayer without initiating the audit process. This option would extend that authority to the child tax credit when the taxpayer and children do not have valid Social Security numbers.

The main advantage of this option is that it would eliminate some of the disparity that currently exists in the credits’ eligibility rules, making them less confusing and easier to administer. Under the option, the requirements related to the possession of a valid Social Security number would be the same for both credits: Only taxpayers (and their children) who are authorized to work in the United States—U.S. citizens, lawful permanent residents, or people in the United States on temporary work visas—would be eligible for the EITC and child tax credit. The IRS

would be able to verify those requirements using the data it already receives from SSA and immediately matches to tax returns, allowing the agency to prevent payment of the credits to ineligible noncitizens.

A disadvantage of the option is the additional burden it would impose on some individuals. Many noncitizens initially obtained Social Security numbers to receive federal benefits at a time when they were not authorized to work in the United States. If they subsequently became permanent residents or U.S. citizens, they may not have notified SSA of the change in their status. Under this option, those individuals would have to take the additional step of updating their work authorization status with SSA to receive the EITC or child tax credit. Those actions would also increase SSA's workload. Many immigrants, however, already have an incentive to inform SSA of changes in their immigration status, so that their new employers can use E-Verify (a system administered by the Department of Homeland Security) to determine whether they are authorized to work in the United States.

The option could be modified in several ways that would either limit or extend its application. As specified, the option would prevent some noncitizens with permanent work authorization from receiving the child tax credit and the EITC because other members of their family are not lawful permanent residents or do not have visas allowing them to work in the United States. For example, one parent may be a lawful permanent resident, but his or her spouse is not authorized to work in the United States. An alternative approach would allow the credits to be paid if only one spouse provides a valid Social Security number. Another effect of the option is that it would allow noncitizens who were issued Social Security numbers when they had temporary work visas to continue receiving the credits when those visas expired. The option could be modified to limit eligibility for the credits to U.S. citizens and lawful permanent residents. However, that restriction would be difficult to administer because Social Security records, which the IRS currently relies upon to verify the identity of taxpayers and which could also be used to determine work status, do not distinguish between noncitizens with temporary work visas and lawful permanent residents.

RELATED OPTION: Revenues, Option 18

RELATED CBO PUBLICATIONS: *How Changes in Immigration Policy Might Affect the Federal Budget* (January 2015), www.cbo.gov/publication/49868; *Growth in Means-Tested Programs and Tax Credits for Low-Income Households* (February 2013), www.cbo.gov/publication/43934; *Refundable Tax Credits* (January 2013), www.cbo.gov/publication/43767

Revenues—Option 20

Increase the Maximum Taxable Earnings for the Social Security Payroll Tax

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total		
											2017–2021	2017–2026	
Raise Taxable Share to 90 Percent													
Change in outlays	0.1	0.2	0.5	0.7	1.1	1.5	1.9	2.5	3.1	3.8	2.6	15.4	
Change in revenues	18.6	60.1	62.5	64.7	67.3	70.1	72.4	75.0	77.7	80.2	273.1	648.4	
Decrease in the Deficit	-18.5	-59.9	-62.0	-64.0	-66.2	-68.6	-70.5	-72.5	-74.6	-76.4	-270.5	-633.0	
Subject Earnings Greater Than \$250,000 to Payroll Tax													
Change in revenues	27.2	85.6	90.1	95.2	101.2	107.6	113.7	121.0	129.1	137.1	399.3	1,007.8	

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

This option would take effect in January 2017.

The change in revenues would consist of an increase in receipts from Social Security payroll taxes (which would be off-budget), offset in part by a reduction in individual income tax revenues (which would be on-budget). The change in outlays would be for additional payments of Social Security benefits and would be classified as off-budget.

Social Security—which consists of Old-Age and Survivors Insurance and Disability Insurance—is financed primarily by payroll taxes on employers, employees, and the self-employed. Only earnings up to a maximum, which is \$118,500 in calendar year 2016, are subject to the tax. That maximum usually increases each year at the same rate as average wages in the economy. The Social Security tax rate is 12.4 percent of earnings: 6.2 percent is deducted from employees' paychecks, and 6.2 percent is paid by employers. Self-employed individuals generally pay 12.4 percent of their net self-employment income.

When payroll taxes for Social Security were first collected in 1937, about 92 percent of earnings from jobs covered by the program were below the maximum taxable amount. During most of the program's history, the maximum was increased only periodically, so the percentage varied greatly. It fell to 71 percent in 1965 and by 1977 had risen to 85 percent. Amendments to the Social Security Act in 1977 boosted the amount of covered taxable earnings, which reached 90 percent in 1983. That law also specified that the taxable maximum be adjusted, or indexed, annually to match the growth in average wages. Despite those changes, the percentage of earnings that is taxable has slipped in the past decade because earnings for the highest-paid workers have grown faster than average earnings. Thus, in 2016, about 82 percent of earnings

from employment covered by Social Security fell below the maximum taxable amount.

This option considers two alternative approaches that would increase the share of earnings subject to payroll taxes.

- The first alternative would increase the taxable share of earnings from jobs covered by Social Security to 90 percent by raising the maximum taxable amount to \$245,000 in calendar year 2017. (In later years, the maximum would grow at the same rate as average wages, as it would under current law.) Implementing such a policy change would increase revenues by an estimated \$648 billion over the 2017–2026 period, according to the staff of the Joint Committee on Taxation (JCT). (The estimates include the reduction in individual income tax revenues that would result from employers' shifting some labor compensation from a taxable to a nontaxable form.)

Because Social Security benefits are tied to the amount of earnings on which taxes are paid, however, some of the increase in revenues from this alternative would be offset by the additional benefits paid to people with earnings above the maximum taxable amount under current law. On net, this alternative would reduce federal budget deficits by an estimated \$633 billion over the 10-year period.

- The second alternative would apply the 12.4 percent payroll tax to earnings over \$250,000 in addition to earnings below the level specified by the current-law taxable maximum. The taxable maximum would continue to grow with average wages, but the \$250,000 threshold would remain at that level, so the gap between the two would shrink. CBO projects that the taxable maximum would exceed \$250,000 in calendar year 2037; after that, all earnings would be subjected to the payroll tax. The current-law taxable maximum would still be used for calculating benefits, so scheduled benefits would not change. This alternative would raise \$1.0 trillion over the 2017–2026 period, according to JCT.

An advantage of either approach is that it would provide more revenue to the Social Security program, which, according to the Congressional Budget Office’s projections, will not have sufficient income to finance the benefits that are due to beneficiaries under current law. If current law remained in place, spending for Social Security would rise from 4.9 percent of gross domestic product (GDP) in 2016 to 6.3 percent by 2041, CBO projects. But Social Security tax revenues, which already are less than spending for the program, would grow more slowly. In CBO’s extended baseline, the combined Old-Age and Survivors Insurance and Disability Insurance trust funds are projected to be exhausted in calendar year 2029. The first alternative, which increases the taxable share of earnings from jobs covered by Social Security to 90 percent, would delay the exhaustion of the combined trust funds by 4 years, to calendar year 2033. The second alternative, which would apply the 12.4 percent payroll tax to earnings over \$250,000, would delay the exhaustion of the combined trust funds by 12 years, to calendar year 2041.

In addition, either alternative would make the payroll tax less regressive. People with earnings above the ceiling now pay a smaller percentage of their total earnings in payroll taxes than do people whose total earnings are below the

maximum. Making more earnings taxable would increase payroll taxes for those high earners. (That change would also lead to higher benefit payments for affected workers under the first alternative, but the tax increase would be much larger than the increase in benefits.) The second alternative would be more progressive than raising the taxable maximum because it would affect only those with earnings above \$250,000.

A disadvantage of both alternatives is that raising the earnings cap would weaken the link between the taxes that workers pay into the system and the benefits they receive. That link has been an important aspect of Social Security since its inception. Under the first alternative, the increase in benefits would be modest relative to the increase in taxes, and under the second alternative, workers with higher earnings would pay additional taxes that would not increase their benefits.

Another drawback is that some people—those with earnings between the existing taxable limits and the higher thresholds under the first alternative, or those with earnings above the \$250,000 threshold under the second alternative—would earn less after taxes for each additional hour worked. Increases in statutory tax rates have two opposing effects among people already working. First, people tend to work fewer hours because other uses of their time become relatively more attractive (the substitution effect). However, people also tend to work more hours because having less after-tax income requires additional work to maintain the same standard of living (the income effect). In CBO’s estimation, the first effect would, on balance, be greater than the second effect. The first approach would thus reduce the incentive to work and also encourage taxpayers to substitute tax-exempt fringe benefits for taxable wages. In contrast, people with earnings well above the limit established by the first alternative would not see any reduction in the return on their additional work, but they would have less income after taxes, which would encourage them to work more.

RELATED OPTIONS: Revenues, Options 21, 23

RELATED CBO PUBLICATIONS: *CBO’s 2015 Long-Term Projections for Social Security: Additional Information* (December 2015), www.cbo.gov/publication/51047; *Social Security Policy Options, 2015* (December 2015), www.cbo.gov/publication/51011; *The 2015 Long-Term Budget Outlook* (June 2015), www.cbo.gov/publication/50250

Revenues—Option 21

Expand Social Security Coverage to Include Newly Hired State and Local Government Employees

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	0.7	2.2	3.8	5.3	6.8	8.4	10.1	11.9	13.8	15.7	18.8	78.4

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

The change in revenues would consist of an increase in receipts from Social Security payroll taxes (which would be off-budget), offset in part by a reduction in individual tax revenues (which would be on-budget). In addition, the option would increase outlays for Social Security by a small amount. The estimates do not include those effects on outlays.

Nearly all private-sector workers and federal employees are covered by Social Security, but a quarter of workers employed by state and local governments are not. Under federal law, state and local governments can opt to enroll their employees in the Social Security program, or they can opt out if they provide a separate retirement plan for those workers instead. (State and local governments may also have their employees participate in both Social Security and a separate retirement plan.) By contrast, all federal employees hired after December 31, 1983, are covered by Social Security and pay the associated payroll taxes. Furthermore, all state and local government employees hired after March 31, 1986, and all federal government employees pay payroll taxes for Hospital Insurance (Medicare Part A).

Under this option, Social Security coverage would be expanded to include all state and local government employees hired after December 31, 2016. Consequently, all newly hired state and local government employees would pay the Social Security payroll tax. That 12.4 percent tax on earnings, half of which is deducted from employees’ paychecks and half of which is paid by employers, funds the Old-Age, Survivors, and Disability Insurance programs. If implemented, this option would increase revenues by a total of \$78 billion over the 2017–2026 period, the staff of the Joint Committee on Taxation estimates. (The estimate includes the reduction in individual income tax revenues that would result from shifting some labor compensation from a taxable to a nontaxable form.)

Paying the Social Security payroll tax for 10 years generally qualifies workers (and certain family members) to receive Social Security retirement benefits; employees must meet different work requirements to qualify for

disability benefits or, in the event of their death, for certain family members to qualify for survivors’ benefits. Although extending such coverage to all newly hired state and local employees would eventually increase the number of Social Security beneficiaries, that increase would have little impact on the federal government’s spending for Social Security in the short term. Over the 2017–2026 period, outlays would increase by only a small amount because most people hired by state and local governments during that period would not begin receiving Social Security benefits for many years, but the effects on outlays would grow in coming decades. (The above estimate does not include any effects on outlays.)

One rationale for implementing this option is that it would slightly enhance the long-term viability of the Social Security program. The Congressional Budget Office projects that, under current law, income dedicated to the program will be insufficient to cover benefits specified in law. Under the option, the additional benefit payments for the expanded pool of beneficiaries would be less, in the long term, than the size of the additional revenues generated by newly covered employees. That is largely because, under current law, most of the newly hired workers would receive Social Security benefits anyway for one of two possible reasons: They might have held other covered jobs, or they might be covered by a spouse’s employment.

Another rationale for implementing the option concerns fairness. Social Security benefits are intended to replace only a percentage of a worker’s preretirement earnings. That percentage (referred to as the replacement rate) is higher for workers with low career earnings than for workers with higher earnings. But the standard formula for calculating Social Security benefits does not

distinguish between people whose career earnings are low and those who just appear to have low career earnings because they spent a portion of their career in jobs that were not covered by Social Security. To make the replacement rate more comparable for workers with similar earnings histories, current law reduces the standard benefits for retired government employees who have spent a substantial portion of their career in employment not covered by Social Security. However, that adjustment is imperfect and can affect various public employees differently. This option would eliminate those inequities.

Finally, implementing this option would provide better retirement and disability benefits for many workers who move between government jobs and other types of employment. By facilitating job mobility, the option would enable some workers—who would otherwise stay in state and local jobs solely to maintain their public-employee retirement benefits—to move to jobs in which they could be more productive. Many state and local employees are reluctant to leave their jobs because pensions are structured to reward people who spend their entire careers in the same pension system. If their government service was covered by Social Security, they would be less reluctant to change jobs because they would remain in the Social Security system. State and local governments, however, might respond to greater turnover

by reducing their investment in workers (by cutting training programs, for example), causing the productivity of state and local employees to fall.

The main argument against the option is the impact it would have on the pension funds of affected state and local governments. That impact would depend on the current structure of state and local pension plans and the way they would be restructured in response to this option. One possibility is that a state or local government would add Social Security on top of its existing pension plan. Alternatively, state and local pension plans for new employees could be reduced or eliminated in response to the expansion of Social Security coverage: New employees would contribute less (or nothing) during their tenure, and they would receive smaller (or no) pension benefits when they retire. Implementing those changes would not be particularly difficult for fully funded pension plans, which could pay benefits for existing employers out of current assets. However, many state and local government pension plans are underfunded, and such plans would probably need future contributions to fund the benefits received by current retirees or by those about to retire under the existing pension system. Any reduction in future contributions to such plans would increase financial pressures on them.

RELATED OPTION: Revenues, Option 20

RELATED CBO PUBLICATIONS: *CBO's 2015 Long-Term Projections for Social Security: Additional Information* (December 2015), www.cbo.gov/publication/51047; *Social Security Policy Options, 2015* (December 2015), www.cbo.gov/publication/51011; *The 2015 Long-Term Budget Outlook* (June 2015), www.cbo.gov/publication/50250

Revenues—Option 22

Increase the Payroll Tax Rate for Medicare Hospital Insurance by 1 Percentage Point

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	47.1	73.7	76.6	79.5	82.5	85.6	89.0	92.6	96.3	100.5	359.4	823.2

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

The primary source of financing for Hospital Insurance (HI) benefits provided under Medicare Part A is the HI payroll tax. The basic HI tax is 2.9 percent of earnings: 1.45 percent is deducted from employees' paychecks, and 1.45 percent is paid by employers. Self-employed individuals generally pay 2.9 percent of their net self-employment income in HI taxes. Unlike the payroll tax for Social Security, which applies to earnings up to an annual maximum (\$118,500 in 2016), the 2.9 percent HI tax is levied on total earnings.

Workers with higher earnings are also subject to a surtax on all earnings above a certain threshold: \$200,000 for unmarried taxpayers and \$250,000 for married couples who file jointly. At those thresholds, the portion of the HI tax that employees pay increases by 0.9 percentage points, to a total of 2.35 percent. The surtax does not apply to the portion of the HI tax paid by employers, which remains 1.45 percent of earnings, regardless of how much the worker earns.

In recent years, spending for the HI program has grown at a much faster pace than revenues derived from the payroll tax. Since 2008, expenditures for HI have exceeded the program's total income—including interest credited to the Hospital Insurance Trust Fund—so balances in the trust fund have declined. The Congressional Budget Office projects that the balances will generally continue to fall until the HI trust fund is exhausted in 2026.

