



EFFECTS OF TAX INCENTIVES ON HOMEOWNERSHIP

Chenxi Lu, Eric Toder, Surachai Khitatrakun, and Robert McClelland

July 1, 2020

ABSTRACT

Federal tax law provides several tax benefits for homeowners. This chartbook focuses on the home mortgage interest deduction. We provide updated estimates of the distributional effects of the home mortgage interest deduction, show how those estimates could change if people pay down their home mortgages in response to an elimination of the deduction, and provide estimates of revenue-neutral reform alternatives that replace the current deduction with a tax credit.

Homeowners who itemize deductions on their individual income taxes may reduce taxable income by deducting interest paid on a home mortgage. Before the Tax Cuts and Jobs Act of 2017 (TCJA), the mortgage interest deduction (MID) on owner-occupied homes was limited to interest paid on up to \$1 million of debt incurred to purchase or substantially rehabilitate a home. Homeowners also could deduct interest paid on up to \$100,000 of home equity debt regardless of how they used the borrowed funds. The TCJA trimmed this tax break for homeowners through the end of 2025. Under current law, taxpayers can deduct interest on up to \$750,000 of mortgage debt incurred after December 16, 2017, to buy or improve a first or second home. But taxpayers can no longer deduct the interest from a loan secured by their home if the loan proceeds weren't used to buy, build, or substantially improve the home no matter when the debt was incurred.

More importantly, the TCJA also temporarily reduced the number of taxpayers who itemize deductions by almost doubling the standard deduction amount for individual taxpayers and limiting the annual deduction for nonbusiness state and local income and property taxes to \$10,000. These changes substantially reduced the number of taxpayers claiming the MID and increased the share of the deduction claimed by the highest-income taxpayers.

The purpose of this chartbook is to briefly examine the effects of the MID and several reform alternatives under current tax law. We generate new estimates of how those effects might change if homeowners were to respond to elimination of the MID by selling off some of their financial assets to pay down mortgage debt. Eliminating the deduction would provide taxpayers an incentive to pay down their mortgages because doing so would enable them to reduce their tax liability without changing their housing consumption or net financial position.

When estimating the revenue and distributional effects of repealing the MID, we compare several assumptions about whether or how people pay down their mortgages. Traditionally, the Tax Policy Center analyzes repeal of the MID assuming taxpayers do not pay down their mortgages. But because repealing the MID increases the after-tax cost of mortgage interest, some homeowners would likely sell financial assets that generate lower after-tax returns to pay down the mortgage debt. So, in addition to the no paydown assumption, we examined three potential paydown percentages: pay down targets of as much as 100 percent, 50 percent, and 25 percent of their debt.¹ We also examine each paydown percentage under two financial scenarios: one where homeowners pay down their debt by selling only tax-exempt municipal bonds² and taxable bonds and another where they pay down their debt by selling tax-exempt municipal bonds, taxable bonds, and stocks.³

We also estimate the distributional effects of replacing the current MID with tax credits. We find two versions of tax credits that would keep federal tax revenue essentially unchanged: an 8.3 percent nonrefundable tax credit and a 7.3 percent refundable tax credit.

The following charts show the effects of repealing the MID under the different assumptions about whether and how people pay down their mortgages and of replacing the current MID with the two tax credit alternatives. Figure 1 and 2 show the distribution of repealing the MID with the Tax Policy

¹ The actual percentage of mortgage debt reduced from paying down one's mortgage is constrained by the amount of available financial assets.

² Because municipal bond interest income generally is tax-exempt for federal income tax purposes, taxpayers holding municipal bonds receive a lower interest rate than the rate on comparable risk taxable bonds (including mortgage debt) that reflects the marginal benefit of tax-exemption. This lower rate of return can be viewed as an implicit tax on tax-exempt bond interest.

³ We assume taxpayers would not use cash or other types of assets to pay down their mortgage because they need cash as an emergency fund, and selling assets such as real estate and active business can incur significant transaction costs.

Center’s standard assumption that taxpayers do not pay down their mortgages in response. Figure 3 summarizes the revenue changes of repealing the MID under all paydown assumptions. Figure 4 compares the distributions using different paydown targets. Figures 5 and 6 compare the distributional results between the scenario where homeowners do not pay down their mortgages and one of the paydown targets. Figures 7 and 8 show the distributional effects of replacing the current-law MID with revenue-neutral tax credits.⁴

⁴ The charts below reflect economic conditions as projected by the Congressional Budget Office in January 2019.

FIGURE 1

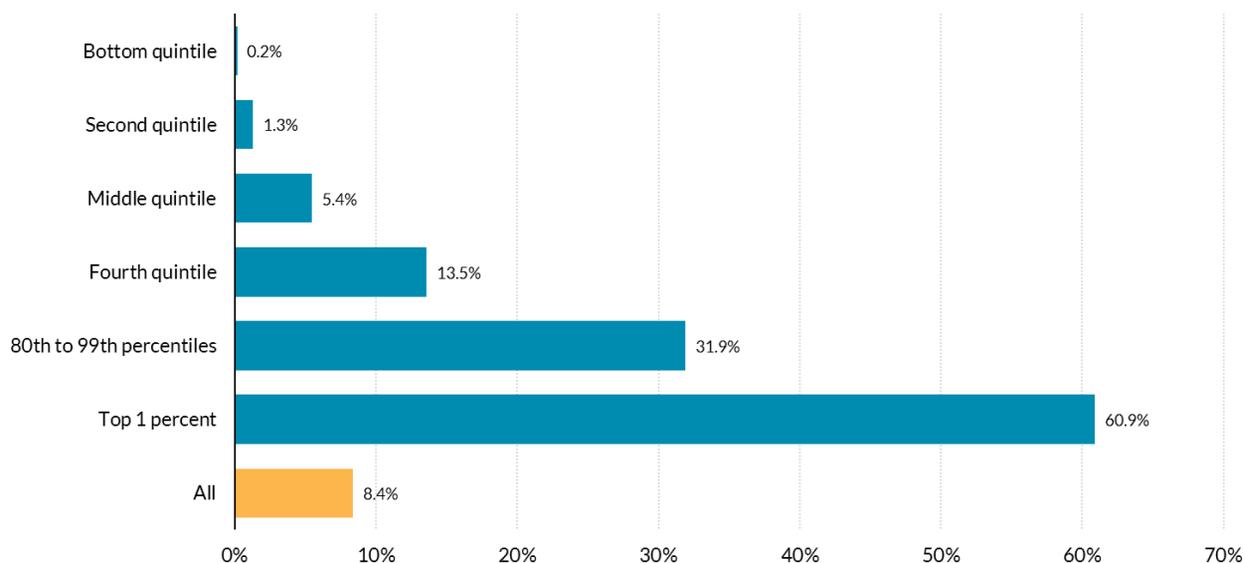
Share of Tax Units with Tax Increase from Repealing the Home Mortgage Interest Deduction

Assuming tax units do not pay down mortgage, by income percentile, calendar year 2019



What Share of Tax Units Benefits from the MID?

- The share of tax units benefiting from the MID is defined as the share of tax units whose taxes increase when the MID is repealed.
- Only 8.4 percent of all tax units currently benefit from the MID. This has declined from the pre-TCJA level of about 20 percent.⁵
- The share of tax units benefiting from the MID increases with income. Only 0.2 percent of tax units in the bottom income quintile benefit from the MID, but more than 60 percent of the tax units in the top 1 percent of the income distribution benefit.



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

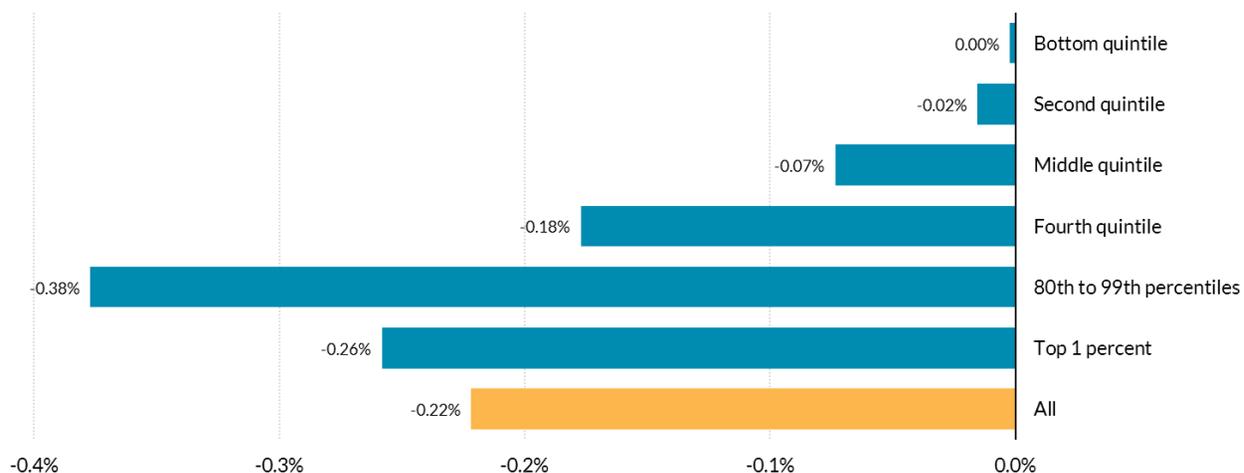
Note: Baseline is the law in place as of January 1, 2020.

⁵ To see the TCJA's impact on the tax benefits of the home mortgage interest deduction, see Urban-Brookings Tax Policy Center. T18-0008 - Impact on the Tax Benefit of Home Mortgage Interest Deduction (MID) of H.R.1, The Tax Cuts and Jobs Act, By Expanded Cash Income Percentile, 2018.

FIGURE 2

Percent Change in After-tax Income from Repealing the Home Mortgage Interest Deduction

Assuming tax units do not pay down mortgage, by income percentile, calendar year 2019



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Note: Baseline is the law in place as of January 1, 2020.

How Would Repeal of the MID Affect Tax Units in Different Income Groups?

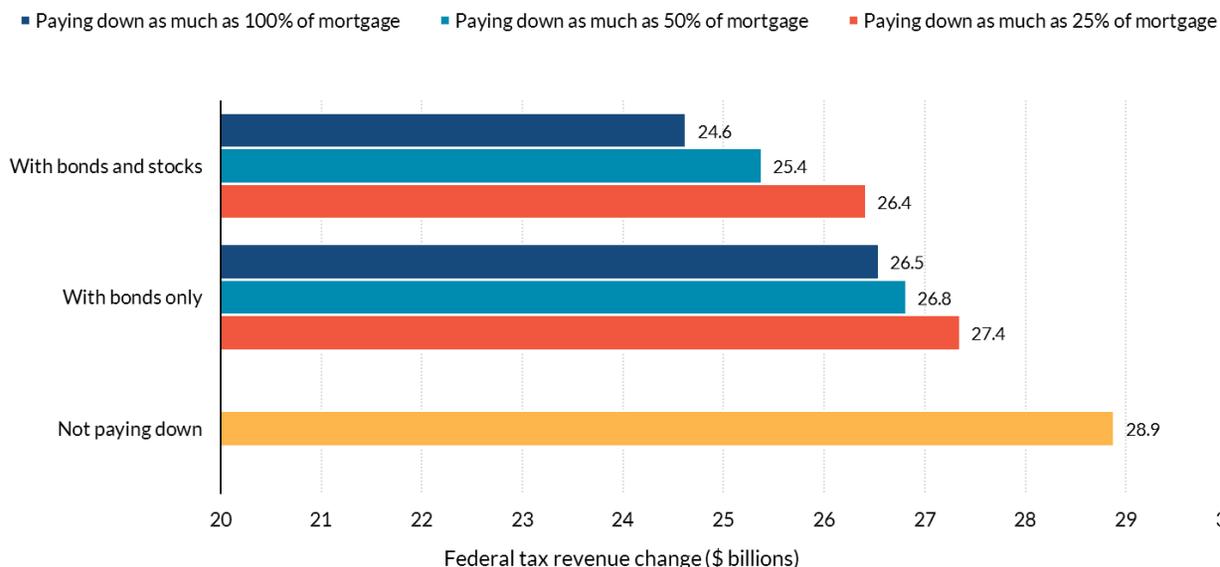
- Repealing the MID would on average decrease the after-tax income for all tax units by 0.22 percent.⁶
- The lowest-income tax units would see almost no income reduction from repealing the MID because they currently benefit little from it.
- Repealing the MID would affect the tax units in the 80th to 99th percentiles the most, averaging an 0.38 percent decrease in after-tax income.
- The top 1 percent receives a smaller benefit from the MID as a share of income because their housing consumption rises less than proportionately with income.

⁶ The change in after-tax income is the average percent change across all tax units in each income group, including those who currently benefit and do not benefit from the MID.

FIGURE 3

Federal Tax Revenue Change from Repealing the Home Mortgage Interest Deduction

Comparison among different paydown assumptions, \$ billions, calendar year 2019



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Note: Baseline is the law in place as of January 1, 2020.

How Much Federal Tax Revenue Would Repeal of the MID Raise?

- If we assume tax units do not pay down their mortgages, repealing the MID would raise \$28.9 billion in 2019. Less revenue would be raised if tax units were to pay down their mortgage in response to the repeal of the MID.
- Paying down larger amounts would lead to smaller tax revenue increases. This is true both in terms of the scale of mortgage payment (e.g., a target of 50 percent versus 25 percent) and in terms of the assets used to pay it down (e.g., selling bonds and stocks versus selling bonds only).
- However, even with a mortgage paydown target of 100 percent from both bonds and stocks, the revenue gain from repealing the MID would be reduced only about 16 percent.⁷

⁷ In the following three figures, we choose to illustrate paydown options that use both bonds and stocks as resources to pay down the outstanding mortgage. The options that use bonds only as the resources for paying down a mortgage have very similar patterns.

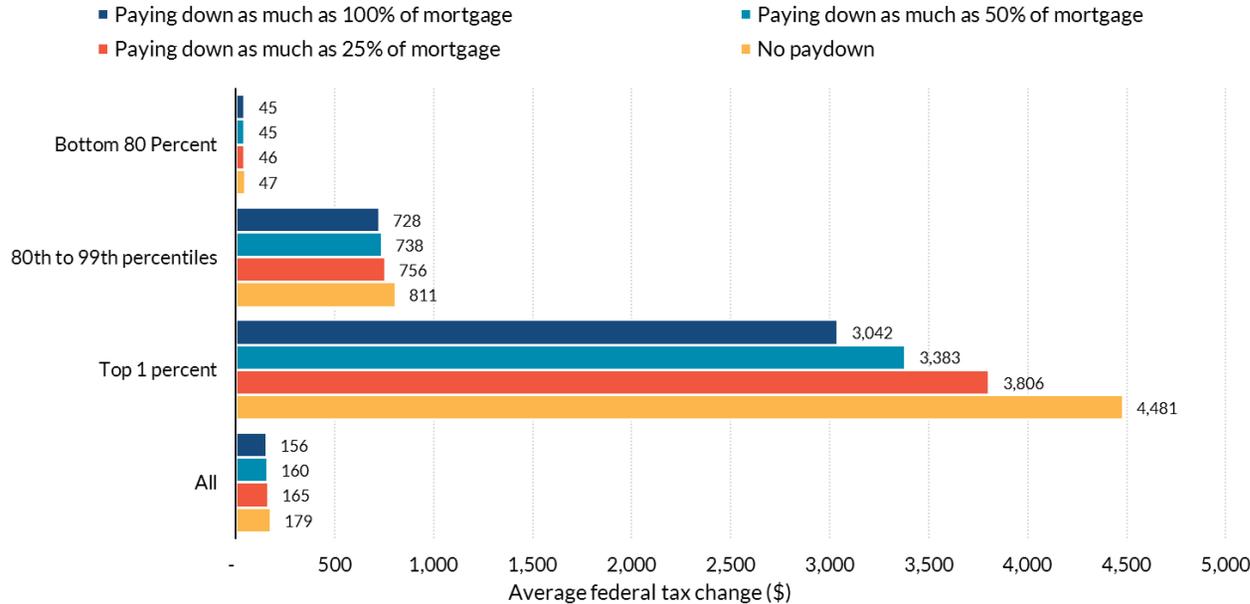
FIGURE 4

Average Federal Tax Change from Repealing the Home Mortgage Interest Deduction

Comparison among different paydown targets, by income percentile, calendar year 2019



If the MID Is Repealed, How Do Different Paydown Targets Affect the Average Tax Increase?



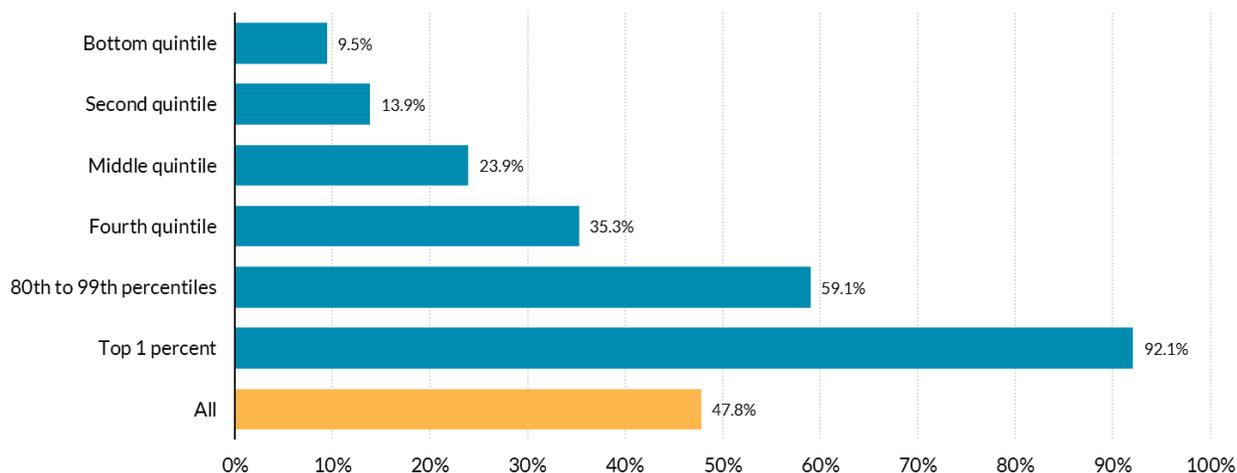
Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).
 Note: Baseline is the law in place as of January 1, 2020. Figure includes only paydown options that use both bonds and stocks to pay down mortgage. The average tax increase is the average tax increase across all tax units, including those who currently benefit and currently do not benefit from the MID.

- If tax units do not pay down their mortgages in response to the MID's repeal, on average tax units would pay about \$180 more tax. If instead they target paying down as much as 25 percent of mortgage debt by selling bonds and stocks, the average annual income tax increase is only about \$165.
- Paying down mortgage debt reduces tax liability more for the higher-income groups because they have larger mortgages and more financial assets to use to pay down their debt.
- Paying down as much as 25 percent of mortgage debt could on average save tax units in the top 1 percent of the income distribution \$675 (i.e., reduce the tax increase for 2019 from \$4,481 to \$3,806).

FIGURE 5

Share of Affected Tax Units Benefiting from Mortgage Paydown, Following Repeal of the Home Mortgage Interest Deduction

Assuming tax units paying down as much as 25 percent of mortgage by selling bonds and stocks, by income percentile, calendar year 2019



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Note: Baseline is the law in place as of January 1, 2020.



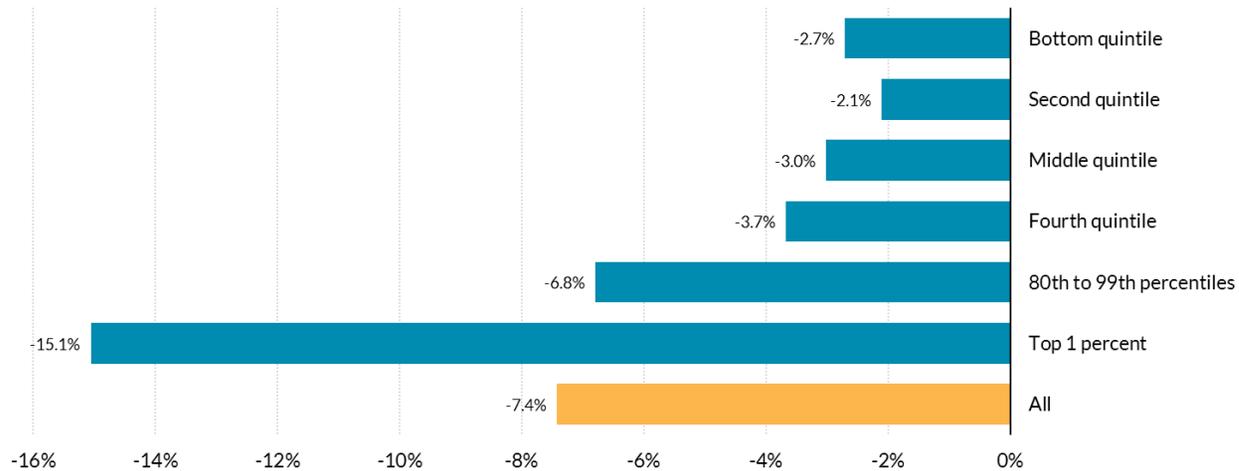
If the MID Is Repealed, How Many Tax Units Would Benefit from Paying Down Their Mortgages?

- Nearly half of all tax units could benefit from paying down their mortgage out of existing financial assets.
- The share of tax units able to benefit from paying down their mortgage debt increases with income because higher-income tax units own more financial assets they can use to pay down their mortgage.
- While less than 10 percent of tax units in the bottom quintile could benefit from paying down their mortgage, more than 90 percent of the top 1 percent of tax units could benefit.

FIGURE 6

Tax Benefit from Paying Down Mortgage, Following Repeal of the Home Mortgage Interest Deduction

Percent difference in tax increase, comparison of paying down as much as 25 percent of mortgage by selling bonds and stocks against not paying down mortgage, by income percentile, calendar year 2019



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Note: Baseline is the law in place as of January 1, 2020.



What Is the Tax Benefit from Paying Down a Mortgage if the MID Is Repealed?

- Paying down as much as 25 percent of a mortgage would reduce the average additional annual income tax liability from repealing the MID by 7.4 percent.⁸
- The size of the average benefit ranges from 2.1 percent of additional tax for the second quintile of tax units to 15.1 percent for tax units in the top 1 percent of the income distribution.
- Tax units in the bottom 80 percent of the income distribution would see much less benefit from paying down their mortgage.

⁸ See Figure 4 for the specific dollar amounts.

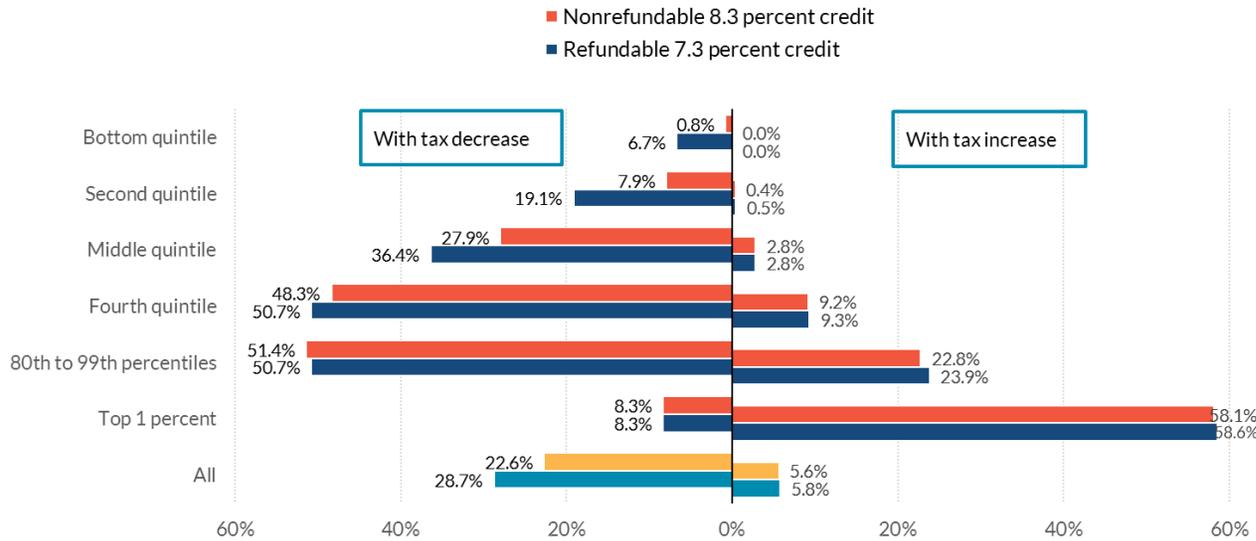
FIGURE 7

Share of Tax Units with Tax Decrease and Tax Increase from Replacing the Home Mortgage Interest Deduction with Revenue-Neutral Tax Credits

Comparison between an 8.3 percent nonrefundable credit and a 7.3 percent refundable credit, by income percentile, calendar year 2019



If the MID Is Replaced by a Revenue-Neutral Tax Credit, What Are the Distributions of Winners and Losers?



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).
 Note: Baseline is the law in place as of January 1, 2020.

- Replacing the MID with a revenue-neutral tax credit would expand the number of beneficiaries because nonitemizers could claim the benefit. (Replacing the MID with an 8.3 percent nonrefundable tax credit would cut taxes for 22.6 percent of tax units and increase taxes for 5.6 percent.)
- Only tax units in the top 1 percent of the income distribution would have more losers than winners if a tax credit were to replace the MID.
- The tax system would be more progressive with a refundable or a nonrefundable tax credit than with the current-law MID.
- Compared with the nonrefundable tax credit, the refundable credit would benefit more tax units with lower incomes.

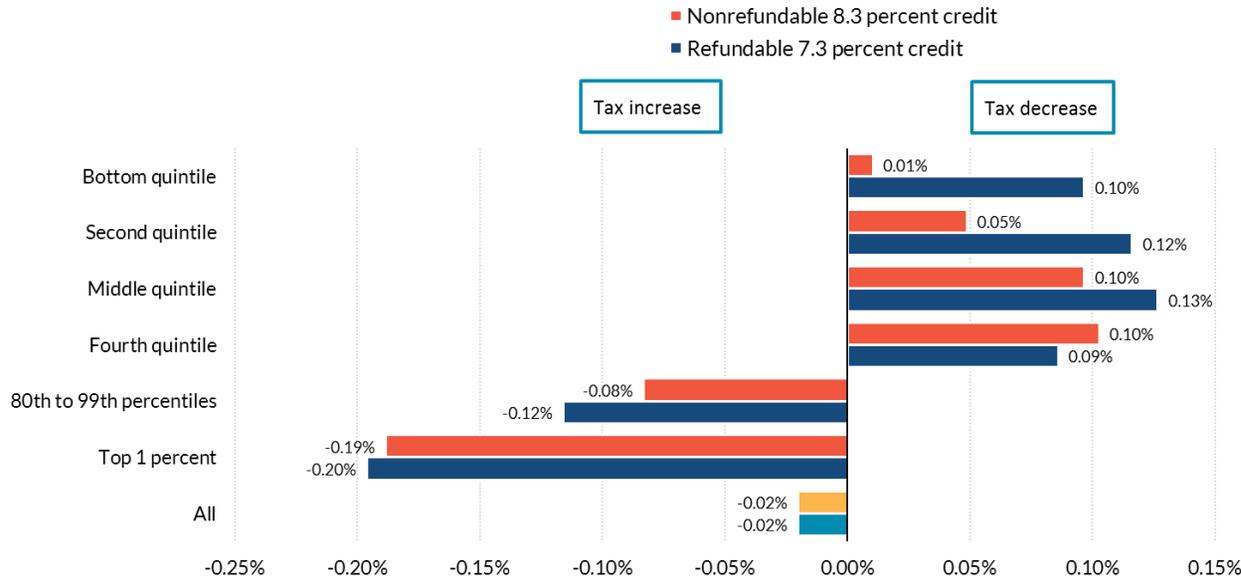
FIGURE 8

Percent Change in After-Tax Income from Replacing the Home Mortgage Interest Deduction with Revenue-Neutral Tax Credits

Comparison between an 8.3 percent nonrefundable credit and a 7.3 percent refundable credit, by income percentile, calendar year 2019



What are the Distributional Consequences of Replacing the MID with a Revenue-Neutral Tax Credit?



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).
 Note: Baseline is the law in place as of January 1, 2020.

- Using a refundable or nonrefundable tax credit to replace the MID would reduce average after-tax income for the tax units in the top income quintile and raise average after-tax income for those in the bottom 80 percent of the income distribution.
- