THE TAX REFORM TRADE-OFF: ELIMINATING TAX EXPENDITURES, REDUCING RATES (PART 2)

TPC Staff
November 15, 2017

ABSTRACT

In Part 1 of this exercise, TPC estimated the revenue and distributional effects of proposals that would eliminate almost all income tax expenditures to lower individual and corporate tax rates and maintain long-run revenue neutrality for the Federal tax system. The results of Part 1 showed that individual and corporate income tax rates could be substantially reduced while meeting the dual constraints of long-run revenue neutrality and maintaining the distributional consequences of the current tax system.

Part 2 of this exercise restores several tax expenditures and calculates the income tax rates necessary to maintain long-run revenue neutrality. This portion of the exercise illustrates a drawback of considering tax expenditures in isolation: that approach ignores interaction effects between tax expenditures.

This analysis was supported by the Peter G. Peterson Foundation. We are grateful to them and to all our funders, who make it possible for TPC to advance its mission. The views expressed are those of the authors and should not be attributed to the Urban Institute, the Brookings Institution, or their funders.
OVERVIEW

The Urban-Brookings Tax Policy Center (TPC) analyzed a series of proposals to help illustrate how eliminating income tax expenditures could finance lower tax rates. To achieve long-run revenue neutrality (defined as raising the same revenue as under current law in FY 2037) and approximate distributional neutrality, the individual income tax schedule could be changed to include a zero bracket and rates of 5 percent, 16 percent, and 29.9 percent. The same type of exercise related to corporate tax expenditures could reduce the corporate income tax rate to 26 percent.

If specific tax expenditures were added back, income tax rates would have to be higher than the base case to maintain long-run revenue neutrality. To illustrate these effects, TPC did such calculations for the following tax expenditures or groups of individual income tax expenditures:

• itemized deduction for mortgage interest
• itemized deduction for state and local taxes
• tax expenditures for retirement
• tax expenditures for health

Addressing tax expenditures individually would affect the distribution across income levels because the benefits are not evenly taken by all taxpayers. In addition, interaction effects among the expenditures could further increase rates significantly. For example, restoring both the mortgage interest deduction and the state and local tax deduction would require the highest rate to be 0.7 percentage points higher than if these two deductions were separately restored.

On the corporate income tax side, if tax expenditures for research and experimentation were added back, the revenue-neutral corporate income tax rate would increase from 26 percent to 27.1 percent. The overall distribution of tax burdens would also shift somewhat.

ELIMINATE TAX EXPENDITURES WITH A REVENUE TARGET

The analysis starts by eliminating virtually all individual and corporate income tax expenditures except for three specific tax expenditures that benefit lower- and middle-income families: the earned income tax credit (EITC), the child tax credit (CTC), and the partial income exclusion for social security benefits. Specifically, the exercise

a) repeals the individual alternative minimum tax (AMT), the net investment income tax, the personal exemption phase-out, and the limitation on itemized deductions;
b) lowers individual income tax rates;
c) collapses the number of individual income tax brackets from seven to three; 
d) eliminates all individual income tax expenditures except for the EITC, the CTC, and the 
   partial income exclusion for social security benefits; 
e) repeals the corporate AMT; 
f) lowers the corporate income tax rate; 
g) eliminates virtually all corporate and business tax expenditures; and 
h) adopts a territorial system (with provisions to prevent income shifting) for the corporate 
   income tax.

TPC then calculated individual and corporate income tax rates so that the overall proposal 
would raise about the same amount of revenue as under current law in the long run (defined 
again as FY 2037).

TPC further modified the proposal by adding a fourth individual rate and adjusting 
individual rates and brackets to maintain, as closely as possible, the distribution of federal tax 
burdens under current law while achieving long-run revenue neutrality. Distributional neutrality 
is measured by the percentage changes in after-tax income across expanded cash income 
percentiles. The goal was to minimize those percentage changes while achieving rough revenue 
neutrality in FY 2037.

Revenue Effects

Revenue estimates are shown in table 1 for the analysis using individual income tax rates of 0 
percent, 5 percent, 16 percent, and 29.9 percent. This rate structure results in a very small 
revenue gain from individual income taxes in FY 2037, offset partially by a small revenue loss 
from the corporate income tax provisions (with a 26 percent corporate rate).
## TABLE 1
Estimated Effect on Revenue of Distribution and Revenue Neutral Proposal
$ billions, FY2018-2027 and FY2028-2037

<table>
<thead>
<tr>
<th>Provision</th>
<th>Fiscal Years 2018-2027</th>
<th>Fiscal Years 2028-2037</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individual income tax</td>
<td>Individual income tax</td>
</tr>
<tr>
<td>Repeal the individual AMT, NIIT, PEP, and &quot;Pease&quot;</td>
<td>-49.7</td>
<td>-69.3</td>
</tr>
<tr>
<td>Reduce individual rates to 0, 5, 16, and 29.9 percent</td>
<td>-508.6</td>
<td>-698.1</td>
</tr>
<tr>
<td>Repeal individual tax expenditures (except the CTC, EITC, and partial exclusion of SSB)</td>
<td>473.5</td>
<td>699.2</td>
</tr>
<tr>
<td>Total for individual income tax revenues</td>
<td>-84.9</td>
<td>-68.2</td>
</tr>
<tr>
<td>Corporate income tax</td>
<td>-6.4</td>
<td>-10.6</td>
</tr>
<tr>
<td>Reduce corporate rate to flat 26.0 percent</td>
<td>-48.7</td>
<td>-97.4</td>
</tr>
<tr>
<td>Territorial system plus minimum tax on foreign-source income earned after 12-31-17</td>
<td>2.1</td>
<td>4.0</td>
</tr>
<tr>
<td>Repeal corporate tax expenditures</td>
<td>52.7</td>
<td>108.7</td>
</tr>
<tr>
<td>Total for corporate income tax revenues</td>
<td>-0.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Total revenue effect of all provisions</td>
<td>-85.3</td>
<td>-63.5</td>
</tr>
</tbody>
</table>

Sources: Urban-Brookings Tax Policy Center (TPC) Microsimulation Model (version 0217-1) and TPC off-model estimates.
Notes: AMT = alternative minimum tax; CTC = child tax credit; EITC = earned income tax credit; NIIT = net investment income tax; PEP = personal exemption phaseout; "Pease" = limitation on itemized deductions; SSB = Social Security benefits.
**Distributional Effects**

The percentage change in after-tax income is 1 percent or less in all income percentiles (table 2) with these revenue-neutral rates, roughly maintaining the distribution of tax burdens under current law. The largest change is for households in the top 1 percent of the income distribution; after-tax income for these households would increase by 1 percent on average (for the top 0.1 percent, the increase would be only 0.1 percent). The lowest quintile of the income distribution would have the largest projected reduction in after-tax income, but that would be only -0.2 percent.

**TABLE 2**

Distribution of Federal Tax Change, Distribution and Revenue Neutral Proposal
By expanded cash income percentile, 2027

<table>
<thead>
<tr>
<th>Expanded cash income percentile</th>
<th>Percent change in after-tax income (%)</th>
<th>Share of total federal tax change (%)</th>
<th>Average federal tax change ($)</th>
<th>Average Federal Tax Rate*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Under the proposal (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowest quintile</td>
<td>-0.2</td>
<td>-2.7</td>
<td>40</td>
<td>0.2</td>
</tr>
<tr>
<td>Second quintile</td>
<td>0.4</td>
<td>10.5</td>
<td>-180</td>
<td>-0.4</td>
</tr>
<tr>
<td>Middle quintile</td>
<td>0.6</td>
<td>23.5</td>
<td>-470</td>
<td>-0.5</td>
</tr>
<tr>
<td>Fourth quintile</td>
<td>0.4</td>
<td>19.0</td>
<td>-460</td>
<td>-0.3</td>
</tr>
<tr>
<td>Top quintile</td>
<td>0.4</td>
<td>50.1</td>
<td>-1,420</td>
<td>-0.3</td>
</tr>
<tr>
<td>All</td>
<td>0.4</td>
<td>100.0</td>
<td>-390</td>
<td>-0.3</td>
</tr>
<tr>
<td>Addendum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80–90</td>
<td>-0.1</td>
<td>-3.4</td>
<td>190</td>
<td>0.1</td>
</tr>
<tr>
<td>90–95</td>
<td>0.2</td>
<td>4.7</td>
<td>-550</td>
<td>-0.2</td>
</tr>
<tr>
<td>95–99</td>
<td>0.4</td>
<td>10.7</td>
<td>-1,590</td>
<td>-0.3</td>
</tr>
<tr>
<td>Top 1 percent</td>
<td>1.0</td>
<td>38.1</td>
<td>-22,940</td>
<td>-0.6</td>
</tr>
<tr>
<td>Top 0.1 percent</td>
<td>0.1</td>
<td>1.9</td>
<td>-11,350</td>
<td>-0.1</td>
</tr>
</tbody>
</table>

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1).

