# Effects of Reforms of the Home Mortgage Interest <br> Deduction by Income Group and by State 

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#### Abstract

This report considers three options for restructuring the home mortgage interest deduction - replacing the deduction with a 15 percent non-refundable interest credit, reducing the ceiling on debt eligible for an interest subsidy to $\$ 500,000$, and combining the substitution of the credit for the deduction with the reduced limit on the interest subsidy. All three options would raise federal tax revenue and make the tax system more progressive. Distributional effects would differ by state of residence and, within states by income group. We display distributional effects by income group in California, Kentucky, Illinois, Michigan, New York, Oregon, Texas, Utah, and Wisconsin.


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## CURRENT LAW AND REFORM OPTIONS

About 30 percent of individual taxpayers itemize deductions to their federal income tax returns, and 75 percent of those who do so claim a deduction for home mortgage interest. Under current law, taxpayers can deduct interest on up to \$1 million in acquisition debt used to buy, build, or improve their primary residence or a second designated residence. They can also deduct interest on up to $\$ 100,000$ in home equity loans or other loans secured by their properties, regardless of the purpose of loans. ${ }^{1}$

The value of the deduction differs across taxpayers because of their different marginal tax rates. A taxpayer in the top tax bracket of 39.6 percent would save $\$ 39.60$ whereas someone in the 15 percent bracket would save only $\$ 15$ from $\$ 100$ additional interest deductions.

Four out of five taxpayers do not claim the mortgage interest deduction, many of whom are lower-income taxpayers. Most of them instead claim the standard deduction because it is larger than the sum of all their potential itemized deductions. Others are itemizers who either do not own a home or have paid off their home mortgage loans.

We consider three options to reform the deduction for home mortgage interest:
Option 1: Replace the mortgage interest deduction with a 15 percent non-refundable tax credit that can be claimed by both itemizers and non-itemizers, while maintaining the $\$ 1$ million cap on the eligible debt.

Option 2: Reduce the maximum amount of debt eligible for the mortgage interest deduction to $\$ 500,000$.

Option 3: Replace the deduction with a 15 percent non-refundable credit, and reduce the cap on the size of the mortgage eligible for the tax preference from $\$ 1$ million to $\$ 500,000$.

For each of the three options, we present federal-level revenue and distributional effects: we display (1) revenue effects for fiscal years 2017 through 2026, (2) distributional effects of beneficiaries and benefits from the mortgage interest subsidy in 2016, and (3) distributional effects of federal tax changes under different options compared with current law. In addition, using a method the Tax Policy Center (TPC) developed of imputing state weights to samples of federal taxpayers, we analyze the effects of the options by state of residence and by income within selected states. Specifically, we display: (4) federal income tax changes by state of residence, and (5) the distributional effects of federal income tax changes by income group within each of nine selected states.

[^0]Here are five key takeaways (one for each section):

- All three options would raise federal tax revenue, and Option 3 would raise the most.
- More taxpayers would benefit from the credit than from the deduction, but the average benefit per recipient from the credit would be substantially lower than that from the deduction.
- Under Options 1 and 3, the biggest winners are the lower-and-middle-income taxpayers while the biggest losers are high-income people who are not at the very top of income scale. Option 2 would impose relatively higher tax increases on upper-income taxpayers.
- Both Options 1 and 3 would increase the average amount of federal tax paid in 46 states and the District of Columbia; Option 2 would increase average federal taxes in all states. Taxpayers in some states would face a much larger federal tax increase than taxpayers in others.
- The distributional effects within the selected states are similar to the distributional effects for the entire country, but do differ from each other. Under Options 1 and 3, higher-income states would have a higher percentage of taxpayers experiencing federal tax increases than the national average and a lower percentage of taxpayers experiencing tax cuts because relatively fewer people in high-income states are non-itemizers who do not benefit from the mortgage interest deduction, but would benefit from a credit.


## PHASE-IN SCHEDULE AND ASSUMPTIONS

Revenue estimates are based on three assumptions. First, each option would be phased in over 5 years, for tax years beginning on January 1, 2017. For options that convert the deduction to a credit (i.e. option 1 and 3 ), they would: (1) allow taxpayers to claim only 80 percent of eligible mortgage interest in 2017, decreasing by 20 percentage points each year until the mortgage interest deduction is completely eliminated in 2021; and (2) allow taxpayers to claim a nonrefundable credit equal to 3 percent of eligible mortgage interest in 2017, increasing by 3 percentage points per year until hitting 15 percent in 2021 and thereafter. Options that reduce the cap (i.e. option 2 and 3 ) would gradually lower the current law maximum of $\$ 1,000,000$ to $\$ 900,000$ in 2017 and by an additional $\$ 100,000$ for each subsequent year until the permanent limit of $\$ 500,000$ is reached in 2021. Since Option 3 would both convert the deduction to a credit and impose a limit on the amount of eligible mortgage, we use Option 3 as an example to illustrate how the phase-in schedule works (Table 1 and Figure 1).

TABLE 1
Illustration of Phase-In Schedule for Option 3
Amount of Mortgage Eligible for an Interest Deduction or Credit Per Tax Unit, 2016-2026

| Year | 2016 | 2017 | 2018 | 2019 | 2020 | 2021-2026 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of home mortgage eligible for an interest deduction | 100\% | 80\% | 60\% | 40\% | 20\% | 0\% |
| Percent of home mortgage eligible for a tax credit | 0\% | 20\% | 40\% | 60\% | 80\% | 100\% |
| Tax credit rate | 0\% | 3\% | 6\% | 9\% | 12\% | 15\% |
| Amount of home mortgage eligible for an interest deduction (\$) | 1,000,000 | 900,000 | 800,000 | 700,000 | 600,000 | 500,000 |

Note: Reform Option 3 is to replace the deduction with a 15 percent non-refundable credit, and to reduce the cap on the size of the mortgage eligible for the tax preference from $\$ 1$ million to $\$ 500,000$, allowing for second mortgages and home equity loans under the cap.

FIGURE 1
Illustration of Phase-In Schedule for Option 3
Amount of mortgage eligible for an interest deduction or credit per taxpayer, 2016-2026


Second, taxpayers optimally pay down their mortgage in response to a smaller tax preference for mortgage interest. For example, if the mortgage interest deduction was eliminated, taxpayers with positive sources of investment income would sell some capital assets to pay down some of their mortgage debt. Third, our revenue estimates are micro-dynamic; a taxpayer's reported taxable income responds to changes in his or her statutory marginal tax rate. However, we do not incorporate any possible impacts of the policy changes on home values, homeownership rates, mortgage interest rates, or new investment in housing.

For distributional estimates, each option is on a fully phased-in basis, starting on January 1, 2016. The distributional estimates assume no behavioral responses, other than tax form optimization (e.g., choosing the itemization status that minimizes tax liability).

## REVENUE EFFECTS

The deduction for home mortgage interest is among the largest federal tax expenditures. The Joint Committee on Taxation estimates that the federal revenue cost of the deduction for home mortgage interest deduction will total $\$ 77$ billion in fiscal year 2016, increasing each year thereafter to $\$ 96$ billion in 2019. ${ }^{2}$

All the options would increase federal revenues, with the annual increase rising over time as the options are phased in (Appendix Table 2 and Figure 2). Phasing out the deduction and phasing in the 15 percent non-refundable credit, while maintaining the current cap on the amount of eligible debt, will raise approximately $\$ 191$ billion between fiscal years 2017 and 2026. Simply imposing a $\$ 500,000$ cap on the amount of eligible debt for the mortgage interest deduction will raise approximately $\$ 87$ billion over the same time period. Phasing out the deduction, phasing in the 15-percent credit, and imposing a $\$ 500,000$ cap will raise approximately $\$ 241$ billion over 10 years.

FIGURE 2
Tax Revenue Increase
Options 1 to 3 vs. Current Law, 2017-2026



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).

[^1]
## DISTRIBUTIONAL EFFECTS OF BENEFICIARIES AND BENEFITS

In this section, we address three key questions under current law and each of the three alternatives: (1) how many taxpayers in each income group would get the benefits, (2) what are the average benefits per taxpayer, and (3) what is the approximate relationship between the size of benefit and income of a beneficiary. We present the distributions of beneficiaries and average benefits by income group under current law and each option. Three key findings are:

- More taxpayers would benefit from the credit than from the deduction (Figure 3).
- For taxpayers receiving benefits, the average benefit from the credit would be substantially lower than that from the deduction (Figure 4): for example, under current law and option 2, beneficiaries receive an average benefit of $\$ 1950$ and $\$ 1820$, respectively, while under options 1 to 3 they receive $\$ 990$ and $\$ 950$, respectively. The same patterns hold for almost every income group, except for those at the very bottom of the income scale.
- Under current law or any of the reform options, the average size of the benefit always increases with income. But replacing the deduction with the tax credit, and imposing a lower cap would both mitigate this regressive distributional pattern because the higher-income beneficiaries would see a larger decline in their average benefit. (Figure 4).

FIGURE 3
Percent of Tax Units with Benefits from Tax Expenditures for Home Mortgage Interest
By expanded cash income level, 2016


[^2]

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).

## Mortgage Interest Deduction with a \$1 million Cap (Current Law)

Under current law, in 2016, about 35 million tax units, or 20 percent of the total, will benefit from the itemized deduction for mortgage interest (Appendix Table 3 and Figure 3). Among tax units with cash incomes less than $\$ 50,000$, just 2.1 million, or 2.4 percent, benefit from the deduction. Most tax units with incomes below $\$ 50,000$ do not claim a mortgage interest deduction either because they have no mortgage or because, compared with the standard deduction, their interest expense, combined with other deductible expenses, is too low to provide a benefit from claiming the deduction. One-fourth of taxpayers with incomes between $\$ 50,000$ and $\$ 125,000$ benefit from the current deduction. Almost two-thirds of those with incomes greater than $\$ 125,000$ benefit from the deduction. Among these highincome taxpayers, those at the very top of the income scale benefit slightly less than those with slightly lower incomes; three-fourths of the taxpayers with incomes between $\$ 200,000$ and $\$ 1$ million benefit while three-fifths of those with incomes above $\$ 1$ million benefit. This is because a smaller percent of taxpayers at the very highest incomes have mortgages.

Overall, under current law in 2016, the average benefit for taxpayers who claim the deduction will be $\$ 1,950$. The average size of the benefit increases with income. For example, the average benefit for taxpayers claiming the deduction in the $\$ 40,000$ to $\$ 50,000$ income group is less than $\$ 500$, while that for taxpayers claiming the deduction with cash incomes of more than $\$ 1$ million is more than $\$ 8,000$. This increase in the average benefit results from two factors: (1) higher-income taxpayers with mortgage debt have larger mortgages on average, and (2) the value of the deduction for any given amount of mortgage interest increases with the taxpayer's marginal income tax rate.

## 15-Percent Credit with a \$1 Million Cap (Option 1)

Under the option to convert the current deduction to a 15 percent non-refundable credit, the number of tax units who benefit would rise by 15 million, to a total of 50 million-approximately 29 percent of all tax units (Appendix Table 3 and Figure 3). Compared to the deduction, a tax credit would benefit many more taxpayers in lower income groups. The number of tax units with incomes less than $\$ 50,000$ who benefit would more than double from 2.1 million under the deduction to 4.6 million, or 5.2 percent of tax units, with the mortgage credit. The percent of units benefiting would rise from 25 to 44 percent of those with incomes between $\$ 50,000$ and $\$ 125,000$, but only from 65 to 73 percent of those with incomes greater than $\$ 125,000$. While only itemizers can claim the deduction, both itemizers and those who claim the standard deduction can claim the tax credit. Because taxpayers at lower income levels are less likely to have sufficient itemized deductions to exceed the value of the standard deduction, they do not benefit from the mortgage interest deduction, but would benefit from the tax credit.

Given that more taxpayers would benefit from the credit, the average benefit from the credit would be substantially lower than that from the deduction. Overall in 2016, under Option 1, the average benefit for taxpayers who claim it will be $\$ 990$, significantly lower than the average benefit of $\$ 1,950$ under current law mortgage interest deduction (Figure 4). The average benefit would decline for all expanded cash income groups, except for taxpayers with incomes less than $\$ 30,000$. The average benefit would decline most for beneficiaries in the highest income groups. For example, the average benefit for beneficiaries with incomes between $\$ 20,000$ and $\$ 30,000$ increases from $\$ 360$ to $\$ 370$; the average benefit for beneficiaries with incomes between $\$ 50,000$ and $\$ 75,000$ decreases from $\$ 730$ to $\$ 530$; and, at the other extreme, the average benefit for beneficiaries with incomes of more than \$1 million declines from $\$ 8,020$ to $\$ 3,270$. The changes in average benefits reflect differences in marginal tax rates faced by taxpayers at different levels, because higher marginal rates raise the value of current law deduction but would not affect the value of tax credit.

## Mortgage Interest Deduction with a $\$ 500,000$ Cap (Option 2)

Under the option to reduce the maximum amount of debt eligible for the mortgage interest deduction to $\$ 500,000$, the number of beneficiaries would be the same as under current law because those who benefit from the deduction under the $\$ 1$ million cap would still benefit under the $\$ 500,000$ cap, though by a lesser amount (Figure 3 and Appendix Table 3). The cap would have different effects on the average benefit in different income groups. Overall in 2016, the average benefit for taxpayers who claim the deduction will be $\$ 1,820$, compared with an average benefit of $\$ 1,950$ with current law $\$ 1$ million cap. The effect of imposing the cap increases with income: the cap has little effect on taxpayers with incomes below $\$ 75,000$ and it reduces the average benefit for taxpayers with incomes between $\$ 75,000$ and $\$ 100,000$ only by $\$ 10$, from $\$ 1050$ to $\$ 1040$. In contrast, for taxpayers with cash incomes of more than $\$ 1$ million, the cap reduces the average benefit by over $\$ 2,000$, from more than $\$ 8,000$ to less than $\$ 6,000$. Compared to current law, the average benefit still increases with income under Option

2, but the increase is smaller due to the lower cap because higher-income taxpayers are more likely to have mortgages larger than the cap.