This option would increase the basic HI tax on total earnings by 1.0 percentage point. The basic rate for both employers and employees would increase by

0.5 percentage points, to 1.95 percent, resulting in a combined rate of 3.9 percent. The rate paid by self-employed people would also rise to 3.9 percent. For taxpayers with earnings above \$200,000 (\$250,000 for married couples who file jointly), the HI tax on earnings that exceed the surtax threshold would increase from 3.8 percent to 4.8 percent; employees would pay 2.85 percent, and employers would pay the remaining 1.95 percent.

If implemented, the option would increase revenues by \$823 billion over the 2017–2026 period, the staff of the Joint Committee on Taxation estimates. (The estimate includes the reduction in individual income tax revenues that would result as some labor compensation shifted from a taxable to a nontaxable form.)

The main argument in favor of the option is that receipts from the HI payroll tax are currently not sufficient to cover the cost of the program, and increasing that tax would shrink the gap between the program's costs and the revenues that finance it. Another argument in support of the option is that an increase in the tax rate would be simpler to administer than most other types of tax increases because it would require relatively minor changes to the current tax system.

A drawback of the option is that it would encourage people to reduce the hours they work or to shift their compensation away from taxable earnings to nontaxable forms of compensation. When employees reduce the hours they work or change the composition of their earnings, economic resources are allocated less efficiently than they would be in the absence of the higher tax rate.

Another disadvantage of the option is that it would increase the tax burden of lower-income workers relative to that of workers with higher income. That is because a larger share of the income of lower-income families is, on average, from earnings that are subject to the HI tax. As a result, a percentage-point increase in the HI tax would

represent a greater proportion of the income of lower-income taxpayers than would be the case for higher-income taxpayers. Moreover, because the option would not make any changes to the Medicare program, the increase in the tax burden would not be offset by greater Medicare benefits when people reached the age of 65.

RELATED OPTION: Revenues, Option 23

Revenues—Option 23

Tax All Pass-Through Business Owners Under SECA and Impose a Material Participation Standard

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	5.8	10.4	11.6	13.1	14.2	14.9	15.6	16.5	17.3	18.1	55.1	137.4

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Most of the revenues would be off-budget. In addition, the option would increase outlays for Social Security by a small amount. The estimates do not include those effects on outlays.

Under current law, workers with earnings from businesses owned by other people contribute to Social Security and Medicare Part A through the Federal Insurance Contributions Act (FICA) tax. The tax rate for Social Security is 12.4 percent of the tax base up to \$118,500, and that threshold increases each year with average wages. For Medicare Part A, the tax rate is 2.9 percent, and there is no ceiling on that base.¹ The tax bases for both programs are limited to labor income (specifically, wages and salaries), and the taxes are split equally between the employer and the employee.

In contrast, people with earnings from businesses they own themselves are taxed either through FICA or through the Self-Employment Contributions Act (SECA), depending on whether the business is incorporated. Owners of unincorporated businesses are subject to the SECA tax, and their tax base is self-employment income (which, unlike the FICA base, generally includes some capital income.) The definition of self-employment income depends on whether one is classified as a sole proprietor, a general partner (that is, a partner who is fully liable for the debts of the firm), or a limited partner (a partner whose liability for the firm’s debts is limited to the amount he or she invests). Sole proprietors pay SECA taxes on their net business income (that is, receipts minus expenses). General partners pay SECA taxes on their “guaranteed payments” (payments they are due regardless of the firm’s profits) and on their share of the firm’s net income. Limited partners pay SECA tax solely on any

guaranteed payments they receive, and then only if those payments represent compensation for labor services.

The definition of limited partners is determined at the state level and, as a result, varies among states. Since the enactment of federal laws distinguishing between the treatment of general and limited partners under SECA, state laws have expanded eligibility for limited-partner status from strictly passive investors to certain partners who are actively engaged in the operation of businesses. Furthermore, state laws have recognized new types of entities, such as the limited liability company (LLC), whose owners do not fit neatly into either of the two partnership categories.

Unlike owners of unincorporated businesses, owners of privately held corporations pay FICA taxes as if they were employees. That treatment includes owners of S corporations—which are certain privately held corporations whose profits, like those of partnerships, are “passed through” to their owners—making them subject to the individual income tax rather than the corporate income tax. Owners of privately held corporations are required to report their “reasonable compensation” for any services they provide and pay FICA tax on that amount. The net income of the firm, after deducting that compensation, is subject to neither the FICA nor the SECA tax.

This option would require owners of all pass-through businesses to pay the SECA tax on their share of net income. In the case of S corporations, owners would no longer pay the FICA tax on their reasonable compensation. In addition, the option would change the definition of self-employment income so that it would no longer depend on whether a taxpayer was classified as a general partner or a limited partner. That distinction would be replaced with a “material participation” standard in which the primary test would be whether the individual engaged

1. If wages exceed certain thresholds—\$250,000 for married taxpayers who file joint returns, \$125,000 for married taxpayers who file separate returns, and \$200,000 for people whose filing status is “single” or “head of household”—an additional 0.9 percent tax, the Additional Medicare Tax, is levied on the amount above the threshold.

in the operation of the business for more than 500 hours during a given year. Partners, LLC members, and S corporation owners categorized as material participants would pay SECA tax on both their guaranteed payments and their share of the firm's net income. Those not deemed to be material participants would pay SECA tax on their reasonable compensation. All sole proprietors would be considered material participants.

The option would increase taxes on owners of S corporations and on limited partners who are material participants by subjecting their entire share of the firm's net income to the SECA tax instead of just their reasonable compensation or guaranteed payments.² However, the option would lower taxes for general partners who are not material participants by excluding from SECA taxation their share of the firm's net income that is in excess of their reasonable compensation. On balance, federal revenues would increase by an estimated \$137 billion over the period from 2017 through 2026, according to the staff of the Joint Committee on Taxation. By increasing, on net, the earnings base from which Social Security benefits are calculated, the option also would increase federal spending for Social Security over the long term. (The estimates do not include that effect on outlays.)

An advantage of this option is that it would eliminate the ambiguity created by the emergence of new types of business entities that were not anticipated when the laws governing Social Security were last amended. The treatment of partners and LLC members under the SECA tax would be defined entirely by federal law and would ensure that owners who are actively engaged in the operation of a business could not legally exclude a portion of their labor compensation from the tax base.

2. Unlike this option, Option 11 would add such income to the base of the Net Investment Income Tax (NIIT), which imposes a 3.8 percent tax on virtually all other forms of investment income when total income exceeds a certain threshold. The intent of that option is to ensure that all types of labor and capital income of higher-income taxpayers are subject to either the NIIT or the Additional Medicare Tax. If this option was implemented, that objective would be accomplished and Option 11 would be unnecessary.

Moreover, because all firms not subject to the corporate income tax would be treated the same, businesses would be more likely to choose their form of organization on the basis of what allowed them to operate most efficiently rather than what minimized their tax liability.

Other arguments in favor of the option are that it would improve compliance with the tax code and reduce complexity for some firms. Under current law, the owners of S corporations have a strong incentive to underreport reasonable compensation so as to minimize their FICA tax liability. By subjecting S corporation owners to the SECA tax, the option would eliminate the ability of material participants to reduce their tax liability by underreporting their reasonable compensation. In addition, the option would simplify recordkeeping for S corporations whose owners are all material participants because they would no longer have to estimate the reasonable compensation of those owners.

A disadvantage of the option is that additional income from capital would be subject to the SECA tax, making the tax less like FICA, which taxes virtually no income from capital. That could deter some people from starting a business and paying the SECA tax on the profits (leading them instead to work for somebody else and pay the FICA tax on their wages). The option could also result in new efforts to recharacterize business income as either rental income or interest income, neither of which is subject to the FICA or the SECA tax. In addition, it could lead to the use of C corporations (businesses that are subject to the corporate income tax) as a tax shelter. For example, faced with a 15.3 percent SECA tax rate on top of the individual income tax, the owners of an S corporation might choose to pay the corporate income tax instead (even though profit distributions would be taxed again under the individual income tax). If the corporate income tax rate was lowered in the future, that incentive would be magnified. Finally, the option would place an additional administrative burden on many partnerships and LLCs: Those entities would be required to determine reasonable compensation for any members considered to be nonmaterial participants.

RELATED OPTIONS: Revenues, Options 11, 20, 22

RELATED CBO PUBLICATION: *The Taxation of Capital and Labor Through the Self-Employment Tax* (September 2012), www.cbo.gov/publication/43644

Revenues—Option 24

Increase Taxes That Finance the Federal Share of the Unemployment Insurance System

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues												
Increase the net FUTA rate to 0.8 percent	1.1	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	7.1	14.9
Increase the FUTA wage base to \$40,000, index the base to future wage growth, and decrease the net FUTA rate to 0.167 percent	14.9	11.9	3.9	-0.1	-2.2	-2.2	-2.6	-3.5	-3.4	-3.7	28.4	13.1

This option would take effect in January 2017.

FUTA = Federal Unemployment Tax Act.

The unemployment insurance (UI) system is a partnership between the federal government and state governments that provides a temporary weekly benefit—consisting of a regular benefit and, often during economic downturns, emergency and extended benefits—to qualified workers who lose their job through no fault of their own. Funding for the state and federal portions of the UI system is drawn from payroll taxes imposed on employers under the State Unemployment Tax Act (SUTA) and the Federal Unemployment Tax Act (FUTA), respectively.

The states administer the UI system, establishing eligibility rules, setting regular benefit amounts, and paying those benefits to eligible people. State payroll taxes vary; each state sets a tax rate schedule and a maximum wage amount subject to taxation. Revenues from SUTA taxes are deposited into dedicated state accounts that are included in the federal budget.

The federal government sets broad guidelines for the UI system, pays a portion of the administrative costs that state governments incur, and makes advances to states that lack the money to pay UI benefits. In addition, during periods of high unemployment, the federal government has often funded, either fully or partially, temporary emergency benefits, supplemental benefits provided through the extended benefits program, or both.

Under FUTA, employers pay taxes on each worker's wages up to \$7,000; the revenues are deposited into several federal accounts. The amount of wages subject to the

FUTA tax (the taxable wage base) is not adjusted, or indexed, to increase with inflation and has remained unchanged since 1983. The FUTA tax rate, which is 6.0 percent, is reduced by a credit of 5.4 percent for state unemployment taxes paid, for a net tax rate of 0.6 percent—or \$42 for each employee earning at least \$7,000 annually. On January 1, 1976, a surtax of 0.2 percent went into effect, raising the total FUTA tax rate, net of the state tax credit, to 0.8 percent—for a maximum of \$56 per employee. That surtax expired on July 1, 2011.

During and after the last recession, funds in the designated federal accounts were insufficient to pay the emergency and extended benefits enacted by the Congress, to pay the higher administrative costs that states incurred because of the greater number of people receiving benefits, or to make advances to several states that did not have sufficient funds to pay regular benefits. That shortfall necessitated that advances be made from the general fund of the U.S. Treasury to the federal accounts. Some of those advances must be repaid by the states, a process that the Congressional Budget Office expects will take several more years under current law.

This option includes two alternative approaches that would increase revenues from unemployment insurance taxes by roughly the same amount over the 2017–2026 period. The first approach would leave the FUTA taxable wage base unchanged but would raise the net FUTA tax rate by reinstating and permanently extending the 0.2 percent FUTA surtax. CBO estimates that this

approach would generate a steady flow of additional revenues in each year between 2017 and 2026, for a total increase of \$15 billion.

The second approach would expand the FUTA taxable wage base but decrease the tax rate. Specifically, the approach would raise the amount of wages subject to the FUTA tax from \$7,000 to \$40,000 in 2017 (and then index that threshold to the growth in future wages). It would also reduce the net FUTA tax rate, after accounting for the 5.4 percent state tax credit, from 0.6 percent under current law to 0.167 percent. Expanding the FUTA taxable wage base would also increase SUTA taxes, which are counted as part of the federal budget. Because federal law requires that each state's SUTA taxes be levied on a taxable wage base that is at least as large as that under FUTA, nearly all states would have to increase their tax base to \$40,000 if this approach was adopted.¹ CBO estimates that this approach would raise revenues by \$13 billion over the 2017–2026 period.

Under this second alternative, revenues would rise initially but fall in later years. They would rise substantially at first primarily because of the added proceeds from SUTA taxes. However, CBO expects that, in the years after 2017, many states would respond by reducing their UI tax rates but leave those rates high enough to generate some additional revenues, on net, over the 2017–2026 period. (States with low UI account balances would be especially likely to allow the increase in the taxable wage base to generate additional revenues.) The extra revenue generated during the first years would also leave the states with larger trust fund balances. That would reduce the need for states to raise revenues to improve their trust fund balances in later years.

The main advantage of both approaches is that they would improve the financial condition of the federal portion of the UI system. By expanding the taxable wage base, the second approach would also improve the financial condition of state UI tax systems. The additional revenues resulting from either approach would allow federal UI accounts to more rapidly repay the outstanding advances from the general fund and would better position those accounts to finance benefits during future

recessions. By reducing reliance on advances from the general fund, both approaches would decrease what are effectively loans from all taxpayers (including non-workers) to workers who benefit from having insurance against unemployment.

Either approach would generally be simpler to implement—especially for employers—than many other proposed changes to the federal tax code. However, expanding the taxable wage base would impose some burden on state governments, requiring them to ensure that their tax bases conformed to the indexed federal tax base.

An argument against both approaches is that employers would generally pass on the additional FUTA taxes to workers in the form of reduced earnings. By reducing workers' after-tax pay, the tax might induce some people to drop out of, or choose not to enter, the workforce. For some people in the workforce, both approaches would increase marginal tax rates by a small amount. (The marginal tax rate is the percentage of an additional dollar of income from labor or capital that is paid in taxes.) On balance, CBO estimates that increasing marginal tax rates reduces the amount that people work relative to what would have occurred otherwise.² Given the small size of the tax changes and corresponding changes in after-tax pay that would result from either approach, the effects on employment would probably be quite small under this option.

The combination of a single tax rate and low thresholds on the amount of earnings subject to the tax makes the FUTA tax regressive—that is, FUTA taxes measured as a share of earnings decrease as earnings rise. Even so, because workers with lower earnings receive, on average, UI benefits that are a higher fraction of their prior earnings than do workers with higher earnings, those benefits are progressive. If taxes and benefits are considered together, the unemployment insurance system is generally thought to be roughly proportional—neither progressive

1. In 2016, only Hawaii and Washington have taxable wages bases above \$40,000.

2. That increase would have two possible effects. On the one hand, the higher marginal tax rates would reduce the share of the returns from additional work that people would keep, reducing their incentive to work. On the other hand, because higher marginal tax rates reduce after-tax income, they make it more difficult for people to attain their desired standard of living with a given amount of work, thus causing some people to work more.

nor regressive—under current law. Neither approach described in this option would affect UI benefits. However, the approaches would have different effects on the distribution of tax burdens: Reinstating the surtax would

increase FUTA taxes proportionately for all income groups, whereas expanding the wage base and lowering the FUTA rate would reduce the regressivity of the FUTA tax.

RELATED OPTION: Revenues, Option 14

RELATED CBO PUBLICATION: *Unemployment Insurance in the Wake of the Recent Recession* (November 2012), www.cbo.gov/publication/43734

Revenues—Option 25

Increase Corporate Income Tax Rates by 1 Percentage Point

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	6.4	8.1	8.9	9.8	10.3	10.6	10.9	11.3	11.7	12.3	43.5	100.3

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Most corporations that are subject to the corporate income tax calculate their tax liability according to a progressive rate schedule. The first \$50,000 of taxable corporate income is taxed at a rate of 15 percent; income of \$50,000 to \$75,000 is taxed at a 25 percent rate; income of \$75,000 to \$10 million is taxed at a 34 percent rate; and income above \$10 million is generally taxed at a rate of 35 percent.¹

Although most corporate income falls within the 35 percent tax bracket, the average tax rate on corporate income (corporate taxes divided by corporate income) is lower than 35 percent because of allowable deductions, exclusions, tax credits, and the lower tax rates that apply to the first \$10 million of income. For example, corporations can deduct business expenses, including interest paid to the firm's bondholders, from gross income to compute taxable income. (Dividends paid to shareholders, however, are not deductible.) Most income earned by the foreign subsidiaries of U.S. corporations is not subject to U.S. taxation until it is repatriated in the form of dividends paid to the parent corporation. To prevent income earned abroad from being subject to both foreign and U.S. taxation, the tax code gives U.S. corporations a credit that reduces their domestic tax liability on that income by the amount of income and withholding taxes they have paid to foreign governments. The foreign tax credit is subject to limits that are designed to ensure that

the dollar value of the credits taken does not exceed the amount of U.S. tax that otherwise would have been due.

This option would increase all corporate income tax rates by 1 percentage point. For example, the corporate income tax rate would increase to 36 percent for taxable income above \$10 million. The option would increase revenues by \$100 billion over the 2017–2026 period, the staff of the Joint Committee on Taxation estimates.

The major argument in favor of the option is its simplicity. As a way to raise revenue, increasing corporate income tax rates would be easier to implement than most other types of business tax increases because it would require only minor changes to the current tax collection system.

The option would also increase the progressivity of the tax system to the extent that the burden of the corporate income tax is largely borne by owners of capital, who tend to have higher income than other taxpayers. (Because the tax reduces capital investment in the United States, it reduces workers' productivity and wages relative to what they otherwise would be, meaning that at least some portion of the economic burden of the tax over the longer term falls on workers—making an increase in corporate tax rates less progressive than it would be if that burden was fully borne by the owners of capital.)

An argument against the option is that it would further reduce economic efficiency. The current corporate income tax system already distorts firms' choices about how to structure the business (for example, whether to operate as a C corporation, an S corporation, a partnership, or a sole proprietorship) and whether to finance investment by issuing debt or by issuing equity. Increasing corporate income tax rates would make it even more advantageous for firms to organize in a manner that

1. Under current law, surtaxes are imposed on some amounts of corporate income. Income between \$100,000 and \$335,000 is subject to a surtax of 5 percent, and an additional 3 percent tax is levied on income between \$15 million and \$18.3 million. Those surtaxes effectively phase out the benefit of the three lower tax rates for corporations with income above certain amounts. As a result, a company that reports more than \$18.3 million in taxable income effectively faces a statutory rate equal to 35 percent of its total corporate taxable income.

allows them to be treated as an S corporation or partnership solely as a way to reduce their tax liabilities. That is because net income from C corporations—those that are subject to the corporate income tax—is first taxed at the business level and then again at the individual level after it is distributed to shareholders or investors. By contrast, income from S corporations and partnerships is generally free from taxation at the business level but is taxed under the individual income tax, even if the income is reinvested in the firm. Raising corporate tax rates would also encourage companies to increase their reliance on debt financing because interest payments, unlike dividend payments to shareholders, can be deducted. Carrying more debt might increase some companies' risk of default. Moreover, the option would discourage businesses from investing, hindering the growth of the economy. An alternative to this option that would reduce such incentives would be to lower the tax rate while broadening the tax base by, for example, reducing or eliminating some exclusions or deductions.

Another concern that might be raised about the option is that it would increase the tax rate that corporations—those based in the United States and those based in foreign countries—face when they earn income in the United States. Under current law, when the federal corporate tax is combined with state and local corporate

taxes (which have a top rate averaging 4 percent), the U.S. tax rate on income in the highest bracket averages 39 percent—already higher than that in any of the other 33 member countries of the Organisation for Economic Co-operation and Development. (The top statutory rates, however, do not reflect the differences in various countries' tax bases and rate structures and therefore do not represent the true average tax rates that multinational firms face.) Those higher rates in the United States influence businesses' choices about how and where to invest; to the extent that firms respond by shifting investment to countries with low taxes as a way to reduce their tax liability at home, economic efficiency declines because firms are not allocating resources to their most productive use. The current U.S. system also creates incentives to shift reported income to low-tax countries without changing actual investment decisions. Such profit shifting erodes the corporate tax base and requires tax planning that wastes resources. Increasing the top corporate rate to 36 percent (40 percent when combined with state and local corporate taxes) would further accentuate those incentives to shift investment and reported income abroad. However, other factors, such as the skill level of a country's workforce and its capital stock, also affect corporations' decisions about where to incorporate and invest.

RELATED OPTIONS: Revenues, Options 33, 34, 35

RELATED CBO PUBLICATIONS: *Taxing Capital Income: Effective Marginal Tax Rates Under 2014 Law and Selected Policy Options* (December 2014), www.cbo.gov/publication/49817; *Options for Taxing U.S. Multinational Corporations* (January 2013), www.cbo.gov/publication/43764; *Taxing Businesses Through the Individual Income Tax* (December 2012), www.cbo.gov/publication/43750; Jennifer C. Gravelle, *Corporate Tax Incidence: Review of General Equilibrium Estimates and Analysis*, Working Paper 2010-03 (May 2010), www.cbo.gov/publication/21486; William C. Randolph, *International Burdens of the Corporate Income Tax*, Working Paper 2006-09 (August 2006), www.cbo.gov/publication/18067; *Corporate Income Tax Rates: International Comparisons* (November 2005), www.cbo.gov/publication/17501

Revenues—Option 26

Capitalize Research and Experimentation Costs and Amortize Them Over Five Years

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	31.3	42.6	33.6	24.4	14.8	8.4	6.9	7.2	7.6	8.0	146.7	184.9

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Under current tax law, companies can deduct the costs of research and experimentation from their income in the year those costs are incurred. (Other cost-recovery methods are allowed but rarely used.) By allowing an immediate deduction, the tax code treats costs associated with research and experimentation as current expenses (the same way that wages of production workers are treated, for instance) rather than as an investment (which is how the purchase of a machine or a building is characterized, for example). Doing so is consistent with the way research and development expenses are treated under the generally accepted accounting principles used in the United States by corporations to report income and assets to shareholders in their financial statements.¹ Companies can also claim a tax credit for certain research costs in excess of a base amount that represents the company's historical level of such spending.

In recent years, some organizations have challenged the characterization of research and development costs as current expenses instead of investment. In 2013, the Bureau of Economic Analysis began treating research and development costs in the national income and product accounts as investments. Under the new approach, an investment in research and development creates an asset (generally referred to as intangible to distinguish it from tangible assets such as equipment and structures) that declines in value over time. That approach has been partially adopted by the International Financial Reporting Standards Board (which established the accounting standards used outside the United States). Under those standards, qualifying development costs—but not research costs—are capitalized (that is, added to the value of assets) and amortized (that is, deducted from both the

value of assets and from current income) in equal annual amounts over the useful life of the asset.

This option would require the costs of both research and experimentation to be capitalized for tax purposes and amortized over five years. In other words, costs would be deducted in equal amounts over five years instead of all at once in the year the expenses were incurred. The existing credit for research and experimentation expenses would remain in place. The staff of the Joint Committee on Taxation estimates that, if implemented, the option would increase revenues by \$185 billion between 2017 and 2026.

One argument in favor of the option is that it would treat investments in different types of assets more alike. The rationale is that investments in research projects that have a high probability of success and short development periods are comparable to investments in equipment and structures. Because the tax code is more favorable to those types of research and experimentation projects than it is to investments in equipment and structures, companies have an incentive to direct more of their resources toward such research and experimentation. Unless such research and experimentation generates benefits for people other than the company's investors (such as customers who benefit from an upgraded email application, for example), that favorable tax treatment results in a misallocation of resources that leads to lower output. However, high risk of failure and lengthy development periods more frequently characterize investments in intangible assets than investments in tangible assets, offsetting to some degree the favorable tax treatment of research and experimentation.

Another rationale is that the option would reduce an advantage that established companies, especially larger ones, have over newer businesses. Under current law, newer companies often do not have any income from

1. Experimentation expenses for tax purposes are a subset of development expenses for financial-reporting purposes. Most corporations use the development expenses from their financial reports as the basis for computing deductible experimentation expenses.

which to deduct their research and experimentation costs and therefore must effectively defer their deduction—for up to 20 years—until they have income from which to subtract their deductible costs. That delay lowers the value of the deduction. Large, established firms, in contrast, generally have income from other projects, allowing them to immediately claim the deduction and thus realize its full value. Under this option, however, the deductions of the large, established companies would be spread out over time, and the realized value of those deductions would more closely match the realized value for newer companies.

An argument against the option is that it would reduce the incentive to conduct research and experimentation that generates benefits for people outside of the firm that

incurs the costs. By reducing the incentive to engage in research and experimentation, this option would, to some extent, discourage those activities and thus curtail those external benefits. For example, if the costs arising from the option were to deter the development of a drug that would improve public welfare, the public would never realize that improvement in welfare. The disincentive is magnified in cases involving a high risk of failure or a long development period.

Another argument against the option is that it would increase companies' recordkeeping burden. Because the option diverges from generally accepted accounting principles, businesses would have to maintain separate tax records for their research and development operations in addition to their records for financial-reporting purposes.

RELATED OPTION: Revenues, Option 27

RELATED CBO PUBLICATION: *Federal Policies and Innovation* (November 2014), www.cbo.gov/publication/49487

Revenues—Option 27

Extend the Period for Depreciating the Cost of Certain Investments

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	4.5	13.9	21.3	26.4	32.0	35.2	33.7	30.7	27.9	25.6	98.1	251.2

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

When calculating their taxable income, businesses can deduct the expenses they incurred when producing tangible goods or providing services for sale. One of those deductions is for depreciation—the drop in the value of a productive asset over time as a result of wear and tear or obsolescence. The tax code sets the number of years, or recovery period, over which the value of different types of investments can be deducted from taxable income and specifies what percentage of the cost can be deducted in each year of the period.

Equipment and structures are the two main types of tangible assets for which businesses take depreciation deductions. The tax code generally specifies recovery periods for equipment of between 3 and 20 years (with 5 years being the most common) and permits firms to accelerate the associated depreciation deductions so that those claimed early in the period are larger than those claimed later.¹ Most structures have recovery periods longer than 20 years (with 39 years being the most common). The cost of structures with recovery periods in excess of 20 years must be recovered by deducting equal amounts in each year over that period.²

The ability to accelerate depreciation deductions reduces the effective tax rate on income from investment in

equipment relative to that on income from investment in structures. (Effective tax rates measure the impact of statutory tax rates and other features of the tax code in the form of a single tax rate that applies over the life of an investment.) The Congressional Budget Office estimates that businesses subject to the corporate income tax face an effective tax rate for equipment of 23.4 percent—9.6 percentage points less than the rate would be if deductions were limited to the actual decline in value (that is, economic depreciation). The corresponding effective tax rate for structures is 29.5 percent, which is 3.8 percentage points lower than if deductions were limited to economic depreciation.

This option would extend the recovery periods of assets placed into service after December 31, 2016, if those assets currently have recovery periods of 20 years or less. Specifically, where the tax code currently stipulates recovery periods of 3, 5, 7, 10, 15, or 20 years for a given type of asset, this option would increase those recovery periods to 4, 7, 9, 13, 20, or 25 years, respectively. If the current recovery period is greater than 20 years, it would not change under the option. Furthermore, the recovery periods for intangible assets, including computer software, would remain the same as under current law. Any asset that currently qualifies for accelerated depreciation would continue to qualify. If implemented, the option would increase revenues by \$251 billion over the 2017–2026 period, the staff of the Joint Committee on Taxation estimates. (Because of the temporary expensing provisions that continue through 2019, the revenue gains would be smaller in the earlier years and greater in the later years than they would be in the absence of expensing.)

An argument in favor of this option is that it would make tax depreciation for equipment align more closely with economic depreciation. That, in turn, would make the effective tax rates on the income generated by different

1. In addition to accelerated depreciation, firms have been allowed, in every year since 2008, to “expense”—that is, deduct from taxable income during the year of purchase—50 percent (and, during one 15-month period, 100 percent) of the costs of purchases of equipment. The percentage that can be expensed declines to 40 percent for equipment acquired during 2018 and to 30 percent for equipment acquired during 2019. After 2019, the tax law will revert to the rules in effect before 2008, which allowed accelerated depreciation but no expensing (except in limited cases).
2. Accelerated depreciation is allowed for structures with recovery periods of 20 years or less, including (but not limited to) electric power plants, oil rigs, railroad tracks, and barns.

types of investment more equal. Under this option, the effective tax rates for businesses subject to the corporate income tax would be 28.2 percent for equipment and 29.9 percent for structures—reducing the gap between equipment and structures from 6.2 percentage points to 1.7 percentage points. That narrowing of the gap would mitigate the incentive that exists in the tax code for companies to invest more in equipment and less in structures than they might if investment decisions were based solely on economic returns.

An argument against this option is that its higher effective tax rates on income generated by capital would discourage investment. From that perspective, effective tax

rates might best be equalized by easing taxation on less favored forms of capital rather than by raising the effective tax rate on a type of capital that is now favored. For example, the economic efficiencies gained by bringing the effective tax rates of equipment and structures closer together could be achieved by shortening the recovery periods of structures instead of by lengthening the recovery periods of equipment. However, that approach would reduce revenues. Another argument against this option is that by raising effective tax rates on business investment, this option would exacerbate the current tax bias in favor of owner-occupied housing relative to business investment.

RELATED OPTIONS: Revenues, Options 26, 28

RELATED CBO PUBLICATION: *Taxing Capital Income: Effective Marginal Tax Rates Under 2014 Law and Selected Policy Options* (December 2014), www.cbo.gov/publication/49817

Revenues—Option 28

Repeal Certain Tax Preferences for Energy and Natural Resource–Based Industries

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues												
Repeal the expensing of exploration and development costs	0.9	1.4	1.4	1.4	1.5	1.4	1.0	0.7	0.6	0.5	6.6	10.7
Disallow the use of the percentage depletion allowance	0.7	1.1	1.2	1.2	1.3	1.4	1.4	1.5	1.6	1.6	5.5	12.8
Both alternatives above	1.6	2.5	2.6	2.6	2.8	2.8	2.4	2.2	2.2	2.1	12.1	23.5

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

When calculating their taxable income, firms in most industrial sectors in the United States are generally allowed to deduct a portion of the investment costs they incurred that year and in previous years. The portion of those costs that is deductible depends on prescribed rates of depreciation or, for certain natural resources, depletion.¹ Costs are deducted over a number of years to reflect an asset's rate of depreciation or depletion.

In contrast, the U.S. tax code treats the energy industry and industries that are heavily based on natural resources more favorably. Tax preferences are provided through a mix of temporary and permanent provisions in the tax code. Tax preferences for the renewable-energy sector are provided largely through temporary provisions, whereas tax preferences for extractive industries that produce oil, natural gas, coal, and hard minerals are provided largely through permanent provisions. Two permanent tax preferences in particular give extractive industries an advantage over other industries:

- One preference allows producers of oil, gas, coal, and minerals to “expense” some of the costs associated with exploration and development. Expensing allows companies to fully deduct such costs as they are incurred rather than waiting for those activities to generate income. For extractive companies, the costs that can be expensed include, in some cases, those related

to excavating mines, drilling wells, and prospecting for hard minerals. Specifically, under current law, integrated oil and gas producers (that is, companies with substantial retailing or refining activity) and corporate coal and mineral producers can expense 70 percent of their costs; those companies are then able to deduct the remaining 30 percent over a period of 60 months. Independent oil and gas producers (companies without substantial retailing or refining activity) and non-corporate coal and mineral producers can fully expense their costs.

