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# AN ANALYSIS OF MARCO RUBIO'S TAX PLAN

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ABSTRACT

Marco Rubio's tax proposal would convert the federal income tax into a consumption tax by not taxing investment income of individuals and by converting the corporate income tax into a cash-flow consumption tax. It would replace most deductions and exemptions with a universal credit; eliminate estate taxes, the AMT, and all ACA taxes; and move the US to a territorial tax system. A new $2,500 child credit would aid families with children. Taxes would fall at all income levels, with high-income households benefiting the most. Revenues would decline by $6.8 trillion over a decade (assuming no change in economic growth).

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## SUMMARY AND INTRODUCTION

Presidential candidate Senator Marco Rubio (R-FL) has proposed a combination of individual and business income tax changes that would convert the federal income tax into a consumption tax by exempting most saving from both personal and business income taxes. The corporate income tax would be replaced by a cash-flow consumption tax that would apply to all businesses: investments would be immediately deducted (expensed) and business interest would no longer be deductible. At the individual level, the plan would exempt interest income, dividends, and capital gains from tax.[1] It would consolidate the standard deduction, personal exemption, and 10 percent rate bracket into one refundable personal credit[2] (but retain dependent exemptions); significantly increase the child tax credit for middle- and higher-income families; reduce top tax rates for both individuals and businesses; eliminate most itemized deductions while allowing all taxpayers to claim a modified mortgage interest deduction and a charitable deduction; consolidate tax incentives for higher education; and eliminate the alternative minimum tax (AMT), estate and gift taxes, and all taxes associated with the Affordable Care Act (ACA).[3] The plan would transition the US tax system to a territorial tax system in which income earned abroad would be exempt from domestic taxation.

The Tax Policy Center (TPC) estimates the proposal would reduce federal revenue by $6.8 trillion over the first decade of implementation and by an additional $8.0 trillion over the subsequent decade, before accounting for added interest costs or considering macroeconomic feedback effects.[4] The revenue loss is roughly evenly split between businesses (both corporations and “flow-through” businesses that file individual income tax returns) and individuals.

The proposal would cut taxes at every income level, but high-income taxpayers would receive the biggest cuts, both in dollar terms and as a percentage of income. Overall, the plan would cut the average tax bill in 2017 by about $3,150, boosting after-tax income by 4.4 percent. However, the highest-income taxpayers (0.1 percent of the population, or those with incomes over $3.7 million in 2015 dollars) would experience an average tax cut of more than $900,000, 13.6 percent of after-tax income. Households in the middle fifth of the income distribution would receive an average tax cut of almost $1,400, or 2.5 percent of after-tax income, while the poorest fifth of households would see their taxes go down an average of about $250, boosting their after-tax income by 1.9 percent.

The marginal tax rate cuts would boost incentives to work, save, and invest if interest rates do not change. The plan would reduce the marginal effective tax rate on all new investments to zero or less (for investments eligible for the research and experimentation credit). It would significantly increase the incentive for investment and reduce tax distortions in the allocation of capital. However, increased government borrowing could push up interest rates and crowd out private investment, thereby offsetting some or all of the plan's positive effects on private investment, unless there are very deep cuts in federal spending.

The main elements of the Rubio proposal, as we have modeled them, are listed below. Appendix A discusses instances in which Senator Rubio's campaign documents and statements were unclear and presents the assumptions that we made in our modeling. Note that these estimates reflect the effects of the Protecting Americans from Tax Hikes Act of 2015 and the tax provisions in the Consolidated Appropriations Act of 2016 on both current-law baseline revenues and the Rubio plan.

***The Rubio Plan and the "X-Tax"***

Our understanding of the Rubio proposal, as noted above, is that it converts the income tax into a consumption-based tax. Many economists favor consumption over income as a tax base because taxing consumption eliminates the penalty on saving that is inherent in an income tax. Critics point out that consumption taxes represent an especially heavy burden on lower-income households because they spend a much larger share of their income than those with higher incomes. The late economist David Bradford (1988) addressed this critique by developing the X-tax—a variant on the subtraction method value-added tax (VAT) in which the wage component of value-added is taxed at the individual level at progressive rates rather than at the firm level.[1] The business component of Rubio's proposal is exactly the cash-flow consumption base recommended by Bradford. Wages are taxed at progressive rates and refundable tax credits provide additional relief targeted at lower-income households.

The Rubio proposal varies from Bradford's blueprint at the individual level where some forms of investment income—specifically short-term capital gains, capital gains from assets other than stock, nonqualified dividends, and some interest income—appear to be taxed. However, the campaign documents are unclear on these provisions, and the campaign did not respond to our request for clarification. Had we interpreted the Rubio proposal to remove tax from these forms of investment income, it would entirely eliminate the tax penalty on savings, but the revenue loss would be larger than we estimated and most of the additional tax savings would accrue to high-income households.

A pure X-tax would also set the business tax rate at the top individual tax rate; in the Rubio plan, the top individual tax rate of 35 percent is higher than the 25-percent business tax rate.

[1] Viard and Carrol (2012) describe and analyze the X-tax in depth.

### *Individual Income Tax*

The main elements of the Rubio proposal for individual income tax are as follows:

- Collapse the current seven tax brackets, which range from 10 to 39.6 percent, into three brackets of 15, 25, and 35 percent.
- Repeal the head of household filing status.
- Eliminate taxation of dividends and capital gains accrued after the proposal's effective date, while imposing a one-time transition tax on unrealized capital gains.
- Eliminate both taxes on interest income and deductibility of interest payments (except mortgage interest).
- Create a new, partially refundable child tax credit of up to $2,500 per child. The credit would phase out between $150,000 and $200,000 of adjusted gross income (AGI) for single filers and between $300,000 and $400,000 for joint filers.
- Replace the standard deduction, the personal exemption for tax filers (but not exemptions for dependents), and the 10 percent rate bracket with a new $2,000 refundable personal tax credit ($4,000 for joint filers). The plan does not fully specify the rules for refundability; this analysis assumes that the credit is refundable to the extent payroll taxes exceed the earned income tax credit (EITC).[5] The credit would phase out between $150,000 and $200,000 of AGI (between $300,000 and $400,000 for joint filers).
- Eliminate all itemized deductions, except for a reformed mortgage interest deduction and a charitable contribution deduction, both of which would be available to all filers.
- Replace existing higher education tax incentives with a $2,500 universal credit that would phase out between 400 percent and 500 percent of poverty levels.
- Repeal the individual alternative minimum tax.

### *Estate and Gift Taxes*

The Rubio plan would eliminate federal estate and gift taxes.

### *Business Taxes*

The main elements of the Rubio proposal for business taxes are as follows:

- Reduce the federal corporate income tax rate to 25 percent.
- Limit the top individual tax rate on income from pass-through businesses such as partnerships to 25 percent.
- Allow immediate expensing of business expenditures for equipment, structures, inventory, and land.
- Eliminate both taxes on interest income and deductibility of interest payments.
- Transition to a territorial tax system. The plan would impose a 6 percent deemed repatriation tax on currently deferred overseas earnings, payable over 10 years.

- Provide a 25 percent nonrefundable tax credit to businesses offering between 4 and 12 weeks of paid family leave, limited to $4,000 per worker.
- Eliminate some business tax preferences.

### *Taxes Related to the Affordable Care Act*

The Rubio plan would repeal all taxes imposed by the Affordable Care Act.

## MAJOR ELEMENTS OF THE PROPOSAL

Senator Rubio's goals are to stimulate economic growth by encouraging work, saving, and investment and to support families (Rubio Campaign 2015).

### *Individual Income Tax*

The plan would eliminate most taxes on capital gains, dividends, and interest income (and no longer allow deduction of interest payments except for those on mortgages). In combination with business income tax changes, that approach would convert the federal income tax into a consumption-based tax by exempting most saving from both personal and business income taxes.[6]

The plan would replace the standard deduction and personal exemptions for tax filers (but not for dependents) with a partially refundable $2,000 credit ($4,000 for joint filers).[7] The credit is also intended to offset the elimination of the 10 percent rate bracket. We assume the new personal credit would be refundable to the extent payroll taxes exceed the EITC.[8] The credit would phase out between $150,000 and $200,000 of AGI (between $300,000 and $400,000 for joint filers). The plan would maintain the existing dependent exemptions ($4,000 per dependent in 2015).

A major feature of the Rubio tax plan is a new, partially refundable, $2,500 child tax credit (CTC), which would be in addition to the current CTC and could be used to offset both income and payroll taxes. We assume the credit would be taken after all other tax credits and would follow current rules for determining whether a child qualifies for the credit.[9] The credit would phase out between $150,000 and $200,000 of AGI for single parents and between $300,000 and $400,000 for joint filers. Both phaseout ranges are higher than for the current CTC (table 1).

The phaseouts of the taxpayer credit and the new CTC over identical income ranges would cause high marginal tax rates (MTRs) over the phaseout range, especially for large families. A single person's $2,000 credit would phase out between $150,000 and $200,000 of AGI, increasing her MTR by 4 percentage points over that range. If she has children, she would also lose $2,500 of the new CTC for each child over the same income range, boosting her MTR by another 5 percentage points for each child. Added to her basic 35 percent tax rate, a single taxpayer with four children would pay 59 cents of federal income tax on each dollar of income in the phaseout range.[10] Married couples would face the same 4 percentage point increase in their MTR between $300,000 and $400,000 of AGI because of the phaseout of their combined $4,000 basic tax credit. However, they would have only half as large an increase in their MTR from the phaseout of the new CTC because the phaseout range for couples is twice as wide as that for single taxpayers. Thus, a couple with four children would face a 49 percent MTR over the phaseout range (= 35 percent basic rate + 4 percent taxpayer credit phaseout + 10 percent new CTC phaseout).[11]

TABLE 1

## Child Tax Credit Under Rubio Tax Plan

| | Current CTC | Proposed Additional CTC |
|---|---|---|
| Credit per child | $1,000 | $2,500 |
| Phaseout | Reduced by 5 percent of income over $75,000 ($110,000 for joint filers) | Reduced evenly over income range $150,000 - $200,000 (single) $300,000 - $400,000 (joint) |
| Refundability | Refundable amount equals 15 percent of earnings in excess of $3,000 | Applied after all other credits and refundable up to payroll tax liability (employer plus employee shares) |

**Source:** Urban-Brookings Tax Policy Center based on IRS Publication 972 and the Rubio tax plan.
**Note:** CTC = child tax credit.

The plan would reduce the number of individual income tax brackets from the current seven brackets to three: 15, 25, and 35 percent, cutting the top 39.6 percent rate by 4.6 percentage points (table 2). It would also repeal all of the taxes associated with the ACA, including the 3.8 percent surtax on investment income of high-income taxpayers.

TABLE 2

## Income Tax Rates Under Current Law and Under Rubio Tax Plan

2015

| Single Filers | | | | Married Couples Filing Jointly | | | |
|---|---|---|---|---|---|---|---|
| Taxable Income[a] | | Current marginal rate (%) | Rubio plan marginal rate (%) | Taxable Income[a] | | Current marginal rate (%) | Rubio plan marginal rate (%) |
| Over | But not over | | | Over | But not over | | |
| 0 | 9,225 | 10 | 15 | 0 | 18,450 | 10 | 15 |
| 9,225 | 37,450 | 15 | 15 | 18,450 | 74,900 | 15 | 15 |
| 37,450 | 75,000 | 25 | 15 | 74,900 | 150,000 | 25 | 15 |
| 75,000 | 90,750 | 28 | 25 | 150,000 | 151,200 | 25 | 25 |
| 90,750 | 150,000 | 28 | 25 | 151,200 | 230,450 | 28 | 25 |
| 150,000 | 189,300 | 28 | 35 | 230,450 | 300,000 | 31 | 25 |
| 189,300 | 411,500 | 33 | 35 | 300,000 | 411,500 | 33 | 35 |
| 411,500 | 413,200 | 35 | 35 | 411,500 | 464,850 | 35 | 35 |
| 413,200 | and over | 39.6 | 35 | 464,850 | and over | 39.6 | 35 |

**Source:** Urban-Brookings Tax Policy Center based on the Rubio tax plan and IRS tax brackets.

[a] Under current law, taxable income in 2015 excludes either the standard deduction ($6,300 for singles or $12,600 for joint filers) or itemized deductions, personal exemptions of $4,000 for each tax filer and dependent, and, if applicable, the additional standard deduction for elderly or blind tax filers. The Rubio plan would replace the standard deduction, most itemized deductions, and personal exemptions for tax filers (but not for dependents) with a $2,000 personal credit ($4,000 for married couples) that could offset income taxes and payroll taxes in excess of the EITC. All tax filers could claim deductions for mortgage interest (subject to limits) and charitable contributions.

Replacing the standard deduction and tax filers' personal exemptions with a credit would help equalize the tax savings received by households at different income levels from provisions designed to deliver a basic benefit for all taxpayers and dependents. Under current law, the tax savings from deductions and exemptions depend on a household's statutory marginal income tax rate: the $10,300 sum of the standard deduction and personal exemption for an unmarried person without children saves a filer in the 10 percent tax bracket $1,030, just over one-quarter of the $4,079 tax reduction for a person in the top 39.6 percent bracket. Under the Rubio proposal, filers could claim the $2,000 credit, regardless of tax bracket, and save the same amount (subject to limits on refundability for people who owe little or no tax). The credit could offset income and payroll taxes (employer and employee shares) that exceed the EITC. Because the EITC already offsets some or all of payroll taxes, low-income families with children would not receive much benefit from the credit's refundable portion. Workers without custodial children, who receive little or no EITC, would be more likely to benefit from the credit's refundability.

The Rubio plan would eliminate all itemized deductions except for a reformed mortgage interest deduction and the deduction for charitable contributions, both of which would be made available to all taxpayers.[12] Allowing those deductions for people who currently claim the standard deduction—and thus receive no benefit from them—would reduce taxes for many low-and middle-income taxpayers (although the tax benefit is limited to tax liability before refundable credits). The allowance would also extend to them the tax incentives to donate to charity and to borrow money to purchase homes; such incentives are currently available only to itemizers, most of whom have higher incomes. At the same time, the plan's cut in tax rates would reduce the value of the deductions for charitable contributions and mortgage interest for taxpayers who currently itemize and receive a marginal tax rate cut, because the tax savings from a deduction are proportional to a household's marginal tax rate. The net effect on mortgages and charitable giving is uncertain. As noted later, repeal of the estate tax would reduce the incentive for wealthy individuals to make charitable gifts.

Deductibility of state and local taxes is effectively a federal subsidy on government spending at those levels. Repeal would put pressure on state and local governments to reduce taxes and public spending.

***Business Taxes***

Senator Rubio proposes cutting the top corporate tax rate from 35 percent to 25 percent. The same 25 percent tax rate would apply to pass-through entities such as partnerships and S corporations, which are taxed at individual rates of up to 39.6 percent under current law.

Taxing pass-through business income at a rate 10 percentage points below the 35 percent top rate on wages would create a strong incentive for wage earners to become independent contractors and thus face the preferential pass-through business tax rates. Congress could impose rules to limit such changes in worker status, but the boundary is difficult to enforce under current law and would be even more difficult to police if the Rubio proposal were enacted. Nevertheless, for purposes of our analysis, we have assumed that effective rules would be implemented. Without such rules, the plan would lose substantially more revenue than we estimate.

Businesses would be permitted to immediately deduct (expense) investment in equipment, structures, inventories, and land, rather than having to capitalize and depreciate those purchases over time as current law requires. In addition, interest costs would no longer be deductible and interest income no longer taxable. Thus, the corporate income tax and the individual income taxation of pass-through businesses would be transformed into a cash-flow tax—effectively a business-level consumption tax. Combined with the provisions of the individual income tax that eliminate taxation of most interest, dividends, and capital gains, Rubio's plan replaces the current income tax system with a consumption tax. We discuss later how these changes would affect the incentive to make new investments.

The plan would also shift taxation of multinationals to a territorial tax system in which the United States, like most other countries, would exempt foreign-source income from US tax liability. In transition to that system, the plan would impose a 6 percent tax on existing unrepatriated foreign income of US firms held in cash (and a lower rate on other unrepatriated income), payable over 10 years.

Although moving to a territorial system and eliminating interest deductiblity could reduce the incentive for a US corporation to move its tax residence overseas (a so-called corporate inversion), it would create a strong incentive to recharacterize domestic corporate income as foreign-source income because doing so would avoid US corporate tax entirely rather than simply deferring it as under current law. Currently, companies recharacterize income by shifting intangible assets such as patents to subsidiaries in low-tax foreign jurisdictions, while allocating most business expenses to the US parent (so they can be deducted in calculating US tax liability). Under a territorial system, there would also be a strong incentive to undercharge foreign subsidiaries for purchases from the US parent ("transfer pricing") in order to shift profits abroad. Senator Rubio has not specified how his territorial tax plan would work or how he would prevent multinationals from exploiting the system, although the lower corporate tax rate he proposes would reduce to some degree the incentives for such tax avoidance.[13] In addition, repealing interest deductibility would eliminate a major technique that both US and foreign-based companies use to shift profits out of the United States to foreign subsidiaries (interest stripping).

### *Estate and Gift Taxes*

The Rubio plan would repeal the federal estate, gift, and generation-skipping transfer taxes.[14] Removing these taxes would reduce incentives to structure estates in ways that reduce or eliminate tax liability at death.[15] Eliminating the estate tax removes several economic distortions (for example, one way to avoid the tax is to spend down asset balances so that they are below the threshold for taxation), but the tax is also the most progressive federal tax. Eliminating the estate tax in the context of a consumption-based tax would also mean that wealth could accumulate tax free across generations, an advantage to those primarily concerned about savings incentives, but it also raises the risk that the resulting large concentrations of wealth would convey undue economic and political power.[16] Repealing the estate tax would also eliminate tax incentives for wealthy individuals to make charitable bequests.[17]

## IMPACT ON REVENUE, DISTRIBUTION, AND COMPLEXITY

### *Impact on Revenue*

We estimate that the Rubio plan would reduce federal receipts by $6.8 trillion between 2016 and 2026 (table 3).[18] About half of the revenue loss would come from business tax provisions. Corporations would pay less due to the reduction in their top rate to 25 percent and repeal of the corporate AMT and pass-through businesses taxed under the individual income tax would pay less because they would face the same 25 percent top rate. All businesses would benefit from expensing of investment, which would be partially offset by the disallowance of interest deductibility, repeal of some tax expenditures, and, for corporations, the transition tax on unrepatriated foreign income.

The other half of the revenue loss would result primarily from non-business individual income tax cuts. By itself, the refundable personal credit appears to have the highest cost. However, the combination of eliminating the standard deduction and personal exemption for taxpayers and repealing itemized deductions other than those for mortgage interest and charitable contributions would more than offset that cost. Other relatively large revenue losses would stem from cutting marginal tax rates; creating the partially refundable CTC; and excluding interest, dividends, and capital gains from taxation.

TABLE 3

## Estimated Effect of Rubio Tax Plan on Tax Receipts

$ billions, FY 2016–36

| Provision | Fiscal Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2016–26 | 2027–36 |
| Individual income tax | | | | | | | | |
| Repeal alternative minimum tax | 0.0 | -22.7 | -31.7 | -33.7 | -35.1 | -36.6 | -366.1 | -588.3 |
| Repeal 3.8 percent net investment surtax | -6.7 | -0.3 | -5.0 | -16.1 | -19.9 | -21.0 | -191.8 | -355.3 |
| Repeal head of household filing status | 0.0 | 8.5 | 11.8 | 12.4 | 13.3 | 14.3 | 147.7 | 254.2 |
| Individual income tax rates of 15, 25, and 35 percent | 0.0 | -81.8 | -113.2 | -119.4 | -127.4 | -136.2 | -1,394.5 | -2,505.4 |
| Repeal personal exemption for taxpayers, retain dependent exemptions | 0.0 | 80.2 | 109.7 | 113.9 | 118.1 | 122.3 | 1,222.8 | 1,761.1 |
| Repeal standard deduction | 0.0 | 63.2 | 85.6 | 87.8 | 90.0 | 92.6 | 926.8 | 1,270.5 |
| Repeal itemized deductions other than charitable and home mortgage interest | 0.0 | 143.8 | 194.1 | 204.7 | 218.4 | 230.9 | 2,350.9 | 3,858.1 |
| Reform home mortgage interest deduction | 0.0 | 1.4 | 4.0 | 7.0 | 10.0 | 12.8 | 139.0 | 464.8 |
| Partially refundable personal credit of $2,000 for singles, $4,000 for married couples | 0.0 | -271.0 | -370.6 | -383.5 | -396.5 | -409.4 | -4,097.5 | -5,835.5 |
| Partially refundable additional $2,500 per child credit | 0.0 | -79.7 | -108.6 | -112.4 | -117.8 | -122.0 | -1,224.6 | -1,833.0 |
| Exclude interest, dividends and capital gains from AGI | 0.0 | -71.0 | -93.8 | -92.9 | -95.9 | -100.5 | -1,023.8 | -1,602.7 |
| Preferential top rate of 25 percent on business income | 0.0 | -37.7 | -52.4 | -56.3 | -60.2 | -64.1 | -652.2 | -1,021.7 |
| Replace AOTC and lifetime learning credit with new education tax credit | 0.0 | 7.7 | 10.4 | 10.5 | 10.6 | 10.6 | 101.4 | 84.5 |
| Repeal tax benefits for new contributions to Coverdells and qualified tuition programs | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 1.3 | 7.4 |
| Tax on unrealized capital gains as of Dec. 31, 2016; paid over ten years | 0.0 | 38.3 | 51.0 | 51.0 | 51.0 | 51.0 | 497.3 | 12.8 |
| Expense all investment; disallow interest deduction and exclude interest received on new business loans | 0.0 | -133.8 | -168.6 | -158.5 | -151.1 | -140.9 | -1,338.8 | -730.1 |
| New 25 percent credit of up to $4,000 per worker for businesses offering paid family leave | 0.0 | -1.2 | -1.7 | -1.8 | -1.8 | -1.9 | -19.4 | -29.8 |
| Repeal certain tax expenditures for passthrough businesses | 0.0 | 23.0 | 41.6 | 43.8 | 45.3 | 47.1 | 463.6 | 674.1 |
| **Total for individual income tax revenues** | **-6.7** | **-333.1** | **-437.3** | **-443.4** | **-448.8** | **-450.9** | **-4,458.0** | **-6,114.3** |
| Corporate income tax | | | | | | | | |
| Reduce corporate rate to 25% and repeal the corporate AMT | 0.0 | -62.0 | -123.7 | -134.2 | -134.4 | -137.1 | -1,340.0 | -2,008.6 |
| Expense all investment; disallow interest deduction and exclude interest received on new business loans | 0.0 | -101.6 | -224.2 | -161.6 | -142.3 | -118.9 | -931.6 | 385.4 |
| Territorial system of taxing foreign-source income earned after 12-31-16 | 0.0 | -8.2 | -16.8 | -19.3 | -20.2 | -21.0 | -204.7 | -326.0 |
| Deemed repatriation over 10 years of accumulated untaxed pre-2017 earnings of CFCs, with reduced rates | 0.0 | 4.7 | 9.3 | 10.4 | 10.4 | 10.4 | 97.0 | 6.7 |
| New 25 percent credit of up to $4,000 per worker for businesses offering paid family leave | 0.0 | -1.4 | -2.9 | -3.3 | -3.5 | -3.6 | -35.4 | -56.4 |
| Repeal certain tax expenditures | 0.0 | 9.2 | 19.0 | 22.5 | 24.2 | 26.0 | 260.4 | 453.1 |
| **Total for corporate income tax revenues** | **0.0** | **-159.4** | **-339.2** | **-285.6** | **-265.8** | **-244.3** | **-2,154.4** | **-1,545.9** |
| Estate and gift taxes | | | | | | | | |
| Repeal the estate and gift taxes (stepped-up basis of bequests retained) | 0.0 | 0.0 | -14.8 | -22.1 | -24.1 | -24.9 | -223.8 | -26.7 |
| **Total for estate and gift tax revenues** | **0.0** | **0.0** | **-14.8** | **-22.1** | **-24.1** | **-24.9** | **-223.8** | **-352.5** |
| Total revenue effect of all proposals | | | | | | | | |
| **Total revenue change** | **-6.7** | **-492.5** | **-791.3** | **-751.1** | **-738.8** | **-720.2** | **-6,836.2** | **-8,012.6** |
| As a percentage of GDP | 0.0 | -2.5 | -3.8 | -3.5 | -3.3 | -3.1 | -2.6 | -2.2 |

**Sources:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0515-3A); Tax Policy Center estimates.
**Note:** AMT = alternative minimum tax; AOTC = American Opportunity Tax Credit; CFC = controlled foreign corporations.

Repealing the estate and gift taxes would have a comparatively modest effect on revenues. Revenues would be reduced by $224 billion over the budget period, accounting for just 3 percent of the overall revenue loss.

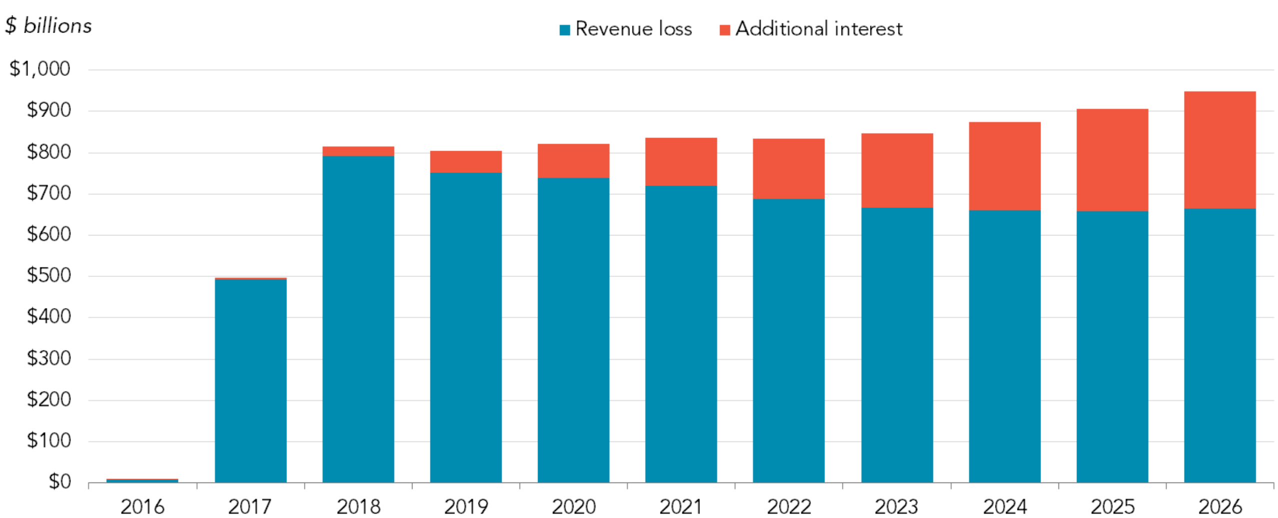
We also estimate the effect of the tax changes in the second decade (2027–36) and find no evidence that the revenue losses are back loaded. The $8.0 trillion revenue loss over the second decade is larger in nominal terms than that in the first 10 years, but it represents a smaller share of cumulative gross domestic product (GDP)—2.2 versus 2.6 percent in 2017–2026.

The revenue losses understate the effect on the national debt because they exclude the additional interest that would accrue if debt increased. Including interest, the proposal would add $8.2 trillion to the national debt by 2026 and another $13.3 trillion between 2027 and 2036 (table 4 and figure 1). Assuming the tax cuts are not offset by spending cuts, we estimate the national debt would rise by 29 percent of GDP by 2026 and roughly 50 percent of GDP by 2036.[19]

FIGURE 1

**Rubio Tax Proposal, Effects on the Debt**

FY 2016–26




**Sources:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0515-3A); Congressional Budget Office (2015a, 2015b).
**Notes:** Increase in debt from 2016 to 2026 is $7,597.3 billion ($6,339.1 billion in revenue loss and $1,258.2 billion in additional interest). Increase in debt from 2027 to 2036 is $12,280.9 billion ($7,404.1 billion in revenue loss and $4,876.7 billion in additional interest).

TABLE 4

Effect of Rubio Tax Proposal on Federal Revenues, Deficits, and the Debt

FY 2016–36

| | Fiscal Year | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2016–26 | 2027–36 |
| Revenue loss ($ billions) | 6.7 | 492.5 | 791.3 | 751.1 | 738.8 | 720.2 | 687.0 | 667.1 | 660.2 | 657.8 | 663.6 | 6,836.2 | 8,012.6 |
| Additional interest ($ billions) | 0.1 | 4.6 | 22.9 | 52.3 | 83.2 | 115.1 | 147.4 | 180.4 | 213.2 | 247.7 | 284.6 | 1,351.4 | 5,264.0 |
| Increase in deficit ($ billions) | 6.8 | 497.1 | 814.2 | 803.4 | 821.9 | 835.2 | 834.5 | 847.4 | 873.4 | 905.5 | 948.2 | 8,187.6 | 13,276.6 |
| Increase in debt[a] ($ billions) | 6.8 | 503.8 | 1,318.0 | 2,121.4 | 2,943.4 | 3,778.6 | 4,613.1 | 5,460.5 | 6,333.9 | 7,239.4 | 8,187.6 | 8,187.6 | 21,464.2 |
| **Increase in debt relative to GDP (%)** | **0.0** | **2.6** | **6.4** | **9.9** | **13.2** | **16.2** | **19.0** | **21.6** | **24.0** | **26.4** | **28.6** | **28.6** | **50.2** |
| Addendum: GDP (end of period; $ billions) | 18,832 | 19,701 | 20,558 | 21,404 | 22,315 | 23,271 | 24,262 | 25,287 | 26,352 | 27,456 | 28,600 | 28,600 | 42,800 |

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0515-3A); Congressional Budget Office (2015a, 2015b).

**Note:** GDP = gross domestic product.

[a] Increase in debt equals the cumulative increase in deficit plus additional interest on the debt.

### *Impact on Distribution*

The proposal would reduce taxes throughout the income distribution.[20] It would cut taxes by an average of about $3,150, or 4.4 percent of after-tax income (table 5). On average, households at all income levels would receive tax cuts, but the highest-income households would receive the largest cuts, both in dollars and as a percentage of income. The top quintile—or fifth of the distribution—would receive an average tax cut of about $16,000 (6.2 percent of after-tax income), the top 1 percent an average cut of more than 10 times as large (nearly $163,000, or 10.4 percent of after-tax income), and the top 0.1 percent an average tax cut worth over $900,000 (13.6 percent of after-tax income). In contrast, the average tax cut for the lowest-income households would be just over $250, just 1.9 percent of after-tax income. Middle-income households would receive an average tax cut of 2.5 percent of after-tax income—about $1,400.[21]

TABLE 5

## Distribution of Federal Tax Change, Rubio Tax Plan

By expanded cash income percentile, 2017

| Expanded cash income percentile[a] | Percent change in after-tax income (%) [b] | Share of total federal tax change (%) | Average federal tax change ($) | Average Federal Tax Rate[c] | |
|---|---|---|---|---|---|
| | | | | Change (% points) | Under the proposal (%) |
| Lowest quintile | 1.9 | 2.2 | -251 | -1.8 | 2.3 |
| Second quintile | 1.4 | 3.1 | -450 | -1.3 | 6.8 |
| Middle quintile | 2.5 | 8.6 | -1,365 | -2.1 | 11.3 |
| Fourth quintile | 3.3 | 15.9 | -3,043 | -2.7 | 14.2 |
| Top quintile | 6.2 | 69.6 | -16,008 | -4.6 | 21.0 |
| All | 4.4 | 100.0 | -3,146 | -3.5 | 16.3 |
| | | | | | |
| **Addendum** | | | | | |
| 80–90 | 4.2 | 13.6 | -6,059 | -3.4 | 16.4 |
| 90–95 | 4.5 | 9.7 | -8,965 | -3.5 | 18.1 |
| 95–99 | 4.7 | 12.6 | -15,364 | -3.6 | 21.5 |
| Top 1 percent | 10.4 | 33.8 | -162,646 | -7.0 | 25.9 |
| Top 0.1 percent | 13.6 | 19.8 | -932,841 | -8.9 | 25.3 |

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0515-3A).

**Notes:** Number of alternative minimum tax (AMT) payers (millions). Baseline: 4.5; proposal: 0. Projections are for calendar year 2017; baseline is current law (including provisions in the Protecting Americans from Tax Hikes Act of 2015 and the Consolidated Appropriations Act of 2016). The proposal includes all individual, corporate, and estate tax provisions. For baseline definitions, see http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm.

[a] The percentile includes both filing and nonfiling units but excludes units that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class, but they 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 2015 dollars) 20%, $23,099; 40%, $45,153; 60%, $80,760; 80%, $142,601; 90%, $209,113; 95%, $295,756; 99%, $732,323; and 99.9%, $3,769,396.

[b] 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.

[c] 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.

Senator Rubio says he would modify the EITC together with broader spending reform, but his campaign plan offers no details. Changes to the EITC would most heavily affect low-income families and would likely interact with some provisions in the plan analyzed here. These changes, which would depend on unknown details, are not reflected in our revenue and distributional estimates.

Rubio's tax plan would provide similar nominal tax cuts in 2025—averaging nearly $3,300. Tax cuts would amount to a smaller share (3.4 percent) of after-tax income than in 2017 (table 6 and figure 2). The highest-income households (0.1 percent) would receive an average tax cut of over $1.1 million, 11.5 percent of after-tax income. In contrast, households in the bottom two quintiles would see their after-tax income rise by an average of just over 1 percent.

TABLE 6

## Distribution of Federal Tax Change, Rubio Tax Plan

By expanded cash income percentile, 2025

| Expanded cash income percentile[a] | Percent change in after-tax income (%)[b] | Share of total federal tax change (%) | Average federal tax change ($) | Average Federal Tax Rate[c] | |
|---|---|---|---|---|---|
| | | | | Change (% points) | Under the proposal (%) |
| Lowest quintile | 1.3 | 1.9 | -232 | -1.2 | 3.3 |
| Second quintile | 1.1 | 3.4 | -493 | -1.0 | 7.7 |
| Middle quintile | 2.0 | 8.8 | -1,430 | -1.7 | 12.6 |
| Fourth quintile | 2.4 | 14.3 | -2,807 | -2.0 | 15.3 |
| Top quintile | 5.0 | 71.1 | -16,946 | -3.7 | 22.5 |
| All | 3.4 | 100.0 | -3,275 | -2.7 | 17.6 |
| | | | | | |
| **Addendum** | | | | | |
| 80–90 | 3.2 | 12.5 | -5,787 | -2.6 | 17.5 |
| 90–95 | 3.2 | 8.1 | -7,719 | -2.5 | 19.2 |
| 95–99 | 3.2 | 10.1 | -12,933 | -2.4 | 22.7 |
| Top 1 percent | 8.9 | 40.3 | -204,995 | -5.9 | 27.6 |
| Top 0.1 percent | 11.5 | 22.8 | -1,122,110 | -7.6 | 26.8 |

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0515-3A).

**Notes:** Number of alternative minimum tax (AMT) payers (millions). Baseline: 5; proposal: 0. Projections are for calendar year 2025; baseline is current law (including provisions in the Protecting Americans from Tax Hikes Act of 2015 and the Consolidated Appropriations Act of 2016). The proposal includes all individual, corporate, and estate tax provisions. For TPC baseline definitions, see http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm.

[a] The percentile includes both filing and nonfiling units but excludes units that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class, but they 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 2015 dollars) 20%, $26,101; 40%, $51,178; 60%, $87,777; 80%, $148,458; 90%, $217,212; 95%, $289,677; 99%, $846,843; and 99.9%, $5,205,348.

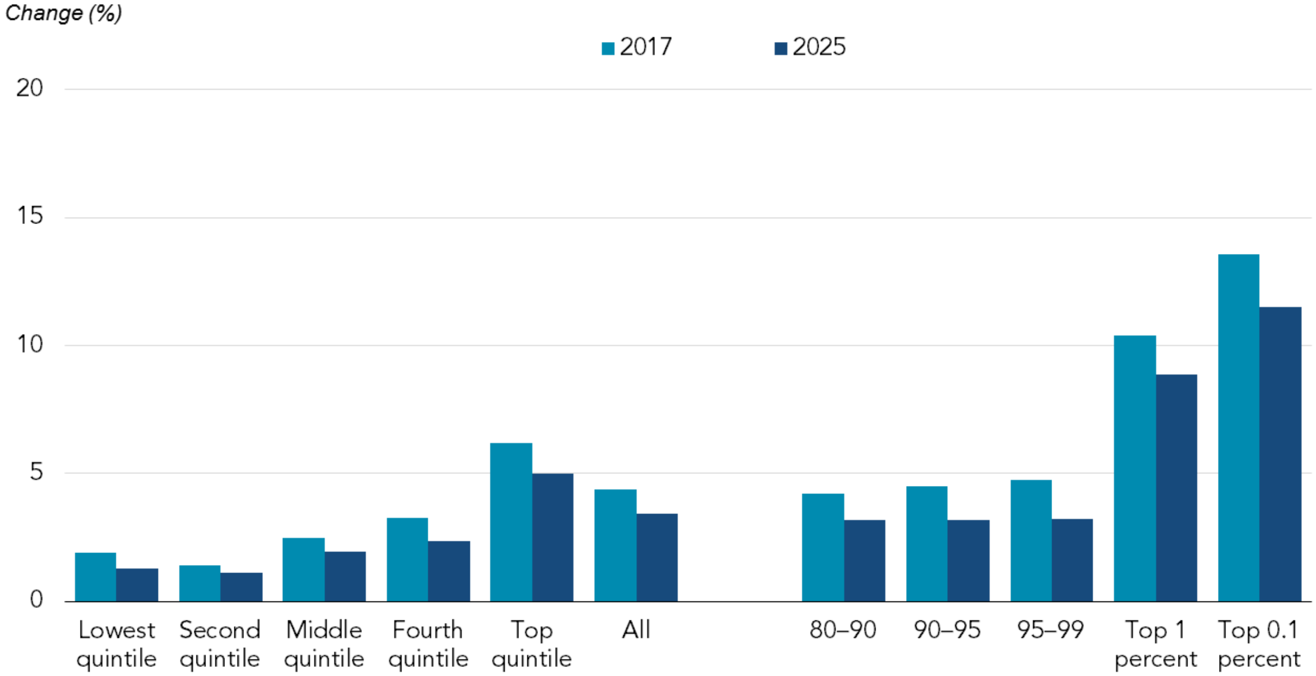
[b] After-tax income is expanded cash income less individual income tax net of refundable credits, corporate income tax payroll taxes (Social Security and Medicare), estate tax, and excise taxes.