## 15-Percent Credit with a $\$ 500,000$ Cap (Option 3)

Under the option to replace the current deduction with a 15-percent non-refundable credit on interest for a mortgage of no more than $\$ 500,000$, the number of taxpayers who benefit would rise to almost 50 million, or 29 percent of the total, the same as under Option 1 because the cap would not affect eligibility for the credit. In 2016, the average benefit for taxpayers who claim the credit will be $\$ 950$, which is $\$ 1,000$ lower than the average benefit under current law and $\$ 40$ lower than the average benefit under Option 1. The cap would reduce the average benefit mostly for upper-income taxpayers and would have almost no effect on the benefit received by taxpayers with incomes below $\$ 100,000$. For example, with the mortgage credit, the $\$ 500,000$ cap would reduce the average benefit for beneficiaries with incomes between $\$ 75,000$ and $\$ 100,000$ by only $\$ 10$, but would reduce the average benefit for taxpayers with cash incomes of more than $\$ 1$ million by $\$ 800$, from $\$ 3,270$ under option 1 to $\$ 2,470$ under option 3. In total, both the mortgage cap and the conversion from deduction to a credit reduce the average benefit received by very high income beneficiaries, with the bigger decline in benefit produced by the conversion from a deduction to a credit.

## DISTRIBUTIONAL EFFECTS OF FEDERAL TAX CHANGES

In this section, we report both the national and state-level distributional effects for each option. We show: (1) the distributional effects by income group nationwide; (2) the distributional effects by state of residence; and (3) the distributional effects by income group within each of nine selected states. All the distributional estimates are for tax year 2016 and assume the options are fully phased-in.

## Distributional Effects by Income Group Nationwide

We show the average tax changes and the percent changes in after-tax income among all taxpayers, the percent of tax units who experience tax cuts or tax increases, and the average tax changes for the affected taxpayers (Appendix Tables 4 through 7 and figures 5.1 through 6.3). Three key findings are:

- In terms of average tax changes for all taxpayers, all three options would increase taxes for taxpayers with incomes above $\$ 100,000$. Options 1 and 3 would slightly cut taxes for those with incomes below \$100,000 (Figure 5.1).
- In terms of the percent changes in after-tax income for all taxpayers, under any of the reform options, those with incomes between $\$ 30,000$ and $\$ 125,000$ would receive the largest benefit (except for Option 2), while those with incomes between $\$ 200,000$ and $\$ 1$ million are the groups most adversely affected (Figure 5.2 and Appendix Tables 4 to 6).
- In terms of winners and losers, Options 1 and 3 would have very similar distributional effects (Figure 6.1 and Figure 6.3), though Option 3 would impose larger tax increases but smaller decreases on the higher-income taxpayers than Option 1 (Figure 5.3). Option 2 would affect the fewest taxpayers: it would hardly affect any taxpayers whose incomes are below \$100,000 (Figure 6.2); however, it would impose larger tax increases on the affected higher-income taxpayers, though not at the very high end, than the other two options (Figure 5.3).

FIGURE B. 1
Average Federal Tax Change for All Tax Units, Options 1 - 3
By expanded cash income Level, 2016


Source: Urban-Brockings Tax Policy Center Microsimulation Model (version 0516-1).

FIGURE 8.2
Average Percent Change in After-tax Income for All Tax Units, Options 1-3
By expanded cash income Level, 2016


Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).

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FIGURE 5.3
Average Federal Tax Changes for Affected Tax Units, Options 1-3
By expanded cash income Level, 2016
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Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).

## Option 1 vs. Current Law

Replacing the current mortgage interest deduction with a 15 percent non-refundable tax credit while maintaining the $\$ 1$ million cap on the eligible debt will raise taxes by an average of $\$ 100$ per tax unit (Appendix Table 4, Figure 5 and Figure 6.1). Taxes will decline for 14 percent of tax units by an average of $\$ 370$ and increase for 13 percent of tax units by an average of $\$ 1,250$. With this option, most affected taxpayers with cash incomes of less than $\$ 125,000$ will experience a tax cut, while most affected taxpayers with incomes over $\$ 150,000$ will see their taxes rise. Tax units with incomes between $\$ 30,000$ and $\$ 125,000$ receive the largest benefit as a percentage of their after-tax income, 0.1 percent, while tax units with incomes between $\$ 200,000$ and $\$ 500,000$ are most adversely affected, with a decline in after-tax income of 0.6 percent.

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FIGURE 6.1
Percent of Affected Tax Units, Option 1
By expanded cash income level, 2016
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Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).

Option 2 vs. Current Law
Reducing the maximum amount of debt eligible for the mortgage interest deduction to \$500,000 will raise taxes by an average of $\$ 20$ per tax unit (Appendix Table 5, Figure 5 and Figure 6.2). No taxpayer will experience a tax cut and hardly any with incomes below $\$ 75,000$ will experience a tax increase. The 1 percent of tax units who are affected by the option, however, will see their taxes rise by an average of $\$ 3,100$ (Figure 5 and Figure 6.2). Tax units with incomes between $\$ 500,000$ and $\$ 1$ million see the largest decline in after-tax income, 0.2 percent, but even in this group less than a fifth of tax units will experience a tax increase.

## FIGURE 6.2 <br> Percent of Affected Tax Units, Option 2 By expanded cash income level, 2016



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).

Option 3 vs. Current Law
Converting the current mortgage interest deduction to a 15 percent non-refundable tax credit on the first $\$ 500,000$ of debt will raise taxes by an average of $\$ 120$ per tax unit (Appendix Table 6, Figure 5 and Figure 6.3). Since the only difference between this option and Option 1 is the cap on the eligible debt, the patterns of distributional effects between these two options are similar. Taxes will decline for 14 percent of tax units by an average of $\$ 370$, but at the same time will increase for 13 percent of tax units by an average of $\$ 1,350$. Most affected taxpayers with cash incomes of less than $\$ 125,000$ will experience a tax cut, while most affected taxpayers with incomes over $\$ 150,000$ will see their taxes rise. Tax units with incomes between $\$ 30,000$ and $\$ 125,000$ receive the largest benefit as a percent of their after-tax income, 0.1 percent, while tax units with incomes between $\$ 200,000$ and $\$ 1$ million are most adversely affected, with a decline in after-tax income of 0.6 percent.


Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).

## Option 1 vs. Option 3

We also compare Options 1 and 3 , using Option 1 as the baseline. By doing this, we are able to estimate the distributional effect of the $\$ 500,000$ cap, assuming we have already replaced the deduction with a 15 percent non-refundable tax credit. Reducing the maximum amount of debt eligible for the 15 percent credit from $\$ 1$ million to $\$ 500,000$ will raise taxes by an average of $\$ 10$ per tax return (Appendix Table 7). Taxes will increase for less than 1 percent of tax units by an average of $\$ 1,590$. The $\$ 500,000$ cap on the size of the mortgage eligible for tax credit would affect taxpayers with cash incomes of more than $\$ 75,000$. More than 20 percent of tax units with incomes more than $\$ 1$ million are adversely affected by the cap. Tax units with incomes between $\$ 500,000$ and $\$ 1$ million see the largest percentage reduction in after-tax income, 0.1 percent.

The cap on eligible debt raises taxes more when homeowners can claim a mortgage interest deduction than if the subsidy is in the form of a 15 -percent non-refundable credit. This occurs because the highest income taxpayers, who are the ones primarily affected by the cap because they are the people with the most expensive homes, receive a larger subsidy with a deduction than with a 15percent credit.

## Distributional Effects by State of Residence

The effects of the three reform options vary across states (Appendix Tables 8 through 10). We look at the following questions. Would tax units in all states experience a net federal tax increase, as do taxpayers nationally, under the reform options? Would taxpayers in some states contribute disproportionally large shares to the total tax increase? In which states would taxpayers experience the largest reductions in their after-tax income? To illustrate the answers to these questions, we focus on three variables in the discussions below: the average federal tax change in absolute dollars, the share of total tax change, and the average tax rate change in percentage points.

Three key findings are:

- Both Option 1 and Option 3 would increase the average amount of federal tax taxpayers pay in 46 states and the District of Columbia. Option 2 would increase average federal tax payments in all states.
- For all the options, taxpayers in five states - California, New York, New Jersey, Virginia and Maryland - would contribute more than half of the total federal tax revenue increase, although they account for less than a fourth of all tax units (Figure 7).
- Taxpayers in the District of Columbia and three states - California, Maryland, and Virginia - are always among the most affected; they would see the highest federal tax rate increase in percentage points for all three options.

For example, under option 3, taxpayers in all states except four (Wyoming, West Virginia, South Dakota and North Dakota) would see their federal tax increase (Appendix Table 10). The national average federal tax increase would be $\$ 120$, but among the states (including DC) where taxpayers' federal taxes rise, the tax increase varies from less than \$10 per tax unit in Mississippi to \$350 per unit in the District of Columbia.

Households in some states would account for a much larger share of the total tax change than the others. Population, income, and housing prices could all affect a state's share of total federal tax change.

For the three options, residents of just three states -- California, New York and New Jersey -contributed between 42.8 and 49.6 percent of the total national tax increase. California taxpayers alone would pay for more than one-fourth of the national revenue increase under Option 3. This is driven by the following three forces. First, 12 percent of total US tax units live in California. Second, California would see a larger percentage of taxpayers with tax increase than the nation as a whole ( $15 \% \mathrm{vs} 13 \%$ ), and a smaller percentage of taxpayers with a tax decrease ( $12 \% \mathrm{vs} 14 \%$ ). Finally, among those who would pay more tax, the average increase is California is $\$ 2,100$, over 50 percent more than the national
average ( $\$ 1,350$ ), and among those who would pay less, the average reduction is $\$ 360$, slightly less than the national average ( $\$ 370$ ). The latter two reflect the facts that Californians on average have higher incomes and face higher housing prices.

As a share of their incomes, taxpayers in the District of Columbia, California, Maryland, and Virginia would face the largest tax increase. Their federal tax rate would increase by 0.3 percentage points under reform option 3 (Appendix Table 10).


## Distributional Effects by Income Group within a State

We also estimate the distributions of federal tax change by income group within each of nine selected states in 2016: California, Illinois, Kentucky, Michigan, New York, Oregon, Texas, Utah, and Wisconsin (Appendix Tables 12 through 20). Below, we compare and summarize the distributional effects of Option 3 by broader income groups in four diverse states: California, Kentucky, New York, and Texas (Table 11). California and New York are examples of high-income and high-tax states. Kentucky is an example of a low-income state. Texas differs from the others by not having a state income tax, which means that any level of income, fewer Texas residents are itemizers than in other states.

The four key findings are:

- The overall patterns of distributional effects are similar between the states and the nation as a whole. The options raise taxes on upper income taxpayers and reduce taxes on lower income taxpayers, with the largest increases of income borne by taxpayers with high incomes, but less with the very highest.
- Compared to the other states we examine, California households would see the largest federal tax increase, both in absolute dollars and as a percentage of income.
- California and New York would have a higher percentage of taxpayers experiencing federal tax increases and a lower percentage of taxpayers experiencing tax cuts than Kentucky and Texas.
- The directions of impacts are the same across states in all income groups except for taxpayers with incomes between $\$ 75,000$ and $\$ 200,000$. For this group, taxpayers in California and New York would see average federal tax increases but Kentucky and Texas taxpayers would see average tax cuts.

Looking more deeply into the data, we illustrate these four points. First, there are three main similarities between the four selected states and the US nationwide:

- Low-income taxpayers would generally receive a modest tax cut. The average federal tax rate for taxpayers with less than $\$ 75,000$ income would decrease by about 0.1 percentage points in all four states.
- Taxpayer with incomes between $\$ 75,000$ and $\$ 200,000$ would have the largest percentage of tax units experiencing tax cuts.
- High-income tax units (but not those at the very top of the income scale with incomes of \$1 million or over) would have the largest percentage of tax units experiencing tax increases and the largest tax increase as a percentage of income.

Second, the distributional effects of average federal tax changes do differ somewhat across states. California residents within each income group would see larger tax increases than residents in the other states. For example, for taxpayers with incomes between $\$ 200,000$ and $\$ 1$ million, Option 3 would increase federal income taxes in California on average by more than $\$ 2,500$, much higher than in Kentucky and Texas (less than $\$ 1,000$ ). In terms of increases in average tax rates, Option 3 would increase the average federal income tax rate in California by 0.8 percentage points, much higher than in Kentucky and Texas ( 0.3 percentage points in each state).

TABLE 11
Distributional Effects of Option 3
By expanded cash income level, 2016

| ECI (thousands of | Number of Tax <br> Units (in | Share of Tax | Percent of ltemizers | Percent with | Percent with | Average Federal | Average Federal Tax Rate |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2016 dollars) | Units <br> thousands) | Within Class | Tax Cuts | Tax Increase | Tax Change (\$) | Change (percentage points) |  |

## The United States

|  |  | 4.8 | 8.7 | 1.3 | -20 | -0.1 |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 75 | 114,590 | 66.1 | 34.8 | 30.9 | 25.3 | 60 | 0.1 |
| $75-200$ | 45,330 | 26.1 | 77.6 | 5.5 | 72.0 | 1,490 | 0.5 |
| $200-1,000$ | 11,600 | 6.7 | 89.9 | 5.7 | 58.3 | 3,360 | 0.1 |
| More than 1,000 | 670 | 0.4 | 17.8 | 14.2 | 12.5 | 120 | 0.1 |
| All | 173,400 | 100.0 |  |  |  |  |  |


| California |  |  |  |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 75 | 13,390 | 65.7 | 4.7 | 7.9 | 1.5 | -10 | -0.1 |
| $75-200$ | 5,090 | 25.0 | 42.3 | 25.2 | 31.0 | 260 | 0.2 |
| $200-1,000$ | 1,620 | 7.9 | 87.4 | 2.2 | 78.0 | 2,510 | 0.8 |
| More than 1,000 | 100 | 0.5 | 96.2 | 2.3 | 69.1 | 5,050 | 0.2 |
| All | 20,380 | 100.0 | 21.1 | 11.6 | 15.3 | 280 | 0.3 |


| Kentucky |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 75 | 1,510 | 68.6 | 4.0 | 9.4 | 1.2 | -20 | -0.1 |
| 75-200 | 580 | 26.4 | 29.1 | 37.0 | 22.1 | -50 | 0.0 |
| 200-1,000 | 100 | 4.5 | 76.3 | 6.6 | 70.6 | 920 | 0.3 |
| More than 1,000 | * | * | ** | ** | ** | ** | ** |
| All | 2,200 | 100.0 | 13.9 | 16.5 | 9.8 | 20 | 0.0 |
| New York |  |  |  |  |  |  |  |
| Less than 75 | 7,430 | 66.0 | 6.2 | 7.4 | 1.1 | -10 | -0.1 |
| 75-200 | 2,850 | 25.3 | 48.5 | 22.4 | 27.1 | 120 | 0.1 |
| 200-1,000 | 830 | 7.4 | 88.7 | 2.3 | 70.6 | 1,440 | 0.4 |
| More than 1,000 | 80 | 0.7 | 96.4 | 2.4 | 66.4 | 4,020 | 0.1 |
| All | 11,260 | 100.0 | 23.6 | 10.8 | 13.3 | 150 | 0.2 |
| Texas |  |  |  |  |  |  |  |
| Less than 75 | 9,110 | 67.5 | 3.6 | 7.5 | 0.9 | -20 | -0.1 |
| 75-200 | 3,330 | 24.7 | 25.2 | 33.9 | 16.2 | -50 | 0.0 |
| 200-1,000 | 910 | 6.7 | 61.8 | 11.5 | 61.3 | 980 | 0.3 |
| More than 1,000 | 60 | 0.4 | 69.1 | 17.9 | 37.8 | 1,830 | 0.1 |
| All | 13,500 | 100.0 | 13.2 | 14.3 | 8.9 | 50 | 0.1 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).

Third, the distribution of affected tax units would also differ across states (Figures 8.1 and 8.2). For example, 14 percent of taxpayers in the United States would experience tax cuts, but the number would be higher in Kentucky (16 percent) and lower in California (12 percent) and New York (11 percent). On the other side, 13 percent of taxpayers in the United States would experience tax increases, but the number would be lower in Kentucky (10 percent) and Texas (only 9 percent) and
higher in California (15 percent). This pattern holds for almost every income group. Many factors contribute to this pattern. Texas does not have a state-level income tax, thus fewer taxpayers itemize their deductions. This results in fewer Texas residents being affected by the elimination of the mortgage interest deduction. In addition, California and New York have relatively more high income families than Kentucky and Texas (and thus higher shares of itemizers) and higher housing prices, resulting in their taxpayers being more adversely affected.

Fourth, the directions of impacts are the same across states in all income groups except for taxpayers with incomes between $\$ 75,000$ and $\$ 200,000$. For taxpayers in this income range, average federal taxes would rise in California by $\$ 260$, more than four times that of the national average, and in New York by $\$ 120$, but would decrease by $\$ 50$ in Kentucky and Texas.

FIGURE 8.1
Percent of Tax Units with Tax Cut, Option 3
Selected states and the U.S., by expanded cash income level, 2016


Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).

Percent of Tax Units with Tax Increase, Option 3
Selected states and the U.S., By expanded cash income level, 2016


Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).

## CONCLUSION

Policymakers, advocates, and the public have been calling for reform of the mortgage interest deduction. All three options considered in this report would raise federal tax revenue and make the tax system more progressive. More taxpayers would benefit from a 15 percent credit than from the deduction, though the average subsidy per recipient from the credit would be lower than that from the deduction. The biggest winners from replacing the deduction with the credit are lower-and-middle income households and the biggest losers are higher income households, except for the small share at the very top of the distribution. The credit would increase the average federal tax paid in 46 states and the District of Columbia, and taxpayers in some of these states would pay more than the others. Higherincome states would have a higher percentage of taxpayers experiencing federal tax increases than the national average and a lower percentage of taxpayers experiencing federal tax cuts.

## APPENDIX: TABLES

TABLE 1
Illustration of Phase-In Schedule for Option 3田

Amount of Mortgage Eligible for an Interest Deduction or Credit Per Tax Unit, 2016-2026

| Year | 2016 | 2017 | 2018 | 2019 | 2020 | $2021-2026$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of home mortgage eligible for an interest deduction | $100 \%$ | $80 \%$ | $60 \%$ | $40 \%$ | $20 \%$ | $0 \%$ |
| Percent of home mortgage eligible for a tax credit | $0 \%$ | $20 \%$ | $40 \%$ | $60 \%$ | $80 \%$ | $100 \%$ |
| Tax credit rate | $0 \%$ | $3 \%$ | $6 \%$ | $9 \%$ | $12 \%$ | $15 \%$ |
| Amount of home mortgage eligible for an interest deduction (\$) | $1,000,000$ | 900,000 | 800,000 | 700,000 | 600,000 | 500,000 |

Note: Reform Option 3 is to replace the deduction with a 15 percent non-refundable credit, and to reduce the cap on the size of the mortgage eligible for the tax preference from $\$ 1$ million to $\$ 500,000$, allowing for second mortgages and home equity loans under the cap.

ABLE 2
Options to Reform the Mortgage Interest Deduction
Impact on Tax Revenue (bilions of current dolars), 2017-26 .

| Proposal ${ }^{\text {P }}$ | Fiscal Year |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { Total } \\ 2017-2026 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |  |
| Option 1: Fuplace the Mongoge Interent Deduetion with a 15 Percome Nonvelundable Crodit | 1.1 | 4.6 | 9.7 | 15.5 | 20.8 | 24.2 | 26.0 | 27.8 | 29.6 | 31.6 | 190.8 |
| Option 2 Reduce the Maximum Amount of Debs Eligble for the Morigage Interest Deduction to $\$ 500,000$ | 0.2 | 0.9 | 2.2 | 4.3 | 7.6 | 10.9 | 12.5 | 14.3 | 16.1 | 18.1 | 87.2 |
| Option 3: Replace the Morgoge interest Deduetion with a 15 Percemt Nonvefundable Credit on the First 5500,000 of Debt | 1.3 | 5.4 | 11.4 | 18.5 | 25.4 | 30.2 | 39.0 | 35.7 | 38.6 | 41.7 | 241.2 |

Source: Utban-Brookings Tax Policy Center Mcrosimulation Model (version 0516-1).
Notes:
 Ootion inent trom mortgage imerest was red.ced.


 squal $\$ 900,000 \mathrm{in} 2017, \$ 800,000 \mathrm{in} 2018,5700,000 \mathrm{in} 2019, \$ 600,000$ in 2020 , and $\$ 500,000$ in tax year 2021 and beyond.
table 3
Benefits from Mortgage Interest Deduction and 15 Percent Non-refundable Credit
$2016{ }^{\prime}$

| Expansed Cuht ineome Level thlosumptr of 2916 dillent 2 | Tha lowiss | Tix Unhe wite Meriguge intest |  | Corrent Merigege intesut Dedortion |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Thx Untr met menatt |  | Averspe menotr (dotior) |  |  |  | Tri Untrewth Senatin' |  | Averge nouett (ideren) |  |  |  |
|  |  |  |  | Crumetewtmit | 5500.080 Lmit |  | Comum twumit |  | 5800,009 UmF |  |
|  |  | Nurter thocsental | Whant Clime |  |  | Nember | $\begin{aligned} & \text { Precent weth } \\ & \text { Clum } \end{aligned}$ | An Tax Unis | Thx Untr |  |  | Nitruthis | Tha Uniz <br> whth <br> Barrefit | $\begin{gathered} \text { Number } \\ \text { (thouanta) } \end{gathered}$ | $\begin{aligned} & \text { Nercent } \\ & \text { Whate Clast } \end{aligned}$ | All Tax Cums | The Uniza Wth Berafit | Atranutes | $\begin{aligned} & \text { Tre Urith } \\ & \text { winh } \\ & \text { orentr } \end{aligned}$ |
| Lemstan 10 | 13.200 | 600 | 45 | - | - | * | * | * | - | - | - | * | - | $\cdots$ | * |
| 15.20 | 24,400 | 1,409 | 60 | 110 | 03 | - | 170 | - | 170 | 200 | 1.2 | - | 210 | - | 210 |
| 20.35 | 21,110 | 2,120 | 10.0 | 350 | 1.4 | 10 | 360 | 10 | 350 | 630 | 30 | 10 | 370 | 10 | 390 |
| 3045 | 16,480 | 3.020 | 18.3 | 670 | 4.0 | 20 | 440 | 20 | 440 | 1,400 | 8.5 | 30 | 020 | 30 | 400 |
| 4550 | 13,400 | 1.500 | 28.8 | 1,200 | 76 | 0 | 40 | 40 | 470 | 2.200 | 16.9 | 70 | 450 | 70 | 440 |
| 59.75 | 25800 | 9,670 | 37.3 | 3,90 | 15.3 | 110 | 730 | 110 | 730 | 7,830 | 30.6 | 160 | 530 | 100 | 530 |
| 75.100 | 16,150 | 8.600 | 53. | 4,820 | 28.6 | 300 | 1,050 | 350 | 1.040 | 8.130 | 50.4 | 360 | 710 | 350 | 700 |
| 180.125 | 11,700 | 7,470 | 63.4 | 4,700 | 399 | 400 | 1,190 | 480 | 1,170 | 7,380 | 62.4 | 530 | 100 | 539 | 150 |
| 125-150 | 1,930 | 5,340 | 67.3 | 3,940 | 48.7 | 720 | 1,200 | 730 | 1,480 | 5,2\% | 66.) | 650 | 1,010 | 670 | 1,005 |
| 150.175 | 5,490 | 4010 | 73.1 | 3.310 | 60.3 | 1,110 | 1,840 | 1,060 | 1,790 | 3.970 | 724 | 340 | 1,150 | 810 | 1,120 |
| 173.280 | 3,970 | 3009 | 775 | 2,810 | 70.8 | 1,409 | 2.000 | 1,420 | 2.010 | 3.000 | 77.0 | 9\% | 1.250 | 960 | 1,30 |
| 200.500 | 10,360 | 8,130 | 795 | 7,840 | 75.7 | 2.540 | 3,360 | 2,370 | 3,120 | 8,030 | 77.5 | 1,310 | 1450 | 1,220 | 1,570 |
| \$50-1,000 | 1240 | 960 | 776 | 930 | 74.7 | 4500 | 6.050 | 3,760 | 5.830 | 550 | 76.4 | 1.950 | $2 \times 00$ | 1.650 | 2160 |
| Ware then 1,060 | 670 | 430 | ds2 | 410 | 61.4 | 4020 | 8.000 | 3,60 | 5,080 | 420 | 635 | 2.860 | 3,270 | 1.570 | 2,470 |
| Al | 173,400 | 58.550 | 33.8 | 34,560 | 19.9 | 390 | 1,950 | 360 | 1,820 | 49,620 | 28.6 | 260 | 990 | 270 | 950 |
| Addendum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lex tien 50 | 88,990 | 10.810 | 12.1 | 2.050 | 2.4 | 10 | 430 | 10 | 430 | 4,580 | 5.2 | 20 | 200 | 20 | 400 |
| 30. 123 | 53.540 | 25.74 | 4.9.1 | 13,230 | 24.7 | 250 | 1,010 | 250 | 90 | 23.310 | 435 | 330 | 000 | 300 | 40 |
| Mare than 125 | 29,560 | 21,960 | 74.0 | 19,240 | 64.9 | 1,750 | 2760 | 1,450 | 2.550 | 21,720 | 73.2 | 1,050 | 1,440 | \$00 | 1,350 |

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TABLE 4
Option 1: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit Distribution of Federal Tax Change by Expanded Cash Income Level, 2016

| Expanded Cash Income Level (thousands of 2016 dollars ${ }^{2}$ | Tax Units with Tax Increase or Cut ${ }^{3}$ |  |  |  | Percent Change in After-Tax Income ${ }^{4}$ | Share of Total Federal Tax Change | Average Federal Tax Change | Average Federal Tax Rate ${ }^{5}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | With Tax Cut |  | With Tax Increase |  |  |  |  | Change |  |
|  | Pct of Tax Units | Avg Tax Cut | Pct of Tax Units | Avg Tax Increase |  |  |  | $\begin{gathered} \text { (Porcentage } \\ \text { Points) } \end{gathered}$ | Proposal |
| Less than 10 | * | ** | * | ** | 0.0 | 0.0 | 0 | 0 | 6.6 |
| 10-20 | 1 | -180 | * | ** | 0.0 | -0.2 | 0 | 0 | 3 |
| 20-30 | 2.6 | -240 | 0.1 | 250 | 0.0 | -0.7 | -10 | 0 | 4.6 |
| 30.40 | 7.4 | -250 | 0.6 | 320 | 0.1 | -1.5 | -20 | -0.1 | 7.9 |
| 40-50 | 14.8 | -280 | 1.1 | 300 | 0.1 | -2.9 | -40 | -0.1 | 10.5 |
| 50-75 | 23.5 | -300 | 4.9 | 390 | 0.1 | -7.2 | . 50 | -0.1 | 13.1 |
| 75-100 | 33 | -380 | 13 | 540 | 0.1 | -5.0 | -60 | -0.1 | 15.7 |
| 100-200 | 29.8 | -460 | 31.8 | 780 | -0.1 | 18.1 | 110 | 0.1 | 19 |
| 200-500 | 5.8 | -470 | 71.7 | 1,760 | -0.6 | 71.3 | 1,240 | 0.4 | 23.5 |
| 500-1,000 | 3.2 | -680 | 73.5 | 3,480 | -0.5 | 17.5 | 2,530 | 0.4 | 28.6 |
| More than 1,000 | 5.9 | -1,490 | 58.2 | 5,050 | -0.1 | 10.6 | 2,850 | 0.1 | 33.8 |
| All | 14.3 | -370 | 12.5 | 1,250 | -0.2 | 100.0 | 100 | 0.1 | 19.9 |
|  |  |  |  |  |  |  |  |  |  |
| Addendum |  |  |  |  |  |  |  |  |  |
| 100-125 | 37.1 | -460 | 16.8 | 670 | 0.1 | -3.9 | -60 | -0.1 | 17.4 |
| 125-150 | 29.7 | -470 | 30.2 | 680 | -0.1 | 3.0 | 70 | 0.1 | 18.8 |
| 150-175 | 24.4 | -440 | 46.1 | 820 | -0.2 | 8.3 | 270 | 0.2 | 19.9 |
| 175-200 | 16 | -440 | 60 | 920 | -0.3 | 10.7 | 480 | 0.3 | 20.9 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).
Notes:

* Non-zero value rounded to zero; ** Insufficient data
(1) Calendar year. Baseline is current law. Proposal would replace the deduction for mortgage interest with a 15 percent non-refundable credit subject to current law limits
( $\$ 1,000,000$ of debt on a primary residence or second home, and $\$ 100,000$ in home equity loans). Estimates are static and do not assume that taxpayers would adjust their investment
portfolio and pay down their mortgage balance if their tax benefit from mortgage interest was reduced. For a description of TPC's current law baseline, see
http:///www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm
ose that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see (3) 12 es 1
den of 510 or more in absolute value
(4) 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 taxes; and excise taxes.
(5) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.

TABLE 5
Option 2: Reduce the Maximum Amount of Debt Eligible for the Mortgage Interest Deduction to $\$ 500,000$ Distribution of Federal Tax Change by Expanded Cash Income Level, 2016 '

| Expanded Cash Income Level (thousands of 2016 dollars $)^{2}$ | Tax Units with Tax Increase or Cut ${ }^{3}$ |  |  |  | Percent Change in After-Tax Income ${ }^{4}$ | Share of Total Federal Tax Change | Average Federal Tax Change | Average Federal Tax Rate ${ }^{5}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | With Tax Cut |  | With Tax Increase |  |  |  |  | Change |  |
|  | Pct of Tax Units | Avg Tax Cut | Pct of Tax Units | Avg Tax Increase |  |  |  | $\begin{aligned} & \text { (Porcentage } \\ & \text { Points) } \end{aligned}$ | Proposal |
| Less than 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.6 |
| 10-20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 |
| 20-30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.6 |
| 30.40 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.0 |
| 40.50 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.6 |
| 50-75 | 0.0 | 0.0 | * | ** | 0.0 | 0.1 | 0.0 | 0.0 | 13.2 |
| 75-100 | 0.0 | 0.0 | 0.3 | 1,140 | 0.0 | 1.4 | * | 0.0 | 15.7 |
| 100-200 | 0.0 | 0.0 | 1.2 | 1,580 | 0.0 | 13.2 | 20 | 0.0 | 18.9 |
| 200-500 | 0.0 | 0.0 | 5.5 | 3,210 | -0.1 | 43.2 | 180 | 0.1 | 23.1 |
| 500-1,000 | 0.0 | 0.0 | 18.2 | 4,190 | -0.2 | 22.4 | 760 | 0.1 | 28.4 |
| More than 1,000 | 0.0 | 0.0 | 22.9 | 5,460 | -0.1 | 19.7 | 1,250 | 0.0 | 33.8 |
| All | 0.0 | 0.0 | 0.8 | 3,100 | 0.0 | 100.0 | 20 | 0.0 | 19.8 |
| Addendum |  |  |  |  |  |  |  |  |  |
| 100-125 | 0.0 | 0.0 | 0.7 | 1,370 | 0.0 | 2.5 | 10 | 0.0 | 17.4 |
| 125-150 | 0.0 | 0.0 | 1.0 | 1,010 | 0.0 | 1.9 | 10 | 0.0 | 18.8 |
| 150-175 | 0.0 | 0.0 | 1.7 | 1,630 | 0.0 | 3.6 | 30 | 0.0 | 19.7 |
| 175-200 | 0.0 | 0.0 | 2.7 | 2,100 | 0.0 | 5.2 | 60 | 0.0 | 20.6 |

Source: Urban-Brookings Tax Policy Center Mirrosimulation Model (version 0516-1).

* Non-zero value rounded to zero; ** Insufficient data
(1) Calendar year. Baseline is current law. Proposal would replace the deduction for mortgage interest with a 15 percent non-refundable credit subject to current law limits
( $\$ 1,000,000$ of debt on a primary residence or second home, and $\$ 100,000$ in home equity loans). Estimates are static and do not assume that taxpayers would adjust their investment
portiolio and pay down their mortgage balance if their tax benefit from mortgage interest was reduced. For a description of TPC's current law baseline, see
http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm
(2) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cffm
(3) Includes tax units with a change in federal tax burden of $\$ 10$ or more in absolute value
(4) 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 taxes; and excise taxes.
(5) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.

TABLE 6
Option 3: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit on the First $\$ 500,000$ of Debt

| Expanded Cash Income Level (thousands of 2016 dollars) ${ }^{2}$ | Tax Units with Tax Increase or Cut ${ }^{3}$ |  |  |  | Percent Change in After-Tax Income ${ }^{4}$ | Share of Total Federal Tax Change | Average Federal Tax Change | Average Federal Tax Rate ${ }^{5}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | With Tax Cut |  | With Tax Increase |  |  |  |  | Change |  |
|  | Pct of Tax Units | Avg Tax Cut | Pct of Tax Units | Avg Tax Increase |  |  |  | (Percentage Points) | Proposal |
| Less than 10 | * | ** | 0.0 | 0 | 0.0 | 0.0 | 0 | 0 | 6.6 |
| 10-20 | 1.0 | -180 | 0.0 | 0 | 0.0 | -0.2 | * | 0 | 3 |
| 20-30 | 2.6 | -240 | 0.1 | 250 | 0.0 | -0.6 | -10 | 0 | 4.6 |
| 30-40 | 7.4 | -250 | 0.6 | 320 | 0.1 | -1.3 | -20 | -0.1 | 7.9 |
| 40-50 | 14.8 | -280 | 1.1 | 300 | 0.1 | -2.6 | -40 | -0.1 | 10.5 |
| 50-75 | 23.5 | -300 | 4.9 | 390 | 0.1 | -6.4 | -50 | -0.1 | 13.1 |
| 75-100 | 33.0 | -380 | 13.2 | 560 | 0.1 | -4.2 | -50 | -0.1 | 15.7 |
| 100-200 | 29.8 | -460 | 32.0 | 820 | -0.1 | 18.3 | 130 | 0.1 | 19 |
| 200-500 | 5.8 | -470 | 71.8 | 1,880 | -0.6 | 68.2 | 1,320 | 0.5 | 23.5 |
| 500-1,000 | 3.2 | -680 | 73.5 | 3,930 | -0.6 | 17.8 | 2,870 | 0.4 | 28.7 |
| More than 1,000 | 5.7 | $-1,260$ | 58.3 | 5,880 | -0.2 | 11.2 | 3,360 | 0.1 | 33.8 |
| All | 14.2 | -370 | 12.5 | 1,350 | -0.2 | 100.0 | 120 | 0.1 | 19.9 |
|  |  |  |  |  |  |  |  |  |  |
| Addendum |  |  |  |  |  |  |  |  |  |
| 100-125 | 37.0 | -460 | 17.0 | 700 | 0.1 | -3.0 | -50 | -0.1 | 17.4 |
| 125-150 | 29.7 | -470 | 30.5 | 710 | -0.1 | 3.0 | 80 | 0.1 | 18.8 |
| 150-175 | 24.4 | -440 | 46.2 | 870 | -0.2 | 8.0 | 290 | 0.2 | 19.9 |
| 175-200 | 16.0 | -440 | 60.2 | 980 | -0.4 | 10.3 | 520 | 0.3 | 20.9 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).
Notes:
*Non-zero value rounded to zero: ** Insufficient data
(1) Calendar year. Baseline is current law. Proposal would replace the deduction for mortgage interest with a 15 percent non-refundable credit subject to current law limits
( $\$ 1,000,000$ of debt on a primary residence or second home, and $\$ 100,000$ in home equity loans). Estimates are static and do not assume that taxpayers would adjust their investment
portiolio and pay down their mortgage balance if their tax benefit from mortgage interest was reduced. For a description of TPC's current law baseline, see
(2) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tex units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm
(4) 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 taxes; and excise taxes.
(5) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.

TABLE 7
Compare Reform Options 1 and 3: Reduce the Maximum Amount of Debt Eligible for the 15 Percent Non-refundable Credit from $\$ 1,000,000$ to $\$ 500,000$ Distribution of Federal Tax Change by Expanded Cash Income Level, $2016{ }^{1}$

| Expanded Cash Income Level (thousands of 2016 dollars) ${ }^{2}$ | Tax Units with Tax Increase or Cut ${ }^{3}$ |  |  |  | Percent Change in After-Tax Income ${ }^{4}$ | Share of Total Federal Tax Change | Average Federal Tax Change | Average Federal Tax Rate ${ }^{5}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | With Tax Cut |  | With Tax Increase |  |  |  |  | Change |  |
|  | Pct of Tax Units | Avg Tax Cut | Pct of Tax Units | Avg Tax Increase |  |  |  | (Percentage Points) | Proposal |
| Less than 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0.0 | 6.6 |
| 10-20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0.0 | 3 |
| 20-30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0.0 | 4.6 |
| 30-40 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0.0 | 7.9 |
| 40.50 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0.0 | 10.5 |
| 50-75 | 0.0 | 0.0 | * | ** | 0.0 | 0.1 | 0 | 0.0 | 13.1 |
| 75-100 | 0.0 | 0.0 | 0.2 | 1,150 | 0.0 | 2.1 | * | 0.0 | 15.7 |
| 100-200 | 0.0 | 0.0 | 1.2 | 1,230 | 0.0 | 19.7 | 10 | 0.0 | 19 |
| 200-500 | 0.0 | 0.0 | 5.5 | 1,570 | 0.0 | 42.2 | 90 | 0.0 | 23.5 |
| 500-1,000 | 0.0 | 0.0 | 18.0 | 1,860 | -0.1 | 19.7 | 340 | 0.1 | 28.7 |
| More than 1,000 | 0.0 | 0.0 | 22.8 | 2,240 | 0.0 | 16.1 | 510 | 0.0 | 33.8 |
| All | 0.0 | 0.0 | 0.8 | 1,590 | 0.0 | 100 | 10 | 0.0 | 19.9 |
|  |  |  |  |  |  |  |  |  |  |
| Addendum |  |  |  |  |  |  |  |  |  |
| 100-125 | 0.0 | 0.0 | 0.6 | 1,220 | 0.0 | 3.8 | 10 | 0.0 | 17.4 |
| 125-150 | 0.0 | 0.0 | 1.0 | 920 | 0.0 | 3.4 | 10 | 0.0 | 18.8 |
| 150-175 | 0.0 | 0.0 | 1.7 | 1,350 | 0.0 | 5.9 | 20 | 0.0 | 19.9 |
| 175-200 | 0.0 | 0.0 | 2.7 | 1,340 | 0.0 | 6.7 | 40 | 0.0 | 20.9 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1),
Notes:
*Non-zero value rounded to zero: ** Insufficient data
(1) Calendar year. Baseline is current law. Proposal would replace the deduction for mortgage interest with a 15 percent non-refundable credit subject to current law limits
( $\$ 1,000,000$ of debt on a primary residence or second home, and $\$ 100,000$ in home equity loans). Estimates are static and do not assume that taxpayers would adjust their investment
portfolio and pay down their mortgage balance if their tax benefit from mortgage interest was reduced. For a description of TPC's current law baseline, see
http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm
http://www.taxpolicycenter.org/TaxModel/income.cfm
(4) 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 taxes; and excise taxes,
(5) 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.

| State | Share of Tax Units | Tax Units with Tex incresse or Cut ${ }^{\text {3 }}$ |  |  |  | Percent Change in After-Tax Income * | Share of Total Federal Tax Change | Average Federal Tax Change |  | Average Federal Tax Ratos |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Whth tax Cut |  | Whith Tax increse |  |  |  |  |  | Change |  |
|  |  | Pct of Tox Units | Avg Tax Cut | Pct of Tax | Avg Tax Ancresse |  |  | Dollars | Percent | $\begin{gathered} \text { (Parcantage } \\ \text { Points) } \end{gathered}$ | Proposal |
| Alabama | 1.4 | 15.7 | -390 | 9.1 | 930 | 0.0 | 0.3 | 23 | 0.2 | 0.0 | 17.4 |
| Alaska | 0.2 | 17.6 | -480 | 9.0 | 1,200 | 0.0 | 0.1 | 23 | 0.1 | 0.0 | 20.0 |
| Arizona | 1.9 | 16.3 | -410 | 11.5 | 1,250 | -0.1 | 1.4 | 75 | 0.5 | 0.1 | 18.3 |
| Arkansas | 0.8 | 15.3 | -370 | 8.1 | 850 | 0.0 | 0.1 | 13 | 0.1 | 0.0 | 17.3 |
| Cailormia | 11.8 | 11.7 | -360 | 15.1 | 1,850 | -0.3 | 27.3 | 239 | 1.2 | 0.3 | 20.9 |
| Colorado | 1.6 | 18.0 | 420 | 15.6 | 1,260 | -0.2 | 1.9 | 120 | 0.6 | 0.1 | 20.4 |
| Connecticut | 1.1 | 12.8 | -330 | 21.1 | 1,380 | -0.3 | 2.8 | 249 | 0.8 | 0.2 | 23.9 |
| Delaware | 0.3 | 17.9 | -390 | 15.5 | 1,120 | -0.2 | 0.3 | 104 | 0.6 | 0.1 | 19.2 |
| District of Columbia | 0.2 | 10.1 | -280 | 17.9 | 1.910 | -0.4 | 0.7 | 312 | 1.2 | 0.3 | 24.0 |
| Florida | 6.9 | 14.1 | -390 | 7.2 | 1,390 | -0.1 | 3.0 | 44 | 0.3 | 0.1 | 19.4 |
| Gerrgia | 3.3 | 12.4 | -380 | 12.1 | 1,100 | -0.2 | 2.8 | 86 | 0.7 | 0.1 | 18.2 |
| Howail | 0.5 | 15.6 | -380 | 11.7 | 1,490 | $-0.2$ | 0.5 | 116 | 0.8 | 0.2 | 18.2 |
| data | 0.4 | 16.8 | -410 | 10.3 | 980 | -0.1 | 0.1 | 33 | 0.3 | 0.0 | 16.9 |
| Ilinois | 4.2 | 13.4 | -350 | 14.9 | 1,150 | -0.2 | 5.0 | 124 | 0.7 | 0.1 | 20.4 |
| Indiana | 2.1 | 16.0 | -370 | 9.2 | 810 | 0.0 | 0.3 | 15 | 0.1 | 0.0 | 17.5 |
| lowa | 0.9 | 17.9 | -360 | 11.8 | 730 | 0.0 | 0.2 | 23 | 0.1 | 0.0 | 18.4 |
| Karsas | 0.9 | 15.1 | -360 | 11.2 | 850 | -0.1 | 0.4 | 41 | 0.3 | 0.1 | 18.8 |
| Kentucky | 1.3 | 16.5 | -380 | 9.8 | 790 | 0.0 | 0.2 | 15 | 0.1 | 0.0 | 17.3 |
| Leuisiona | 1.3 | 15.1 | -380 | 7.9 | ${ }_{89}$ | 0.0 | 0.2 | 13 | 0.1 | 0.0 | 18.3 |
| Maine | 0.4 | 18.3 | . 370 | 11.9 | 850 | -0.1 | 0.1 | 34 | 0.3 | 0.0 | 18.1 |
| Maryland | 1.9 | 12.8 | -350 | 22.7 | 1,440 | -0.3 | 5.1 | 280 | 1.3 | 0.3 | 21.0 |
| Massachusetts | 2.1 | 14.0 | -330 | 19.6 | 1,350 | $-0.3$ | 4.5 | 217 | 0.9 | 0.2 | 22.5 |
| Michigon | 3.3 | 14.7 | -360 | 11.2 | 920 | -0.1 | 1.6 | 49 | 0.4 | 0.1 | 18.1 |
| Minnesota | 1.7 | 16.7 | -370 | 17.0 | 1,080 | -0.2 | 2.0 | 121 | 0.6 | 0.1 | 20.1 |
| Mississippi | 0.9 | 13.6 | -370 | 7.0 | 790 | 0.0 | 0.0 | 5 | 0.1 | 0.0 | 16.0 |
| Missouri | 1.8 | 15.9 | -370 | 10.9 | 910 | -0.1 | 0.7 | 41 | 0.3 | 0.1 | 18.3 |
| Montana | 0.3 | 17.1 | -390 | 9.7 | 910 | 0.0 | 0.1 | 21 | 0.2 | 0.0 | 17.5 |
| Nebraska | 0.6 | 16.4 | -360 | 11.8 | 780 | -0.1 | 0.2 | 33 | 0.2 | 0.0 | 18.8 |
| Nevada | 0.9 | 16.2 | . 440 | 8.3 | 1,300 | -0.1 | 0.3 | 36 | 0.2 | 0.1 | 19.4 |
| New Hampshire | 0.4 | 20.3 | 440 | 14.0 | 1,130 | -0.1 | 0.3 | 70 | 0.3 | 0.1 | 21.1 |
| New Jersey | 2.9 | 11.3 | -330 | 19.1 | 1,400 | -0.3 | 6.5 | 230 | 1.0 | 0.2 | 22.0 |
| New Mexico | 0.7 | 14.8 | -390 | 8.4 | 1,000 | -0.1 | 0.2 | 26 | 0.2 | 0.0 | 17.0 |
| New York | 6.5 | 10.8 | -320 | 13.3 | 1,340 | $-0.2$ | 9.0 | 143 | 0.6 | 0.1 | 22.6 |
| North Carolina | 2.9 | 14.9 | -370 | 12.6 | 1,050 | -0.1 | 2.2 | 77 | 0.6 | 0.1 | 18.0 |
| North Dasots | 0.2 | 18.5 | -360 | 7.2 | 830 | 0.0 | 0.0 | -7 | 0.0 | 0.0 | 20.2 |
| Ohio | 3.7 | 16.3 | -350 | 12.2 | 800 | -0.1 | 1.5 | 41 | 0.3 | 0.1 | 18.4 |
| Oxihhoma | 1.1 | 15.5 | -370 | 8.6 | 840 | 0.0 | 0.2 | 15 | 0.1 | 0.0 | 18.4 |
| Oregon | 1.2 | 15.7 | -390 | 14.2 | 1,130 | -0.2 | 1.2 | 100 | 0.7 | 0.1 | 18.2 |
| Pennysivania | 4.2 | 14.8 | -340 | 12.6 | 1,010 | -0.1 | 3.2 | 77 | 0.5 | 0.1 | 19.4 |
| Rhode estand | 0.3 | 14.1 | -340 | 16.1 | 1,030 | -0.2 | 0.4 | 119 | 0.7 | 0.1 | 19.5 |
| South Carolina | 1.4 | 15.3 | -360 | 10.8 | 1,000 | -0.1 | 0.7 | 50 | 0.4 | 0.1 | 17.2 |
| South Daskots | 0.3 | 18.2 | -390 | 5.4 | 930 | 0.0 | -0.1 | -20 | -0.1 | 0.0 | 18.8 |
| Ternessee | 2.0 | 16.0 | -410 | 6.9 | 1,080 | 0.0 | 0.2 | 9 | 0.1 | 0.0 | 18.3 |
| Texas | 7.8 | 14.3 | . 390 | 8.9 | 1,140 | -0.1 | 3.5 | 46 | 0.3 | 0.1 | 20.4 |
| Utah | 0.8 | 17.0 | 440 | 13.3 | 1,000 | -0.1 | 0.4 | 58 | 0.4 | 0.1 | 17.7 |
| Vermont | 0.2 | 17.2 | -370 | 11.9 | 870 | -0.1 | 0.1 | 40 | 0.3 | 0.1 | 18.8 |
| Virginis | 2.5 | 14.9 | -370 | 19.6 | 1,500 | -0.3 | 5.8 | 238 | 1.2 | 0.2 | 20.6 |
| Wastington | 2.2 | 18.2 | -430 | 13.5 | 1,410 | -0.2 | 2.4 | 113 | 0.6 | 0.1 | 20.3 |
| West Virginis | 0.6 | 16.7 | -360 | 6.4 | 810 | 0.0 | 0.0 | -8 | -0.1 | 0.0 | 17.0 |
| Wescorsin | 1.8 | 16.0 | -350 | 13.9 | 820 | -0.1 | 1.0 | 57 | 0.4 | 0.1 | 18.7 |
| Wyoring | 0.2 | 19.6 | -450 | 6.2 | 1,040 | 0.0 | 0.0 | -24 | -0.1 | 0.0 | 20.6 |
| United States | 100.0 | 14.3 | -370 | 12.5 | 1,250 | -0.2 | 100.0 | 103 | 0.6 | 0.1 | 19.9 |

Source: Urban-Brookings Tax Policy Center Mcrosimulation Model (version $0516-1$ ).
Notes:
(1) Calendar year. Baseline is current law. Proposal would reduce the maximum amount of debt eligible for the mortgage interest deduction to $\$ 500,000$ of debt on a primary
residence, second home, and/or a home equty loan. Estimates are static and do not assume that taxpayers would adjust their investment portfolio and pay down their mortgage balance
If their tax benefit from mortgage interest was reduced. For a description of TPC's current law baseline, see
(2) Includes both filing and non-fling units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/T axNoode//income.cfm
(3) Includes tax units with a change in federal tax. burden of $\$ 10$ or more in absolute value.
(4) 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 taxes; and excise taxes.
(5) Average federal tax (indudes individual and corporate income tax, payyoll taxes for Social

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[^3](1) Calendar year. Baseline is current law. Proposal would reduce the maximum amount of debt eligible for the mortgage interest deduction to $\$ 500,000$ of debt on a primary
residence, second home, and/or a home equity loan. Estimates are static and do not assume that taxpayers would adjust their investment portfolio and pay down their mortgage balance
ther tax benefit from mortgage interest was reduced. For a description of TPC's current law baseline, see
(2) Includes both fliling and non-fliling units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a descripton of expanded cash income, se (c)://www. taxpolicycenter.org/T TaxNodel/ income.cfm

Includes tax units with a change in federal tax burden of $\mathbf{\$ 1 0}$ or more in absolute value.
Aver-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate taxes; and excise taxes.
(5) 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.

TAOLE 10
Option 3: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit on the First $\$ 500,000$ of Debt

| State | Share of Tax Units | Tax Units with Tax incresse or Cut ${ }^{\text {3 }}$ |  |  |  | Percent Change in After-Tax Income * | Share of Total Federal Tax Change | Average Federal Tax Change |  | Average Federal Tax Ratos |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Whth Tax Cut |  | Whith Tax licresse |  |  |  |  |  | Change |  |
|  |  | Pct of Tax Units | Avg Tax Cut | Pct of Tax Units | Avg Tax Incresse |  |  | Dollars | Percent | (Percentage Points) | Proposal |
| Alabama | 1.4 | 15.7 | -390 | 9.1 | 1,000 | -0.1 | 0.4 | 29 | 0.2 | 0.0 | 17.4 |
| Alaska | 0.2 | 17.6 | -480 | 9.0 | 1,270 | 0.0 | 0.1 | 30 | 0.2 | 0.0 | 20.0 |
| Arizona | 1.9 | 16.3 | -410 | 11.5 | 1,350 | -0.1 | 1.5 | 89 | 0.6 | 0.1 | 18.3 |
| Arkansas | 0.8 | 15.3 | -370 | 8.1 | 880 | 0.0 | 0.1 | 15 | 0.1 | 0.0 | 17.3 |
| Caiforria | 11.8 | 11.6 | -360 | 15.3 | 2,100 | $-0.4$ | 28.4 | 280 | 1.5 | 0.3 | 21.0 |
| Colorado | 1.6 | 17.9 | -420 | 15.7 | 1,360 | -0.2 | 1.9 | 137 | 0.7 | 0.2 | 20.4 |
| Connecticut | 1.1 | 12.8 | -330 | 21.1 | 1,470 | -0.3 | 2.6 | 268 | 0.9 | 0.2 | 24.0 |
| Delaware | 0.3 | 17.9 | -390 | 15.6 | 1,190 | -0.2 | 0.3 | 116 | 0.7 | 0.1 | 19.2 |
| District of Columbia | 0.2 | 10.1 | -280 | 17.9 | 2,130 | -0.4 | 0.7 | 353 | 1.3 | 0.3 | 24.0 |
| Florida | 6.9 | 14.1 | -390 | 7.2 | 1,510 | -0.1 | 3.2 | 54 | 0.4 | 0.1 | 19.4 |
| Gerrgia | 3.3 | 12.4 | -380 | 12.1 | 1,150 | $-0.2$ | 2.6 | 92 | 0.7 | 0.1 | 18.2 |
| Howaii | 0.5 | 15.5 | -380 | 11.9 | 1,760 | -0.2 | 0.6 | 151 | 1.1 | 0.2 | 18.2 |
| data | 0.4 | 16.8 | -410 | 10.4 | 1,030 | -0.1 | 0.1 | 39 | 0.3 | 0.1 | 16.9 |
| Ilinois | 4.2 | 13.4 | -350 | 14.9 | 1,200 | -0.2 | 4.8 | 132 | 0.7 | 0.2 | 20.4 |
| Indisna | 2.1 | 16.0 | -370 | 9.2 | 820 | 0.0 | 0.3 | 16 | 0.1 | 0.0 | 17.5 |
| lowa | 0.9 | 17.9 | -360 | 11.8 | 740 | 0.0 | 0.2 | 24 | 0.2 | 0.0 | 18.4 |
| Karsas | 0.9 | 15.1 | -360 | 11.2 | 870 | -0.1 | 0.3 | 43 | 0.3 | 0.1 | 18.8 |
| Kentucky | 1.3 | 16.5 | -380 | 9.8 | 810 | 0.0 | 0.2 | 17 | 0.1 | 0.0 | 17.3 |
| Levisisna | 1.3 | 15.1 | -380 | 7.9 | 920 | 0.0 | 0.2 | 15 | 0.1 | 0.0 | 18.3 |
| Maine | 0.4 | 18.3 | -370 | 11.9 | 870 | -0.1 | 0.1 | 36 | 0.3 | 0.1 | 18.1 |
| Maryland | 1.9 | 12.7 | -350 | 22.8 | 1,540 | -0.4 | 5.0 | 307 | 1.4 | 0.3 | 21.0 |
| Massachusetts | 2.1 | 14.0 | -330 | 19.6 | 1,420 | -0.3 | 4.2 | 231 | 0.9 | 0.2 | 22.5 |
| Michigan | 3.3 | 14.7 | -360 | 11.2 | 940 | -0.1 | 1.5 | 52 | 0.4 | 0.1 | 18.1 |
| Minnesota | 1.7 | 16.7 | -370 | 17.0 | 1,120 | $-0.2$ | 1.9 | 129 | 0.7 | 0.1 | 20.1 |
| Mississippi | 0.9 | 13.6 | -370 | 7.0 | 810 | 0.0 | 0.0 | 6 | 0.1 | 0.0 | 16.0 |
| Missouri | 1.8 | 15.9 | -370 | 11.0 | 930 | -0.1 | 0.7 | 44 | 0.3 | 0.1 | 18.3 |
| Montana | 0.3 | 17.1 | -390 | 9.7 | 940 | 0.0 | 0.1 | 24 | 0.2 | 0.0 | 17.5 |
| Nebraska | 0.6 | 16.4 | -360 | 11.8 | 790 | -0.1 | 0.2 | 35 | 0.2 | 0.0 | 18.8 |
| Nevoda | 0.9 | 16.2 | -440 | 8.3 | 1,420 | -0.1 | 0.4 | 48 | 0.3 | 0.1 | 19.4 |
| New Hampshire | 0.4 | 20.3 | -40 | 14.1 | 1,180 | -0.1 | 0.3 | 79 | 0.4 | 0.1 | 21.1 |
| New Jersey | 2.9 | 11.3 | -330 | 19.2 | 1,490 | -0.3 | 6.2 | 248 | 1.0 | 0.2 | 22.0 |
| New Mexico | 0.7 | 14.8 | . 390 | 8.4 | 1.040 | -0.1 | 0.2 | 30 | 0.3 | 0.0 | 17.0 |
| New York | 6.5 | 10.8 | -320 | 13.3 | 1,420 | -0.2 | 8.6 | 154 | 0.7 | 0.2 | 22.6 |
| North Carolina | 2.9 | 14.9 | -370 | 12.6 | 1,090 | -0.1 | 2.1 | 82 | 0.6 | 0.1 | 18.0 |
| North D.skots | 0.2 | 18.5 | -360 | 7.2 | 850 | 0.0 | 0.0 | -6 | 0.0 | 0.0 | 20.2 |
| Ohio | 3.7 | 16.3 | -350 | 12.2 | 810 | -0.1 | 1.3 | 42 | 0.3 | 0.1 | 18.4 |
| OXJhoma | 1.1 | 15.5 | -370 | 8.6 | 860 | 0.0 | 0.2 | 17 | 0.1 | 0.0 | 18.4 |
| Oregon | 1.2 | 15.7 | -390 | 14.2 | 1,190 | -0.2 | 1.1 | 109 | 0.8 | 0.1 | 18.2 |
| Penngyvania | 4.2 | 14.8 | -340 | 12.6 | 1,040 | -0.1 | 3.0 | 81 | 0.5 | 0.1 | 19.4 |
| Rtode istord | 0.3 | 14.1 | -340 | 16.2 | 1,060 | $-0.2$ | 0.4 | 124 | 0.8 | 0.2 | 19.5 |
| South Carolina | 1.4 | 15.3 | -380 | 10.8 | 1,050 | -0.1 | 0.7 | 56 | 0.5 | 0.1 | 17.2 |
| South Dasota | 0.3 | 18.2 | -390 | 5.4 | 960 | 0.0 | 0.0 | -18 | -0.1 | 0.0 | 18.8 |
| Ternessee | 2.0 | 16.0 | -410 | 6.9 | 1,140 | 0.0 | 0.2 | 14 | 0.1 | 0.0 | 18.3 |
| Texas | 7.8 | 14.3 | -390 | 8.9 | 1,180 | -0.1 | 3.4 | 51 | 0.3 | 0.1 | 20.4 |
| Utah | 0.8 | 17.0 | -40 | 13.4 | 1,070 | -0.1 | 0.5 | 69 | 0.5 | 0.1 | 17.7 |
| Vermont | 0.2 | 17.2 | -370 | 11.9 | 880 | -0.1 | 0.1 | 42 | 0.3 | 0.1 | 18.8 |
| Viginis | 2.5 | 14.9 | -370 | 19.7 | 1.630 | -0.3 | 5.8 | 266 | 1.3 | 0.3 | 20.6 |
| Wastington | 2.2 | 18.2 | -430 | 13.6 | 1,550 | -0.2 | 2.5 | 133 | 0.7 | 0.1 | 20.3 |
| West Virginis | 0.6 | 16.7 | -360 | 6.4 | 820 | 0.0 | 0.0 | -7 | -0.1 | 0.0 | 17.0 |
| Wascorsin | 1.8 | 16.0 | -350 | 13.9 | 830 | -0.1 | 0.9 | 59 | 0.4 | 0.1 | 18.7 |
| Wyorning | 0.2 | 19.6 | -450 | 6.3 | 1,100 | 0.0 | 0.0 | -20 | -0.1 | 0.0 | 20.6 |
| United States | 100.0 | 14.2 | -370 | 12.5 | 1,350 | -0.2 | 100.0 | 116 | 0.7 | 0.1 | 19.9 |

Nource:: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).
(1) Calendar year. Baseline is current law. Proposal would replace the deduction for mortgage interest with a 15 percent non-refundable credit on the first $\$ 500,000$ of debt on a
primary residence, second home, and/or a home equity loan. Estimates are static and do not assume that taxpayers would adjust their investment portfoio and pay down their mortgage balance if their tax benefit from mortgage interest was reduced. For a description of TPC's current law baseline, see
(2) Includes both filing and non-fling units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxNoode//income.cfm
(3) Includes tax units with a change in federal tax burden of $\$ 10$ or more in absolute value.
(5) Average federal tax (includes individual and conporate income tax, tapyroll taxes for social Sedits; corporate income tax; payroll taxes (Social Security and Medicare); estate taxes; and excise taxes.

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TABLE 11
Distributional Effects of Option 3
By expanded cash income level, 2016

| ECI (thousands of 2016 dollars) | Number of Tax Units (in thousands) | Share of Tax Units | Percent of ltemizers Within Class | Percent with Tax Cuts | Percent with Tax Increase | Average Federal Tax Change (\$) | Average Federal Tax Rate Change (percentage points) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The United States |  |  |  |  |  |  |  |
| Less than 75 | 114,590 | 66.1 | 4.8 | 8.7 | 1.3 | -20 | -0.1 |
| 75-200 | 45,330 | 26.1 | 34.8 | 30.9 | 25.3 | 60 | 0.1 |
| 200-1,000 | 11,600 | 6.7 | 77.6 | 5.5 | 72.0 | 1,490 | 0.5 |
| More than 1,000 | 670 | 0.4 | 89.9 | 5.7 | 58.3 | 3,360 | 0.1 |
| All | 173,400 | 100.0 | 17.8 | 14.2 | 12.5 | 120 | 0.1 |
| California |  |  |  |  |  |  |  |
| Less than 75 | 13,390 | 65.7 | 4.7 | 7.9 | 1.5 | -10 | -0.1 |
| 75-200 | 5,090 | 25.0 | 42.3 | 25.2 | 31.0 | 260 | 0.2 |
| 200-1,000 | 1,620 | 7.9 | 87.4 | 2.2 | 78.0 | 2,510 | 0.8 |
| More than 1,000 | 100 | 0.5 | 96.2 | 2.3 | 69.1 | 5,050 | 0.2 |
| All | 20,380 | 100.0 | 21.1 | 11.6 | 15.3 | 280 | 0.3 |
| Kentucky |  |  |  |  |  |  |  |
| Less than 75 | 1,510 | 68.6 | 4.0 | 9.4 | 1.2 | -20 | -0.1 |
| 75-200 | 580 | 26.4 | 29.1 | 37.0 | 22.1 | -50 | 0.0 |
| 200-1,000 | 100 | 4.5 | 76.3 | 6.6 | 70.6 | 920 | 0.3 |
| More than 1,000 | * | * | ** | ** | ** | ** | ** |
| All | 2,200 | 100.0 | 13.9 | 16.5 | 9.8 | 20 | 0.0 |
| New York |  |  |  |  |  |  |  |
| Less than 75 | 7,430 | 66.0 | 6.2 | 7.4 | 1.1 | -10 | -0.1 |
| 75-200 | 2,850 | 25.3 | 48.5 | 22.4 | 27.1 | 120 | 0.1 |
| 200-1,000 | 830 | 7.4 | 88.7 | 2.3 | 70.6 | 1,440 | 0.4 |
| More than 1,000 | 80 | 0.7 | 96.4 | 2.4 | 66.4 | 4,020 | 0.1 |
| All | 11,260 | 100.0 | 23.6 | 10.8 | 13.3 | 150 | 0.2 |
| Texas |  |  |  |  |  |  |  |
| Less than 75 | 9,110 | 67.5 | 3.6 | 7.5 | 0.9 | -20 | -0.1 |
| 75-200 | 3,330 | 24.7 | 25.2 | 33.9 | 16.2 | -50 | 0.0 |
| 200-1,000 | 910 | 6.7 | 61.8 | 11.5 | 61.3 | 980 | 0.3 |
| More than 1,000 | 60 | 0.4 | 69.1 | 17.9 | 37.8 | 1,830 | 0.1 |
| All | 13,500 | 100.0 | 13.2 | 14.3 | 8.9 | 50 | 0.1 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1)

TABLE 12
Option 3: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit on the First $\$ 500,000$ of Debt; California, Baseline: Current Law Distrbution of Federal Tax Change by Expanded Cash Income Level, 2016 .

| Expmended Cath income Level thoumende of 2018 dollara? | Tax Unita meth Tax incrate of Cut ? |  |  |  | Parcant Change in Afarlaw income ${ }^{4}$ | Share of Tetal Finderal Tix Change | Averege Fideral Tix Charge |  | Aversge Federal Tix Rato ${ }^{\text {a }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Whh Tax Cut |  | What Trelocrew |  |  |  |  |  | $\begin{aligned} & \text { Chunge } \\ & \text { (Porchtige } \\ & \text { Polnte) } \end{aligned}$ | Under the Proposel |
|  | Pet of Tive Unit: | Avg Tax On | Fet of Tax Units | Avg Tax Incresur |  |  | Delan | Pereme |  |  |
| Less then 10 | 0. | . 60 | 00 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 6. |
| 10.20 | 0.9 | -180 | 00 | 8.220 | 0.0 | 0.1 | 0 | 0.4 | 0.0 | 3.0 |
| 20.30 | 27 | 250 | 0.1 | 270 | 00 | 0.3 | 40 | 0.5 | 0.0 | 48 |
| 30.40 | 7.1 | 250 | 08 | 360 | 0.1 | -0.5 | -10 | -0, | 0.0 | 7.9 |
| 42.50 | 13.7 | 270 | 18 | 360 | 0.1 | -0.9 | -30 | 07 | 0.1 | 102 |
| 50.75 | 21.6 | -310 | 5.7 | 520 | 0.1 | -1.8 | 40 | -0, | Q 0.1 | 12.8 |
| 75.100 | 297 | 380 | 16.3 | 790 | 0.0 | 0.4 | 10 | 0.1 | 0.0 | 15.7 |
| 100.200 | 22.8 | 440 | 39.1 | 1.280 | 0.4 | 23.1 | 400 | 15 | 0.3 | 19.3 |
| 200.500 | 24 | 420 | 77.5 | 2.910 | -10 | 565 | 2250 | 3.4 | 0.8 | 27.8 |
| 500-1,000 | 08 | -710 | 81.4 | 5,580 | -0.9 | 14.8 | 4530 | 24 | 0.7 | 28.7 |
| More then 1,000 | 23 | -1,280 | 69.1 | 7,360 | 0.2 | 8.7 | 5.050 | 0.4 | 0.2 | 335 |
| Al | 11.6 | 360 | 15.3 | 2,100 | 0.4 | 1000 | 280 | 15 | 0.3 | 21.0 |
| Addendum |  |  |  |  |  |  |  |  |  |  |
| $100 \cdot 125$ | 31.4 | 440 | 23.1 | 1,130 | 0.1 | 27 | 120 | 0.6 | 0.1 | 177 |
| 125.150 | 226 | 440 | 37.2 | 1,020 | 0.3 | 4.3 | 280 | 1.1 | 0.2 | 19.0 |
| 150.175 | 16.3 | 400 | 53.3 | 1,310 | 0.5 | 70 | 630 | 20 | 0.4 | 202 |
| 175.200 | 85 | 420 | 67.0 | 1,660 | -0.) | 9.0 | 1,060 | 28 | 0.6 | 21.1 |

Source: Uta--Brockings Tax Polcy Center Nicrovimulation Model (wervion 0516-1].
Notas:
(1) Calender yeur. Beneline is current lam. Proponal would replece the dedection for rongege interest with a 15 peccent non-eviurdable credit on the frat 5500,000 of debt on e

biance 7 their tax benest from morgege intierest was rediced. Ror
 thlp. /hww. Laxpelcycemterorg/Tawlodi//ncorese. dm
(3) Includes sax unitas with a change in federal lax burden of $\$ 10$ or mare in dosolute wilue.

(5) Arerge fedcral tux Sncludes indiridual and copporate hcome wax, payroll taxes for Socal Security and Medicos, the estate tax, and exolse taxes) as a percentoge of average expanded cash income.

TABLE 13
Option 3: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit on the First $\$ 500,000$ of Debt; Illinois, Baseline: Current Law Distribution of Federal Tax Crenge by Expanded Cash income Level, 2016

| Expanded Coth inceme Level ftheorandte of 2016 dollaris) |  |  |  |  | Percant Change in Aherfaz Incerme: | Share of Toral Federal Tax Cheng: | Averrge Federal Tax Change. |  | Averrge Fedeal Tux Reat' |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Whh Tux Cut |  | Whit Tar horeene |  |  |  |  |  | $\begin{aligned} & \text { Changt } \\ & \text { Porcintige } \\ & \text { Polntis) } \end{aligned}$ | Under the Proporn |
|  | Ptef Tin Units | Avg Tix Cut | Pet of Tix Units | Avy Tax Inowere |  |  | Dotarn | Precent |  |  |
| Less than 10. | 0.0 | . 60 | 0.0 | 0 | 00 | 0.0 | 0 | 00 | 0.0 | 6.9 |
| 10.20 | 1.0 | -170 | 00 | 6.220 | 0. | -2 | 0 | 0.4 | 00 | 30 |
| 20.30 | 27 | 230 | 0.1 | 270 | 00 | 0.6 | -10 | 0.5 | 0.0 | 4.6 |
| 30.40 | 75 | 200 | 0.5 | 320 | at | -1.1 | $-20$ | 0.6 | 0.1 | 79 |
| 40.50 | 14.5 | 200 | 1.1 | 260 | 0.1 | 20 | 40 | 0.0 | Q 1 | 10.4 |
| 50.75 | 23.1 | 200 | 5.7 | 350 | 0.1 | 4.8 | 40 | 00 | 0.1 | 13.1 |
| 75.100 | 31.1 | . 360 | 16.2 | 520 | 0.0 | 20 | 30 | 0.2 | 00 | 15.9 |
| 100.200 | 26.3 | 430 | 38.8 | 720 | a 1 | 20.3 | 150 | 0.6 | 0.1 | 19.2 |
| 200.500 | 38 | 420 | 75.3 | 1.680 | 0.0 | 63.9 | 1,250 | 1.9 | 04 | 23.5 |
| 500.1.000 | 17 | . 500 | 75.9 | 3.430 | 05 | 15.4 | 2.590 | 1.3 | 0.4 | 28.9 |
| Mave than 1,000 | 3.4 | -1.030 | 60.8 | 5.400 | 0.2 | 10.9 | 3,250 | 03 | 0.1 | 34.1 |
| All | 13.4 | . 350 | 14.9 | 1,200 | . 02 | 100.0 | 130 | 0.7 | 02 | 20.4 |
| Addendum |  |  |  |  |  |  |  |  |  |  |
| 100.125 | 33.4 | . 440 | 21.4 | 620 | 0.0 | 08 | -10 | 0.1 | 00 | 17.5 |
| 125.150 | 26.5 | 450 | 34.4 | 870 | at | 41 | 110 | 0.4 | 0.1 | 19.0 |
| 150.175 | 20.9 | . 400 | 51.6 | 760 | 0.2 | 77 | 310 | 10 | 02 | 20.3 |
| 175.200 | 13.0 | 400 | 65.9 | 880 | 0.3 | 93 | 500 | 13 | 03 | 21.1 |

Sourca: Uiban-Brookings Tax Policy Center Microsimulation Model lvenion 0516-1)
Noter:

pricary residerce, second home, andior a home equity loan Estimasos ae satic and do not assume trat taxpuyers would adjut ther investment portfolio and poy down their morgage
bolance it heir tax benefe from mortgoge interest was reduced. For a dasciption of TPC: Gument bew boselice, seo
俍 epirnw.taxpolicyeenter.ag/TaxModel/ncome.dm
(4) Aldudes tax units with a charge in federal tax burden of $\$ 10 \alpha$ more in aboolute wolve.

table 14
Option 3: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit on the First $\$ 500,000$ of Debt; Kentucky, Baseline: Current Law Distribution of Foderal Tax Change by Expanded Cash incorse Level 2016

| Expanded Cush income Level phousands of 2016 dellen ${ }^{4}$ | Tax Unts whth Tax Mersase or Cut ${ }^{\text {? }}$ |  |  |  | Percent Ovange in Ahertixu Incem: | Share of Total Fodenal Tlx Chang: | Average Federal Tax Chenge |  | Averseg Foderal Tox Rato" |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Whatrecyt |  | With frelncruen |  |  |  |  |  | ChangtPorontgePoina) | Under the Frepout |
|  | Prt of Tax Units | Avg tox Cut | Ptt of Tax Unlts | Ang Thx increste |  |  | Dollen | Forcent |  |  |
| Less than 10 | 0.0 | -60 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 6.7 |
| 10.20 | 1.0 | -190 | 0.0 | 0 | 0.0 | 4.8 | 0 | -0.5 | 0.0 | 2.9 |
| 20.30 | 2.6 | -240 | 0.1 | 190 | 0.0 | 4.6 | -10 | 0.6 | 0.0 | 4.4 |
| 30.40 | 76 | . 250 | 0.5 | 260 | 0.1 | +10.6 | 20 | -6.7 | -0.1 | 76 |
| 40.50 | 15.7 | 280 | 1.0 | 200 | 0.1 | 20.4 | 40 | -0.9 | 0.1 | 99 |
| 50.75 | 25.8 | 310 | 4.5 | 300 | 0.1 | -6.1 | 70 | 0.9 | 0.1 | 12.5 |
| 75-100 | 37.7 | 400 | 11.4 | 410 | 0.1 | -1.4 | . 100 | 0.8 | 0.1 | 15.0 |
| 100.200 | 30.6 | 470 | 28.6 | 550 | 0.0 | +12.3 | to | 0.1 | 0.0 | 18.5 |
| 200.500 | 7.0 | 410 | 70.6 | 1.200 | 0.4 | 19.4 | 810 | 1.3 | 03 | 23.1 |
| 500-1,000 | 2.4 | -640 | 70.3 | 2.780 | 0.4 | 49.3 | 1,940 | 1.0 | 0.3 | 28.7 |
| Mose than 1.000 | 3.2 | .980 | 54.8 | 4.460 | 0.1 | 27.2 | 2.410 | 0.3 | 0.1 | 33.7 |
| All | 16.5 | 350 | 9.8 | 810 | 0.0 | 1000 | 20 | 0.1 | 0.0 | 17.3 |
| Addendum |  |  |  |  |  |  |  |  |  |  |
| 100.125 | 45.2 | 480 | 12.1 | 450 | 02 | -67.9 | -180 | 0.9 | 0.1 | 16.8 |
| 125-150 | 35.1 | 450 | 30.1 | 500 | 0.0 | 4.8 | 20 | 0.1 | 0.0 | 18.3 |
| 150.175 | 29.9 | 420 | 45.0 | 600 | 0.1 | 25. 3 | 100 | 0.5 | 0.1 | 19.9 |
| 175-200 | 19.4 | 420 | 59.8 | 600 | 0.2 | 35.1 | 300 | 0.8 | 0.2 | 20.6 |

Notes:
(11) Calendar year Baseine is curment lew. Proposal would replace the dedustion for motgoge interest with a 15 percent non-velundable creatit on the fint 5500.000 of debbt on a
 balance it their lax bersefit ham mortgoge interest was seduced. For a deaciption of TPCis curent lan baseline, we
ketpi/tmm Laspoicyeenser.orghtuatopics/Basciess Defintions dfm


ahodes iex unis wis a change in ledores tax buiden of $\$ 10$ or mere
信


TABLE 15
Option 3: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit on the First $\$ 500,000$ of Debt; Michigan, Baseline: Current Law Distribuiton of Federal Tax Change by Expanded Cash income Level, 2016 ,

| Expended Creh Incem: Level ghoumends of 2016 dellans ${ }^{2}$ | Tax Unta whit Tix Increve or Cin ${ }^{\text {a }}$ |  |  |  | Parcent Change in Ahar Tox hoome ${ }^{4}$ | Suare of Total Federal Tix Change | Average Federal Thx Change |  | Aversge Federal Tex Rent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wht Tricut |  | Wah Tar howene |  |  |  |  |  | ChangeQorentsge <br> Malnti) | under the <br> Propotel |
|  | Fet of Trex Units | Avg Tax Cut | Pat of tix Units | Avg Tix mowere |  |  | velans | Preamt |  |  |
| Less than 10 | 0.0 | 60 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0. | 0.0 | 6.7 |
| 1020 | 1.1 | -180 | 0.0 | 0 | 00 | . 0.6 | 0 | 0.5 | 00 | 2.8 |
| 20.30 | 2.7 | 200 | 0.1 | 250 | 0.0 | 4.5 | -10 | 0.6 | 00 | 4.0 |
| 3040 | 7.5 | 260 | 0.4 | 290 | 0.1 | 3.1 | 20 | 0.3 | 0.1 | 7.0 |
| 40.50 | 15.5 | . 270 | 0.8 | 270 | 0.1 | 5.7 | 40 | 0.9 | 0.1 | 9.6 |
| 50.75 | 25.3 | 290 | 4.9 | 330 | 0.1 | -15.0 | -60 | 0.7 | Q 0.1 | 12.2 |
| 75.00 | 36.1 | . 380 | 13.0 | 450 | 0.1 | -13.5 | -80 | -0.6 | $0 \cdot 1$ | 15.0 |
| 100.200 | 32.6 | . 450 | 31.7 | 630 | 0.1 | 167 | 50 | 0.2 | 0.0 | 18.6 |
| 200.500 | 6.0 | . 410 | 33.2 | 1.340 | 0.5 | 91.1 | 980 | 15 | 0.4 | 23.3 |
| 5001,000 | 2.4 | . 520 | 72.7 | 2900 | -0.4 | 202 | 2.100 | 1.1 | 03 | 28.8 |
| More then 1,000 | 37 | .990 | S8. 4 | 4.630 | 0.1 | 11.5 | 2.870 | 03 | 0.1 | 33.9 |
| All | 14.3 | . 360 | 19.2 | 980 | 0.1 | t000 | 50 | 0.4 | 0.1 | 18.1 |
| Addendum |  |  |  |  |  |  |  |  |  |  |
| 100.125 | 49.0 | . 460 | 15.2 | 520 | 0.1 | -14.0 | -110 | -0.6 | as | 16.8 |
| 125-150 | 32.4 | . 400 | 30.0 | 570 | 0.0 | 2.0 | 20 | a) | 00 | 18.4 |
| 150.175 | 25.3 | . 410 | 49.5 | 670 | 0.2 | 13.1 | 220 | 0.7 | 0.1 | 19.8 |
| 175.200 | 17.5 | 410 | 62.5 | 710 | 0.3 | 15.6 | 370 | 1.0 | 0.2 | 20.8 |

Source:
-ookings Tex Potcy Center Micresimulotion Model Version 0516
Caiender yeac: Baseline sounert bo. Proposal would replace the deduction for mortgnge interest with a 15 percent non-effundeble credt on the firt 5500,000 of debt on a
俍
alarce if theie tax berefit from mortgage interent was roduced. For a donciption of TPC
(ing unts but exdudes those thet we dependents of other tax units. Tax unis with negative adjusted goss income are exduded from their reppective income class but ave induded in the towls. For a descripton of experded cash hoome, see



table 16
Option 3: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit on the First $\$ 500,000$ of Debt; New York, Baseline: Current Law Oistrbution of Federal Tax Change by Expanded Cash Income Level 2016

| Expanded Cewh heom: Level thousands of 2016 dolarn)? | Tru Units with Tei Increve or Cit ${ }^{\text {a }}$ |  |  |  | Porcent Chagge In Ahtar-Tir Insome: | Shere of Total Federal Tax Change | Aversge Federal Txx Change |  | Averego Federal Tax Reme' |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Whh tax ${ }^{\text {at }}$ |  | What Tax Increven |  |  |  |  |  | $\begin{aligned} & \text { Changr } \\ & \text { Qurcitheg } \\ & \text { Pointe) } \end{aligned}$ | Under the Properal |
|  | Pet of Tax Units | Avg Tax Cut | Fot of Tax Unts | Ang Tax marease |  |  | Dolar | Prement |  |  |
| Less thin 10 | 00 | . 60 | 00 | 0 | 0 | 0. | 0 | 0. | 0.0 | 6.2 |
| 10.20 | 0.9 | -160 | 0.0 | 6.220 | 0.01 | Q1 | 0 | -0.4 | 00 | 2.6 |
| 20.30 | 23 | . 230 | a. 1 | 300 | 0002 | -0.4 | 0 | 0.5 | 0.0 | 4.1 |
| 3040 | 65 | 230 | 0.4 | 330 | 0.04 | 0.8 | -10 | 0.5 | 00 | 7.8 |
| 40.50 | 13.1 | 250 | 07 | 390 | 0.00 | -1.4 | 30 | 20 | 0.1 | 10.8 |
| 50.75 | 20.5 | 260 | 43 | 360 | 0.07 | 35 | 40 | 0.5 | 0.1 | 13.7 |
| 75.100 | 267 | -330 | 13.6 | 540 | 0.02 | 0.8 | to | 0.1 | 0.0 | 16.6 |
| 100.200 | 20.0 | 400 | 365 | 780 | 0.17 | 202 | 190 | 03 | 0.1 | 19.5 |
| 200.500 | 24 | -420 | 70.4 | 1,810 | -0.58 | 532 | 1,270 | 1.9 | 0.4 | 23.9 |
| 500-1,000 | 1.0 | . 570 | 72.4 | 3,670 | . 054 | 158 | 2.650 | 1.4 | 0.4 | 28.9 |
| More then 1,000 | 24 | -1,360 | 66.4 | 6,100 | 0.15 | 180 | 4.020 | 03 | 0.1 | 33.6 |
| A] | 108 | . 320 | 13.3 | 1,420 | 0.19 | 1000 | 150 | 0.7 | 0.2 | 22.6 |
| Addendum |  |  |  |  |  |  |  |  |  |  |
| 100.125 | 26.8 | 400 | 19.7 | 670 | 0.03 | 1.0 | 20 | 0.1 | 00 | 18.0 |
| 125-150 | 193 | 410 | 322 | 720 | 0.14 | 45 | 150 | 0.6 | 0.1 | 19.5 |
| 150.175 | 14.7 | 390 | 48.9 | 810 | 0.20 | 6.0 | 340 | 1.1 | 0.2 | 20.3 |
| 175.200 | 88 | 400 | 62.6 | 910 | -0.36 | 7.8 | 540 | 1.4 | 0.3 | 21.2 |

ion 0516-1)
Source:


blance if teir tax bencefe from mongege inteest was rediced For a desciption of TPCY
tup // weww taxpoligcenterong/axeopics/laseline.Defisitions cfm

pilminiaxpotrycenter.agh/TaxModeincorse. dfm
(4) Atter-ax income is expanded cash income leas indindual income tax net of reindoble cedits copporate insome tax pyrol texes (socel Security and Medcarel; estate taxes; and exose texes.
(5) Auverge federal tax fincudes inchidual and copporte hoome tas, payoll axes for Socal Security and Medicre, the estate tax and excise taxest as a percentage of verrage expanded cash income.

TABLE 17
Option 3: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit on the First $\$ 500,000$ of Debt; Oregon, Baseline: Current Law Distribusion of Federal Tax Change by Expanded Cash Income Level. 2016 '

| Expanded Cath Income Level thousuds of 2016 dedient ${ }^{2}$ | Tax Unitr wht Tax morese or Cre? |  |  |  | Parcent Charge in Ahertaut Incersen : | Sheme ef Toteil Federnl Tax Charge | Averrge Fideral Tex Change |  | Averseg Federal Tax lital |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Whis Tax cut $^{\text {a }}$ |  | What Tarlorwe |  |  |  |  |  | ChasigeParsentagePointa) | Under the Propesal |
|  | Pt of Tax Units | Arg Ther Cit | Pst of Tax Units | Ang Tix Increnter |  |  | Dolltr | Mercent |  |  |
| Less than 10 | 0.0 | - | 0.0 | 0 | 00 | 0.0 | 0 | 0.0 | 0.0 | 6.7 |
| 10.20 | 1.2 | . 200 | 0.0 | 6,220 | 00 | 0.3 | 0 | 0.4 | 0.0 | 3.9 |
| 20.30 | 3.5 | 270 | 0.1 | 330 | 0.0 | 0.9 | -10 | 0.08 | 0.0 | 5.7 |
| 30.40 | 9.5 | 270 | 08 | 380 | 21 | -1.9 | 20 | -0.8 | 0.1 | 8.4 |
| 40.50 | 16.2 | -290 | 16 | 370 | a) | 2.9 | . 40 | -0.9 | -0.1 | 10.5 |
| 50.75 | 26.2 | 320 | 6.5 | 450 | 0.1 | 7.9 | . 60 | 0.7 | -0.1 | 12.6 |
| 75-100 | 36.2 | 420 | 16.1 | 560 | a1 | 53 | . 60 | 04 | 0.1 | 15.1 |
| 100.200 | 29.7 | 470 | 37.8 | 840 | 0.2 | 28.8 | 180 | 0.7 | 0.1 | 18.4 |
| 200.500 | 4.2 | 420 | 76.7 | 1,830 | -06 | 68.5 | 1,380 | 22 | 0.5 | 23.0 |
| 500-1,000 | 1.4 | -680 | 77.4 | 3,750 | -0.6 | 15.1 | 2,890 | 1.6 | 0.4 | 28.1 |
| Mave than 1,000 | 2.8 | $-1,060$ | 62.8 | 5,200 | 0.2 | 6.9 | 3,230 | 0.4 | 0.1 | 32.6 |
| All | 15.7 | -390 | 14.2 | 1,190 | 0.2 | 100.0 | 110 | 0.8 | 0.1 | 182 |
| Addendum |  |  |  |  |  |  |  |  |  |  |
| 100.125 | 40.4 | 490 | 18.8 | 720 | 0.1 | 4.1 | . 60 | 0.3 | 0.1 | 16.8 |
| 125-150 | 27.9 | 470 | 39.4 | 730 | Q 0.1 | 7.1 | 160 | 0.6 | 0.1 | 18.1 |
| 150. 175 | 21.1 | 110 | 56.1 | 900 | 0.3 | 12.3 | 420 | 1.3 | 0.3 | 19.7 |
| 175-200 | 12.4 | 410 | 67.8 | 1.000 | 0.4 | 13.5 | 630 | 1.7 | 0.3 | 20.5 |

Sourow:
(1) Calendar year Baselne is current liw. Proposal would replace the deduction for mongoge interest with a 15 percent non-rufurdatie credit an the fint 5500,000 of debt on a
primary widence, weond home, andlor a home equig loan. Evimates are static and do not aswure thet taxpeges waid adjust thei imestment portfolo and pay down ther mengage
balance if ther tux berefi fiom motguge norest was nduced. For a desciption of TPC, contem law baselne, we



(3) incudes tax unts with a dange in federel tax burden of 510 or more h absobye value.


table fe
Option 3: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit on the First $\$ 500,000$ of Debt; Texas, Baseline: Current Law Distrbution of Federal Tax Change by Expanded Cash income Level, 2016

| Expended Conh Inceme Lever (ahoumends of 2014 dolary) | Tax Unta with Thx increme ee Cit? |  |  |  | Fercent Change in Ahteriax heome * | Share of Total Pideral Txx Change | Avorsge Foderal Iix Chuge |  | Averuge Federal Thx Rene' |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | whh trecut |  | Wah tax lorume |  |  |  |  |  |  | Under the Propoen |
|  | Pet of Tixx Unita | Ava Tax Cut | Pte of Tax Units | Ang Pax Incesure |  |  | Dollars | Percent |  |  |
| Less then 10 | 0.0 | 60 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 00 | 6.5 |
| 10.20 | 08 | -160 | 0.0 | 0 | 0.0 | -0.4 | 0 | -0.4 | 00 | 2.0 |
| 20.30 | 20 | 220 | 0.1 | 240 | 0.0 | -1,4 | 0 | -0.5 | 00 | 3.6 |
| 3040 | 5.8 | -220 | 0.4 | 310 | 0.0 | 2.3 | -10 | 0.5 | 0.0 | 74 |
| 20.50 | 12. | 20 | 0.9 | 200 | 0.1 | 5. 2 | 30 | 0.7 | 0.1 | 10.2 |
| 50.75 | 20.5 | 290 | 3.1 | 360 | 0.1 | 14.3 | -50 | 0.6 | - 0.1 | 13.1 |
| 78.100 | 31.9 | -370 | 8.0 | 470 | 0.1 | 14.3 | -50 | -0.6 | 0.1 | 15.8 |
| 100200 | 35.0 | 460 | 20.9 | 630 | 0.0 | -8.8 | *0 | 0.1 | 0.0 | 19.2 |
| 200500 | 11.8 | -510 | 61.0 | 1,470 | -0.4 | 98.3 | 830 | 1.3 | 03 | 23.8 |
| 500-1,000 | 92 | 750 | 63.7 | 3.340 | -0.4 | 323 | 2060 | 1.1 | 03 | 29.1 |
| More then 1,000 | 17.9 | -1340 | 37.8 | 5.480 | 0.1 | 15.8 | 1.830 | 0. | at | 34.8 |
| Al | 14.3 | -390 | 89 | 1,180 | -0.1 | 1000 | 50 | 03 | 0.1 | 20.4 |
| Addendum |  |  |  |  |  |  |  |  |  |  |
| $100 \cdot 125$ | 37.8 | .450 | 12.0 | 530 | 0.1 | - 313 | -100 | 0.5 | 0.1 | 17.7 |
| 128.150 | 34.9 | 470 | 18.6 | 580 | 0.1 | 4.8 | 60 | -0.2 | 00 | 19.0 |
| 150.775 | 33. | 480 | 30.4 | 620 | 0.0 | 1.7 | 30 | 0.1 | 00 | 19.9 |
| 175.200 | 28.1 | 460 | 38.4 | 810 | 0.1 | 7.6 | 190 | 0.5 | 0.1 | 21.4 |

Source: Utan Prookings Tax Polcy Center Microsimuation Nodef foerion C516-11
Notue:
 primary nevidence, second homes, end/er a homse equity loan. Extimates aee tatic and do not assume that taxpyyers would acfut ther imestmemp portloio and pay down their mongoge hatp///www. taxpolicycemtecorg/taxtopages/laseline. Deffitionscim
 thpi//www.taxpolcycemecorg/tanModel/íncome.dm
13) includes tax unita with a change in federal tax burden of $\$ 10$ ce mone in absolute walue

(5) Arerge foderal tax onchudes indvidual and corporate income tax, pepoll taxes for Social Secivity and Modcare, the estate tax, and excose taves) as a percentage of average oppanded cash income.

TABLE 19
Option 3: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit on the First $\$ 500,000$ of Debt; Utah, Baseline: Current Law Distribuion of Feceral Tax Change by Expanded Cash income Level. 2016

| Expanded Cuh Income tevel fhoumends of 2016 dellens ${ }^{2}$ | Thx Unita wiht Tax mersase or Cins |  |  |  | Frevent Cange in AherTai theome: | Share of Total Federal Tinx Chang: | Avorrge Federal Fxx Ounge |  | Aversge Federal Tix Reno' |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weh Tax Cut |  | Whet Tax incruen |  |  |  |  |  | ChangeParentagePointy | Under ine Propare |
|  | Pt of Tax Units | Avg Tax Cut | Pct of 7ax Units | Ang Pax horeave |  |  | Delan | Present |  |  |
| Less tivan 10 | 0.0 | \$0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 7.8 |
| 10.20 | 0.9 | -180 | 0.0 | 0 | 00 | 0.3 | 0 | 0.3 | 0.0 | 4.3 |
| 20.30 | 2.7 | -250 | 0.1 | 200 | 00 | 4.15 | -10 | 0.5 | 0.0 | 5.9 |
| 30.40 | 8.0 | . 260 | 08 | 310 | 0.1 | 2.5 | -20 | 0.6 | 0.1 | 8.4 |
| 42.50 | 15.3 | -300 | 1.9 | 310 | 0.1 | 4.4 | 40 | -0.9 | -0. 1 | 10.0 |
| 50.75 | 24.9 | -350 | 7.1 | 460 | 0.1 | -12.2 | \$0 | -0.7 | 0.1 | 12.1 |
| 75.100 | 37.1 | . 470 | 13.9 | 560 | 0.1 | -14.9 | -100 | 0.8 | 0.1 | 14.3 |
| 100.200 | 33.6 | . 520 | 31.8 | 730 | 0.1 | 16.1 | 60 | 0.2 | 0.0 | 17.5 |
| 200.500 | 5.3 | 440 | 75.0 | 1,650 | 0.6 | 89.8 | 1210 | 2.0 | 0.4 | 22.3 |
| 500-1,000 | 25 | . 690 | 69.3 | 3,740 | 0.5 | 18.5 | 2570 | 1.4 | 0.4 | 27.8 |
| More tran 1,000 | 43 | -1,220 | 56.5 | 5,370 | 0.2 | 11.0 | 2980 | 0.4 | 0.1 | 33.0 |
| All | 17.0 | 460 | 13.4 | 1.070 | 0.1 | 1000 | 70 | 0.5 | 0.1 | 17.7 |
| Addendom |  |  |  |  |  |  |  |  |  |  |
| 100.125 | 43.7 | . 560 | 13.5 | 610 | 02 | -19.0 | -160 | 0.9 | -0, | 15.9 |
| 125-150 | 33.3 | . 510 | 30.5 | 620 | 00 | 1.6 | 20 | 0.1 | 0.0 | 17.2 |
| 150.175 | 23.2 | 440 | 51.4 | 840 | 0.3 | 173 | 330 | 1.1 | 0.2 | 18.7 |
| 178.200 | 17.1 | 460 | 64.9 | 790 | 0.3 | 162 | 440 | 1.2 | 0.2 | 19.7 |

Source: Utban-Brookings Tax Polcy Certor Micosimulation Model (rersion 0516.72
Notes:



 Help://mwn Laxpoicyenter:.arg/TaxModelrears, ifm
(3) Inciudes tax unts with a change in fecteral tax burden of 510 or more in absoblie velue

15) Averge federal tax (includes individul and copporate hoome tax, peypol taxes for Social Security and Medicure, the estate tax, and excse taxes) as a percentige of averoge expanded cash income.
table 20
Option 3: Replace the Mortgage Interest Deduction with a 15 Percent Non-refundable Credit on the First $\$ 500,000$ of Debt; Wisconsin, Baseline: Current Law Dastrbution of Feserai Tax Charge by Eypanded Cash Income Level, 2016 '

| Expanded Cush income Lavel (thousands of 2976 dolare) ${ }^{2}$ | Thx Unlos with fixi incresee or Cut ? |  |  |  | Pureent Chunge in Ahap tax theome ${ }^{4}$ | Share of Total Federal Tux Cange | Anwrege Frederal Tax Cheng* |  | Averres Federal Thx Reto' |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weh Tux Cut |  | Whih Tax licrease |  |  |  |  |  | $\begin{aligned} & \hline \text { Chingt } \\ & \text { Premegre } \\ & \text { Folnt) } \end{aligned}$ | Under the Propeatal |
|  | Met of 7ax Units | Avg Tix Cut | $\begin{aligned} & \text { Pct of Tax } \\ & \text { Units } \end{aligned}$ | Ang tax motese |  |  | Dollan | Pvicont |  |  |
| Less then 10 | 2.1 | 60 | 0.0 | 0 | 0.0 | 00 | 0 | 00 | 00 | 7.6 |
| 10.20 | 1.1 | +160 | 0.0 | 0 | 0.0 | 0.4 | 0 | 0.3 | 0.0 | 4.2 |
| 20.30 | 28 | 230 | 2.1 | 260 | 00 | -1.2 | -10 | 0.4 | 0. | 5.8 |
| 3040 | 84 | .250 | 0.4 | 300 | 0.1 | 3.0 | 20 | 0.6 | -2. | 8.7 |
| 42.50 | 15.9 | 200 | as | 270 | 0.1 | 5.1 | $\pm 0$ | -0. | as | 10.9 |
| 50.75 | 252 | 200 | 6.2 | 310 | 0.1 | 433 | . 50 | -0.6 | at | 13.2 |
| 75.100 | 35.4 | .370 | 14.4 | 440 | 0.1 | +11.8 | . 70 | as | a.t | 15.4 |
| 100.200 | 30.4 | 430 | 35.2 | 590 | 0.1 | 250 | 80 | 03 | 0.1 | 18.5 |
| 200.500 | 40 | . 390 | 76.3 | 1.230 | 0.4 | 81.9 | 520 | 1.5 | 03 | 22.8 |
| 500-1.000 | 15 | .550 | 72. | 2680 | 0.4 | 17.4 | 1.820 | 1.0 | 03 | 28.5 |
| Mere thin 1.000 | 25 | . 980 | 55.9 | 4,180 | 0.1 | 10.5 | 2.310 | 0.2 | 0.1 | 33.4 |
| Al | 160 | -350 | 13.9 | 830 | 0.1 | 1000 | 60 | 0.4 | 0.1 | 18.7 |
| Addendum |  |  |  |  |  |  |  |  |  |  |
| 100.125 | 40.4 | 440 | 16.2 | 490 | 0.1 | 42.9 | -100 | 0.5 | 0.1 | 16.9 |
| 125-150 | 29.2 | .400 | 34.9 | 520 | 0.1 | 52 | 60 | 0.2 | 0.0 | 18.2 |
| 150.775 | 22.1 | . 390 | 54.2 | 820 | 0.2 | 15.5 | 250 | 0.8 | 02 | 19.7 |
| 175.200 | 136 | -400 | 68.0 | 690 | 0.3 | 17.3 | 420 | 1.1 | 02 | 20.4 |

Source: Utan-Prockings Tax Polcy Center Microsimulation Model berion 0516-1)
Noter:
 primary revidence, zoeend home, and/or a home equity loen. Extimases are static and do not asume that taxpayen would aduat their investremt portaio end pay down their monguge




(3) Incluaca uax unita with a change in federal lax burden ol $\$ 10$ er more in ebsolute volue.

(5) Aneroge federal tax fincludes individual and copporte ncome tax, poproll weses for Social Secunty end Medicare, the estate tax, and excse taves) as a percencage of evergege expanded cash income.

## REFERENCES

Joint Committee on Taxation (2015). Estimates of Federal Tax Expenditures for Fiscal Years 2015-2019.

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The Tax Policy Center is a joint venture of the Urban Institute and Brookings Institution.


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[^0]:    1 The amounts of \$1 million and \$100,000 are not indexed for inflation. In 2010, an IRS ruling allowed taxpayers with acquisition debt over $\$ 1$ million to re-characterize the debt in excess of $\$ 1$ million as a home equity loan. This effectively raised the ceiling on acquisition debt that is deductible to $\$ 1.1$ million, which remains the allowable maximum on the sum of acquisition debt and home equity loans that are deductible.

[^1]:    2 Joint Committee on Taxation (2015). Estimates of Federal Tax Expenditures for Fiscal Years 2015-2019.

[^2]:    Source: Urtan-Brookings Tax Policy Center Microsimuation Model (version 0516-1)

[^3]:    Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0516-1).