**Note:** Number of AMT taxpayers (millions): Baseline: 5.6; Proposal: 0.

* Calendar year. Baseline is current law. Proposal would: repeal the Net Investment Income Tax (NIIT), individual and corporate alternative minimum tax (AMT), phase-out of personal exemptions, and Pease limitation on itemized deductions; set individual tax rates of 0 percent, 5 percent, 16 percent, and 29.9 percent; repeal individual income tax expenditures except the CTC, EITC, and partial exclusion of Social Security benefits; set corporate tax rate of 26 percent; implement territorial system plus minimum tax on foreign-source income; and repeal corporate tax expenditures.

http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm

* Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

* The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $28,100; 40% $54,700; 60% $93,200; 80% $154,900; 90% $225,400; 95% $304,600; 99% $912,100; 99.9% $5,088,900.

* After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

* Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.
Implications

Together, a corporate tax rate of 26 percent and individual income tax rates of 0 percent, 5 percent, 16 percent, and 29.9 percent simultaneously achieve near distributional neutrality and long-run revenue neutrality. This provides a reasonable baseline for adding tax expenditures back to the system, either separately or in groups.

RESTORE SELECTED GROUPS OF TAX EXPENDITURES

After creating a nearly tax expenditure–free baseline, TPC restored four groups of individual tax expenditures to the revenue- and distributional-neutral baseline:

- tax expenditures for retirement
- tax expenditures for health
- the itemized deduction for state and local taxes
- the itemized deduction for mortgage interest

TPC also restored the corporate tax expenditures for research and experimentation.3

To achieve revenue neutrality in FY 2037 when restoring each of the four groups of individual tax expenditures, the three non-zero individual income tax rates were adjusted upward proportionately. The lowest of the four rates is 0, so a different approach was required to adjust that rate upward as each group of tax expenditures was restored. Our approach was to multiply the proportional change in the top three rates by 15 percent (the second lowest rate under current law) to determine the lowest rate.4 This permits the lowest income tax rate to move up roughly in line with the other tax rates. In this exercise, the corporate tax rate was simply adjusted upward to achieve revenue neutrality in FY 2037, when the corporate tax expenditures for research and experimentation are added back to the starting baseline.

Revenue Effects

Revenue estimates for the restoration of all five groups of tax expenditures combined with the proportionately higher rates over the FY 2018–27 period are shown in table 3A and for the FY 2028–37 period in table 3B. Compared with current law, all five scenarios lose revenue over the FY 2018–27 period, raise revenue over the FY 2028–37 period, and have (modest) overall revenue gains over the FY 2018-37 period.

Table 3A also shows the individual income tax rates required for each hypothetical tax system to achieve long-run (FY 2037) revenue neutrality when compared with current law. For individual tax expenditures, the largest rate adjustments were needed when tax expenditures for retirement and health were added back.
### TABLE 3A

**Estimated Effect on Revenues of Restoring Selected Groups of Tax Expenditures**

$ billions, FY2018-2027

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 1: Tax Expenditures for Retirement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce individual rates to 1.3, 5.5, 17.6, and 32.9 percent</td>
<td>-439.6</td>
<td>-602.7</td>
<td>-625.7</td>
<td>-651.3</td>
<td>-678.2</td>
<td>-706.5</td>
<td>-735.9</td>
<td>-766.2</td>
<td>-797.4</td>
<td>-829.0</td>
<td>-6,832.4</td>
<td></td>
</tr>
<tr>
<td>Repeal individual tax expenditures (except retirement-related and the CTC, EITC, and partial exclusion of SSB)</td>
<td>408.9</td>
<td>611.5</td>
<td>656.6</td>
<td>694.5</td>
<td>728.5</td>
<td>765.0</td>
<td>804.4</td>
<td>845.9</td>
<td>889.3</td>
<td>933.9</td>
<td>7,338.5</td>
<td></td>
</tr>
<tr>
<td>Provisions unchanged from previous proposal</td>
<td>-50.2</td>
<td>-64.6</td>
<td>-77.8</td>
<td>-74.5</td>
<td>-77.5</td>
<td>-81.5</td>
<td>-77.8</td>
<td>-73.5</td>
<td>-70.3</td>
<td>-68.2</td>
<td>-715.8</td>
<td></td>
</tr>
<tr>
<td><strong>Total revenue change</strong></td>
<td>-80.9</td>
<td>-55.8</td>
<td>-46.9</td>
<td>-31.2</td>
<td>-27.1</td>
<td>-23.0</td>
<td>-9.2</td>
<td>6.3</td>
<td>21.6</td>
<td>36.6</td>
<td>-209.7</td>
<td></td>
</tr>
<tr>
<td><strong>Group 2: Tax Expenditures for Health</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce individual rates to 1.4, 5.5, 17.7, and 33.1 percent</td>
<td>-435.3</td>
<td>-596.7</td>
<td>-619.4</td>
<td>-644.7</td>
<td>-671.2</td>
<td>-728.1</td>
<td>-759.4</td>
<td>-796.6</td>
<td>-839.4</td>
<td>884.1</td>
<td>929.2</td>
<td>7,225.4</td>
</tr>
<tr>
<td>Repeal individual tax expenditures (except health-related and the CTC, EITC, and partial exclusion of SSB)</td>
<td>392.7</td>
<td>591.4</td>
<td>639.6</td>
<td>680.6</td>
<td>716.4</td>
<td>755.4</td>
<td>796.6</td>
<td>839.4</td>
<td>884.1</td>
<td>929.2</td>
<td>7,225.4</td>
<td></td>
</tr>
<tr>
<td>Provisions unchanged from previous proposal</td>
<td>-50.2</td>
<td>-64.6</td>
<td>-77.8</td>
<td>-74.5</td>
<td>-77.5</td>
<td>-81.5</td>
<td>-77.8</td>
<td>-73.5</td>
<td>-70.3</td>
<td>-68.2</td>
<td>-715.8</td>
<td></td>
</tr>
<tr>
<td><strong>Total revenue change</strong></td>
<td>-92.7</td>
<td>-69.8</td>
<td>-57.6</td>
<td>-38.6</td>
<td>-32.3</td>
<td>-25.4</td>
<td>-9.3</td>
<td>7.9</td>
<td>25.1</td>
<td>41.0</td>
<td>-251.8</td>
<td></td>
</tr>
<tr>
<td><strong>Group 3: Itemized Deduction for State and Local Taxes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce individual rates to 0.8, 5.3, 17, and 31.7 percent</td>
<td>-466.5</td>
<td>-639.8</td>
<td>-664.5</td>
<td>-692.1</td>
<td>-721.1</td>
<td>-751.7</td>
<td>-783.5</td>
<td>-816.5</td>
<td>-850.4</td>
<td>-884.7</td>
<td>-7,270.9</td>
<td></td>
</tr>
<tr>
<td>Repeal individual tax expenditures (except SALT and the CTC, EITC, and partial exclusion of SSB)</td>
<td>441.4</td>
<td>656.1</td>
<td>704.8</td>
<td>747.5</td>
<td>784.8</td>
<td>825.9</td>
<td>870.0</td>
<td>913.9</td>
<td>960.0</td>
<td>1,006.6</td>
<td>7,911.0</td>
<td></td>
</tr>
<tr>
<td>Provisions unchanged from previous proposal</td>
<td>-50.2</td>
<td>-64.6</td>
<td>-77.8</td>
<td>-74.5</td>
<td>-77.5</td>
<td>-81.5</td>
<td>-77.8</td>
<td>-73.5</td>
<td>-70.3</td>
<td>-68.2</td>
<td>-715.8</td>
<td></td>
</tr>
<tr>
<td><strong>Total revenue change</strong></td>
<td>-75.2</td>
<td>-48.3</td>
<td>-37.6</td>
<td>-19.0</td>
<td>-13.8</td>
<td>-7.3</td>
<td>8.7</td>
<td>23.9</td>
<td>39.3</td>
<td>53.6</td>
<td>-75.7</td>
<td></td>
</tr>
<tr>
<td><strong>Group 4: Itemized Deduction for Mortgage Interest</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce individual rates to 0.3, 5.1, 16.4, and 30.7 percent</td>
<td>-491.6</td>
<td>-674.6</td>
<td>-700.9</td>
<td>-730.2</td>
<td>-761.1</td>
<td>-793.8</td>
<td>-827.8</td>
<td>-863.1</td>
<td>-899.3</td>
<td>-936.1</td>
<td>-7,678.7</td>
<td></td>
</tr>
<tr>
<td>Repeal individual tax expenditures (except MID and the CTC, EITC, and partial exclusion of SSB)</td>
<td>465.9</td>
<td>687.1</td>
<td>735.6</td>
<td>775.9</td>
<td>819.4</td>
<td>862.6</td>
<td>908.3</td>
<td>955.2</td>
<td>1,004.3</td>
<td>1,053.8</td>
<td>8,271.7</td>
<td></td>
</tr>
<tr>
<td>Provisions unchanged from previous proposal</td>
<td>-50.2</td>
<td>-64.6</td>
<td>-77.8</td>
<td>-74.5</td>
<td>-77.5</td>
<td>-81.5</td>
<td>-77.8</td>
<td>-73.5</td>
<td>-70.3</td>
<td>-68.2</td>
<td>-715.8</td>
<td></td>
</tr>
<tr>
<td><strong>Total revenue change</strong></td>
<td>-75.9</td>
<td>-52.1</td>
<td>-43.1</td>
<td>-25.2</td>
<td>-19.3</td>
<td>-12.7</td>
<td>2.7</td>
<td>18.7</td>
<td>34.7</td>
<td>49.5</td>
<td>-122.8</td>
<td></td>
</tr>
<tr>
<td><strong>Corporate Tax Expenditures for R&amp;E2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce corporate rate to flat 27.1 percent</td>
<td>-42.8</td>
<td>-85.5</td>
<td>-102.4</td>
<td>-102.5</td>
<td>-104.1</td>
<td>-105.9</td>
<td>-109.1</td>
<td>-112.6</td>
<td>-116.7</td>
<td>-121.4</td>
<td>-1,002.9</td>
<td></td>
</tr>
<tr>
<td>Territorial system plus minimum tax on foreign-source income earned after 12-31-17</td>
<td>2.3</td>
<td>4.6</td>
<td>4.9</td>
<td>4.7</td>
<td>4.4</td>
<td>4.2</td>
<td>3.9</td>
<td>3.5</td>
<td>3.2</td>
<td>2.8</td>
<td>38.4</td>
<td></td>
</tr>
<tr>
<td>Repeal corporate tax expenditures (except R&amp;E-related)</td>
<td>34.5</td>
<td>75.5</td>
<td>95.1</td>
<td>111.1</td>
<td>121.2</td>
<td>129.9</td>
<td>143.5</td>
<td>160.6</td>
<td>175.2</td>
<td>189.7</td>
<td>1,238.0</td>
<td></td>
</tr>
<tr>
<td>Provisions unchanged from previous proposal</td>
<td>-91.3</td>
<td>-78.8</td>
<td>-66.0</td>
<td>-56.4</td>
<td>-51.5</td>
<td>-46.0</td>
<td>-40.5</td>
<td>-35.6</td>
<td>-29.4</td>
<td>-23.8</td>
<td>-519.3</td>
<td></td>
</tr>
<tr>
<td><strong>Total revenue change</strong></td>
<td>-97.2</td>
<td>-84.3</td>
<td>-68.3</td>
<td>-43.1</td>
<td>-30.0</td>
<td>-17.9</td>
<td>-0.5</td>
<td>16.0</td>
<td>32.2</td>
<td>47.3</td>
<td>-245.8</td>
<td></td>
</tr>
</tbody>
</table>

**Sources:** Urban-Brookings Tax Policy Center (TPC) Microsimulation Model (version 0217-1) and TPC off-model estimates.

**Notes:** AMT = alternative minimum tax; CTC = child tax credit; EITC = earned income tax credit; MID = itemized deduction for mortgage interest; NIIT = net investment income tax; PEP = personal exemption phaseout; “Pease” = limitation on itemized deductions; R&E = research and experimentation; SALT = itemized deduction for state and local taxes; SSB = Social Security benefits.

1. Includes the revenue effect of the repeal of the individual AMT, NIIT, PEP, and “Pease” and all corporate income tax provisions shown in Table 1.

2. Includes the research and experimentation credit and expensing of research and development costs.

3. Includes the revenue effect of the repeal of the corporate AMT and all individual income tax provisions shown in Table 1.
### TABLE 3B
Estimated Effect on Revenues of Restoring Selected Groups of Tax Expenditures
$ billions, FY2028-2037

<table>
<thead>
<tr>
<th>Provision</th>
<th>Fiscal Years 2018-2027</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2028</td>
</tr>
<tr>
<td><strong>Group 1: Tax Expenditures for Retirement</strong></td>
<td></td>
</tr>
<tr>
<td>Reduce individual rates to 1.3, 5.5, 17.6, and 32.9 percent</td>
<td>-862.3</td>
</tr>
<tr>
<td>Repeal individual tax expenditures (except retirement-related and the CTC, EITC, and partial exclusion of SSB)</td>
<td>979.3</td>
</tr>
<tr>
<td>Provisions unchanged from previous proposal</td>
<td>-71.7</td>
</tr>
<tr>
<td><strong>Total revenue change</strong></td>
<td>45.3</td>
</tr>
<tr>
<td><strong>Group 2: Tax Expenditures for Health</strong></td>
<td></td>
</tr>
<tr>
<td>Reduce individual rates to 1.4, 5.5, 17.7, and 33.1 percent</td>
<td>-852.7</td>
</tr>
<tr>
<td>Repeal individual tax expenditures (except health-related and the CTC, EITC, and partial exclusion of SSB)</td>
<td>975.6</td>
</tr>
<tr>
<td>Provisions unchanged from previous proposal</td>
<td>-71.7</td>
</tr>
<tr>
<td><strong>Total revenue change</strong></td>
<td>51.2</td>
</tr>
<tr>
<td><strong>Group 3: Itemized Deduction for State and Local Taxes</strong></td>
<td></td>
</tr>
<tr>
<td>Reduce individual rates to 0.8, 5.3, 17, and 31.7 percent</td>
<td>-920.9</td>
</tr>
<tr>
<td>Repeal individual tax expenditures (except SALT and the CTC, EITC, and partial exclusion of SSB)</td>
<td>1,054.3</td>
</tr>
<tr>
<td>Provisions unchanged from previous proposal</td>
<td>-71.7</td>
</tr>
<tr>
<td><strong>Total revenue change</strong></td>
<td>61.7</td>
</tr>
<tr>
<td><strong>Group 4: Itemized Deduction for Mortgage Interest</strong></td>
<td></td>
</tr>
<tr>
<td>Reduce individual rates to 0.3, 5.1, 16.4, and 30.7 percent</td>
<td>-974.9</td>
</tr>
<tr>
<td>Repeal individual tax expenditures (except MID and the CTC, EITC, and partial exclusion of SSB)</td>
<td>1,104.6</td>
</tr>
<tr>
<td>Provisions unchanged from previous proposal</td>
<td>-71.7</td>
</tr>
<tr>
<td><strong>Total revenue change</strong></td>
<td>58.0</td>
</tr>
<tr>
<td><strong>Corporate Tax Expenditures for R&amp;E</strong></td>
<td></td>
</tr>
<tr>
<td>Reduce corporate rate to flat 27.1 percent</td>
<td>-126.2</td>
</tr>
<tr>
<td>Territorial system plus minimum tax on foreign-source income earned after 12-31-17</td>
<td>2.4</td>
</tr>
<tr>
<td>Repeal corporate tax expenditures (except R&amp;E-related)</td>
<td>199.1</td>
</tr>
<tr>
<td>Provisions unchanged from previous proposal</td>
<td>-18.7</td>
</tr>
<tr>
<td><strong>Total revenue change</strong></td>
<td>56.5</td>
</tr>
</tbody>
</table>

Sources: Urban-Brookings Tax Policy Center (TPC) Microsimulation Model (version 0217-1) and TPC off-model estimates.