[c] Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) is a percentage of average expanded cash income.

FIGURE 2

## Change in After-Tax Income Under Rubio Tax Proposal

By expanded cash income percentile, 2017 and 2025




**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0515-3A).

The plan would increase the number of households that would pay no income tax (or receive a refund in excess of income tax liability). In 2017, an estimated 87 million households would pay no income tax under the plan, compared with 77 million under current law. That prospect would boost the percentage of households paying no income tax from 44 percent to 50 percent.

The financing of the tax cuts would ultimately affect the distribution of winners and losers in ways that are difficult to predict. Although a portion of the revenue loss might be offset by higher tax revenues resulting from increased economic growth, the remainder of the financing would have to come from a combination of spending cuts and tax increases. If the tax cuts were financed by broad spending cuts, the net effects of the plan would likely be regressive, because the benefits of government spending tend to be distributed progressively (Elmendorf et al. 2008). If the resulting deficits ultimately were financed by restoring higher taxes, and the tax increases were concentrated at the top of income distribution, then the long-run effect could be more progressive (although this would entail economic costs, as discussed later).

### *Impact on Complexity*

Senator Rubio's plan would simplify the tax code in several ways. By eliminating most itemized deductions and making a modified mortgage interest deduction and charitable deduction available to everyone, the plan would reduce record keeping for some taxpayers and increase record keeping for others. Only those paying mortgage interest or contributing to charitable causes would have to keep records of these items. [22] In addition, eliminating taxes on capital gains, dividends, and interest and repealing the AMT, the ACA's net investment income tax, and estate and gift taxes would all simplify tax preparation. For businesses, the proposal would allow immediate expensing of all investments, thereby eliminating the need to compute depreciation and changes in inventories, and also would repeal a number of special tax provisions that complicate record keeping, tax planning, and tax preparation.

Refundability issues related to the new CTC would add complexity. Although software could simplify tax calculations, taxpayers would likely find it difficult to understand when and how they would benefit from the credit.

## ECONOMIC EFFECTS

### *Impact on Saving and Investment*

The Rubio plan would alter incentives to save and invest in the United States. Most savings would be tax exempt under the plan as we model it. Assuming that interest rates do not change (see discussion later) and the tax cuts are not eventually financed in ways that reduce incentives to save and invest, we project these effects would increase saving and investment in the US economy. The only caveat, however, is that the removal of tax-advantaged status for retirement accounts and pension plans might cause some employers to drop their retirement plans. Given the importance of institutional factors—such as employer matching contributions, the ease of payroll deduction, and automatic enrollment—in encouraging saving, the diminution in availability of workplace retirement plans might cause workers as a group to save less (Wu et al 2014; Beshears et al, 2007 and 2009).

The overall effect of taxes on incentives to save and invest can be summarized in the proposal's effect on marginal effective tax rates (METRs) on new investments. METR is a forward-looking measure of the effect of the tax system on the rate of return of a hypothetical marginal (i.e., just break-even) investment project. We compare the METR on different investments under the Rubio proposal with the METR under current law (including the provisions of the Protecting Americans from Tax Hikes Act of 2015 and the tax provisions in the Consolidated Appropriations Act of 2016). Because it would allow expensing (i.e., immediate deduction) of all investment and would eliminate individual-level taxation of interest, capital gains, and dividends, the Rubio proposal would zero out METRs for most new business investment (table 7). Investments in research and development eligible for the research and experimentation tax credit would face a negative METR, as they do under current law, because firms can expense their research and development costs and because the Protectiong Americans from Tax Hikes Act of 2015 permanently extended the research credit, which we assume the Rubio proposal would retain. Overall, the Rubio plan would lower METRs and would make investment more attractive, except in cases of business investments financed entirely by debt, for which the loss of interest deductibility would exceed the benefit of switching to expensing.

TABLE 7

## Marginal Effective Tax Rates on New Investment

Percent, 2017

| Category | Current law | Rubio proposal | Change (percentage points) |
|---|---|---|---|
| **Business investment** | **23.2** | **-0.6** | **-23.8** |
| Corporate | 25.7 | -0.6 | -26.3 |
| Equipment | 21.6 | 0.0 | -21.6 |
| Structures | 29.5 | 0.0 | -29.5 |
| Intellectual property products | 1.3 | -6.1 | -7.4 |
| Inventories | 39.8 | 0.0 | -39.8 |
| Pass-through | 19.1 | -0.6 | -19.7 |
| Equipment | 15.8 | 0.0 | -15.8 |
| Structures | 22.4 | 0.0 | -22.4 |
| Intellectual property products | -3.3 | -5.8 | -2.5 |
| Inventories | 31.9 | 0.0 | -31.9 |
| | | | |
| **Memo** | | | |
| Corporate (equity financed) | 32.5 | -0.5 | -33.0 |
| Corporate (debt financed) | -6.2 | -0.8 | 5.4 |
| | | | |
| Variation (s.d.) across assets | 12.8 | 1.5 | |
| Variation (s.d.) across industries | 6.4 | 0.7 | |

**Source:** Urban-Brookings Tax Policy Center calculations. See Rosenberg and Marron (2015) for discussion.
**Notes:** s.d. = standard deviation. Estimates for are calendar year 2017; the baseline is current law and includes the effect of provisions passed as part of the Protecting Americans from Tax Hikes Act of 2015 and the Consolidated Appropriations Act of 2016.

By eliminating taxes on new investments, the Rubio proposal would level the playing field across types of investment and means of financing. Under current law, for example, corporate investment faces an average METR of 25.7 percent while the average METR for investment by pass-through entities is just 19.1 percent, making the latter more attractive. Allowing the expensing of all investments and eliminating taxation of corporate income at the individual level (as dividends or capital gains) would effectively eliminate the tax law's advantage provided to pass-throughs relative to taxable corporations. Similarly, the Rubio proposal would eliminate the current tax preference for debt-financed investment relative to equity-financed investment.

In estimating effects on investment incentives, we assume the Rubio plan would not affect the overall level of interest rates and would not eventually be financed by spending cuts or tax increases that reduce investment incentives. However, large reductions in federal revenues that are not offset by some combination of spending cuts or increased revenues from higher economic activity are likely to drive up interest rates. Higher interest rates, future cuts in public investments, or increases in taxes on capital income could negate some or all of the increase in investment arising from the tax changes (Gale and Orszag 2005).

***Impact on Labor Supply***

The Rubio proposal would also cut effective tax rates on labor income (i.e., taxes on wages and salaries for employees and on self-employment income for others). Effective marginal tax rates on labor income would be reduced by an average of 3.7 percentage points and by almost 5.0 percentage points for the top 0.1 percent (table 8). Research suggests that taxes play a small or negligible role in labor supply decisions for most workers. When tax rates fall, some workers choose to work more because the reward for working rises, but some choose to work less because meeting consumption goals is easier with higher per-hour take-home pay.

TABLE 8

## Effective Marginal Individual Income Tax Rates on Wages, Salaries, and Self-Employment Income, Rubio Tax Proposal

Percent, 2017[a]

| Expanded cash income percentile | Tax units (thousands) | Individual Income Tax | | | Individual Income Tax and Payroll Taxes | | |
|---|---|---|---|---|---|---|---|
| | | Current law | Rubio proposal | Change (percentage points) | Current law | Rubio proposal | Change (percentage points) |
| Lowest quintile | 47,878 | 1.7 | 4.3 | 2.6 | 15.6 | 18.1 | 2.6 |
| Second quintile | 37,992 | 15.7 | 12.4 | -3.3 | 29.5 | 26.2 | -3.3 |
| Middle quintile | 34,342 | 19.0 | 14.4 | -4.6 | 32.6 | 28.0 | -4.6 |
| Fourth quintile | 28,545 | 19.9 | 17.2 | -2.7 | 33.4 | 30.7 | -2.7 |
| Top quintile | 23,785 | 31.0 | 26.7 | -4.3 | 38.1 | 33.8 | -4.3 |
| All | 173,829 | 24.6 | 20.9 | -3.7 | 34.8 | 31.1 | -3.7 |
| | | | | | | | |
| **Addendum** | | | | | | | |
| 80–90 | 12,240 | 25.3 | 18.9 | -6.5 | 35.9 | 29.4 | -6.5 |
| 90–95 | 5,942 | 27.6 | 23.2 | -4.4 | 35.4 | 31.0 | -4.4 |
| 95–99 | 4,468 | 33.2 | 31.8 | -1.3 | 38.6 | 37.2 | -1.3 |
| Top 1 percent | 1,135 | 39.0 | 34.5 | -4.5 | 42.9 | 38.4 | -4.5 |
| Top 0.1 percent | 116 | 39.3 | 34.4 | -4.9 | 43.1 | 38.2 | -4.9 |

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0515-3A).

[a] Includes both filing and non-filing units but excludes units that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class, but they 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 2015 dollars) 20%, $23,099; 40%, $45,153; 60%, $80,760; 80%, $142,601; 90%, $209,113; 95%, $295,756; 99%, $732,323; and 99.9%, $3,769,396.

Second earners—lower-earning spouses—are sensitive to taxes, however. A person married to a high earner might face a very high marginal tax rate on the first dollar of earnings, which, when combined with the costs of working (e.g., paying for child care), can make working seem especially unappealing. By reducing marginal tax rates, the proposal would reduce the disincentive for entering the workforce for potential second earners.

### *Macroeconomic Effects*

Gale and Samwick (2014) discuss the effect of an income tax cut on the long-term growth rate of the economy. They suggest that the potential effects of a change in the individual income tax can be broken into four parts. The first effect—known as the substitution effect—is that lower tax rates increase incentives to work, save, and invest.

A second effect—the income effect—tends to offset the first, however. Tax cuts raise the after-tax return to labor, saving, and investment, making it easier to reach consumption targets, such as paying for college or retirement. Because taxpayers feel richer, some decide to work, save, or invest less.

The third effect of tax cuts stems from whether the revenue loss is covered primarily by increased federal borrowing or by spending cuts, and if the latter, what kind of cuts. If the immediate revenue loss from a tax cut is not offset with spending reductions, then the higher federal deficits reduce net national saving. Increased federal borrowing crowds out private investment, thereby raising interest rates and the cost of capital and depressing investment and economic growth. As noted earlier, the deficits arising from this plan are so large that they would require significant offsetting spending cuts. Even if the immediate revenue loss from a tax cut is offset with spending reductions, the combination could reduce economic growth if the spending cuts reduce public investments that boost growth. [23]

The fourth effect stems from base broadening. Broadening the base by reining in distortionary tax expenditures reduces the role of taxation in determining the allocation of resources across the economy, which, in turn, can increase economic output. However, Gravelle and Marples (2015) point out that some tax expenditures tend to increase with income, meaning that base broadening can increase marginal effective tax rates on an additional dollar of earnings by raising the cost of some goods and services purchased with the earnings. For example, state income taxes tend to increase with income. Thus, the deductibility of state taxes reduces the marginal effective income tax rate. Eliminating the deduction, as the Rubio proposal would do, would therefore tend to increase effective marginal rates.