- A second preference allows extractive industries to elect to use a percentage depletion allowance rather than the amount prescribed by the cost depletion method, which is a method that allows for the recovery of investment costs as income is earned from those investments. Through the percentage depletion allowance, certain extractive companies can deduct from their taxable income between 5 percent and 22 percent of the dollar value of material extracted during the year, depending on the type of resource and up to certain limits. (For example, oil and gas companies' eligibility for the percentage depletion allowance is limited to independent producers who operate domestically; for those firms, only the first 1,000 barrels of oil—or, for natural gas, oil-equivalent—per well, per day, qualify, and the allowance is limited to 65 percent of overall taxable income.) For each property they own, firms take a deduction for the greater of the percentage depletion allowance or the amount prescribed by the cost depletion system. The amount of deductions allowed under cost depletion is limited to the

1. One exception to this general rule allows firms with relatively small amounts of qualifying capital investments (primarily equipment) to fully deduct the costs of those items in the year in which they are incurred. That exception is generally referred to as section 179 expensing, after the section of the tax code that authorizes it.

value of the land and improvements. As a result, the percentage depletion allowance can be more generous than the cost depletion method because it is not limited to the cost of the property.

This option includes two different approaches to limiting tax preferences for extractive industries. The first approach would replace the expensing of exploration and development costs for oil, gas, coal, and hard minerals with the rules for deducting costs that apply in other industries.² That approach would increase revenues by \$11 billion over the 2017–2026 period, according to estimates by the staff of the Joint Committee on Taxation (JCT). The second approach would eliminate the percentage depletion allowance, forcing all companies to use the cost depletion system rather than choose the more generous of the two methods. That approach would raise \$13 billion over that 10-year period, according to JCT. If the two approaches were combined, revenues would increase by \$24 billion over the 2017–2026 period.

The principal argument in favor of this option is that the two tax preferences for extractive industries distort the allocation of society's resources in several ways. First, for the economy as a whole, the preferences influence the allocation of resources between the extractive industries and other industries in a manner that does not reflect market outcomes. Those incentives encourage some investments in drilling and mining that produce output with a smaller market value than such investments would produce elsewhere because, when making investment decisions, companies take into account not only the market value of the output but also the tax advantage that expensing and percentage depletion provide. Second, for the same reason, the preferences also lead to an allocation of resources that does not reflect market outcomes within the extractive industries. Third, the preferences encourage producers to extract more resources in a shorter amount of time. In the case of oil, for example, that additional

2. The option would still allow other costs that are unique to extractive industries, such as those associated with unproductive wells and mines, to be expensed.

drilling makes the United States less dependent on imported oil in the short run, but it accelerates the depletion of the nation's store of oil and could cause greater reliance on foreign producers in the long run.

An argument against this option is that it treats expenses that might be viewed as similar in different ways. In particular, exploration and development costs for extractive industries can be seen as analogous to research and development costs, which can be expensed by all businesses. Another argument against this option is that encouraging producers to continue exploring and developing domestic energy resources may enhance the ability of U.S. households and businesses to accommodate disruptions in the supply of energy from other countries.

Another argument against this option is that it would alter permanent tax preferences for extractive industries but would not make any changes to temporary tax preferences for the renewable-energy sector. This report, however, does not include options to eliminate or curtail temporary tax preferences. Under current law, temporary tax preferences for the renewable-energy sector are scheduled to expire over the next several years; consequently, eliminating those preferences would not have a significant effect on deficits over the decade. Nonetheless, some temporary tax preferences are frequently extended and so resemble permanent tax preferences. For example, the tax credit for renewable-energy production is classified as temporary but has been in effect since 1992. In 2015, JCT estimated that if policymakers extended that credit so that it remained in place from 2015 to 2024, federal revenues would be reduced by \$23 billion over that period. Limiting temporary tax preferences for renewable-energy sources would further reduce the distortions in the way resources are allocated between the energy sector and other industries, as well as within the energy sector. However, producing energy from renewable sources may yield wider benefits to society that a producer does not take into account, such as limiting pollution or reducing dependence on foreign governments as domestic reserves are depleted; in that case, preferential tax treatment could improve the allocation of resources.

RELATED OPTIONS: Mandatory Spending, Option 1; Revenues, Options 27, 31

RELATED CBO PUBLICATIONS: *Federal Support for the Development, Production, and Use of Fuels and Energy Technologies* (November 2015), www.cbo.gov/publication/50980; *Energy Security in the United States* (May 2012), www.cbo.gov/publication/43012

Revenues—Option 29

Repeal the Deduction for Domestic Production Activities

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	9.6	17.8	18.0	18.2	18.2	18.1	18.3	18.3	18.5	18.8	81.8	173.7

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Most businesses can deduct from their taxable income 9 percent of what they earn from qualified domestic production activities.¹ The design of the deduction makes it comparable to a 3 percentage-point reduction in the tax rate on income earned from U.S.-based manufacturing. Various activities qualify for the deduction if they occur largely in the United States:

- Lease, rental, sale, exchange, or other disposition of tangible personal property, computer software, or sound recordings;
- Production of films (other than those that are sexually explicit);
- Production of electricity, natural gas, or potable water;
- Construction or renovation of real property; and
- Performance of engineering or architectural services.

The list of qualified activities specifically excludes the sale of food or beverages prepared at retail establishments; the transmission or distribution of electricity, natural gas, or potable water; and many activities that would otherwise qualify except that the proceeds come from sales to a related business.

This option would repeal the deduction for domestic production activities. Doing so would increase revenues by \$174 billion from 2017 through 2026, the staff of the Joint Committee on Taxation estimates.

1. The deduction is 6 percent for oil-related qualified production activities.

One argument in favor of this option is that it would reduce economic distortions. Although the deduction is targeted toward investments in domestic production activities, it does not apply to all domestic production. Thus, the deduction gives businesses an incentive to invest in a particular set of domestic production activities and to forgo other, perhaps more economically beneficial, investments in domestic production activities that do not qualify.

In addition, to comply with the law, businesses must satisfy a complex and evolving set of statutory and regulatory rules for allocating gross receipts and business expenses to the qualified activities. Companies that want to take full advantage of the deduction may incur large tax-planning costs (for example, fees to tax advisers). Moreover, the complexity of the rules can cause conflict between businesses and the Internal Revenue Service regarding which activities qualify under the provision.

An argument against implementing this option is that simply repealing the deduction for domestic production activities would increase the cost of domestic business investment and could reduce the amount of such investment. Alternatively, the deduction could be replaced with a revenue-neutral reduction in the top corporate tax rate (a cut that would reduce revenues by the same amount that eliminating the deduction would increase them). That alternative would end the current distortions between activities that qualify for the deduction and those that do not. It also would reduce the extent to which the corporate tax favors noncorporate investments over investments in the corporate sector and foreign activities over domestic business activities.

RELATED OPTION: Revenues, Option 25

RELATED CBO PUBLICATION: *Taxing Capital Income: Effective Marginal Tax Rates Under 2014 Law and Selected Policy Options* (December 2014), www.cbo.gov/publication/49817

Revenues—Option 30

Repeal the “LIFO” and “Lower of Cost or Market” Inventory Accounting Methods

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	11.4	22.8	22.8	22.9	12.4	1.8	1.9	1.9	2.0	2.0	92.3	101.9

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

To compute its taxable income, a business must first deduct from its receipts the cost of purchasing or producing the goods it sold during the year. Determining those costs requires that the business identify and attach a value to its inventory. Most companies calculate the cost of the goods they sell in a year by adding the value of the inventory at the beginning of the year to the cost of goods purchased or produced during the year and then subtracting from that total the value of the inventory at the end of the year.

The tax code allows firms to choose from among several approaches for identifying and determining the value of the goods included in their inventory. For itemizing and valuing goods in stock, firms can use the “specific identification” method. That approach, however, requires a very detailed physical accounting in which each item in inventory is matched to its actual cost (that is, the cost to purchase or produce the item). An alternative approach—“last in, first out” (LIFO)—also allows firms to value their inventory at cost but, in addition, permits them to assume that the last goods added to inventory were the first ones sold. Under that assumption, the cost of those more recently added goods should approximate current market value (that is, the cost of replacing the inventory).

Yet another alternative approach—“first in, first out” (FIFO)—is based on the assumption that the first goods sold from a business’s inventory have been in that inventory the longest. Like firms that adopt the LIFO method, firms using the FIFO approach can also value their goods at cost. But firms that use the FIFO approach have still another choice—the “lower of cost or market” (LCM) method. Instead of assessing their end-of-year inventory at cost, they can assess that inventory on the basis of its market value and use that valuation if it is lower than the actual cost of acquiring or producing those goods. In

addition, businesses that use the FIFO approach can qualify for the “subnormal goods” method of inventory valuation if their goods cannot be sold at market prices because they are damaged or flawed.

This option would eliminate the LIFO method of identifying inventory, as well as the LCM and subnormal-goods methods of inventory valuation. Businesses would be required to use the specific-identification or FIFO methods to account for goods in their inventory and to set the value of that inventory on the basis of cost. Those changes—which would be phased in over a period of four years—would increase revenues by a total of \$102 billion over the 2017–2026 period, the staff of the Joint Committee on Taxation estimates.

The main rationale for this option is that it would align tax accounting rules with the way businesses tend to sell their goods. Under many circumstances, firms prefer to sell their oldest inventory first—to minimize the risk that the product has become obsolete or been damaged while in storage. In such cases, allowing firms to use alternative methods to identify and value their inventories for tax purposes allows them to reduce their tax liabilities without changing their economic behavior.

An argument for eliminating the LIFO method is that it allows companies to defer taxes on real (inflation-adjusted) gains when the prices of their goods are rising relative to general prices. Firms that use the LIFO method can value their inventory on the basis of costs associated with newer—and more expensive—inventory when, in fact, the actual items sold may have been acquired or produced at a lower cost at some point in the past. By deducting those higher costs as the price of production, firms are able to defer paying taxes on the amount their goods have appreciated until those goods are sold.

An argument against eliminating the LIFO method relates to the effects of inflation on taxable income. When inventories are valued on the basis of historical costs, price increases that occur between the time the inventory is purchased and the time its value is assessed raise taxable income. That effect tends to be greater with the FIFO method than with the LIFO method because the latter method values inventory by using the purchase prices of more recently acquired goods, thus deferring the effects of inflation on taxable income. However, other elements of the corporate income tax also treat gains that are attributable to inflation as taxable income.

An argument for eliminating the LCM method of inventory valuation under FIFO is that, when prices are falling, it provides a tax advantage for goods that have not been sold. The LCM method allows a business to compare the market value of each item in its end-of-year inventory with the cost to purchase or produce the item and then set the lower of the two as the item's value. The year-end inventory will have a lower total value under LCM than under the cost method if the market value of

any item in the inventory is less than its actual cost. Using the LCM method when prices are falling allows the firm to claim a larger deduction for the costs of goods sold, causing the firm's taxable income to fall as a result. In effect, that method allows a firm to deduct from its taxable income the losses it incurred from the decline in the value of its inventory. (That deduction is allowed even though the firm has not sold the goods.) A firm, however, is not required to recognize gains in the value of its inventory when prices are rising, which means that gains and losses are taxed differently. Similarly, firms that use the subnormal-goods method of inventory valuation can immediately deduct the loss, even if the company later sells the good at a profit.

An argument against eliminating the LCM method for tax purposes is that it can simplify inventory valuations by those businesses. To the extent that firms find the LCM method a desirable method of inventory valuation, allowing them to use the same methodology for both financial accounting and tax purposes reduces complexity, particularly for small businesses.

Revenues—Option 31

Subject All Publicly Traded Partnerships to the Corporate Income Tax

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	0.3	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	2.6	5.9

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Until 1981, all companies whose shares were available for purchase through a public exchange were incorporated and subject to the corporate income tax. The profits of those corporations were, and continue to be, paid to shareholders as dividends or capital gains and taxed again to some extent under the individual income tax. During the 1980s, however, partnerships that were not subject to the corporate income tax began raising capital by offering shares, or “units,” on public exchanges. The profits of such partnerships were allocated among the partners and added to their taxable income. Income that was allocated to partners who were individuals (as opposed to corporations) was subject only to the individual income tax. By avoiding the corporate income tax, the partnership form of organization reduced the cost of investing by individuals, making it an increasingly popular choice.

In 1987, the Congress made newly created publicly traded partnerships subject to the corporate income tax unless 90 percent or more of the partnership’s revenues were derived from qualifying activities—specifically, activities related to natural resources (including exploration, mining, refining, transportation, storage, and marketing), real estate, and commodity trading. Preexisting publicly traded partnerships that did not meet the 90 percent threshold in 1987 were exempted from that restriction, but only a handful survive today—the rest having incorporated, abandoned the public trading of their units, or been acquired by other companies.

This option would eliminate the exceptions enacted in 1987 and make all publicly traded partnerships subject to the corporate income tax. Between 2017 and 2026, it

would increase revenues by \$6 billion, according to estimates by the staff of the Joint Committee on Taxation.

An advantage of this option is that it would treat the taxation of different economic activities more similarly. When the tax treatment of economic activities is more uniform, investors are more likely to direct their money to where it would realize the greatest return, not to where it would save the most in taxes. Such efficient investing would increase the overall size of the economy. The option would also encourage companies to choose a form of organization and a method of raising capital that best suit the company, not those that minimize tax liabilities.

Most of the affected companies are engaged in activities related to oil and gas (especially pipeline transportation), and the option would probably increase the price of those products. An advantage of the option is that those higher prices would reduce the consumption of oil and gas and the harmful effects of carbon emissions and other pollutants associated with that consumption. However, increases in the costs of oil and gas would probably cause the cost of transporting all types of goods to rise. A disadvantage of the option is that the resulting increases in the price of goods would probably place a greater burden on lower-income households than on higher-income households.

Another disadvantage of the option is that it would increase the cost of investing in activities that are currently exempt from the corporate income tax and thus would probably reduce such investments. A reduction in investment in oil and gas pipelines could leave regions of the United States with a less reliable energy supply.

RELATED OPTIONS: Revenues, Options 28, 42

RELATED CBO PUBLICATION: *Federal Support for the Development, Production, and Use of Fuels and Energy Technologies* (November 2015), www.cbo.gov/publication/50980

Revenues—Option 32

Repeal the Low-Income Housing Tax Credit

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	*	0.1	0.5	1.3	2.3	3.4	4.6	5.8	7.1	8.4	4.2	33.5

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

* = between zero and \$50 million.

Real estate developers who provide rental housing to people with low income may qualify for the low-income housing tax credit (LIHTC), which is designed to encourage investment in affordable housing. The credit covers a portion of the costs incurred for the construction of new housing units and the substantial rehabilitation of existing units.

Each year, the federal government allocates funding to the states for LIHTCs on the basis of a per-resident formula. State or local housing authorities review proposals submitted by developers and select those projects that will receive credits. To qualify for the credit, developers must agree to meet two requirements for at least 30 years: First, they must set aside either 20 percent of a project’s rental units for people whose income is below 50 percent of the area’s median income or 40 percent of the units for people whose income is below 60 percent of the median. Second, they must agree to limit the rent they charge on the units occupied by low-income people to 30 percent of a set portion of the area’s median income. (That portion is either 50 percent or 60 percent and corresponds to the developer’s choice regarding the first requirement.) In addition, the buildings have to meet local health, safety, and building codes.

LIHTCs can be used to lower federal tax liability over a period of 10 years. There are two types of credits. One type is reserved for projects that receive financing through tax-exempt bonds; it can equal up to 30 percent of the costs allocable to the set-aside units. The other type of credit generally equals up to 70 percent of costs allocable to the set-aside units. Projects can qualify for larger credits (equal to up to 39 percent of the costs allocable to the set-aside units for the first type of credit or up to 91 percent of such costs for the second type of credit) if they are located in census tracts determined by the Department of

Housing and Urban Development to have a large proportion of low-income households.

This option would repeal the low-income housing tax credit starting in 2017, although taxpayers could continue to claim credits granted before 2017 until their eligibility expired. Repealing the LIHTC would increase revenues by \$34 billion from 2017 through 2026, according to estimates by the staff of the Joint Committee on Taxation.

One argument for repealing the low-income housing tax credit is that there are alternative ways to help people with low income obtain safe, affordable housing, generally at less cost to the government. For instance, the Housing Choice Voucher program—sometimes referred to as Section 8 after the part of the legislation that authorized it—provides vouchers that help families pay rent for housing they choose, provided it meets minimum standards for habitation and total rent does not exceed limits set by the federal government. Such vouchers are typically a less expensive way to provide housing assistance than the LIHTC primarily because the costs of constructing a new building or substantially renovating an existing building are higher than the costs of simply using an existing building in most housing markets where low-income households are situated. Further, people with very low income often cannot afford even the reduced rents in the set-aside units of LIHTC projects without additional subsidies. Vouchers are especially helpful to them.

Repeal of the LIHTC could be paired with an increase in housing vouchers. That would, of course, result in less deficit reduction than repeal alone. The net effect on the deficit would depend on the extent to which the voucher program was expanded. One possible approach would be to expand the voucher program to cover the same num-

ber of households currently served by the LIHTC; in that case, deficits would still be reduced, on balance. But the number of low-income households qualifying for housing assistance substantially exceeds the number supported through existing programs. Therefore, another possible approach would be to use all of the savings from repeal of the LIHTC to expand the voucher program, which would increase the total number of households receiving assistance; in that case, deficits would be unaffected, on balance.

A rationale against implementing the option is that landlords might be less willing to accept housing vouchers in areas experiencing growing strength in their housing markets. LIHTCs could be more effective at preserving low-income housing in such areas because LIHTC units are provided on the basis of 30-year contracts. In addition, by supporting the construction of new buildings and the substantial rehabilitation of existing

buildings, the LIHTC can help improve neighborhoods. For example, one study found that, in New York City between 1991 and 2000, the use of LIHTCs in blighted neighborhoods to replace abandoned buildings with new construction and to build new structures on empty lots increased property values within a few blocks of the newly constructed buildings.¹ Although the positive effect diminished somewhat over time, it remained significant five years after the completion of the projects. Because those benefits seem to be limited to the immediate neighborhoods, such projects might be more appropriately funded by local or state governments rather than the federal government.

1. Ingrid Gould Ellen and others, “Does Federally Subsidized Rental Housing Depress Neighborhood Property Values?” *Journal of Policy Analysis and Management*, vol. 26, no. 2 (Spring 2007), pp. 257–280, <http://dx.doi.org/10.1002/pam.20247>.

RELATED OPTIONS: Discretionary Spending, Options 22, 23

RELATED CBO PUBLICATIONS: *Federal Housing Assistance for Low-Income Households* (September 2015), www.cbo.gov/publication/50782; *An Overview of Federal Support for Housing* (November 2009), www.cbo.gov/publication/41219; *The Cost-Effectiveness of the Low-Income Housing Tax Credit Compared With Housing Vouchers* (April 1992), www.cbo.gov/publication/16375

Revenues—Option 33

Determine Foreign Tax Credits on a Pooling Basis

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	4.1	7.9	7.6	8.1	8.7	9.4	9.7	8.6	8.5	9.3	36.4	82.0

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

The U.S. government taxes both the domestic and foreign income of businesses that are incorporated in the United States and operate in this country and abroad. Often, such corporations must also pay income taxes to their foreign host countries. The income that foreign subsidiaries of U.S. multinational corporations earn is generally not subject to U.S. taxation until it is paid to the U.S. parent company—that is, the tax is deferred until the income is repatriated. U.S. corporate income taxes are then assessed on income that exceeds those companies' expenses. Current law provides a system of credits for taxes that U.S. businesses pay to foreign governments; the credits typically offer some relief from what otherwise would amount to double taxation of that repatriated income.

Under current law, the value of a company's foreign tax credit cannot exceed the U.S. taxes the company would pay on that amount of income. Income that is repatriated from a country with a higher corporate tax rate than that in the United States generates "excess credits"—credits from foreign tax liabilities that cannot be used because they exceed the amount owed to the U.S. government. In contrast, income that is repatriated from a country with a lower tax rate generates credits that are not sufficient to offset the entire U.S. tax owed on that income. Absent any further provisions of tax law, the company would face a residual tax in the United States on the income from that lower-tax country.

However, U.S. tax law allows firms to combine the credits generated by repatriating income from high- and low-tax-rate countries on their tax returns. Thus, the excess credits arising from the taxes paid on income repatriated from high-tax countries can be applied to the income repatriated from low-tax countries, effectively offsetting some or all of the U.S. tax liability on income from low-tax countries. One consequence of the current system is that, for any given amount of foreign income that it

repatriates, a company can increase the value of its foreign tax credit by repatriating more income from countries with higher tax rates and less from countries with lower tax rates.

Under this option, a company's foreign tax credit would be determined by pooling the company's total income from all foreign countries and the taxes paid to those countries. The total credit would equal the product of all taxes paid to foreign governments and the percentage of foreign income that was repatriated. The credit would not exceed the total amount of U.S. taxes owed on repatriated income. The staff of the Joint Committee on Taxation estimates that the option would increase revenues by \$82 billion over the 2017–2026 period.

If this option was implemented, the overall credit rate—the credit as a percentage of total repatriated income—would not depend on the distribution of the repatriated income across foreign countries but would equal the average foreign tax rate on all foreign earnings. In contrast, under current law, a company's overall credit rate is higher if a larger share of its repatriated income is from countries with higher tax rates. Hence, the foreign tax credit would be smaller under the pooling option than under current law for companies that repatriate a greater share of their earnings from countries with higher-than-average tax rates.

One argument in favor of this option is that it would restrict companies' ability to use excess credits from countries with high taxes to offset the U.S. corporate tax on income from countries with low taxes. The current method for computing excess credits makes it advantageous for firms to design and use accounting or other legal strategies to report income and expenses for their U.S. and foreign operations in ways that reduce their overall tax liabilities. By basing the credit on total foreign income and taxes, this option would reduce the incentive

for companies to strategically choose subsidiaries from which to repatriate income so as to reduce the amount of taxes they owed—and thus also reduce the incentive for firms to devote resources to strategic tax planning rather than to more productive activities.

An argument against the option is that it would increase incentives to invest in low-tax countries and to retain more of the resulting earnings abroad. Firms would be

encouraged to shift investment from high-tax to low-tax countries because of the decline in the value of excess credits. The option would also increase incentives to keep profits from those investments abroad to avoid the higher U.S. taxes on repatriated income. However, many other factors—such as the skill level of a country’s workforce and its capital stock—also affect corporations’ decisions about where to invest.

RELATED OPTIONS: Revenues, Options 25, 34, 35

RELATED CBO PUBLICATION: *Options for Taxing U.S. Multinational Corporations* (January 2013), www.cbo.gov/publication/43764

Revenues—Option 34

Require a Minimum Level of Taxation of Foreign Income as It Is Earned

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	6.1	18.5	26.2	31.8	33.9	35.0	35.8	36.2	37.7	39.7	116.5	300.9

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Businesses that are incorporated in the United States are subject to U.S. taxes on both their domestic income and their foreign income. To offset potential double taxation, a foreign tax credit is provided to account for foreign taxes paid on foreign income. Most types of foreign income earned by the foreign subsidiaries of U.S. companies, however, are not subject to U.S. taxation until the income is brought back to the United States—that is, repatriated. There are exceptions to the deferral of U.S. tax payments on that foreign income. Certain types of income—such as interest income—are considered passive (that is, received by taxpayers who are not actively involved in the operation of the business). Other types of income—such as royalty payments—are considered highly mobile (that is, easily shifted across borders). Foreign income categorized as passive or highly mobile is subject to U.S. taxes as it is earned.

Under this option, all future foreign income of U.S. corporations and their foreign subsidiaries would be subject to U.S. taxes as it is earned. Foreign income that is not passive or highly mobile would be taxed at a combined U.S. and foreign tax rate of at least 19 percent. That minimum tax rate would be applied separately for each country in which the U.S. corporation or its foreign subsidiary earns income. If income is taxed by more than one country, then the income would be assigned to the highest-tax country.

To provide a credit for foreign taxes paid, the U.S. tax rate on the taxable foreign earnings in each country would be equal to 19 percent minus 85 percent of the foreign effective tax rate on those earnings. The effective tax rate would be calculated as the ratio of qualifying foreign taxes to foreign income over a 60-month period; qualifying foreign tax payments would include all tax payments that are eligible for foreign tax credits under the current U.S. tax code. (The U.S. tax rate would be zero

on earnings for which 85 percent of the foreign effective tax rate is greater than 19 percent.)

The resulting U.S. tax rate would be applied to foreign income that is not passive or highly mobile minus a deduction for return on equity. (That deduction is intended to exempt from the minimum tax the risk-free return—generally approximated by the market interest rate for long-term government bonds—on active investments in each country). Passive and highly mobile foreign income would be taxed at the full U.S. statutory corporate tax rate, and current rules governing foreign tax credits for that income would continue to apply. There would be no further federal tax payments due on foreign income when it is repatriated. If enacted, the option would increase revenues by a total of \$301 billion from 2017 through 2026, the staff of the Joint Committee on Taxation estimates. That increase includes some revenues that would be collected after 2026 under current law.

The main argument in favor of this option is that the current system of deferral provides an incentive to hold profits overseas. Because companies do not have to pay U.S. taxes on foreign income until the income is repatriated, deferral reduces the cost of foreign investment relative to the cost of domestic investment. By ending deferral, this option would reduce the after-tax return on foreign investment, which could increase domestic investment.

Another argument in favor of this option is that it would provide greater certainty about the timing and size of tax payments. That would reduce the gains from strategies that lower businesses' tax liabilities through the use of deferral, which would result in companies' incurring lower tax planning costs. Those resources could be reallocated to more productive activities.

The main argument against this option is that it would put U.S. multinational corporations at a disadvantage

relative to foreign multinationals. To the extent that deferral is used to permanently avoid U.S. tax payments, the minimum tax would increase total taxes paid by U.S. multinationals. The increase in tax payments and resulting reduction in after-tax profits could reduce both domestic and foreign investment by U.S. multinationals. (That reduction in domestic investment would offset at least a portion of the increase in domestic investment mentioned above.) The increase in the benefits associated with being a foreign corporation would also increase the incentive for U.S. corporations to be acquired by a foreign corporation or for new companies to incorporate outside of the United States.

Another argument against this option is that the requirement to report tax payments and income on a per-country basis would increase compliance costs for U.S.

multinationals. Each foreign subsidiary of a U.S. multinational would have to devote time and resources to allocating its earnings and taxes across all countries in which it operates. Those resources would be diverted from more productive activities.

Compared with an approach that would tax worldwide income as it is earned at the full U.S. statutory corporate tax rate, this option would result in a smaller increase in tax payments for U.S. multinationals, so it would put U.S. multinationals at less of a disadvantage relative to foreign multinationals. U.S. taxation at a reduced rate would, however, be more complicated to administer, as companies and tax-enforcement agencies would have to continue to distinguish passive and highly mobile income from other types of corporate income.

RELATED OPTIONS: Revenues, Options 25, 33, 35

RELATED CBO PUBLICATION: *Options for Taxing U.S. Multinational Corporations* (January 2013), www.cbo.gov/publication/43764

Revenues—Option 35

Further Limit the Deduction of Interest Expense for Multinational Corporations

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	2.6	5.2	5.7	6.3	7.1	7.7	8.0	8.1	8.5	9.0	26.9	68.2

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Interest payments on business loans are generally tax deductible. A consequence of that deductibility is that a multinational corporation can lower its corporate tax payments by having an affiliate in a country with a lower tax rate make a loan to a U.S.-based affiliate. Because the deduction for the interest payment is taken in the United States and the income from the interest payment is taxed by a country with a lower tax rate, income is shifted from the United States to a lower-tax country and overall tax payments are reduced. For multinationals incorporated in the United States, the ability to lower tax payments through interest payments is significantly limited because interest payments received by their low-tax foreign subsidiaries are generally taxed at the full U.S. statutory corporate tax rate in the year in which the payments are made.¹ However, for multinationals incorporated outside of the United States, such payments are not taxed by the United States. For those foreign multinationals, opportunities to lower tax payments through interest are limited only by restrictions on the deduction of interest expense.

The existing restriction on a U.S. company's deduction of interest expense is based on the earnings of the U.S. company and its relation to the companies to which it pays interest. The limit applies mainly to interest paid to a company that is both a "related party" and either entirely or partially exempt from U.S. taxation. (Examples of related parties to whom those rules might apply are a foreign company that owns a U.S. company or other foreign companies that are in the same foreign multinational group as a U.S. company.) Specifically, if the U.S. company's debt-to-equity ratio exceeds 1.5 to 1 and its total net interest expense (the amount of interest paid minus the amount of interest received) exceeds 50 percent of its

adjusted taxable income, then any portion of the interest expense above the 50-percent limit that is paid to the types of related companies described above cannot be deducted.² A company can "carry forward" (use to reduce its tax liability in a future year) disallowed interest expense indefinitely and then deduct that interest expense from taxable income in that future year. Additionally, if a company's net interest expense is below the allowable level, the company can carry forward its "excess limitation"—the gap between the company's level of net interest expense and the allowable level in a given year—and use it to increase the allowable level of interest expense in any of the next three years.

Information about a company's loans and obligations can be obtained from two main sources: tax returns, which are submitted to tax authorities and are based on tax-accounting methods; and financial statements, which provide information on the company's financial position and are based on accepted financial-accounting methods. Differences in financial- and tax-accounting methods mean that the values reported in financial reports may differ from the values reported on tax returns. Tax returns do not necessarily include information on the other companies that are part of the multinational group, but consolidated financial statements—which combine the financial statements of a parent company and separate legal companies that are owned by that parent company—do. Consolidated financial statements are usually available for any U.S. company that controls (owns the majority of outstanding common stock) or is controlled by another company. Those consolidated financial statements contain the information needed to compare the

1. Those rules are effective at limiting the use of interest payments to shift profits from the United States to other countries, but they are less effective at limiting such shifting between two foreign affiliates.

2. Adjusted taxable income is calculated by adding back certain deductions—such as net interest expense; deductions for depreciation, amortization, and depletion; any deduction for net operating loss; and any deduction for domestic production activities under section 199 of the tax code—to taxable income.

U.S. company's net interest expense with the overall level of net interest expense reported by its multinational group.

Under this option, a U.S. company's allowable deduction of net interest expense would be determined on the basis of the net interest expense reported by the company's multinational group. Specifically, the limit would be based on the overall level of net interest expense reported in the consolidated financial statement of the U.S. company's multinational group. The deduction for net interest expense would be limited if the U.S. company's net interest expense for financial reporting purposes exceeded the U.S. company's proportionate share of the group's net interest expense. The proportionate share—which could take a value from zero to 100 percent—would be equal to the U.S. member's share of the group's earnings before net interest expense, taxes, depreciation, and amortization were taken into account. If there are differences between the interest expense reported for financial purposes and expense reported in tax filings, then the proportion of the deduction for net interest expense that would be disallowed for tax purposes would be equal to the proportion by which the net interest expense for financial reporting purposes exceeded the allowable level.³ The U.S. company would have the choice of using that group-level approach or instead limiting its deduction of net interest expense to 10 percent of its adjusted taxable income. Carry-forward rules would match those in place under current law. U.S. companies that are not part of a financial reporting group would continue to face the limitations on the deduction of net interest expenses that are

3. The permitted net interest expense deduction would be zero if the proportionate share of the group net interest expense would have been less than or equal to zero.

currently in place. The option would not apply to financial services companies or to financial reporting groups with a net interest expense of less than \$5 million. The option would increase revenues by a total of \$68 billion from 2017 through 2026, the staff of the Joint Committee on Taxation estimates.

The main argument in favor of this option is that it would reduce the tax advantages associated with foreign incorporation by limiting the ability of foreign-owned multinationals to move income out of the United States to lower-tax jurisdictions. Moving to a group-level standard would mean that the interest expense of the group's U.S. affiliate would have to be proportionate to the group's overall level of interest expense. That would prevent foreign multinationals from using loans between affiliates in lower-tax countries and their U.S. affiliates to place a disproportionate amount of debt in those U.S. affiliates, thus reducing income shifting. By lowering the benefit of foreign incorporation, the incentive for U.S. multinationals to change their country of incorporation through mergers (including corporate inversions) would be reduced.

The main argument against this option is that it could result in the denial of tax deductions for normal interest expenses. That would result in U.S. companies' being unable to deduct standard business expenses. Although the option would probably be more effective at targeting excessive interest than a fixed standard, there could still be operational reasons that a U.S. group member would be more leveraged than the rest of its financial reporting group. To the extent that the disallowance increased the cost of attaining funds for the U.S. group member, the limit on the interest expense deduction would decrease investment in the United States.

RELATED OPTIONS: Revenues, Options 25, 33, 34

RELATED CBO PUBLICATION: *Options for Taxing U.S. Multinational Corporations* (January 2013), www.cbo.gov/publication/43764

Revenues—Option 36

Increase Excise Taxes on Motor Fuels by 35 Cents and Index for Inflation

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	32.5	46.5	47.4	48.1	48.7	49.3	49.8	50.1	50.4	50.6	223.2	473.6

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Revenues from federal excise taxes on motor fuels are credited to the Highway Trust Fund to pay for highway construction and maintenance as well as for investment in mass transit. Those taxes currently are set at 18.4 cents per gallon of gasoline and 24.4 cents per gallon of diesel fuel produced.¹ (State and local excise taxes bring total average tax rates nationwide to about 48 cents per gallon of gasoline and about 54 cents per gallon of diesel fuel.)

This option would increase federal excise taxes on gasoline and diesel fuel by 35 cents per gallon, to 53.4 cents per gallon of gasoline and 59.4 cents per gallon of diesel fuel. In future years, those values would be adjusted to reflect changes in the price index for gross domestic product between 2017 and the most recent year for which data for that price index were available. According to estimates by the staff of the Joint Committee on Taxation, the option would increase federal revenues by \$474 billion between 2017 and 2026. (Because higher excise taxes would raise businesses' costs, they would reduce the tax base for income and payroll taxes. The estimates shown here reflect reductions in revenues from those sources.)

One rationale for increasing excise taxes on motor fuels is that the rates currently in effect are not sufficient to fully fund the federal government's spending on highways. A second rationale is that increasing excise taxes on motor fuels would have relatively low collection costs because such taxes are already being collected.

A further rationale for this option is that when users of highway infrastructure are charged according to the marginal (or incremental) costs of their use—including the “external costs” that such use imposes on society—economic efficiency is promoted. Because current fuel

taxes do not cover all of those marginal costs, raising fuel taxes by the amount specified in this option would more accurately reflect the external costs created by the consumption of motor fuel. Some of those costs, including those associated with pollution, climate change, and dependence on foreign oil, are directly related to the amount of motor fuel consumed. However, the larger fraction of such costs is related to the number of miles that vehicles travel, the road congestion that arises when people drive at certain times and in certain locations, noise, accidents, and—primarily because of heavy vehicles—pavement damage. (As vehicles become more fuel efficient, the share of external costs attributable to the number of miles traveled rises.) Various studies suggest that, in the absence of a tax on the number of vehicle miles traveled or on other factors that generate external costs, the external costs of motor fuels amount to at least \$1 per gallon. If drivers paid no other taxes, then setting taxes on motor fuels so that they equaled external costs would be economically efficient. Even after accounting for the ways in which taxes on motor fuels would compound the costs associated with current taxes on individual and corporate income, excise tax rates on motor fuels would probably have to be substantially higher than the current rates for taxes to cover the costs that drivers impose on society. With a higher tax on fuel, people would drive less or purchase vehicles that use fuel more efficiently, thus reducing some of the external costs. In contrast, paying for highways and mass transit through general revenues provides no incentive for the efficient use of those transportation systems.

An argument against this option is that it would probably be more economically efficient to base a tax on the number of miles that vehicles travel or on other measurable factors that generate external costs. For example, imposing tolls or implementing congestion pricing (charging fees for driving at specific times in given areas) would be

1. A portion of that tax—0.1 cent—is credited to the Leaking Underground Storage Tank Trust Fund.

more direct ways to alleviate congestion. Similarly, a levy on the number of miles driven could be structured to correspond more closely to the costs of repairing damaged pavement than could a tax on motor fuels. However, creating the systems necessary to administer a tax on the number of vehicle miles traveled would be much more complex than increasing the existing excise taxes on fuels. Moreover, because fuel consumption has some external costs that do not depend on the number of miles traveled, economic efficiency would still require taxes on motor fuels even if other fees were assessed at their efficient levels.

Some other arguments against raising taxes on motor fuels involve issues of fairness. Such taxes impose a proportionally larger burden, as a share of income, on middle- and lower-income households (particularly those not well-served by public transit) than they do on upper-income households. Those taxes also impose a disproportionate burden on rural households because the benefits of reducing vehicle emissions and congestion are greatest in densely populated, mostly urban, areas. Finally, to the extent that the trucking industry passed on the higher

cost of fuel to consumers (in the form of higher prices for transported retail goods, for instance) those higher prices would further increase the relative burden on people in low-income households and in households—typically situated in rural areas—at some distance from most manufacturers.

An alternative approach would restore the purchasing power that the excise taxes on gasoline and diesel fuel had in 1993—the last time those two taxes were increased—plus an adjustment to include the effects of inflation since that time. Under that approach, the taxes on gasoline and diesel fuel would be increased, respectively, by 12 cents and 16 cents per gallon. Combined with the \$70 billion in transfers (mostly from the general fund of the Treasury) provided in the Fixing America’s Surface Transportation Act of 2015 (FAST Act), the increased taxes would allow the trust fund to meet obligations provided for under the FAST Act as well as the obligations that would occur from 2020 to 2026 if the obligation levels (as adjusted for projected inflation) in that act were continued.

RELATED OPTION: Revenues, Option 37

RELATED CBO PUBLICATIONS: *How Would Proposed Fuel Economy Standards Affect the Highway Trust Fund?* (May 2012), www.cbo.gov/publication/43198; *Alternative Approaches to Funding Highways* (March 2011), www.cbo.gov/publication/22059; *Spending and Funding for Highways* (January 2011), www.cbo.gov/publication/22003; *Using Pricing to Reduce Traffic Congestion* (March 2009), www.cbo.gov/publication/20241; *Effects of Gasoline Prices on Driving Behavior and Vehicle Markets* (January 2008), www.cbo.gov/publication/41657

Revenues—Option 37

Impose an Excise Tax on Overland Freight Transport

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	21.9	33.2	33.8	34.3	34.9	35.6	36.3	36.9	37.6	38.3	158.1	342.9

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

Existing federal taxes related to overland freight transport consist of a tax on diesel fuel; excise taxes on new freight trucks, tires, and trailers; and an annual heavy-vehicle use tax. Revenues from those taxes are credited to the Highway Trust Fund, which finances road construction and maintenance and mass transit. Railroads, which generally operate on infrastructure they own and maintain, are currently exempt from the diesel fuel tax, other than an assessment of 0.1 cent per gallon for the Leaking Underground Storage Tank Trust Fund.

The two most recent federal surface transportation laws—the Moving Ahead for Progress in the 21st Century Act of 2013 (MAP-21) and the Fixing America’s Surface Transportation Act of 2015 (FAST Act)—define and establish a set of national policies to improve the movement of freight. The FAST Act commits funds from the Highway Trust Fund to two programs that focus on freight. (One of them is a grant program designed to reduce congestion and improve “critical freight movements,” and the other is a formula-funded program that supports investment in freight projects on the National Highway Freight Network.) Neither act, however, establishes a source of revenue for funding such programs. Under current law, the Highway Trust Fund cannot incur negative balances. As a result, with its existing revenue sources, the trust fund will not be able to support spending at current levels (with adjustments for inflation) beyond 2021, the Congressional Budget Office estimates.¹

This option would impose a new tax on freight transport by truck and rail. The tax would be 30 cents per mile on freight transport by heavy-duty trucks (Class 7 and Class 8 vehicles in the Federal Highway Administration’s

vehicle-weight classification). The tax would apply to all types of freight haulers: common carriers (available for hire by any shipper), contract carriers (which work with a limited number of client shippers and can refuse transport jobs), and private fleets (which haul goods only for the fleet owner). Under the option, freight transport by rail would be subject to a tax of 12 cents per mile (per railcar). The tax would not apply to miles traveled by trucks or railcars without cargo. According to estimates by the staff of the Joint Committee on Taxation, the option would increase federal revenues by \$343 billion between 2017 and 2026. (Because higher excise taxes would raise businesses’ costs, they would reduce the tax base for income and payroll taxes. The estimates shown here reflect reductions in revenues from those sources.)

One rationale for imposing an excise tax on freight transport is that it would promote economic efficiency. Freight transport imposes “external costs” on society, including pavement damage, congestion, accidents, and emissions of air pollutants. Existing taxes on fuel better target emissions than do taxes on miles traveled, but they do not cover the other external costs that freight transport imposes on society. A tax on transport distance would address some of those costs (pavement damage, accidents, and congestion) more directly than increasing the existing fuel tax. The higher tax rate on truck transport reflects the fact that estimates of the external costs imposed by trucks are greater than estimates of those costs for rail. Although the higher rate would induce some shippers to shift some of their freight business from truck to rail, that effect would be small; most companies that ship by truck prefer that mode of transport over rail to a sufficient degree that the difference in tax rates would not alter their choice.

A second rationale is that the tax would create a source of revenue that could be used to lower other taxes, reduce the deficit, or finance public infrastructure projects that

1. See Congressional Budget Office, *Updated Budget Projections: 2016 to 2026* (March 2016), www.cbo.gov/publication/51384.

would facilitate the transport of freight. Such projects—which could include building additional transfer stations (where intermodal shipping containers can be shifted between truck and rail), dedicated highway truck lanes, grade separations (bridges and tunnels that keep rail and vehicular traffic apart at intersections), and bypasses to route trucks around crowded sections of highway—would ease traffic congestion and accommodate expected future growth in shipping. Traditionally, infrastructure projects have been funded out of transport tax revenues, but the current taxes on trucks and diesel fuel, which are credited to the Highway Trust Fund, do not provide enough revenue to finance such projects while also building and maintaining federal highways. The trust fund receives no revenue from rail freight transport.

An argument against this option is that it would be costly to administer. It would require that carriers report their miles traveled and that systems be developed to collect the taxes and audit the reported distances. Moreover, because fuel consumption has some external costs that do not depend on miles traveled, economic efficiency would still require taxes on motor fuels even if other fees were assessed at their efficient levels.

Another argument against this option is that it would apply the same tax rate to cargo of all weights, even though external costs tend to be greater for heavier cargo. The tax based on miles traveled would encourage shippers and carriers to maximize the weight per shipment. The tax would also encourage some shifting of truck freight to smaller Class 6 trucks to avoid the tax. Those effects would be constrained by statutory weight limits on roadways and bridges and by the capacities of truck trailers and railcars. An alternative would be to base the tax on weight and distance, but such an approach would be costlier to administer because it would require information on the weight of every shipment.

An additional argument against this option is that the tax would probably be passed on to consumers through increases in the price of final goods. For many types of goods, the price increase would be relatively small because freight transport accounts for less than 5 percent of the cost of the merchandise. For some bulk commodities such as coal, however, the transport cost share is substantially higher, which would cause the tax to have a larger impact on final prices.

RELATED OPTION: Revenues, Option 36

RELATED CBO PUBLICATIONS: David Austin, *Pricing Freight Transport to Account for External Costs*, Working Paper 2015-03 (March 2015), www.cbo.gov/publication/50049; *Alternative Approaches to Funding Highways* (March 2011), www.cbo.gov/publication/22059; *Spending and Funding for Highways* (January 2011), www.cbo.gov/publication/22003; *Using Pricing to Reduce Traffic Congestion* (March 2009), www.cbo.gov/publication/20241

Revenues—Option 38

Increase All Taxes on Alcoholic Beverages to \$16 per Proof Gallon

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	5.2	7.0	7.0	7.1	7.2	7.2	7.3	7.4	7.5	7.5	33.5	70.4

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2017.

In 2015, the federal government collected \$9.9 billion in revenue from excise taxes on distilled spirits, beer, and wine. Different alcoholic beverages are taxed at different rates. Specifically, the alcohol content of beer and wine is taxed at a much lower rate than the alcohol content of distilled spirits in part because the taxes are determined on the basis of different liquid measures. Distilled spirits are measured in proof gallons, which denote a liquid gallon that is 50 percent alcohol by volume. The current excise tax levied on those spirits, \$13.50 per proof gallon, translates to about 21 cents per ounce of pure alcohol. Beer, by contrast, is measured by the barrel, and the current tax rate of \$18 per barrel translates to about 10 cents per ounce of pure alcohol (under the assumption that the alcohol content of the beer is 4.5 percent). The current levy on table wine is \$1.07 per gallon, or about 6 cents per ounce of pure alcohol (assuming an alcohol content of 13 percent). Wines with high volumes of alcohol, and sparkling wines, face a higher tax per gallon. Last raised in 1991, current excise tax rates on alcohol are far lower than historical levels when adjusted to include the effects of inflation. Additionally, there is currently a tax credit that lowers the effective per-gallon tax rate for small quantities of beer and nonsparkling wine for certain small producers and there is an exemption from tax for small volumes of beer and wine that are for personal or family use. States and some municipalities also tax alcohol; those rates vary substantially and sometimes exceed federal rates.

This option would standardize the base on which the federal excise tax is levied by using the proof gallon as the measure for all alcoholic beverages. The tax would be raised to \$16 per proof gallon, thus increasing revenues by \$70 billion over the 2017–2026 period, the staff of the Joint Committee on Taxation estimates. (Because excise taxes reduce producers' and consumers' income, higher excise taxes would lead to reductions in revenue from income and payroll taxes. The estimates shown here

reflect those reductions.) This option would also eliminate the small producer tax credits and the exemptions for personal use, thus making the tax rate equal across all producers and quantities of alcohol.

A tax of \$16 per proof gallon would equal about 25 cents per ounce of alcohol. Under this option, the federal excise tax on a 750-milliliter bottle (commonly referred to as a fifth) of distilled spirits would rise from about \$2.14 to \$2.54. The tax on a six-pack of beer at 4.5 percent alcohol by volume would jump from about 33 cents to 81 cents, and the tax on a 750-milliliter bottle of wine with 13 percent alcohol by volume would increase from about 21 cents to 82 cents.

Experts agree that the consumption of alcohol creates costs for society that are not reflected in the before-tax price of alcoholic beverages. Examples of those "external costs" include spending on health care that is related to alcohol consumption and covered by the public, losses in productivity stemming from alcohol consumption that are borne by others besides the consumer, and the loss of lives and property that results from alcohol-related accidents and crime.

One argument in favor of raising excise taxes on alcoholic beverages is that they would reduce alcohol use—and thus the external costs of that use—and make consumers of alcoholic beverages pay a larger share of such costs. Research has consistently shown that higher prices lead to less alcohol consumption, even among heavy drinkers.

Moreover, raising excise taxes to reduce consumption might be desirable, regardless of the effect on external costs, if lawmakers believed that consumers underestimated the harm they do to themselves by drinking. Heavy drinking is known to cause organ damage and cognitive impairment; and the links between highway accidents and drinking, which are especially strong

among the young, are well-documented. Substantial evidence also indicates that the use of alcohol from an early age can lead to heavy consumption later in life. When deciding how much to drink, people—particularly young people—may not adequately consider such long-term risks to their health. However, many other choices that people make—for example, to consume certain types of food or engage in risky sports—can also lead to health damage, and those activities are not taxed.