Notes: AMT = alternative minimum tax; CTC = child tax credit; EITC = earned income tax credit; MID = itemized deduction for mortgage interest; NIIT = net investment income tax; PEP = personal exemption phaseout; "Pease" = limitation on itemized deductions; R&E = research and experimentation; SALT = itemized deduction for state and local taxes; SSB = Social Security benefits.

1 Includes the revenue effect of the repeal of the individual AMT, NIIT, PEP, and "Pease" and all corporate income tax provisions shown in Table 1.
2 Includes the research and experimentation credit and expensing of research and development costs.
3 Includes the revenue effect of the repeal of the corporate AMT and all individual income tax provisions shown in Table 1.
Interaction Effects

In the previous step, each of the four groups of individual tax expenditures was restored separately and revenue-neutral tax rates computed. But the combined effect of these steps on individual income tax rates would be expected to be different if two or more groups were simultaneously restored. These differences are because of “interaction effects,” the way that some provisions of the tax code affect the way other provisions operate. The restoration of itemized deductions provides a good example of such interaction effects. Because most itemized deductions had been repealed under the original exercise, nearly all taxpayers would use the standard deduction. The amount of state and local taxes paid by most taxpayers is less than their standard deduction, so restoring just the deduction for state and local taxes would cause relatively few taxpayers to switch from claiming the standard deduction to itemization. Likewise, mortgage interest payments for most taxpayers are less than their standard deduction, so restoring just that deduction would not result in many itemizers. But the sum of state and local taxes and mortgage interest paid is larger than the standard deduction for many taxpayers for whom neither deduction alone exceeds the standard deduction amount, so restoring both deductions simultaneously would result in substantially more itemizers.

TPC produced an additional set of estimates to help quantify the importance of interaction effects. These estimates restored the itemized deductions for state and local taxes and mortgage interest simultaneously. We first calculated the change in individual income tax rates from this set of estimates, compared with the revenue- and distributionally neutral rates. Then we calculated the change in rates from the estimates for each of the two separate restorations of these groups from the revenue- and distributionally neutral rates. And then we added up those changes. The interaction effect is the difference between the changes from the simultaneous repeal set of estimates and the combined changes from the separate repeal sets of estimates. The results of these calculations (table 4) show fairly significant interaction effects between these two deductions. The interactions indicate that we must consider the potential relationship between tax expenditures in a tax reform effort, and not consider them in isolation. Ignoring interaction effects means the revenue consequences of the reform effort would be mis-estimated.
Distributional Effects

Distributional effects by expanded cash income percentile are shown for the restoration of

- retirement-related individual tax expenditures in table 5;
- health-related individual tax expenditures in table 6;
- itemized deduction for state and local taxes in table 7;
- itemized deduction for mortgage interest in table 8; and
- corporate tax expenditures for research and experimentation in table 9.

For the four groups of individual income tax expenditures, the tax rates for the
distributionally neutral scenario were proportionately adjusted when the tax expenditures were
restored. However, the tax expenditures being analyzed are not uniformly distributed across
income groups, so the changes shown in tables 5 through 8 are no longer distributionally neutral.
Similarly, the (single) corporate tax rate was adjusted when the research and experimentation
tax expenditures were restored, but these changes in the corporate tax base are not distributed
in the same manner as the increase in the corporate tax rate used to finance them, so the tax
changes in table 9 are also no longer distributionally neutral.8

These differential distributional results are summarized by cash income percentile in table
10, which shows the difference between the effects of restoration of each group on after-tax
income (relative to current law) and the effects of the distributionally neutral exercise on after-
tax income (relative to current law). Restoration of retirement-related expenditures, health-related expenditures, itemized deduction for mortgage interest, and corporate research and experimentation expenditures—with income tax rates proportionately adjusted to maintain revenue neutrality—would all shift tax burdens to high-income tax units (i.e., the after-tax incomes of higher-income households would decline). This effect is most pronounced for the tax expenditures for retirement and health, with people in the top 1 percent of the income distribution seeing relatively large increases in tax burden. This is because of the substantial upward shift in the top individual income tax rate necessary to offset the revenue loss (3 percentage points or more). This increased tax rate, though, applies to nearly all income for the household, while the restored tax expenditure is small relative to the size of household income. Conversely, restoration of the deduction for state and local taxes would shift tax burdens from high-income tax units to low- and middle-income units.
### TABLE 5
Distribution of Federal Tax Change, Restoration of Tax Expenditures for Retirement
By expanded cash income percentile, 2027

<table>
<thead>
<tr>
<th>Expanded cash income percentile</th>
<th>Percent change in after-tax income (%)</th>
<th>Share of total federal tax change (%)</th>
<th>Average federal tax change ($)</th>
<th>Average Federal Tax Rate&lt;sup&gt;e&lt;/sup&gt;</th>
<th>Change (% points)</th>
<th>Under the proposal (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest quintile</td>
<td>-0.2</td>
<td>-4.0</td>
<td>50</td>
<td>0.2</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Second quintile</td>
<td>0.5</td>
<td>15.6</td>
<td>-210</td>
<td>-0.4</td>
<td>8.4</td>
<td></td>
</tr>
<tr>
<td>Middle quintile</td>
<td>1.0</td>
<td>47.6</td>
<td>-740</td>
<td>-0.8</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>Fourth quintile</td>
<td>1.0</td>
<td>66.1</td>
<td>-1,260</td>
<td>-0.8</td>
<td>16.1</td>
<td></td>
</tr>
<tr>
<td>Top quintile</td>
<td>-0.2</td>
<td>-24.7</td>
<td>550</td>
<td>0.1</td>
<td>26.4</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>0.3</td>
<td>100.0</td>
<td>-310</td>
<td>-0.3</td>
<td>19.9</td>
<td></td>
</tr>
</tbody>
</table>

**Addendum**

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>80–90</td>
<td>0.7</td>
<td>29.7</td>
<td>-1,280</td>
<td>-0.6</td>
<td>19.2</td>
<td></td>
</tr>
<tr>
<td>90–95</td>
<td>1.4</td>
<td>38.5</td>
<td>-3,530</td>
<td>-1.1</td>
<td>20.8</td>
<td></td>
</tr>
<tr>
<td>95–99</td>
<td>0.8</td>
<td>30.2</td>
<td>-3,530</td>
<td>-0.6</td>
<td>24.9</td>
<td></td>
</tr>
<tr>
<td>Top 1 percent</td>
<td>-2.5</td>
<td>-123.2</td>
<td>58,430</td>
<td>1.6</td>
<td>35.1</td>
<td></td>
</tr>
<tr>
<td>Top 0.1 percent</td>
<td>-4.0</td>
<td>-89.0</td>
<td>419,450</td>
<td>2.6</td>
<td>36.5</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1).