The actual effect of tax cuts is an empirical question, and researchers have applied many methods to estimate the effect. [24] Examination of particular historical examples of tax reform—including shifts between the pre– and post–World War II periods, and the tax changes that occurred in 1981, 1986, 2001, and 2003—suggest little effect of taxes on growth. Simulation models suggest that deficit-financed tax cuts or tax cuts financed by cutting productive government spending are less effective at promoting growth than tax cuts financed by cutting unproductive government spending (Auerbach and Slemrod 1997; Dennis et al. 2004; Desai and Goolsbee 2004; Gale and Potter 2002). Cross-country comparisons of changes in output and changes in top marginal tax rates suggest little or no effect of taxes on growth (Piketty, Saez, and Stantcheva 2014).

One challenge in estimating the effect of taxes on the economy is the endogenous nature of tax changes: for example, policymakers may choose to enact tax cuts when the economy is weak, which would lead to large apparent growth responses, or they might cut taxes when the economy is strong and revenues are surging, which would produce the opposite response. Romer and Romer (2010) identified plausibly exogenous US tax reforms in time-series data and measured a positive effect of net tax cuts on economic activity. Although Romer and Romer could not distinguish short-term demand-side responses from more permanent supply-side responses, some recent research (Barro and Redlick 2011; Mertens 2015) finds evidence that the response is a supply-side effect. [25]

The Rubio plan would require unprecedented spending cuts to avoid adding to the federal debt. We estimate that the plan would reduce revenues by $658 billion in 2025 (before considering macroeconomic effects).

The Congressional Budget Office (2015a) projects total noninterest outlays in 2025 of about $5.3 trillion. As a result, Congress would need to cut projected program spending by 12 percent to prevent the plan from adding to the deficit in 2025. Congress could meet that goal by eliminating virtually all defense spending (about $711 billion). Alternatively, it would have to cut nearly half of all discretionary spending, or about one-quarter of all Medicare and Social Security spending, to offset the direct revenue loss.

As in the distributional analysis discussed earlier, financing of the tax cuts can have important effects on the long-run macroeconomic results. If spending were cut enough to offset most of the revenue losses—and the cuts did not impede growth—the economy would grow. In a 2006 study, the US Department of the Treasury concluded that financing the permanent extension of the 2001 and 2003 tax cuts by cutting spending would raise gross national product (GNP) by 0.1 to 1.2 percent, depending on how labor supply and saving respond to tax rates (US Department of the Treasury 2006). The Treasury study also implicitly assumed that the reductions in spending came from programs like transfer payments (e.g., Social Security or food stamps), but if spending cuts are concentrated in public investments in infrastructure, education, and research, they could ultimately harm the economy.

However, if spending were not cut and the growing deficits ultimately led to tax rate increases, the same study found that GNP would fall by 0.9 percent in the long run. The experience of the past three decades suggests that large tax cuts that widen the deficit are not necessarily followed by spending cuts, but instead may ultimately require future tax increases. [26] If that pattern were repeated after enactment of the Rubio tax cuts, total economic output could ultimately be smaller than if the tax cuts had not been enacted in the first place.

Barring politically difficult spending cuts or tax increases, the Rubio tax cuts would produce deficits of as much as $8.2 trillion over the next decade, which could offset—or even outweigh—the salutary effects arising from lowering marginal effective tax rates on work, saving, and investment. We estimate that by 2036, with no change in spending or interest rates, the proposal would raise the national debt by about 50 percent of GDP. If interest rates rise in response to the growing public debt, the increase in the debt could be much larger.

## CONCLUSIONS

Senator Rubio's tax reform plan would convert the income tax into a consumption tax and, if the revenue losses were offset by spending cuts, would boost incentives to work, save, and invest. Repealing many deductions, the AMT, and taxes associated with the ACA and allowing businesses to expense investments would simplify the tax code, but expansion of child credits would add new complications. By lowering marginal tax rates and further limiting or repealing many tax expenditures, the plan would reduce the incentives and opportunities to engage in some forms of wasteful tax avoidance. At the same time, eliminating taxes on investment income and setting the top pass-through business tax rate below the top individual rate would increase opportunities to reduce taxes by recharacterizing labor income as investment income and by workers shifting their work status from employees to contractors. The proposal would cut taxes on households at every income level, but much more as a share of income at the top income levels. Large families with children would benefit especially from the plan's additional child credit. But the plan poses the fundamental concern that barring extraordinarily large cuts in government spending or future tax increases, it would yield persistently large, and likely unsustainable, budget deficits.

## APPENDIX A. UNCLEAR DETAILS AND TPC'S ASSUMPTIONS ABOUT THE RUBIO PLAN

Because candidates' proposals rarely include all the details needed to model them accurately, we ask their staffs to clarify provisions or further specify details. We sent the following questions to the campaign along with our working assumptions, which were based on Senator Rubio's statements and documents released by the campaign (see Rubio Campaign 2015). The campaign did not ultimately respond to our specific questions, but it did send a set of questions about how TPC conducts its analysis. Those questions and our answers are also reproduced below.

Following our initial set of questions, Congress permanently extended a number of expiring tax provisions. We note below how that legislation changed our assumptions. In selected other cases, we ultimately decided that, barring guidance from the campaign, different assumptions were more appropriate. We note those changes below as well.

1. Individual Income Tax

Q1. Would the proposal repeal the Married Filing Separately (MFS) filing status?

A1. We assume the proposal retains the MFS filing status.

Q2. "Marco's Plan for Taxes" states that the new refundable personal tax credit is $2,000 for individuals and $4,000 for joint filers, and phases out beginning at income levels of $150,000 (individual) and $300,000 (joint) and is fully phased out at income levels of $200,000 (individual) and $400,000 (joint). It also describes the credit as "in place of the standard deduction" but other documents describe it as also replacing the personal exemption (for taxpayers).

a. Are the credit amount and the phaseout ranges indexed for inflation? If so, from what year?
b. Does the credit replace the personal exemption for taxpayers, as well as the standard deduction?
c. Is the credit available to dependent filers, and if not how would they be taxed?

A2. We assume that the credit replaces the personal exemption for taxpayers as well as the standard deduction, and that the credit and phaseout range amounts are all indexed for inflation after 2015. We also assume that dependent filers would not be eligible for the credit but would have the current law standard deduction and the deductions for mortgage interest and charitable contributions available to other taxpayers, but (like other taxpayers) no itemized deductions.

Q3. The Tax Foundation blog states that, based on statements made by the campaign, the new refundable personal credit "would be limited to current tax filers and not be available to non-working, non-filing individuals." How would that restriction be enforced?

A3. We assume that this restriction is enforced by making the credit refundable only to the extent payroll taxes (employer plus employee) exceed the EITC.

Q4. "Marco's Plan for Taxes" indicates that all itemized deductions would be repealed, but that both the (reformed) mortgage interest deduction and the charitable contribution deduction would be available to all taxpayers.

a. Would there be any floor (e.g., a de minimis dollar amount or percent of AGI) on either deduction?
b. Would the current-law limitation on itemized deductions ("Pease") apply to the (reformed) mortgage interest deduction and the charitable contribution deduction available to all taxpayers?

A4. We assume that there is no floor of any kind on either deduction, and that the current law Pease limitation applies to these deductions.

Q5. The documentation indicates that the mortgage interest deduction would be reformed. The Tax Foundation's analysis of Rubio-Lee states that the reform would reduce the current $1 million cap to $300,000.

a. Is the Tax Foundation's description of the reform correct?
b. Does the reform apply to existing mortgages or only to new mortgages?
c. Is the additional $100,000 "home equity" limit retained?

A5. We assume the limit is reduced to $300,000 only for mortgages that originate after the effective date of the reform (see below), and that the additional $100,000 "home equity" limit is retained.

Q6. "Marco's Plan for Taxes" provides a three tax rate (15 percent, 25 percent, and 35 percent) schedule for individuals and joint filers. Are the rate brackets indexed for inflation, and if so from what year?

A6. We assume that the rate brackets are indexed from 2015.

Q7. "Marco's Plan for Taxes" states that the plan "addresses the tax treatment of health care" and "repeals all 21 ObamaCare taxes." Another document, "Economic Growth and Family Fairness Tax Reform Plan," discusses the reform or repeal of the exclusion for employer-provided health insurance, but does not include any specific changes to this provision in the plan.

a. Is the 3.8 percent net investment income tax (NIIT) on high-income taxpayers, enacted as part of the Affordable Care Act (ACA), included among the repealed taxes?
b. Is the exclusion for employer-provided health insurance or any other pre-ACA health-related provisions related to health care reformed or repealed?

A7. We assume that the 3.8 percent NIIT is repealed and that no pre-ACA health-related tax provisions are reformed or repealed.

Q8. "Marco's Plan for Taxes" states that dividends and capital gains on stock would no longer be taxed, but that there would be a transition period "which requires a one-time booking of investment at current law capital gains and dividend rates, minus the 3.8% investment tax hike from ObamaCare."

a. Would short-term capital gains on stocks, long-term capital gains on assets other than stocks, and non-qualified dividends all be taxed at ordinary rates?
b. Does the "one-time booking of investment" mean that (exchange-traded) stocks would be marked-to-market and any net gain taxed at current capital gains rates (except the 3.8% net investment income tax rate)?
c. Would taxpayers be able to pay the tax on the "one-time booking of investment" over multiple years, or would the entire amount be payable immediately?
d. How would accumulated gains on closely-held stock be valued and taxed?

A8. We assume that short-term capital gains on stocks, long-term gains on other assets, and non-qualified dividends will all be taxed at ordinary rates. We also assume that exchange-traded stocks will be marked to market on the effective date of the reform and any gain taxed at current rates (except the 3.8% NIIT), with the tax payable pro rata, without interest, over ten years. We will not include any effect for closely held stock.

Q9. "Economic Growth and Family Fairness Tax Reform Plan" states that "most" interest income would not be taxable, whereas "Marco's Plan for Taxes" states that the plan "fully removes interest from the tax base." Would any forms of interest income remain taxable?

A9. We assume that interest received from pass-through businesses on fixed interest rate loans outstanding the day before enactment would be taxable (and deductible by the borrower, see below) and that interest received on bank deposits and home mortgages (both of which remain deductible) would also be taxable; no other forms of interest would be taxable.

Q10. "Economic Growth and Family Fairness Tax Reform Plan" refers to reforms of the EITC in the context of reforms to welfare programs, but it (and other documents) does not describe any specific changes to the EITC. Are any changes to the EITC included in the plan?

A10. We assume the plan makes no changes to the EITC.

Q11. The documentation states that the current child tax credit is retained. Is it modified in any way (e.g., by indexing the amount of the credit or the phaseout ranges for inflation)?

A11. We assume that there are no changes to the current child tax credit.

Q12. Does the proposal allow the expansions to the earned income and child tax credits to expire as scheduled at the end of 2017?

A12. Following passage of the PATH Act, which permanently extended these expansions, we changed this assumption and modeled the Rubio plan as retaining the present-law provisions.

Q13. The documentation does not provide certain details about the new $2,500 child tax credit:

a. Does the credit replace the personal exemption for dependents? If not, is the Personal Exemption Phaseout (PEP) retained for dependent exemptions?
b. Are the child and dependent care tax credit and the adoption credit repealed?
c. Is the credit available to dependents other than children?
d. What are the age limits for eligibility of children?
e. Is the credit taken after all other credits, as indicated in "Economic Growth and Family Fairness Tax Reform Plan"?

A13. We assume that the credit does not replace personal exemptions for dependents, that PEP is retained, and that the child and dependent care tax credit and the adoption credit are not repealed. We also assume that the credit is only available to children eligible for the current child tax credit (in particular, they must be under age 17). We assume that the credit is taken after the new personal credit, the current child tax credit and EITC (which are treated as offsetting both employer and employee payroll taxes as well as income tax), and other current credits.

Q14. "Marco's Plan for Taxes" states that the new $2,500 child tax credit phases out beginning at income levels of $150,000 (single) and $300,000 (joint) and is fully phased out at income levels of $200,000 (single) and $400,000 (joint).

a. Is the credit for all children phased out over these income ranges, so that the phaseout rate increases with the number of children?
b. Are the credit amount and the phaseout ranges indexed for inflation? If so, from what year?

A14. We assume that the credit for all children is phased out over these ranges, and that the credit and phaseout range amounts are all indexed for inflation after 2015.

Q15. “Marco’s Plan for Taxes” describes a new “$2,500 universal tax credit for the first four years of post-secondary education and costs related to eligible job skills training” that “consolidates the maze of higher education tax incentives” and “phases out between 400 - 500 percent above the Federal Poverty Level.”

a. Are all current tax incentives for higher education, including the American Opportunity Tax Credit, the Lifetime Learning Credit, and the allowance of new contributions to Coverdell Education Savings Accounts and 529 accounts, repealed?
b. Is the credit amount limited to expenses for higher education, and if so which expenses?
c. Is the credit fully or partially refundable?
d. Is the phaseout range based on the number of taxpayers (1 for single and 2 for joint) plus the number of dependents, and the HHS Poverty Guidelines?

A15. We assume that all of the current tax incentives for higher education are repealed, that the new education credit is limited to expenses for tuition, required fees, and books (or $2,500, if less), that the new education credit can be taken in addition to the new child tax credit, that the new education credit is not refundable, and that the phaseout is based on the HHS Poverty Guidelines for a household size that includes the taxpayer(s) plus dependents.

Q16. “Marco’s Plan for Taxes” indicates that tax “extenders” are eliminated. Does the proposal allow all individual income tax “extenders” to expire as scheduled?

A16. We assume the proposal allows all income tax extenders to expire as scheduled under current law. Following passage of the PATH Act, we changed this assumption and modeled the Rubio plan as retaining all of the extended provisions (which are now part of current law), including the research and experimentation credit, except as noted below in A30.

Q17. Are there any other changes to any exclusions, above-the-line deductions, or credits that are not specified in the plan description?

A17. We assume there are no other changes to exclusions, above-the-line deductions, or credits.

**2. Estate and Gift Taxes**

Q18. The documentation states that the proposal would repeal the estate tax.

a. Would the gift and Generation Skipping Transfer (GST) taxes also be repealed?
b. Would the basis of inherited assets be stepped up, as under current law, or would there be some form of carryover basis regime?

A18. We assume that the gift and GST taxes are also repealed, and that there is no carryover basis regime.

### 3. Affordable Care Act Provisions

Q19. "Marco's Plan for Taxes" states that the plan "repeals all 21 ObamaCare taxes."

c. Would the plan repeal all of the excises enacted as part of the ACA, including the excise tax on high-cost health plans (the "Cadillac Tax"), the excise on health insurance providers, the excise on brand-name drug manufacturers and importer, and the excise on medical devices?
d. Would the plan repeal the penalties on certain individuals who do have health insurance coverage (the "individual mandate") and on certain employers who do not provide health insurance coverage for the employees (the "employer mandate")?
e. Is the 0.9 percent additional HI tax rate on the wages of high-income taxpayers, enacted as part of the ACA, included in the repealed taxes?

A19. We assume the proposal repeals all of the excises and penalties enacted as part of the ACA. For consistency with our analysis of other candidates' plans, we included repeal of the 3.8 percent NIIT (see Q7 and A7 above), but did not include repeal of any of the excises and penalties, or the 0.9 percent additional HI tax, enacted as part of the ACA in our analysis of the Rubio plan. We would include the repeal of these other ACA taxes in any subsequent analysis that included Senator Rubio's full health reform plan.

### 5. Business Provisions

Q20. Would the 25 percent corporate rate be a flat rate tax on all corporate income, or would some form of graduated rate schedule be maintained?

A20. We assume the corporate rate is a flat 25 percent.

Q21. The documentation explicitly states that the individual alternative minimum tax (AMT) is repealed, but is silent on the corporate AMT. Is the corporate AMT repealed?

A21. We assume that the corporate AMT is repealed.

Q22. The documentation states that the income tax rate on the income of sole proprietors and pass-throughs would be no higher than 25 percent.

a. Does the rate cap apply to the portion of this income that is considered compensation (i.e., that is subject to SECA)?
b. Would the income (or the income in excess of the portion subject to SECA) be taxed under the regular individual income tax rates, but with a rate cap of 25 percent?

A22. We assume that the rate cap does not apply to the portion of this income that is subject to SECA, and that the remainder of the income is taxed using a preferential rate schedule in a manner similar to the way in which current law applies preferential rates to long-term capital gains and qualified dividends. The remainder of the income that would otherwise be taxed at 15 percent would continue to be taxed at 15 percent and the income that would otherwise be taxed at 25 or 35 percent would be taxed at 25 percent. We assume that business losses would only be deductible against business income taxed at the preferential rates with current law carryforward/carryback rules.

Q23. The documentation appears to indicate that expensing would only be allowed for new investments. Would expensing be allowed for new investments only? Would old investments continue to be depreciated under current law depreciation schedules? If not, how would they be treated?

A23. We assume that only new investments are expensed, and that unused depreciation on old investments would continue to be deducted under current rules.

Q24. The documentation indicates that expensing would apply to equipment, structures, inventories and land. Would purchases of land be expensed, or just improvements made to land (e.g., irrigation systems)?

A24. We assume that both purchases and improvements to land are expensed.

Q25. Would all targeted business preferences that take the form of expensing be effectively retained (or expanded, if partial expensing) such as, for example, expensing of intangible drilling costs?

A25. We assume that full expensing will apply to all business investment.

Q26. Would businesses be allowed to deduct interest on existing debt or would the interest deduction be eliminated immediately for all interest? Would interest on new debt held by businesses be taxable?

A26. We assume that interest on businesses' fixed interest rate loans outstanding the day before enactment would remain deductible and interest received on these loans would be taxable. Interest on old debt received by pass-through businesses would pass through to individual owners and be taxable, but interest received on new debt by pass-throughs and corporations would not be taxable. (However, see question below concerning interest paid and received by financial corporations.)

Q27. Is the one-time repatriation tax similar to the Camp proposal in that it would apply the 6 percent rate only to accumulated untaxed CFC earnings held in cash and apply a lower rate to the remainder?

A27. We assume that the one-time repatriation tax is structured in the same manner, with the same relative rates, as the Camp proposal, but the payments would be made over 10 years (rather than 8 under the Camp proposal).

Q28. Would the territorial system apply to corporations only? Would US individuals still pay tax on their worldwide income (with a foreign tax credit)?

A28. We assume that the territorial system applies only to corporations.

Q29. "Marco's Plan for Taxes" indicates that tax "extenders" are eliminated. Does the proposal allow all business income tax "extenders" to expire as scheduled?

A29. We assume the proposal allows all business income tax extenders to expire as scheduled under current law. Following passage of the PATH Act, we changed this assumption and modeled the Rubio plan as retaining all of the extended provisions (which are now part of current law), including the research and experimentation credit, except as noted below A30.

Q30. The documentation indicates that the plan would eliminate various (unspecified) business tax preferences. Would the following business tax preferences be eliminated or retained?

a. Inventory property sales source exemption
b. Tax credits for alternative energy production and investment, energy conservation, and investments in energy-efficient property.
c. Percentage depletion
d. Tax incentives for preservation of historic structures
e. Exemption of credit union income
f. Exclusion of interest on life insurance savings
g. Tax-exemption of insurance companies owned by tax-exempt organizations
h. Small life-insurance company deduction
i. Credit for low-income housing investments
j. Deduction for US production activities
k. Other targeted incentives for community and regional development
l. Tax credit for orphan drug research
m. Special blue cross blue shield deduction
n. Tax benefits for ESOPs

A30. We assume that all of these provisions are repealed. Following passage of the PATH Act, which extended a number of business preferences, we extended this list to include repeal of the employer wage credit for military reservists and provisions related to the low-income housing credit and the deduction for US production activities.

Q31. Would the proposal implement any new rules concerning the determination of SECA earnings from pass-throughs?

A31. We assume there is no change in these rules.

Q32. "Economic Growth and Family Fairness Tax Reform Plan" indicates that the current law treatment of the interest income and expenses of financial institutions would be retained, whereas "Marco's Plan for Taxes" states that the plan "fully removes interest from the tax base". Would the tax treatment of interest received and paid by financial institutions be changed in some way?

A32. We assume that the interest income and expense of financial institutions are taxed in the same manner as under current law, but that the revised tax rates, expensing provisions, and other changes to the tax treatment of businesses in the plan would also apply to financial institutions.

Q33. "Marco's Plan for Taxes" describes a new "25% non-refundable credit to any business offering between four and twelve weeks of paid family leave, limited to $4,000 per worker" which "applies in a number of situations."

a. Does the credit only apply to the actual amount paid for family leave during the fourth through twelfth weeks of such leave?
b. Would there be provisions to insure that the employer did not shift compensation from earlier (or later) periods into the fourth through twelfth weeks of paid family leave in order to maximize the credit?

A33. We will assume that the credit applies only to the actual amount paid for family leave during the fourth through twelfth weeks, and that there are effective enforcement provisions. After reviewing the Strong Families Act introduced by Senators Fischer and King, which we understand is the Rubio proposal is based on, we removed the restriction stated in our assumptions that leave had to be *paid* during the fourth through twelfth weeks.

**5. Effective Date**

Q34. Are all provisions intended to go into effect in 2017, or at some earlier date? Are some (such as the corporate rate reduction) assumed to be phased in, and, if so, over what time period?

A34. We assume the provisions would be effective beginning in 2017, after the Presidential election, and that no provisions are phased in.

# APPENDIX B. QUESTIONS FROM THE CAMPAIGN AND TPC RESPONSE

In response to our questions, we received a number of questions from the campaign. As part of our effort to be completely transparent about how we conduct campaign tax analyses, we reproduce our response to the campaign below. We did not ultimately receive answers to our questions about details of the campaign tax plan.

<u>TPC email to campaign dated 12/2/16</u>

Thank you for these questions, which we are happy to answer. First, I'd like to provide a general comment about our estimating methodology, because several of your questions relate to that.

TPC generally follows estimating conventions used by official government estimating agencies, such as the Joint Committee on Taxation (JCT). Our estimates include (to the extent possible) the effect of changes in tax policies on taxpayer behavior, including the character and reporting of income. We calibrate our model to match the CBO baseline and our estimates of behavioral responses are designed to match as closely as possible those that would be produced by the JCT, which is the official scorekeeper for any legislation.

TPC estimates do not incorporate macroeconomic feedback (i.e., "dynamic scoring"). However, all of our analyses of Presidential campaign proposals will include a substantive discussion of the macroeconomic effects of the tax proposal, informed by model-derived estimates and the economic literature.

More detail on the TPC model and methods can be found on our website: http://www.taxpolicycenter.org/taxtopics/Model-Related-Resources-and-FAQs.cfm

Our answers (shown in indented paragraphs) to your questions (numbered) are listed below:

1. One of the main goals of the tax plan is to stimulate economic growth, which it accomplishes through its treatment of household savings and business investment. How will your analysis consider the incentives for savings and investment provided by the tax plan?

    *See general comment above. TPC analyses include estimates of the plan's impact on effective marginal tax rates for both labor and capital income. See http://www.taxpolicycenter.org/numbers/displayatab.cfm?Docid=4245&DocTypeID=2 for our estimates of effective marginal tax rates under current law. Our analyses also include estimates of the effect on investment incentives, as measured by the marginal effective tax rate (METR), as discussed in http://www.taxpolicycenter.org/publications/url.cfm?ID=2000103.*

2. Lowering marginal tax rates for individuals, as the Rubio plan does, will provide a greater return from work. The effects will include changes on both the intensive margin, with current workers working longer hours, and the extensive margin through the creation of new jobs. How will your analysis consider the effects on employment which are caused by the tax reform plan?

   *In addition to a discussion of the incentive effects created by the Rubio plan's key provisions, we will provide estimates of the effect of the plan on effective marginal tax rates for labor income.*

3. The Rubio plan reforms taxes of business income, by lowering corporate taxes and harmonizing the treatment of business income on pass-through entities. How do you account for potential increases in investment in response, including inflows from abroad? How do you model the formation of new businesses?

   *See general comment above.*

4. By changing the tax treatment of business income, the plan will likely spur changes in its allocation and composition. How do you account for shifts between business and labor income at the individual level? How do you account for the tax effects on changes in business entities or their forms?

   *See general comment above. Also see TPC's questions #23 and #32 to clarify how the Rubio plan would address some of these related issues.*

5. In considering the distributional impact of corporate tax reform, how do you treat the incidence of corporate taxes? What assumptions do you make about which taxpayers ultimately pay corporate taxes? Do you assume 20 percent falls on the owners and 80 percent falls on the workers? 50/50? 80/20?

   *TPC assumes that 20 percent of the corporate income tax burden falls on labor, 20 percent on the normal return to all capital, and 60 percent on the supernormal returns to corporate equity (shareholders). See http://www.taxpolicycenter.org//UploadedPDF/412651-Tax-Model-Corporate-Tax-Incidence.pdf for a detailed discussion of our corporate incidence assumptions, which are in line with those used by the CBO and Treasury in their distribution analyses.*

6. An important component of the reform of business taxes is the shift to territorial taxation and a deemed repatriation rate on currently deferred overseas earnings. How do you model the impact of these changes? How do you account for the inflow of investment that it will provide? How do you model the revenue impact of the repatriation of earnings?