An increase in taxes on alcoholic beverages would have disadvantages as well. It would make a tax that is already regressive—one that takes up a greater percentage of income for low-income families than for middle- and upper-income families—even more so. In addition,

it would affect not only problem drinkers but also drinkers who imposed no costs on society and who thus would be unduly penalized. Furthermore, higher taxes would reduce consumption by some moderate drinkers whose intake of alcohol is believed to have health benefits. (Moderate alcohol consumption, particularly of wine, has been linked to lower incidence of heart disease, obesity, and stroke and to increases in life expectancy.) In the longer term, changes in health and life expectancy resulting from reduced alcohol consumption would probably affect spending on federal health care, disability, and retirement programs. However, such changes in health and longevity go in opposite directions for moderate and heavy drinkers, so the direction and magnitude of changes in spending are uncertain.

RELATED OPTION: Health, Option 17

RELATED CBO PUBLICATION: *Raising the Excise Tax on Cigarettes: Effects on Health and the Federal Budget* (June 2012), www.cbo.gov/publication/43319

Revenues—Option 39

Impose a 5 Percent Value-Added Tax

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total		
											2017–2021	2017–2026	
Change in Revenues													
Broad base	0	180	270	280	290	300	320	330	340	350		1,030	2,670
Narrow base	0	110	180	190	190	200	210	220	230	240		670	1,770

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2018.

A value-added tax (VAT) is a type of consumption tax that is levied on the incremental increase in value of a good or service. The tax is collected at each stage of the production process and passed on until the full tax is paid by the final consumer. Although the United States does not have a broad, consumption-based tax, federal excise taxes are imposed on the purchase of several goods (gasoline, alcohol, and cigarettes, for example). In addition, most states impose sales taxes, which, unlike a VAT, are levied on the total value of goods and services purchased.

More than 140 countries—including all members of the Organisation for Economic Co-operation and Development (OECD), except for the United States—have adopted VATs. The tax bases and rate structures of VATs differ greatly among countries. Most European countries have implemented VATs that have a narrow tax base, with certain categories of goods and services—such as food, education, and health care—excluded from the tax base. In Australia and New Zealand, the VAT has a much broader tax base, with exclusions generally limited only to those goods and services for which it is difficult to determine a value. In 2016, the average national VAT rate for OECD countries was 19.2 percent, ranging from 5 percent in Canada to 27 percent in Hungary. All OECD countries that impose a VAT also collect revenues from taxes on individual and corporate income.

This option includes two different approaches that would impose a 5 percent VAT. Each of the approaches would become effective on January 1, 2018—a year later than most of the revenue options presented in this volume—to provide the Internal Revenue Service time to set up and administer the tax.

- The first approach would apply the VAT to a broad base that would include most goods and services.

Certain goods and services would be excluded from the base, because their value is difficult to measure. Those include financial services without explicit fees, existing housing services, primary and secondary education, and other services provided by government agencies and nonprofit organizations for little or no fee. (Existing housing services encompass the monetary rents paid by tenants and rents imputed to owners who reside in their own homes. Although existing housing services would be excluded under this alternative, the broad base would include all future consumption of housing services by taxing the purchase of new residential housing.) In addition, government-reimbursed expenditures for health care—primarily costs paid by Medicare and Medicaid—would also be excluded from the tax base under this approach. With those exclusions taken into account, the tax base would encompass approximately 65 percent of household consumption in 2018. This approach would increase revenues by \$2.7 trillion over the 2018–2026 period, the staff of the Joint Committee on Taxation (JCT) estimates. (Because a VAT, like excise taxes, reduces the tax base of income and payroll taxes, implementing such a tax would lead to reductions in revenues from those sources. The estimates shown here reflect those reductions.)

- Under the second approach, the VAT would apply to a narrower base. In addition to those items excluded under the broad base, the narrow base would exclude certain goods and services that are considered necessary for subsistence or that provide broad social benefits. Specifically, purchases of new residential housing, food purchased for home consumption, health care, and postsecondary education would be excluded from the tax base. With those exclusions taken into account,

the tax base would include about 46 percent of household consumption in 2018. This approach would increase revenues by \$1.8 trillion over the 2018–2026 period, according to JCT’s estimates.

Both approaches would employ the “credit-invoice method,” which is the most common method used by other countries to administer a VAT. That method would tax the total value of a business’s sales of a particular product or service, and the business would claim a credit for the taxes paid on the purchased inputs—such as materials and equipment—it used to make the product or provide the service. With a credit-invoice method, goods and services could be either “zero-rated” or “exempt” from the VAT; in both cases, the VAT would not apply to purchased items. If the purchased item was zero-rated, however, the seller would be able to claim a credit for the VAT that had been paid on the production inputs. In contrast, if the purchased item was exempted, the seller would not be able to claim a credit for the VAT paid on the production inputs.

Under both variants, primary and secondary education and other noncommercial services provided by government or nonprofit organizations for little or no fee would be zero-rated, and financial services and existing housing services would be exempt from the VAT. In addition, under the option with the narrow base, food purchased for home consumption, new housing services, health care, and postsecondary education would be zero-rated.

One argument in favor of the option is that it would raise revenues without discouraging saving and investment by taxpayers. In any given period, income can be either consumed or saved. Through exclusions, deductions, and credits, the individual tax system provides incentives that encourage saving, but those types of preferences do not apply to all methods of saving and increase the complexity of the tax system. In contrast to a tax levied on income, a VAT applies only to the amount of income consumed and therefore would not discourage private saving and investment in the economy.

A drawback of the option is that it would require the federal government to establish a new system to monitor compliance and collect the tax. As with any new tax, a VAT would impose additional administrative costs on the federal government and additional compliance costs on businesses. A study conducted by the Government Accountability Office in 2008 showed that all of the

countries evaluated in the study—Australia, Canada, France, New Zealand, and the United Kingdom—devoted significant resources to addressing and enforcing compliance.¹ Because such compliance costs are typically more burdensome for smaller businesses, many countries exempt some small businesses from the VAT.

Another argument against implementing a VAT is that, as specified under both alternatives in this option, it would probably be regressive—that is, it would be more burdensome for individuals and families with fewer economic resources than it would be for individuals and families with more economic resources. The regressivity of a VAT, however, depends significantly on how its effects are measured. Furthermore, there are ways to design a VAT—or implement complementary policies—that could ameliorate distributional concerns.

If the burden of a VAT was measured as a share of annual income, the tax would be regressive, primarily because lower-income families generally consume a greater share of their income than higher-income families do. If, however, the burden of a VAT was measured over a much longer period, the tax would appear to be less regressive than if the burden was measured in a single year. For example, the burden of a VAT relative to a measure of lifetime income—which would account for both life-cycle income patterns and temporary fluctuations in annual income—would be less regressive than the burden of a VAT relative to a measure of annual income that does not account for those patterns and anomalies. Furthermore, in the initial year, the distributional effects of a VAT would depend on its impact on consumer prices. Adopting a VAT would probably cause an initial jump in the consumer price index, which would be based on prices that would reflect the new consumption tax. That initial price increase would be equivalent to a onetime implicit tax on existing wealth because of the immediate reduction in purchasing power. To the extent that wealth and annual income are positively correlated, the distributional effects of a VAT in the initial year—if measured relative to annual income—would be less regressive than in subsequent years because of the onetime increase in price levels.

1. See Government Accountability Office, *Value-Added Taxes: Lessons Learned From Other Countries on Compliance Risks, Administrative Costs, Compliance Burden, and Transition*, GAO-08-566 (April 2008), www.gao.gov/products/GAO-08-566.

One way to make a VAT less regressive would be to exclude from the tax base certain basic goods and services—just as the narrow-base alternative of this option does. Applying a VAT to that narrower tax base would be less regressive because low-income individuals and families spend a relatively larger share of their budgets on those basic goods and services than higher-income individuals and families do. (Alternatively, lower rates could be applied to such items.) Those preferences, however, generally would make the VAT more complex and would reduce revenues from the new tax. In addition, a VAT with a narrow base would distort economic decisions to a greater degree than would a VAT with a broader base. An alternative approach to offset the regressive impact of a VAT would be to increase or create additional exemptions or refundable credits under the federal income tax for low-income individuals and families. That approach, however, would add to the complexity of the individual income tax and reduce individual income tax revenues, offsetting some of the revenue gains from a VAT.

There are alternative forms of a broad-based consumption that would potentially be easier to implement or be

less regressive. A national retail sales tax, for example, would initially be easier to implement than a VAT. However, it would require the federal government to coordinate tax collection and administration with state and local governments. In addition, there are more incentives to underreport national retail sales taxes because they are collected only when the final user of the product makes a purchase, whereas a VAT is collected throughout the entire production chain. A cash-flow tax would be an alternative to a VAT that would be less regressive. A cash-flow tax applies to the difference between a business's cash receipts and cash payments, which would be equivalent to a consumption tax on income sources other than wages and salaries. Because consumption from wages and salaries would not be included in the tax base, a cash-flow tax would generally have a narrower base than a VAT and would be substantially less regressive than a VAT—and potentially progressive depending on how it was measured. Implementing a cash-flow tax would probably require modifications to the current corporate income tax system but would more easily incorporate the value of financial services in the tax base than a VAT.

RELATED CBO PUBLICATIONS: *Comparing Income and Consumption Tax Bases* (July 1997), www.cbo.gov/publication/10599; *The Economic Effects of Comprehensive Tax Reform* (July 1997), www.cbo.gov/publication/10355; testimony of Robert D. Reischauer, Director, before the Senate Committee on Energy and Natural Resources, *Effects of Energy Taxes and Value-Added Taxes (VAT)* (February 24, 1993), www.cbo.gov/publication/20834; *Distributional Effects of Substituting a Flat-Rate Income Tax and a Value-Added Tax for Current Federal Income, Payroll, and Excise Taxes* (April 1992), www.cbo.gov/publication/20766; *Effects of Adopting a Value-Added Tax* (February 1992), www.cbo.gov/publication/20769

Revenues—Option 40

Impose a Fee on Large Financial Institutions

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	5.2	10.4	10.4	10.4	10.4	10.3	10.4	10.4	10.3	10.3	46.7	98.3

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

This option would take effect in January 2017.

During the financial crisis that occurred between 2007 and 2009, the federal government provided substantial assistance to major financial institutions, effectively protecting many uninsured creditors from losses. Although most of that assistance was ultimately recovered, it could have resulted in great cost to taxpayers. That assistance reinforced investors’ perceptions that large financial firms are “too big to fail”—in other words, so important to the financial system and the broader economy that the firms’ creditors are likely to be protected by the government in the event of large losses.

In the wake of that crisis, legislators and regulators adopted a number of measures designed to prevent the failure of large, systemically important financial institutions and to resolve any future failures without putting taxpayers at risk. One of those measures provided the Federal Deposit Insurance Corporation (FDIC) with orderly liquidation authority. That authority is intended to allow the FDIC to quickly and efficiently settle the obligations of such institutions, which can include companies that control one or more banks (also known as bank holding companies) or firms that predominantly engage in lending, insurance, securities trading, or other financial activities. In the event that a large financial institution fails, the FDIC will be appointed to liquidate the company’s assets in an orderly manner and thus maintain critical operations of the failed institution in an effort to avoid consequences throughout the financial system.

Despite the new safeguards, if one or more large financial institutions were to fail, particularly during a period of broader economic distress, the FDIC might need to borrow funds from the Treasury to implement its orderly liquidation authority. The law mandates that those funds be repaid either through recoveries from the failed firm or through a future assessment on the surviving firms. As a result, individuals and businesses dealing with those firms could be affected by the costs of the assistance provided

to the financial system. For example, if a number of large firms failed and substantial cash infusions were needed to resolve those failures, the assessment required to repay the Treasury would have to be set at a very high amount. Under some circumstances, the surviving firms might not be able to pay that assessment without making significant changes to their operations or activities. Those changes could result in higher costs to borrowers and reduced access to credit at a time when the economy might be under significant stress.

Under this option, an annual fee would be imposed beginning in 2017 on financial institutions subject to the orderly liquidation authority—that is, bank holding companies (including foreign banks operating in the United States) with \$50 billion or more in total assets and nonbank financial companies designated by the Financial Stability Oversight Council for enhanced supervision by the Board of Governors of the Federal Reserve. The annual fee would be 0.15 percent of firms’ covered liabilities, defined primarily as total liabilities less deposits insured by the FDIC. Covered liabilities also include certain types of noncore capital and exclude certain reserves required for insurance policies. The sums collected would be deposited in an interest-bearing fund that would be available for the FDIC’s use when exercising its orderly liquidation authority. The outlays necessary to carry out the FDIC’s orderly liquidation authority are estimated to be the same under this option as under current law. If implemented on January 1, 2017, such a fee would generate revenues totaling \$103 billion from 2017 through 2026, the staff of the Joint Committee on Taxation estimates. (Such a fee would reduce the tax base of income and payroll taxes, leading to reductions in income and payroll tax revenues. The estimates shown here reflect those reductions.)

In its current-law baseline projections for the 2017–2026 period, the Congressional Budget Office accounted for

the probability that the orderly liquidation authority would have to be used and that an assessment would have to be levied on surviving firms to cover some of the government's costs. Net proceeds from such assessments are projected to total roughly \$5 billion over the next decade. Under the option, CBO expects that the receipts from the fee would provide a significant source of funds for the FDIC to carry out its orderly liquidation authority and thus reduce the likelihood that an assessment would be needed during the coming decade. Therefore, to determine the net effect on revenues, CBO subtracted \$5 billion in projected assessments under current law from the amount the new fee is projected to generate (\$103 billion), yielding net additional revenues of \$98 billion from 2017 through 2026.

At 0.15 percent, the fee would probably not be so high as to cause financial institutions to significantly change their financial structure or activities. The fee could nevertheless affect institutions' tendency to take various business risks, but the net direction of that effect is uncertain; in some ways, it would encourage greater risk-taking, and in other ways, less risk-taking. One approach might be to vary the amount of the fee so that it reflected the risk posed by each institution, but it might be difficult to assess that risk precisely.

The main advantage of this option is that it would help defray the economic costs of providing a financial safety net by generating revenues when the economy is not in a financial crisis, rather than in the immediate aftermath of one. Another advantage of the option is that it would provide an incentive for banks to keep assets below the \$50 billion threshold, diminishing the risk of spillover effects to the broader economy from a future failure of a particularly large institution (although at the expense of potential economies of scale). Alternatively, if larger financial institutions reduced their dependence on liabilities subject to the fee and increased their reliance on equity, their vulnerability to future losses would be reduced. The fee also would improve the relative competitive position of small and medium-sized banks by charging the largest institutions for the greater government protection they receive.

The option would also have two main disadvantages. Unless the fee was risk-based, stronger financial institutions that posed less systemic risk—and consequently paid lower interest rates on their debt as a result of their lower risk of default—would face a proportionally greater increase in funding costs than would weaker financial institutions. In addition, the fee could reduce the profitability of larger institutions, which might create an incentive for them to take greater risks in pursuit of higher returns to offset their higher costs.

RELATED OPTION: Revenues, Option 41

RELATED CBO PUBLICATIONS: *The Budgetary Impact and Subsidy Costs of the Federal Reserve's Actions During the Financial Crisis* (May 2010), www.cbo.gov/publication/21491; letter to the Honorable Charles E. Grassley providing information on the President's proposal for a financial crisis responsibility fee (March 4, 2010), www.cbo.gov/publication/21020

Revenues—Option 41

Impose a Tax on Financial Transactions

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	-53.6	13.3	62.9	85.0	92.6	95.9	98.7	101.3	104.1	106.9	200.3	707.3

Source: Staff of the Joint Committee on Taxation.

This option would take effect in January 2018.

The United States is home to large financial markets, with hundreds of billions of dollars in stocks and bonds—collectively referred to as securities—traded on a typical business day. The total dollar value, or market capitalization, of U.S. stocks was roughly \$23 trillion in March 2016, and about \$265 billion in shares is traded on a typical day. The value of outstanding bond market debt was about \$40 trillion at the end of 2015, and average trading volume in debt, concentrated mostly in Treasury securities, amounts to over \$700 billion on a typical day. In addition, large volumes of derivatives—contracts that derive their value from another security or commodity and include options, forwards, futures, and swaps—are traded on U.S. financial markets every business day. None of those transactions are taxed in the United States, although most taxpayers who sell securities for more than they paid for them owe tax on their gains.

This option would impose a tax on the purchase of most securities and on transactions involving derivatives. For purchases of stocks, bonds, and other debt obligations, the tax generally would be 0.10 percent of the value of the security. For purchases of derivatives contracts, the tax would be 0.10 percent of all payments actually made under the terms of the contract, including the price paid when the contract was written, any periodic payments, and any amount to be paid when the contract expires. Trading costs for institutional investors tend to be very low—in many cases less than 0.10 percent of the value of the securities traded—so this option would generate a notable increase in trading costs for those investors.

The tax would not apply to the initial issuance of stock or debt securities, transactions in debt obligations with fixed maturities of no more than 100 days, or currency transactions (although transactions involving currency derivatives would be taxed). The tax would be imposed on transactions that occurred within the United States and on transactions that took place outside of the country, as

long as any party to an offshore transaction was a U.S. taxpayer (whether a corporation, partnership, citizen, or resident). The tax would apply to transactions occurring after December 31, 2017. This option would be effective a year later than nearly all of the other revenue options analyzed in this report to provide the government and firms sufficient time to develop and implement the new reporting systems that would be necessary to accurately collect the tax.

The tax would increase revenues by \$707 billion from 2017 through 2026, according to estimates by the staff of the Joint Committee on Taxation (JCT). The option would result in a revenue loss in 2017 because the transaction tax would lower the value of financial assets and thus lower capital gains. JCT assumes that, until 2020, when all reporting systems are expected to be in place, financial transactions will be underreported. Revenues would be lower if implementation of the option was phased in because of delays in developing the new reporting systems. (Because a financial transaction tax would reduce the tax base of income and payroll taxes, it would lead to reductions in revenues from those sources. The estimates shown here reflect those reductions.) The additional revenues generated by the option would depend significantly on the extent to which transactions subject to the tax fell in response to the policy.

One argument in favor of a tax on financial transactions is that it would significantly reduce the amount of short-term speculation and computer-assisted high-frequency trading that currently takes place and direct the resources dedicated to those activities to more productive uses. Speculation can destabilize markets and lead to disruptive events, such as the October 1987 stock market crash and the more recent “flash crash” that occurred when the stock market temporarily plunged on May 6, 2010. Although neither of those events had significant effects

on the general economy, the potential exists for negative spillovers from future events.

A disadvantage of the option is that the tax would discourage all short-term trading, not just speculation—including some transactions by well-informed traders and transactions that stabilize markets. Empirical evidence suggests that, on balance, a transaction tax could make asset prices less stable: In particular, a number of studies have concluded that higher transaction costs lead to more, rather than less, volatility in prices. (However, much of that evidence is from studies conducted before the rise of high-frequency trading programs, which now account for a significant share of trading in the stock market.)

The tax could also have a number of negative effects on the economy stemming from its effects on asset prices and the frequency of trading. Traders and investors would seek to recoup the cost of trading by raising the return they require on financial assets, thereby lowering the value of those assets. However, because the tax would be small relative to the returns that investors with long-term horizons could earn, the effect on asset prices would be partly mitigated when traders and investors reduced the

frequency of their trading, which would have a trade-off in terms of lowering liquidity and reducing the amount of information reflected in prices. Consequently, investment could decline (leaving aside the positive effects of higher tax revenues lowering federal borrowing and thus increasing the funds available for investment) because of the following: the increase in the cost of issuing debt and equity securities that would be subject to the tax and the potential negative effects on derivatives trading that could make it more difficult to efficiently distribute risk in the economy. The cost to the Treasury of issuing federal debt would increase (again, leaving aside the effects of deficit reduction) because of the increase in trading costs and the reduction in liquidity. Household wealth would decline with the reduction in asset prices, which would lower consumption.

In addition, traders would have an incentive to reduce the tax they must pay either by developing alternative instruments not subject to the tax or by moving their trading out of the country (although offshore trades by U.S. taxpayers would be taxed). Such effects would be mitigated if other countries enacted financial transaction taxes; currently, many members of the European Union are considering implementing such a tax.

RELATED OPTIONS: Revenues, Options 3, 40

RELATED CBO PUBLICATION: Letter to the Honorable Orrin G. Hatch responding to questions about the effects of a tax on financial transactions that would be imposed by the Wall Street Trading and Speculators Tax Act, H.R. 3313 or S. 1787 (December 12, 2011), www.cbo.gov/publication/42690

Revenues—Option 42

Impose a Tax on Emissions of Greenhouse Gases

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	57.4	90.3	93.6	96.5	98.6	101.3	104.6	108.1	111.5	115.2	436.5	977.2

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

This option would take effect in January 2017.

Many estimates suggest that the effect of climate change on the nation's economic output, and hence on federal tax revenues, will probably be small over the next 30 years and larger, but still modest, in later years.¹ Nonetheless, significant uncertainty surrounds those estimates. The accumulation of greenhouse gases (GHG) in the atmosphere—particularly carbon dioxide (CO₂), which is released when fossil fuels (such as coal, oil, and natural gas) are burned, and as a result of deforestation—could generate damaging and costly changes in the climate around the world. Although the consequences of those changes are highly uncertain and would probably vary widely across the United States and the rest of the world, many scientists think there is at least some risk that large changes in global temperatures will trigger catastrophic damage. Among the less uncertain effects of climate change on humans, some would be positive, such as fewer deaths from cold weather and improvements in agricultural productivity in certain areas; however, others would be negative, such as the loss of property from storm surges as sea levels rise and declines in the availability of fresh water in areas dependent on snowmelt. Many scientists agree that reducing global emissions of greenhouse gases would decrease the extent of climate change and the expected costs and risks associated with it. The federal government regulates some of those emissions but does not directly tax them.

This option would place a tax of \$25 per metric ton on most emissions of greenhouse gases in the United States—specifically, on most energy-related emissions of CO₂ (for example, from electricity generation, manufacturing, and transportation) and some other GHG emissions from large manufacturing facilities. Emissions would be measured in CO₂ equivalents (CO₂e), which

reflect the amount of carbon dioxide estimated to cause an equivalent amount of warming. The tax would increase at an annual real (inflation-adjusted) rate of 2 percent. During the first decade the tax was in effect, the Congressional Budget Office estimates, cumulative emissions from sources subject to the tax would fall by roughly 9 percent.

According to estimates by the staff of the Joint Committee on Taxation and CBO, federal revenues would increase by \$977 billion between 2017 and 2026. (The tax would increase businesses' costs, which would reduce the tax bases for income and payroll taxes. The estimates shown here reflect the resulting reduction in revenues from those sources.)

The size of the tax used for these estimates was chosen for illustrative purposes, and policymakers who wanted to pursue this approach might prefer a smaller tax or a larger one. The appropriate size of a tax on GHG emissions, if one was adopted, would depend on the value of limiting emissions and their associated costs, the way in which the additional revenues were used, the effect on emissions overseas, and the additional benefits and costs that resulted from the tax.

One argument in support of the option is that it would reduce emissions of greenhouse gases at the lowest possible cost per ton of emissions because each ton would be subject to the same tax. That uniform treatment would increase the cost of producing and consuming goods and services in proportion to the amount of greenhouse gases emitted as a result of that production and consumption. Those higher production costs, and corresponding increases in prices for final goods and services, would create incentives for firms, households, governments, and other entities throughout the U.S. economy to undertake reductions of greenhouse gases that cost up to \$25 per metric ton of CO₂e to achieve. This approach would

1. Congressional Budget Office, *Potential Impacts of Climate Change in the United States* (May 2009), www.cbo.gov/publication/41180.

minimize the cost of achieving a given level of emissions because the tax would motivate reductions that cost less than \$25 per ton to achieve, but not those that would cost more than \$25 per ton. An alternative approach to reducing GHG emissions that is currently being pursued by the federal government is to issue regulations based on various provisions of the Clean Air Act (CAA). However, standards issued under the CAA (for example, specifying an emissions rate for a given plant or an energy-efficiency standard for a given product) would offer less flexibility than a tax and, therefore, would achieve any given amount of emission reductions at a higher cost to the economy than a uniform tax that was applied to all sectors of the economy.

Another argument in favor of a GHG tax is that such a program could generate “co-benefits.” Co-benefits would occur when measures taken to reduce GHG emissions—such as generating electricity from natural gas rather than from coal—also reduced other pollutants not explicitly limited by the cap, thereby reducing the harmful effects estimated to be associated with those emissions. However, measures taken to decrease CO₂ emissions could also result in additional costs depending on how the emissions were reduced. For example, increased use of nuclear power could exacerbate potential problems created by the lack of adequate long-term storage capacity for nuclear waste.

An argument against a tax on GHG emissions is that curtailing U.S. emissions would burden the economy by raising the cost of producing emission-intensive goods and services while yielding benefits for U.S. residents of an uncertain magnitude. For example, most of the benefits of limiting emissions and any associated reductions in climate change might occur outside of the United States, particularly in developing countries that are at greater risk from changes in weather patterns and an increase in sea

levels. Another argument against this option is that reductions in domestic emissions could be partially offset by increases in emissions overseas if carbon-intensive industries relocated to countries that did not impose restrictions on emissions or if U.S. reductions in energy consumption led to decreases in fuel prices outside of the United States. More generally, averting the risk of future damage caused by emissions would depend on collective global efforts to cut emissions. Most analysts agree that if other countries with high levels of emissions do not cut those pollutants substantially, reductions in emissions in this country would produce only small changes in the climate (although such reductions would still diminish the probability of catastrophic damage).

An alternative approach for reducing emissions of greenhouse gases would be to establish a cap-and-trade program that set caps on such emissions in the United States. Under such a program, allowances that conveyed the right to emit 1 metric ton of CO₂e apiece would be sold at open auction, and the cap would probably be lowered over time. If the caps were set to achieve the same cut in emissions that was anticipated from the tax, then the program would be expected to raise roughly the same amount of revenues between 2017 and 2026 as the tax analyzed here. Both a tax on GHG emissions and a cap-and-trade program for those emissions would represent market-based approaches to cutting emissions and would achieve any desired amount of emission reduction at a lower cost than the regulatory approach described above. In contrast with a tax, a cap-and-trade program would provide certainty about the quantity of emissions from sources that are subject to the cap (because it would directly limit those emissions), but it would not provide certainty about the costs that firms and households would face for the greenhouse gases that they continued to emit.

RELATED CBO PUBLICATIONS: *Effects of a Carbon Tax on the Economy and the Environment* (May 2013), www.cbo.gov/publication/44223; *How Policies to Reduce Greenhouse Gas Emissions Could Affect Employment* (May 2010), www.cbo.gov/publication/41257; *The Costs of Reducing Greenhouse-Gas Emissions* (November 2009), www.cbo.gov/publication/20933; Testimony of Douglas W. Elmendorf, Director, before the Senate Committee on Energy and Natural Resources, *The Economic Effects of Legislation to Reduce Greenhouse-Gas Emissions* (October 14, 2009), www.cbo.gov/publication/41254; *Potential Impacts of Climate Change in the United States* (May 2009), www.cbo.gov/publication/41180

Revenues—Option 43

Increase Federal Civilian Employees’ Contributions to the Federal Employees Retirement System

Billions of Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
											2017–2021	2017–2026
Change in Revenues	1.5	3.0	4.4	5.9	5.8	5.7	5.6	5.5	5.3	5.2	20.6	47.9

This option would take effect in January 2017.

The federal government provides most of its civilian employees with a defined benefit retirement plan, in the form of an annuity, through the Federal Employees Retirement System (FERS) or its predecessor, the Civil Service Retirement System. Those annuities are jointly funded by the employees and the federal agencies that hire them. Over 90 percent of federal employees participate in FERS, and most of them contribute 0.8 percent of their salary toward their future annuity. Those contributions are withheld from employees’ after-tax income—that is, the contributions are subject to income and payroll taxes. The contribution rates for most employees hired since 2012, however, are much higher. First, the Middle Class Tax Relief and Job Creation Act of 2012 increased the contribution rate to 3.1 percent for most employees hired after December 31, 2012. Then, the Bipartisan Budget Act of 2013 increased the contribution rate further to 4.4 percent for most employees hired after December 31, 2013. Agency contributions to FERS do not have any effect on total federal spending or revenues because they are intragovernmental payments, but employee contributions are counted as federal revenues. Annuity payments made to FERS beneficiaries represent federal spending.

Under this option, most employees enrolled in FERS would contribute 4.4 percent of their salary toward their retirement annuity. The contribution rate would increase by 3.6 percentage points for employees who enrolled in FERS before 2013 and by 1.3 percentage points for employees who enrolled in FERS in 2013. The increased contribution rates would be phased in over the next four years. The dollar amount of future annuities would not change under the option, and the option would not affect employees hired in 2014 or later who already make or will make the larger contributions under the Bipartisan Budget Act. If implemented, the option would increase federal revenues by \$48 billion from 2017 through 2026, the Congressional Budget Office estimates. Agency contributions would remain the same.

An argument in favor of this option is that retention rates probably would not fall much for most groups of federal employees. Federal employees receive, on average, substantially more total compensation—the sum of wages and benefits—than private-sector workers in similar occupations and with similar education and experience. In fact, a substantial number of private-sector employers no longer provide health insurance for their retirees or defined benefit retirement annuities, instead offering only defined contribution retirement plans that are less costly; in contrast, the federal government provides a defined benefit retirement plan, a defined contribution retirement plan, and health insurance in retirement. Therefore, even if federal employees hired before 2014 had to contribute somewhat more toward their annuity, their total compensation would, on average, still be higher than that available in the private sector. In addition, because this option would not change the compensation of federal employees hired after 2014, who are already contributing 4.4 percent of their salary toward their retirement annuity, the option would probably not further affect the quality of new recruits. Moreover, that is an advantage because recruits hired after 2014 are typically younger than other workers, and younger workers are particularly susceptible to competition from the private sector where their compensation is generally more favorable.

An argument against this option is that retention rates would probably fall substantially among the most experienced and highly qualified federal employees. Employees who have served long enough to be eligible for a FERS annuity immediately upon leaving the federal workforce are forgoing annuity payments by remaining in federal service. Many of those employees might choose to retire instead of making larger contributions to the annuity on top of forgoing payments. Also, some highly qualified federal employees have more lucrative job opportunities in the private sector than in the federal government, in part because private-sector salaries have grown faster than

federal salaries since 2010. More of those employees would leave for the private sector under this option.

The option would also further accentuate the difference in the timing of compensation provided by the federal government and the private sector. Because many private-sector employers no longer provide health insurance for their retirees or defined benefit retirement annuities, a significantly greater share of total compensation in the private sector is paid to workers immediately, whereas federal employees receive a larger portion of their compensation in retirement. If that shift by private firms

indicates that workers prefer to receive more of their compensation right away, then shifting federal compensation in the opposite direction—which this option would do by reducing current compensation while maintaining retirement benefits—would be detrimental to the retention of federal employees. If lawmakers wanted to reduce the total compensation of federal employees while maintaining or increasing the share of that compensation provided immediately, they could consider modifying the formula used to calculate federal annuities (see Mandatory Spending, Option 12, in this report) or making other changes to salaries and benefits.

RELATED OPTION: Mandatory Spending, Option 12

RELATED CBO PUBLICATIONS: *Comparing the Compensation of Federal and Private-Sector Employees* (January 2012), www.cbo.gov/publication/42921; Justin Falk, *Comparing Benefits and Total Compensation in the Federal Government and the Private Sector*, Working Paper 2012-04 (January 2012), www.cbo.gov/publication/42923