**Note:** Number of AMT taxpayers (millions): Baseline: 5.6; Proposal: 0.

<sup>a</sup> Calendar year. Baseline is current law. Proposal would: repeal the Net Investment Income Tax (NIIT), individual and corporate alternative minimum tax (AMT), phase-out of personal exemptions, and Pease limitation on itemized deductions; set individual tax rates of 1.3 percent, 5.5 percent, 17.6 percent, and 32.9 percent; repeal individual income tax expenditures except those that are retirement-related and the CTC, EITC, and partial exclusion of Social Security benefits; set corporate tax rate of 26 percent; implement territorial system plus minimum tax on foreign-source income; and repeal corporate tax expenditures. [http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm](http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm)

<sup>b</sup> Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see [http://www.taxpolicycenter.org/TaxModel/income.cfm](http://www.taxpolicycenter.org/TaxModel/income.cfm)

<sup>c</sup> The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $28,100; 40% $54,700; 60% $93,200; 80% $154,900; 90% $225,400; 95% $304,600; 99% $912,100; 99.9% $5,088,900.

<sup>d</sup> After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

<sup>e</sup> Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.
**TABLE 6**

Distribution of Federal Tax Change, Restoration of Tax Expenditures for Health

By expanded cash income percentile, 2027

<table>
<thead>
<tr>
<th>Expanded cash income percentile b,c</th>
<th>Percent change in after-tax income (%) d</th>
<th>Share of total federal tax change (%)</th>
<th>Average federal tax change ($)</th>
<th>Average Federal Tax Rate e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest quintile</td>
<td>-0.3</td>
<td>-5.5</td>
<td>60</td>
<td>0.3</td>
</tr>
<tr>
<td>Second quintile</td>
<td>0.8</td>
<td>30.6</td>
<td>-390</td>
<td>-0.8</td>
</tr>
<tr>
<td>Middle quintile</td>
<td>1.4</td>
<td>75.6</td>
<td>-1,100</td>
<td>-1.2</td>
</tr>
<tr>
<td>Fourth quintile</td>
<td>1.5</td>
<td>104.1</td>
<td>-1,850</td>
<td>-1.2</td>
</tr>
<tr>
<td>Top quintile</td>
<td>-0.6</td>
<td>-104.1</td>
<td>2,170</td>
<td>0.5</td>
</tr>
<tr>
<td>All</td>
<td>0.3</td>
<td>100.0</td>
<td>-290</td>
<td>-0.2</td>
</tr>
</tbody>
</table>

**Addendum**

<table>
<thead>
<tr>
<th></th>
<th>Percent change in after-tax income (%) d</th>
<th>Share of total federal tax change (%)</th>
<th>Average federal tax change ($)</th>
<th>Average Federal Tax Rate e</th>
</tr>
</thead>
<tbody>
<tr>
<td>80–90</td>
<td>0.6</td>
<td>29.7</td>
<td>-1,190</td>
<td>-0.5</td>
</tr>
<tr>
<td>90–95</td>
<td>0.4</td>
<td>12.4</td>
<td>-1,060</td>
<td>-0.3</td>
</tr>
<tr>
<td>95–99</td>
<td>-0.1</td>
<td>-4.8</td>
<td>520</td>
<td>0.1</td>
</tr>
<tr>
<td>Top 1 percent</td>
<td>-2.6</td>
<td>-141.4</td>
<td>62,470</td>
<td>1.8</td>
</tr>
<tr>
<td>Top 0.1 percent</td>
<td>-4.0</td>
<td>-96.8</td>
<td>424,820</td>
<td>2.7</td>
</tr>
</tbody>
</table>

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1).

**Note:** Number of AMT taxpayers (millions): Baseline: 5.6; Proposal: 0.

a Calendar year. Baseline is current law. Proposal would: repeal the Net Investment Income Tax (NIIT), individual and corporate alternative minimum tax (AMT), phase-out of personal exemptions, and Pease limitation on itemized deductions; set individual tax rates of 1.4 percent, 5.5 percent, 17.7 percent, and 33.1 percent; repeal individual income tax expenditures except those that are health-related and the CTC, EITC, and partial exclusion of Social Security benefits; set corporate tax rate of 26 percent; implement territorial system plus minimum tax on foreign-source income; and repeal corporate tax expenditures.

http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm

b Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

c The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $28,100; 40% $54,700; 60% $93,200; 80% $154,900; 90% $225,400; 95% $304,600; 99% $912,100; 99.9% $5,088,900.

d After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

e Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.
### TABLE 7
Distribution of Federal Tax Change, Restoration of Itemized Deduction for State and Local Taxes
By expanded cash income percentile, 2027

<table>
<thead>
<tr>
<th>Expanded cash income percentile</th>
<th>Percent change in after-tax income (%)</th>
<th>Share of total federal tax change (%)</th>
<th>Average federal tax change ($)</th>
<th>Average Federal Tax Rate&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Change (% points)</th>
<th>Under the proposal (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest quintile</td>
<td>-0.3</td>
<td>-7.1</td>
<td>60</td>
<td>0.3</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>Second quintile</td>
<td>0.2</td>
<td>7.7</td>
<td>-80</td>
<td>-0.2</td>
<td>8.7</td>
<td></td>
</tr>
<tr>
<td>Middle quintile</td>
<td>0.3</td>
<td>17.1</td>
<td>-200</td>
<td>-0.2</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td>Fourth quintile</td>
<td>0.0</td>
<td>0.6</td>
<td>-10</td>
<td>0.0</td>
<td>17.0</td>
<td></td>
</tr>
<tr>
<td>Top quintile</td>
<td>0.4</td>
<td>82.4</td>
<td>-1,390</td>
<td>-0.3</td>
<td>26.0</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>0.2</td>
<td>100.0</td>
<td>-230</td>
<td>-0.2</td>
<td>20.0</td>
<td></td>
</tr>
</tbody>
</table>

**Addendum**

<table>
<thead>
<tr>
<th></th>
<th>Percent change in after-tax income (%)</th>
<th>Share of total federal tax change (%)</th>
<th>Average federal tax change ($)</th>
<th>Average Federal Tax Rate&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Change (% points)</th>
<th>Under the proposal (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80–90</td>
<td>-0.5</td>
<td>-28.0</td>
<td>910</td>
<td>0.4</td>
<td>20.2</td>
<td></td>
</tr>
<tr>
<td>90–95</td>
<td>-0.1</td>
<td>-5.0</td>
<td>340</td>
<td>0.1</td>
<td>22.0</td>
<td></td>
</tr>
<tr>
<td>95–99</td>
<td>0.7</td>
<td>32.4</td>
<td>-2,850</td>
<td>-0.5</td>
<td>25.1</td>
<td></td>
</tr>
<tr>
<td>Top 1 percent</td>
<td>1.3</td>
<td>83.0</td>
<td>-29,650</td>
<td>-0.8</td>
<td>32.6</td>
<td></td>
</tr>
<tr>
<td>Top 0.1 percent</td>
<td>0.4</td>
<td>12.5</td>
<td>-44,360</td>
<td>-0.3</td>
<td>33.6</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1).

**Note:** Number of AMT taxpayers (millions): Baseline: 5.6; Proposal: 0.

<sup>a</sup> Calendar year. Baseline is current law. Proposal would: repeal the Net Investment Income Tax (NIIT), individual and corporate alternative minimum tax (AMT), phase-out of personal exemptions, and Pease limitation on itemized deductions; set individual tax rates of 0.8 percent, 5.3 percent, 17.0 percent, and 31.7 percent; repeal individual income tax expenditures except the itemized deduction for state and local taxes and the CTC, EITC, and partial exclusion of Social Security benefits; set corporate tax rate of 26 percent; implement territorial system plus minimum tax on foreign-source income; and repeal corporate tax expenditures. [http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm](http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm)

<sup>b</sup> Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see [http://www.taxpolicycenter.org/TaxModel/income.cfm](http://www.taxpolicycenter.org/TaxModel/income.cfm)

<sup>c</sup> The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $28,100; 40% $54,700; 60% $93,200; 80% $154,900; 90% $225,400; 95% $304,600; 99% $912,100; 99.9% $5,088,900.