   *See TPC questions #28 and #29 to clarify how the Rubio proposal would work. TPC estimates will be based, in part, on the JCT estimates of the Camp proposal, which included similar components.*

7. The Rubio plan transitions to a zero tax rate on dividends and capital gains. How do you model the realization of capital gains during the transition? How do you model the impact of the lower tax rate on household savings decisions?

   *See TPC question #8 to clarify the details about the transition rules. In general, our assumptions about the behavior of capital gains realizations are based on the following JCT document: https://www.jct.gov/publications.html?func=startdown&id=3157, updated to reflect the most recent evidence on behavioral responses used by JCT.*

8. We understand that your model includes both current tax filers as well as a population of non-filers. How do you determine which individuals decide to file income tax returns in response to a tax change? How do administrative and other costs factor into this decision?

   *The filers in our model come from the public use file (PUF) of tax returns produced by the Statistics of Income Division of IRS. We obtain "non-filers" through a statistical match with the Current Population Survey (CPS). We therefore assume that all records from the PUF file an income tax return (even if their incomes are below the filing threshold and they do not qualify for refundable credits) and that records obtained from the CPS do not file an income tax return in the base year of our file. In future years, the CPS records can become filers if their income grows enough—or the tax law changes—so that they meet the filing requirements or become eligible for refundable credits. If new refundable credits are put in place, we employ "participation rates" to determine the fraction of non-filers that would now file. We base these rates on evidence from the academic literature or other sources to attempt to account for administrative and other costs and other reasons why not all potentially eligible tax units would file to claim the credit.*

9. Relatedly, we understand that your model includes separate consideration of dependents who do not currently file tax returns, but potentially could file in response to a tax change.How do you determine which dependents choose to file, and how does this differ from other non-filers?

   *The PUF data file on which our model is based contains income tax return information on current-law dependent filers. It also provides information on the number of non-filing dependents and the characteristics of the tax units that these dependents are a member of. The PUF does not, however, contain data on the incomes of dependents who do not file under current law. If a tax proposal provided the incentive for dependents to file a tax return, we would perform any necessary imputations and determine participation rates in a similar manner to that described above.*

10. The Rubio plan replaces the standard deduction and most itemized deductions with a personal credit. However it retains deductions for mortgage interest payments and charitable contributions, which remain available to all taxpayers. How would you account for

these deductions for those taxpayers who would claim the standard deduction under current law?

*We impute mortgage interest and charitable contributions (and other itemized deductions) to "non-itemizers," those tax units who report the standard deduction in our underlying data file (the public-use file produced by the Statistics of Income Division of IRS) using a statistical matching technique. Charitable contributions are imputed from responses in the Panel Study of Income Dynamics (PSID) and mortgage interest is imputed from the Current Population Survey, the American Housing Survey, and the Survey of Consumer Finances.*

11. In considering the benchmark against which the Rubio plan and other reforms will be judged, do you allow for the expiration of all provisions in current law which are currently scheduled to expire? How do the expiration of various provisions affect your baseline starting date, and the revenue and distributional impacts of tax changes?

*We use "current law" as the baseline for our analysis; this is consistent with the official scoring done by JCT. Current law assumes that tax provisions expire as scheduled. We will use the same current-law baseline for our analyses of the Presidential candidates' tax plans, although we sometimes also discuss how the proposals would compare to a baseline in which the tax cuts were extended. For example, we compare marginal effective tax rates with current law—in which the research and experimentation credit and bonus depreciation have expired—and also against 2014 law, when those provisions generally reduced effective tax rates on new investment. This is relevant because Congress has routinely extended the expiring provisions (and is currently considering legislation to make some or all of them permanent). In addition, we will produce distribution tables—with current law as the baseline—for both 2017 (before several individual income tax provisions are set to expire) and for 2025.*

*See TPC questions #12 and #16 to clarify how the Rubio proposal would treat expiring provisions.*

12. Many of your questions ask about indexing to inflation, with your suggested assumptions indexing to 2015. However you propose implementing the reform in 2017, after the election. Why do you propose such a discrepancy and how will it be resolved?

*We assume that 2017 would be the earliest possible implementation date for the Presidential candidates' tax plans. In order to treat all proposals from the candidates equally, we plan to use that same date for each plan that we analyze unless given specific guidance otherwise. At the same time, we realize that dollar values that the candidates use on their website or in their public statements are likely meant to reflect current 2015 dollars. But if that is not the case for the Rubio plan, please let us know and we will use the parameter values and inflation indexing assumptions that you stipulate.*

13. It is unlikely that a tax plan could be implemented immediately after the presidential election. How would changing the start date of the proposed reform affect your analysis?

    *We decided on using a standard start date for all of our analyses of the candidates' tax plans so that they could be easily compared. With 2017 as the start date, we will provide a standard ten-year revenue estimate for the period 2017-26 and then an estimate for the second ten-year period from 2027-2036. Changing the start date (delaying one year, for example) would mean that we would look at different ten-year periods (2018-2027 and 2028-2037, for example) but that should not change the results significantly. Obviously, we do not know when a new president will get a tax plan enacted (and it's likely that Congress would change it in ways that we cannot anticipate), but it is not unprecedented for a new president to get a major tax change enacted relatively quickly. Both Ronald Reagan and George W. Bush got large tax cuts passed in their first year in office, following through on campaign promises, and Bill Clinton got a significant package of spending cuts and tax increases enacted in his first year.*

14. CBO has recently expanded its analysis to include more macroeconomic analysis, including on the spending side. Will your analysis include any cost changes on the spending side? For example, will you anticipate any changes to costs on federal anti-poverty programs due to increases in labor?

    *See general comment above.*

15. Will the analysis include any savings for compliance costs savings given the simplification the plan achieves?

    *TPC's analyses generally include a discussion on the impact of tax changes on compliance and the simplicity of the federal tax system.*

16. Does the analysis predict any changes other countries will make because of the reforms the tax plan makes in order to increase international competitiveness? For example, will TPC assume other countries will cut corporate rates more because the US corporate rate is cut in the Rubio plan? If so, which counties? And how would the GDP of another country impact the GDP estimates for the US?

    *See general comment above.*

17. Will TPC make any assumptions on interest rates given the treatment of interest in the tax plan?

    *See general response above. TPC uses CBO's baseline economic forecast (including their forecast of interest rates) in both our tax model and in any off-model estimates that we produce. We may discuss the potential long run implications of a tax plan on interest rates, especially if it raises or* *reduces the debt significantly relative to baseline levels, but we do not estimate the effect or build alternative interest rate assumptions into our estimates.*

18. How will other analyses TPC provides impact its scoring of the tax plan?

*Some of our estimates are made off-model. We generally use similar estimating methodology to that employed by government scorekeepers with the goal of producing estimates close to the official estimates that JCT would published if the proposal were introduced as legislation.*

19. Will TPC provide a distributional analysis of the top 1 percent? If so, why not provide an analysis on every 1 percent, rather than by deciles up to the top 1 percent?

*TPC produces distribution tables by both dollar income class and our percentile breakdowns (for examples, see http://www.taxpolicycenter.org/numbers/displayatab.cfm?template=simulation&SimID=504). Showing results of subgroups within the top quintile (including the top 1%) is standard in distributional analyses. As a practical matter, there is a lot more interesting variation in level and components of income and deductions within the top 20 percent than in the rest of the population so the break-down is informative. Also, since the PUF sample is stratified by income, with a much higher sampling rate at the top, we can provide more precise estimates for small slivers of higher income groups than for the rest of the population.*

20. How will TPC account for any items outside of the ten-year window? What assumptions might be made about depreciation/full expensing? Economic growth projections?

*For all of our analyses of Presidential candidate tax plans, we plan to produce a standard ten-year revenue estimate as well as an additional estimate of the revenue effect of the plan in the second ten years. We will use the long-run extension of our tax model to produce the on-model estimates for the second ten -years. For a description of the assumptions underlying our long-run tax model, see http://www.taxpolicycenter.org/UploadedPDF/2000351-why-individual-income-tax-revenues-grow-faster-than-gdp.pdf. The economic growth projections we use in both our long-run model and in any off-model estimates come from CBO's long-run budget forecast.*

21. Will TPC provide another opportunity for our review before publishing anything to ensure our questions are answered and that we have the complete ability to articulate any items that are not correct?

*We will supply the campaign an embargoed copy of our analysis several hours before it is released to the public. We do everything we can to avoid errors (which is why we sent the long list of questions), but we would be happy to correct an error if you find one.*

The Tax Policy Center's (TPC) estimates differ from other published estimates of the revenue cost of Marco Rubio's tax proposal (table B1). TPC's estimate of 10-year revenue cost ($6.8 trillion) is smaller than the $11.8 trillion estimate from Citizens for Tax Justice (CTJ) (2015). The Tax Foundation estimated that the Rubio plan would reduce revenues by $6.1 trillion over a decade on a static basis.

TABLE C1

## Tax Policy Center Revenue Estimates for Rubio Tax Proposal Compared with Other Public Estimates

$ billions

| | Citizens for Tax Justice 2016-2025 | Tax Foundation 2015–24 | Tax Policy Center 2016–26 |
|---|---|---|---|
| Individual | N/A | N/A | -4,458 |
| Corporate | N/A | N/A | -2,154 |
| Estate | N/A | N/A | -224 |
| **Total** | **-11,800** | **-6,055** | **-6,836** |

**Sources:** Citizens for Tax Justice (2015); Tax Foundation, "A Comparison of Presidential Tax Plans and Their Economic Effects," available online at http://taxfoundation.org/blog/comparison-presidential-tax-plans-and-their-economic-effects; and Urban-Brookings Tax Policy Center calculations.

**Note:** N/A = not available.

These differences cannot be fully reconciled on the basis of the level of detail published. One difference is the assumed starting date of the Rubio proposal: the Tax Foundation uses 2015, CTJ uses 2016, and TPC uses 2017. TPC's later starting date, in itself, should make the TPC estimate larger than the others. In addition, TPC's estimates reflect the effects of the Protecting Americans from Tax Hikes (PATH) Act of 2015 and the tax provisions in the Consolidated Appropriations Act of 2016 on baseline revenues under current law as well as on the provisions in the Rubio plan. Including the effects of that legislation reduces the projected cost of the plan. CTJ and the Tax Foundation analyzed the Rubio plan before those acts became law and so did not incorporate the laws' effects.

The Tax Foundation evaluated an earlier tax plan that Senator Rubio put together with Senator Mike Lee (R-UT). That plan differed from the plan Senator Rubio has promoted during the campaign in at least three ways that would affect its projected revenue loss:

- The earlier plan proposed two tax brackets with 15 percent and 35 percent rates rather than the three brackets in the version we evaluated. Tax brackets subject to the 25 percent rate in the plan analyzed here would be taxed at 35 percent under the earlier plan. The lower rate would increase the projected revenue loss.
- The $2,500 additional child tax credit (CTC) in the original plan was not phased out at higher-income levels. The campaign version of the plan would phase out the credit above $150,000 of income ($300,000 for married couples). Imposing a phaseout would decrease the plan's projected revenue loss.
- The additional CTC was not refundable in the earlier plan. Because the TPC analysis assumed only a limited degree of refundability, the effect on projected revenues would be relatively small.

Finally, the Tax Foundation apparently evaluated the earlier plan as if it were fully phased in. Therefore, it assigned no revenue loss to the plan's provisions that would allow firms to expense their investment costs.[27] TPC assumes firms would continue to depreciate old investments, which increases the revenue loss in the early years.

The CTJ analysis contains too few details for us to determine why its estimated revenue loss from the Rubio plan is much greater than TPC's estimate.

Revenue estimates could also differ because of alternative baselines or differences in tax simulation models, such as alternative assumptions about the degree of taxpayers' response to changes in tax rates. Our baseline is calibrated to match the Congressional Budget Office (2015a, 2015b) projections. In addition, our estimates of the responsiveness of taxpayers to changes in tax rates are designed to match as closely as possible official congressional estimates produced by the Joint Committee on Taxation.

## APPENDIX D. MEASURING DISTRIBUTIONAL EFFECTS OF TAX CHANGES

Analysts use a variety of measures to assess the distributional effects of tax changes. No perfect measure exists; often, a combination of measures is more informative than any single measure.

The Tax Policy Center generally focuses on the percentage change in after-tax income because it is a measure of the gain or loss of income available to households to buy goods and services, relative to the amount available before the tax change. A tax change that raises or lowers after-tax income by the same percentage for all households leaves the progressivity of the tax unchanged.

Other measures used to assess a tax change's effects include the shares of the tax cut going to different percentiles of the income distribution, the size of each group's cut measured in dollars, and the percentage change in tax liability. The first two measures poorly indicate the effects of a tax change because they ignore the initial distribution of taxes and thus do not assess changes in a tax's progressivity. The percentage change in tax liability can be particularly misleading because it relies too much on the initial distribution of taxes. Cutting the tax on a person earning $1,000 from $50 to $10 is an 80 percent cut, whereas reducing the tax on a person earning $1 million from $250,000 to $150,000 is just a 40 percent cut. However, the tax savings boosts after-tax income by only about 4 percent for the lower-income person, compared with a more than 13 percent increase for the higher-income person.

Table C1 shows several different measures of the potential effects of the Rubio tax plan on households at different income levels in 2017. The tax cut would be most significant as a share of after-tax income (column 1) for those with high incomes, as discussed earlier. Also true for this plan, high-income people would receive the bulk of the tax cuts (column 2) and their average tax change would be larger than that for other income groups (column 3). In contrast, the tax cut would be a larger share of tax liability for households in the lowest income quintile, simply because they have very low tax liability under current law (column 4). Finally, the share of federal tax burdens would fall for households at the bottom and the top of the income distribution and rise modestly for those in the middle (column 5).

For further discussion, see "Measuring the Distribution of Tax Changes" (http://taxpolicycenter.org/taxtopics/How-to-Interpret-Distribution-Tables-2013.cfm).

TABLE D1

## Alternative Ways of Presenting Change in Distribution of Tax Burdens Under Rubio Tax Plan

By expanded cash income percentile, 2017

| Expanded cash income percentile[a] | Percent change in after-tax income (%)[b] | Share of total federal tax change (%) | Average Federal Tax Change[c] | | Share of Federal Taxes | |
|---|---|---|---|---|---|---|
| | | | Dollars | Percent | Change (% points) | Under the proposal (%) |
| Lowest quintile | 1.9 | 2.2 | -251 | -44.3 | -0.3 | 0.6 |
| Second quintile | 1.4 | 3.1 | -450 | -16.1 | 0.1 | 3.5 |
| Middle quintile | 2.5 | 8.6 | -1,365 | -15.9 | 0.2 | 9.8 |
| Fourth quintile | 3.3 | 15.9 | -3,043 | -16.1 | 0.3 | 17.8 |
| Top quintile | 6.2 | 69.6 | -16,008 | -18.0 | -0.2 | 68.3 |
| All | 4.4 | 100.0 | -3,146 | -17.7 | 0.0 | 100.0 |
| | | | | | | |
| **Addendum** | | | | | | |
| 80–90 | 4.2 | 13.6 | -6,059 | -17.2 | 0.1 | 14.1 |
| 90–95 | 4.5 | 9.7 | -8,965 | -16.2 | 0.2 | 10.8 |
| 95–99 | 4.7 | 12.6 | -15,364 | -14.2 | 0.7 | 16.4 |
| Top 1 percent | 10.4 | 33.8 | -162,646 | -21.2 | -1.2 | 27.0 |
| Top 0.1 percent | 13.6 | 19.8 | -932,841 | -26.0 | -1.4 | 12.1 |

**Source:** Urban-Brookings Tax Policy Center Microsimulation Model (version 0515-3A).

**Notes:** Number of alternative minimum tax (AMT) payers (millions). Baseline: 4.5; proposal: 0. Projections are for calendar year 2017; baseline is current law (including provisions in the Protecting Americans from Tax Hikes Act of 2015 and the Consolidated Appropriations Act of 2016). The proposal includes all individual, corporate, and estate tax provisions. For TPC baseline definitions, see http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm.

[a] The percentile includes both filing and nonfiling units but excludes units that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class, but they 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 2015 dollars) 20%, $23,099; 40%, $45,153; 60%, $80,760; 80%, $142,601; 90%, $209,113; 95%, $295,756; 99%, $732,323; and 99.9%, $3,769,396.

[b] 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.

[c] Average federal tax includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes.

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## NOTES

[1] Current investors would incur a transition tax on those sources of income.

[2] In its baseline estimates, TPC assumes that the personal credit would be refundable to the extent payroll taxes exceed the earned income tax credit. The summary document of the Rubio plan ("Marco's Plan for Taxes") states the plan "creates a new $2,000 (individual) / $4,000 (married filing jointly) refundable personal tax credit in place of the standard deduction…" (https://marcorubio.com/issues-2/rubio-tax-plan/). The actual plan, "Economic Growth and Family Fairness Tax Reform Act" (http://www.rubio.senate.gov/public/index.cfm/files/serve/?File_id=2d839ff1-f995-427a-86e9-267365609942), does not discuss refundability of the personal credit. A Rubio spokesperson told Vox: "Rules would be tailored to ensure that our reforms would not create payments for new, non-working filers" (http://www.vox.com/2015/10/30/9642850/marco-rubio-john-harwood).

[3] TPC's analysis accounts for only the repeal of the ACA's 3.8 percent net investment income tax, not the other smaller ACA taxes that Rubio would eliminate. This approach is consistent with TPC analyses of other candidates' tax plans.

[4] Our estimates account for many microeconomic behavioral responses, such as reduced use of tax preferences and increased capital gains realizations when marginal tax rates on income and capital gains decline. Our estimating methodology generally follows the conventional approach used by the Joint Committee on Taxation (JCT) and the US Department of the Treasury to estimate revenue effects before considering the macroeconomic effects. In some cases noted in the text, we do not model potentially large tax avoidance responses because of uncertainty about exactly how the proposal would be implemented. (The JCT has the advantage of actual legislative language as the basis for their estimates and would estimate the revenue loss attributable to tax avoidance if they judged the legislation to lack effective anti-avoidance measures.)

[5] The summary document of the Rubio plan indicates the credit is fully refundable. A Rubio aide clarified to VOX that "rules would be tailored to ensure that our reforms would not create payments for new, non-working filers."

[6] As noted above, the plan is not a pure consumption tax because of the taxation of some capital gains, dividends, and interest. But our current income tax is not a pure income tax because some forms of capital income are exempt or lightly taxed. The plan would transform our current hybrid tax system from one that is mostly an income tax to one that is mostly a consumption tax.

[7] In 2015, the standard deduction plus nondependent personal exemptions equaled $10,600 for childless single filers and $20,600 for joint filers.

[8] The Tax Foundation analysis (Schuyler 2015) assumed the personal credit would be fully refundable. This approach would provide much higher benefits to very-low-income families. However, the Tax Foundation subsequently blogged that the personal credit "would be limited to current tax filers and not be available to non-working, non-filing individuals." We assume this restriction would be enforced by making the new personal credit refundable only to the extent payroll taxes (employer plus employee shares) exceed the EITC. See questions 2 and 3 in Appendix A for further clarification. If the credit were fully refundable—for individuals with any earnings—the cost of the proposal would rise from $6.8 trillion over the 10-year budget window to at least $7.1 trillion. Virtually all of the benefits of full refundability would go to households in the bottom two income quintiles: after-tax income would increase by 4.9 percent for the lowest quintile (versus 1.9 percent with more limited refundability) and by 2.0 percent for the second quintile (versus 1.4 percent). The actual cost of granting a $2,000 refundable credit to adults with at least $1 of earnings would be much, much higher, however, because there would be a huge incentive to earn and report that first dollar. One could imagine nursing home residents selling services to each other for a nominal fee so they could claim their $2,000 tax credit. "Old Joe only earns $10 from cutting up Sam's food for him, but that self-employment income qualifies him for a $2,000 check from the IRS." Tax preparers might find it profitable to pay individuals who are out of the work force in December for services of nominal value with the promise of much bigger

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rewards in January when they file their tax returns. Beyond this gaming, it would also be very hard for the IRS to monitor fraud associated with such a credit. This is why we think it is unlikely that Senator Rubio actually has such an expansive proposal in mind.

[9] "Marco's Plan for Taxes" does not explicitly state whether the new CTC will follow the eligibility rules of the existing CTC, nor does it indicate whether the credit will be taken before or after existing tax credits. We assume the credit will be taken after all other credits, as indicated in the "Economic Growth and Family Fairness Tax Reform Plan." See questions 13 and 14 in Appendix A for clarification about TPC assumptions.

[10] The taxpayer's marginal rate would be even higher between $150,000 and $155,000 of AGI as the last of her basic CTC would phase out at a 5 percent rate, bringing her marginal tax rate to 64 percent over that income range.

[11] Phaseout of the couple's basic CTC would be complete when their AGI reached $190,000 and would thus not affect their MTR in the phaseout range for the taxpayer credit and the new CTC.

[12] Senator Rubio's plan did not specify how he would reform the mortgage interest deduction. The Tax Foundation's analysis of the Rubio-Lee tax plan (Schuyler 2015) assumed that the mortgage interest deduction would be limited to interest on no more than $300,000 of mortgage debt, down from the current $1 million limit. Our analysis similarly assumes the same $300,000 limit and that the Rubio plan would retain the current $100,000 limit on home equity debt eligible for the interest deduction. See Questions 4 and 5 in Appendix A.

[13] Most developed countries have a so-called territorial system, but they also have various degrees of anti-avoidance measures that tax some foreign income on a current basis. No country is either purely territorial or purely worldwide: all are hybrids (see Altshuler, Shay, and Toder 2015). The tax reform plan of Representative David Camp (R-MI) follows this practice by proposing a minimum tax on above-normal profits earned by foreign subsidiaries.

[14] The Rubio plan is silent about gift and generation-skipping taxes. We assume they would also be repealed.

[15] To the extent that states retain their estate or inheritance taxes, taxpayers could still have incentives to set up their estates to minimize liability for those taxes.

[16] However, without an estate tax, the "tax price" of political contributions would increase for wealthy donors, which could partially offset the wealth effect (that wealthier people make larger political contributions).

[17] Repealing the estate tax would also reduce the incentive to make donations during an individual's lifetime. Under current law, such donations produce an income tax deduction and reduce the size of the taxable estate, thereby saving both income and estate taxes. Overall, the plan would substantially increase the tax price of donating for very wealthy individuals, which would tend to reduce charitable giving. However, the large tax cuts for high-income households discussed later would produce a partially offsetting income or wealth effect because giving tends to rise with income, all else being equal.

[18] Although we assume an effective date of January 1, 2017, we estimate a slight revenue loss in 2016 because taxpayers would try to postpone realizing capital gains in anticipation of the repeal of those taxes in 2017. Appendix B compares our estimates of revenue with other published estimates.

[19] These estimates assume that interest rates would not be affected by the substantial increase in government borrowing. If interest rates increase to reflect the increased demand for capital, then the debt would rise even more.

[20] This distributional analysis (as well as most of the revenue analysis) is based on the Urban-Brookings Tax Policy Center Microsimulation Model. For, a brief description of the model, visit http://www.taxpolicycenter.org/taxtopics/Brief-Description-of-the-Model-2015.cfm. Appendix D discusses alternative distribution measures and illustrates several alternatives for the Rubio tax proposal.

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[21] *I*f the personal credit were fully refundable to all individuals with at least some earnings, then the 10-year revenue loss from the proposal would rise from $6.8 trillion to $7.1 trillion and the average tax cut for the bottom quintile would more than double from $251 to $650.

[22] People who now claim the standard deduction and thus do not need to keep records on deductible expenses would have to track their charitable donations and mortgage interest, making tax filing more complex if they choose to take advantage of those deductions.

[23] Well-targeted spending on education and infrastructure, for example, may boost growth. Other spending may distort resource allocation in much the same way that poorly designed tax expenditures do.

[24] See Gale and Samwick (2014) for a recent review of the literature.

[25] If the economy is operating below capacity, deficit-financed tax cuts can boost the economy in the short run by increasing aggregate demand if individuals decide to spend their tax cuts (rather than saving them or paying down debt) or if temporary investment tax cuts encourage companies to boost purchases of machines and other equipment. However, deficit-financed tax cuts can overheat an economy that is at full employment, which can lead to inflation and, ultimately, a recession if the Federal Reserve responds to the inflationary pressures by raising interest rates. In addition, there is a growing consensus that for most economic downturns (2008 being a notable exception), monetary policy is a preferable instrument for stabilization policy.

[26] Ronald Reagan raised taxes in 1982 and 1984; George H. W. Bush raised them in 1990; Bill Clinton raised them in 1993; and. Barack Obama raised them in 2012. With the exception of Reagan's tax increases, all of these tax changes included significant increases in top marginal tax rates.

[27] The Tax Foundation analysis of the Rubio plan (Schuyler 2015) does not state that expensing would not reduce revenues. However, that was the approach taken in its analysis of Jeb Bush's plan.

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