<sup>d</sup> After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

<sup>e</sup> Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.
### TABLE 8

**Distribution of Federal Tax Change, Restoration of Itemized Deduction for Mortgage Interest**

By expanded cash income percentile, 2027

<table>
<thead>
<tr>
<th>Expanded cash income percentile</th>
<th>Percent change in after-tax income (%)</th>
<th>Share of total federal tax change (%)</th>
<th>Average federal tax change ($)</th>
<th>Average Federal Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest quintile</td>
<td>-0.2</td>
<td>-3.7</td>
<td>50</td>
<td>0.2</td>
</tr>
<tr>
<td>Second quintile</td>
<td>0.4</td>
<td>10.8</td>
<td>-160</td>
<td>-0.3</td>
</tr>
<tr>
<td>Middle quintile</td>
<td>0.6</td>
<td>27.3</td>
<td>-460</td>
<td>-0.5</td>
</tr>
<tr>
<td>Fourth quintile</td>
<td>0.4</td>
<td>26.0</td>
<td>-540</td>
<td>-0.4</td>
</tr>
<tr>
<td>Top quintile</td>
<td>0.3</td>
<td>40.0</td>
<td>-970</td>
<td>-0.2</td>
</tr>
<tr>
<td>All</td>
<td>0.3</td>
<td>100.0</td>
<td>-340</td>
<td>-0.3</td>
</tr>
</tbody>
</table>

**Addendum**

<table>
<thead>
<tr>
<th></th>
<th>Percent change in after-tax income (%)</th>
<th>Share of total federal tax change (%)</th>
<th>Average federal tax change ($)</th>
<th>Average Federal Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>80–90</td>
<td>0.0</td>
<td>1.6</td>
<td>-80</td>
<td>0.0</td>
</tr>
<tr>
<td>90–95</td>
<td>0.3</td>
<td>8.8</td>
<td>-880</td>
<td>-0.3</td>
</tr>
<tr>
<td>95–99</td>
<td>0.7</td>
<td>24.0</td>
<td>-3,040</td>
<td>-0.5</td>
</tr>
<tr>
<td>Top 1 percent</td>
<td>0.1</td>
<td>5.6</td>
<td>-2,890</td>
<td>-0.1</td>
</tr>
<tr>
<td>Top 0.1 percent</td>
<td>-1.0</td>
<td>-20.3</td>
<td>103,540</td>
<td>0.7</td>
</tr>
</tbody>
</table>

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1).

**Note:** Number of AMT taxpayers (millions): Baseline: 5.6; Proposal: 0.

* Calendar year. Baseline is current law. Proposal would: repeal the Net Investment Income Tax (NIIT), individual and corporate alternative minimum tax (AMT), phase-out of personal exemptions, and Pease limitation on itemized deductions; set individual tax rates of 0.3 percent, 5.1 percent, 16.4 percent, and 30.7 percent; repeal individual income tax expenditures except the itemized deduction for mortgage interest and the CTC, EITC, and partial exclusion of Social Security benefits; set corporate tax rate of 26 percent; implement territorial system plus minimum tax on foreign-source income; and repeal corporate tax expenditures. [http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm](http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm)

* Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see [http://www.taxpolicycenter.org/TaxModel/income.cfm](http://www.taxpolicycenter.org/TaxModel/income.cfm)

* The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $28,100; 40% $54,700; 60% $93,200; 80% $154,900; 90% $225,400; 95% $304,600; 99% $912,100; 99.9% $5,088,900.

* After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

* Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.
### TABLE 9
Distribution of Federal Tax Change, Restoration of Corporate Tax Expenditures for R&E
By expanded cash income percentile, 2027

<table>
<thead>
<tr>
<th>Expanded cash income percentile b,c</th>
<th>Percent change in after-tax income (%) d</th>
<th>Share of total federal tax change (%)</th>
<th>Average federal tax change ($)</th>
<th>Average Federal Tax Rate e Change (% points)</th>
<th>Under the proposal (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest quintile</td>
<td>-0.2</td>
<td>-2.2</td>
<td>30</td>
<td>0.1</td>
<td>4.5</td>
</tr>
<tr>
<td>Second quintile</td>
<td>0.4</td>
<td>12.4</td>
<td>-200</td>
<td>-0.4</td>
<td>8.5</td>
</tr>
<tr>
<td>Middle quintile</td>
<td>0.6</td>
<td>27.1</td>
<td>-490</td>
<td>-0.5</td>
<td>13.3</td>
</tr>
<tr>
<td>Fourth quintile</td>
<td>0.4</td>
<td>22.4</td>
<td>-490</td>
<td>-0.3</td>
<td>16.6</td>
</tr>
<tr>
<td>Top quintile</td>
<td>0.3</td>
<td>40.8</td>
<td>-1,050</td>
<td>-0.2</td>
<td>26.0</td>
</tr>
<tr>
<td>All</td>
<td>0.4</td>
<td>100.0</td>
<td>-360</td>
<td>-0.3</td>
<td>19.9</td>
</tr>
</tbody>
</table>

**Addendum**

<table>
<thead>
<tr>
<th>Expanded cash income percentile b,c</th>
<th>Percent change in after-tax income (%) d</th>
<th>Share of total federal tax change (%)</th>
<th>Average federal tax change ($)</th>
<th>Average Federal Tax Rate e Change (% points)</th>
<th>Under the proposal (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80–90</td>
<td>-0.1</td>
<td>3.4</td>
<td>170</td>
<td>0.1</td>
<td>19.9</td>
</tr>
<tr>
<td>90–95</td>
<td>0.2</td>
<td>5.1</td>
<td>-540</td>
<td>-0.2</td>
<td>21.7</td>
</tr>
<tr>
<td>95–99</td>
<td>0.3</td>
<td>9.5</td>
<td>-1,280</td>
<td>-0.2</td>
<td>25.3</td>
</tr>
<tr>
<td>Top 1 percent</td>
<td>0.7</td>
<td>29.7</td>
<td>-16,250</td>
<td>-0.5</td>
<td>33.0</td>
</tr>
<tr>
<td>Top 0.1 percent</td>
<td>-0.4</td>
<td>-6.9</td>
<td>37,700</td>
<td>0.2</td>
<td>34.1</td>
</tr>
</tbody>
</table>

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1).

**Note:** Number of AMT taxpayers (millions): Baseline: 5.6; Proposal: 0.

a Calendar year. Baseline is current law. Proposal would: repeal the Net Investment Income Tax (NIIT), individual and corporate alternative minimum tax (AMT), phase-out of personal exemptions, and Pease limitation on itemized deductions; set individual tax rates of 0 percent, 5 percent, 16 percent, and 29.9 percent; repeal individual income tax expenditures except the CTC, EITC, and partial exclusion of Social Security benefits; set corporate tax rate of 27.1 percent; implement territorial system plus minimum tax on foreign-source income; and repeal corporate tax expenditures except those related to research and experimentation. [http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm](http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm)

b Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see [http://www.taxpolicycenter.org/TaxModel/income.cfm](http://www.taxpolicycenter.org/TaxModel/income.cfm)

c The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $28,100; 40% $54,700; 60% $93,200; 80% $154,900; 90% $225,400; 95% $304,600; 99% $912,100; 99.9% $5,088,900.

d After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

e Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.
**TABLE 10**

Difference in the Percentage Change in After-Tax Income from Restoring Each Group of Tax Expenditures
By expanded cash income percentile, 2027

<table>
<thead>
<tr>
<th>Expanded cash income percentile&lt;sup&gt;b,c&lt;/sup&gt;</th>
<th>Group 1 (Retirement-related)</th>
<th>Group 2 (Health-related)</th>
<th>Group 3 (Deduction for state and local taxes)</th>
<th>Group 4 (Deduction for mortgage interest)</th>
<th>Group 5 (Corporate R&amp;E-related)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest quintile</td>
<td>0.0</td>
<td>-0.1</td>
<td>-0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Second quintile</td>
<td>0.1</td>
<td>0.4</td>
<td>-0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Middle quintile</td>
<td>0.4</td>
<td>0.8</td>
<td>-0.3</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Fourth quintile</td>
<td>0.6</td>
<td>1.1</td>
<td>-0.4</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Top quintile</td>
<td>-0.6</td>
<td>-1.0</td>
<td>0.0</td>
<td>-0.1</td>
<td>-0.1</td>
</tr>
<tr>
<td>All</td>
<td>-0.1</td>
<td>-0.1</td>
<td>-0.2</td>
<td>-0.1</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Addendum**

<table>
<thead>
<tr>
<th></th>
<th>Group 1 (Retirement-related)</th>
<th>Group 2 (Health-related)</th>
<th>Group 3 (Deduction for state and local taxes)</th>
<th>Group 4 (Deduction for mortgage interest)</th>
<th>Group 5 (Corporate R&amp;E-related)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80–90</td>
<td>0.8</td>
<td>0.7</td>
<td>-0.4</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>90–95</td>
<td>1.2</td>
<td>0.2</td>
<td>-0.3</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>95–99</td>
<td>0.4</td>
<td>-0.5</td>
<td>0.3</td>
<td>0.3</td>
<td>-0.1</td>
</tr>
<tr>
<td>Top 1 percent</td>
<td>-3.5</td>
<td>-3.6</td>
<td>0.3</td>
<td>-0.9</td>
<td>-0.3</td>
</tr>
<tr>
<td>Top 0.1 percent</td>
<td>-4.1</td>
<td>-4.1</td>
<td>0.3</td>
<td>-1.1</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1).

<sup>a</sup> Calendar year. Baseline is current law. http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm

<sup>b</sup> Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

<sup>c</sup> The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $28,100; 40% $54,700; 60% $93,200; 80% $154,900; 90% $225,400; 95% $304,600; 99% $912,100; 99.9% $5,088,900.

<sup>d</sup> After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

**CONCLUSION**

This series of exercises shows that a reform of the US income tax system that repeals virtually all tax expenditures is technically achievable in a way that maintains both the revenue levels and the distributional consequences associated with the current tax system. Maintaining approximate long-run revenue neutrality for the corporate income tax with all tax expenditures repealed would require a statutory income tax rate of around 26 percent. Maintaining approximate distributional neutrality as well as overall long-run revenue neutrality for the individual income tax with nearly all tax expenditures repealed would require a 0 percent income tax bracket for many low-income households and a top rate of almost 30 percent for high-income households.
When adding various groups of tax expenditures back individually, the general result is an increase in individual income tax rates to maintain long-run revenue neutrality. However, because these rate increases are done (more or less) proportionately, the distributional consequences shift some of the overall burden among income categories. The shift is most pronounced for retirement and health tax expenditures, with higher tax burdens for households in the top 1 percent of the income distribution.

When adding back the tax expenditures for research, the revenue-neutral corporate income tax rate is increased by just over 1 percentage point, from 26 percent to 27.1 percent.
1 For the three-rate system, the current 10 and 15 percent brackets of current law were combined, the 25 and 28 percent brackets combined, and the 33 percent and higher brackets combined.
2 For the four-bracket system, the current 10 percent and 15 percent brackets were retained, the 25 percent and 28 percent brackets were retained but with the end of the 28 percent bracket increased by 28 percent, and the fourth bracket covered all remaining higher brackets.
3 Appendix A lists the specific tax expenditures included in each group.
4 We chose 15 percent (rather than the 10 percentage point differential between the lowest rates under current law and the first proposal) to roughly reflect the average proportion of the gap between the rates computed to be distributionally neutral and the rates under current law.
5 Because rates are adjusted to achieve revenue neutrality (as closely as possible) in FY 2037 when each group of tax expenditures is restored, revenue patterns over time do not isolate interaction effects.
6 Itemized deductions claimed for costs of earning income, such as the deduction for investment interest, are not tax expenditures and so remained available to taxpayers in the original exercise.
7 As another part of the exercise, TPC also restored all four groups of individual tax expenditures simultaneously and adjusted individual income tax rates to achieve revenue neutrality in FY 2037. These calculations show fairly significant interaction effects that would require higher tax rates than if the groups were restored one at a time.
8 In general, changes in the corporate tax base are believed to have a larger effect on the location of investment than changes in the corporate tax rate do, so more of the change in burden from a change in the base is borne by labor. See Jim Nunns, How TPC Distributes the Corporate Income Tax (Washington, DC: Urban-Brookings Tax Policy Center, 2012).
9 The lowest-income tax units would have a small decline in after-tax income from restoration of the health-related tax expenditures.
JCT TAX EXPENDITURES

**Retirement-Related**

Net exclusion of pension contributions and earnings: Plans covering partners and sole proprietors (sometimes referred to as "Keogh" plans)
Net exclusion of pension contributions and earnings: Defined benefit plans
Net exclusion of pension contributions and earnings: Defined contribution plans
Individual retirement arrangements: Traditional IRAs
Individual retirement arrangements: Roth IRAs
Credit for certain individuals for elective deferrals and IRA contributions
Exclusion of veterans' pensions

**Health-Related**

Exclusion of employer contributions for health care, health insurance premiums, and long-term care insurance premiums
Exclusion of medical care and TRICARE medical insurance for military dependents, retirees, and retiree dependents not enrolled in Medicare
Exclusion of health insurance benefits for military retirees and retiree dependents enrolled in Medicare
Deduction for health insurance premiums and long-term care insurance premiums by the self-employed
Deduction for medical expenses and long-term care expenses
Exclusion of workers' compensation benefits (medical benefits)
Health savings accounts
Credit for purchase of health insurance by certain displaced persons

**Itemized Deduction for State and Local Taxes**

Deduction for property taxes on real property
Deduction of nonbusiness State and local government income taxes, sales taxes, and personal property taxes

**Itemized Deduction for Mortgage Interest**

Deduction for mortgage interest on owner-occupied residences
Deduction for premiums for qualified mortgage insurance

**Corporate Research and Experimentation-Related**

Credit for increasing research activities (Code section 41)
Expensing of research and experimental expenditures
Uncategorized

Exclusion of benefits and allowances to armed forces personnel
Exclusion of military disability benefits
Deduction for overnight-travel expenses of national guard and reserve members
Exclusion of combat pay
Exclusion of certain allowances for Federal employees abroad
Exclusion of foreign earned income: Housing
Exclusion of foreign earned income: Salary
Inventory property sales source rule exception
Deduction for foreign taxes instead of a credit
Interest expense allocation: Unavailability of symmetric worldwide method
Interest expense allocation: Separate grouping of affiliated financial companies
Apportionment of research and development expenses for determination of foreign tax credits
Special rules for interest-charge domestic international sales corporations
Tonnage tax
Deferral of active income of controlled foreign corporations
Deferral of active financing income
Therapeutic research credit
Credit for energy-efficient improvements to existing homes
Credit for holders of clean renewable energy bonds (Code sections 54 and 54C)
Exclusion of energy conservation subsidies provided by public utilities
Credit for holders of qualified energy conservation bonds
Energy credit (section 48): Solar
Energy credit (section 48): Geothermal
Energy credit (section 48): Fuel Cells
Energy credit (section 48): Microturbines
Energy credit (section 48): Combined heat and power
Energy credit (section 48): Small wind
Energy credit (section 48): Geothermal heat pump systems
Credits for electricity production from renewable resources (section 45): Wind
Credits for electricity production from renewable resources (section 45): Closed-loop biomass
Credits for electricity production from renewable resources (section 45): Geothermal
Credits for electricity production from renewable resources (section 45): Qualified hydropower
Credits for electricity production from renewable resources (section 45): Small irrigation power
Credits for electricity production from renewable resources (section 45): Municipal solid waste
Credits for electricity production from renewable resources (section 45): Open-loop biomass
Special rule to implement electric transmission restructuring
Credits for investments in clean coal facilities
Coal production credits: Refined coal
Coal production credits: Indian coal
Credits for alternative technology vehicles: Other alternative fuel vehicles
Residential energy-efficient property credit
Credit for plug-in electric vehicles
Credit for investment in advanced energy property
Exclusion of interest on State and local government qualified private activity bonds for energy production facilities
Expensing of exploration and development costs, fuels: Oil and gas
Expensing of exploration and development costs, fuels: Other Fuels
Excess of percentage over cost depletion, fuels: Oil and gas
Excess of percentage over cost depletion, fuels: Other Fuels
Amortization of geological and geophysical expenditures associated with oil and gas exploration
Amortization of air pollution control facilities
Depreciation recovery periods for energy-specific items: Five-year MACRS for certain energy property (solar, wind, etc.)
Depreciation recovery periods for energy-specific items: 10-year MACRS for smart electric distribution property
Depreciation recovery periods for energy-specific items: 15-year MACRS for certain electric transmission property
Depreciation recovery periods for energy-specific items: 15-year MACRS for natural gas distribution line
Exceptions for publicly traded partnership with qualified income derived from certain energy-related activities
Special depreciation allowance for certain reuse and recycling property
Expensing of exploration and development costs, nonfuel minerals
Excess of percentage over cost depletion, nonfuel minerals
Expensing of timber-growing costs
Special rules for mining reclamation reserves
Special tax rate for nuclear decommissioning reserve funds
Exclusion of contributions in aid of construction for water and sewer utilities
Exclusion of earnings of certain environmental settlement funds
Amortization and expensing of reforestation expenditures
Capital gains treatment for qualified timber income (including coal and iron ore)
Treatment of income from exploration and mining of natural resources as qualifying income under the publicly-traded partnership rules
Expensing of soil and water conservation expenditures
Expensing of the costs of raising dairy and breeding cattle
Exclusion of cost-sharing payments
Exclusion of cancellation of indebtedness income of farmers
Income averaging for farmers and fishermen
Five-year carryback period for net operating losses attributable to farming
Expensing by farmers for fertilizer and soil conditioner costs
Cash accounting for agriculture
Exclusion of income attributable to the discharge of principal residence acquisition indebtedness
Exclusion of capital gains on sales of principal residences
Exclusion of interest on State and local government qualified private activity bonds for owner-occupied housing
Credit for low-income housing
Credit for rehabilitation of historic structures
Credit for rehabilitation of structures, other than historic structures
Exclusion of interest on State and local government qualified private activity bonds for rental housing
Depreciation of rental housing in excess of alternative depreciation system
Exclusion of interest on State and local government small-issue qualified private activity bonds
Carryover basis of capital gains on gifts
Deferral of gain on non-dealer installment sales
Deferral of gain on like-kind exchanges
Expensing under section 179 of depreciable business property
Amortization of business startup costs
Reduced rates on first $10,000,000 of corporate taxable income
Exemptions from imputed interest rules
Expensing of magazine circulation expenditures
Special rules for magazine, paperback book, and record returns
Completed contract rules
Cash accounting, other than agriculture
Credit for employer-paid FICA taxes on tips
Deduction for income attributable to domestic production activities
Credit for the cost of carrying tax-paid distilled spirits in wholesale inventories
Reduced rates of tax on dividends and long-term capital gains
Surtax on net investment income
Exclusion of capital gains at death
Expensing of costs to remove architectural and transportation barriers to the handicapped and elderly
Exclusion for gain from certain small business stock
Distributions in redemption of stock to pay various taxes imposed at death
Exclusion from UBTI of certain payments to controlling exempt organizations
Inventory methods and valuation: Last in first out
Inventory methods and valuation: Lower of cost or market
Inventory methods and valuation: Specific identification for homogeneous products
Exclusion of gain or loss on sale or exchange of brownfield property
Income recognition rule for gain or loss from section 1256 contracts
Net alternative minimum tax attributable to net operating loss limitation
Exclusion of interest on State and local qualified private activity bonds for green buildings and sustainable design projects
Depreciation of buildings other than rental housing in excess of alternative depreciation system
Depreciation of equipment in excess of the alternative depreciation system
Exemption of credit union income
Small life insurance company taxable income adjustment
Special treatment of life insurance company reserves
Special deduction for Blue Cross and Blue Shield companies
Tax-exempt status and election to be taxed only on investment income for certain small property and casualty insurance companies
Interest rate and discounting period assumptions for reserves of property and casualty insurance companies
Proration for property and casualty insurance companies
Exclusion of employer-paid transportation benefits (parking, van pools, and transit passes)
Deferral of tax on capital construction funds of shipping companies
Exclusion of interest on State and local government qualified private activity bonds for highway projects and rail-truck transfer facilities
Exclusion of interest on State and local government qualified private activity bonds for high-speed intercity rail facilities
Exclusion of interest on State and local government qualified private activity bonds for private airports, docks, and mass-commuting facilities
Provide a 50 percent tax credit for certain expenditures for maintaining railroad tracks
Empowerment zone tax incentives
New markets tax credit
District of Columbia tax incentives
Credit for Indian reservation employment
Exclusion of interest on State and local government qualified private activity bonds for sewage, water, and hazardous waste facilities
Recovery zone economic development bonds
Eliminate requirement that financial institutions allocate interest expense attributable to tax-exempt interest
National disaster relief
Deduction for interest on student loans
Exclusion of earnings of Coverdell education savings accounts
Exclusion of scholarship and fellowship income
Exclusion of income attributable to the discharge of certain student loan debt and NHSC and certain State educational loan repayments
Exclusion of employer-provided education assistance benefits
Exclusion of employer-provided tuition reduction benefits
Parental personal exemption for students aged 19 to 23
Exclusion of interest on State and local government qualified private activity bonds for student loans
Exclusion of interest on State and local government qualified private activity bonds for private nonprofit and qualified public educational facilities
Credit for holders of qualified zone academy bonds
Deduction for higher education expenses
Deduction for teacher classroom expenses
Deduction for charitable contributions to educational institutions
Credits for tuition for post-secondary education
Exclusion of tax on earnings of qualified tuition programs: Prepaid tuition programs
Exclusion of tax on earnings of qualified tuition programs: Savings account programs
Qualified school construction bonds
Exclusion of employee meals and lodging (other than military)
Exclusion of benefits provided under cafeteria plans
Exclusion of housing allowances for ministers
Exclusion of miscellaneous fringe benefits
Exclusion of employee awards
Exclusion of income earned by voluntary employees' beneficiary associations
Special tax provisions for employee stock ownership plans (ESOPs)
Deferral of taxation on spread on acquisition of stock under incentive stock option plans
Deferral of taxation on spread on employee stock purchase plans
Disallowance of deduction for excess parachute payments (applicable if payments to a disqualified individual are contingent on a change of control of a corporation and are equal to or greater than three times the individual’s annualized includible compensation)
Limits on deductible compensation
Work opportunity tax credit
Credit for children under age 17
Credit for child and dependent care and exclusion of employer-provided child care
Credit for employer-provided dependent care
Exclusion of certain foster care payments
Adoption credit and employee adoption benefits exclusion
Deduction for charitable contributions, other than for education and health
Credit for disabled access expenditures
Exclusion of interest on State and local government qualified private activity bonds for private nonprofit hospital facilities
Deduction for charitable contributions to health organizations
Credit for orphan drug research
Tax credit for small businesses purchasing employer insurance
Subsidies for insurance purchased through health benefit exchanges
Exclusion of amounts received under life insurance contracts
Exclusion of workers’ compensation benefits (disability and survivors payments)
Exclusion of damages on account of personal physical injuries or physical sickness
Exclusion of special benefits for disabled coal miners
Exclusion of other employee benefits: Premiums on group term life insurance
Exclusion of other employee benefits: Premiums on accident and disability insurance
Additional standard deduction for the blind and the elderly
Deduction for casualty and theft losses
Earned income credit
Phase out of the personal exemption for the regular income tax, and disallowance of the personal exemption and the standard deduction against the alternative minimum tax
Exclusion of survivor annuities paid to families of public safety officers killed in the line of duty
Exclusion of disaster mitigation payments
ABLE accounts
Exclusion of untaxed Social Security and railroad retirement benefits
Exclusion of veterans’ disability compensation
Exclusion of veterans’ readjustment benefits
Exclusion of interest on State and local government qualified private activity bonds for veterans’ housing
Exclusion of interest on public purpose State and local government bonds
Build America bonds
Deferral of interest on savings bonds

OTHER CORPORATE PROVISIONS (FROM FY 2017 BUDGET)

- Impose a 19 percent minimum tax on foreign income
The Tax Policy Center is a joint venture of the Urban Institute and Brookings Institution.

For more information, visit taxpolicycenter.org or email info@taxpolicycenter.org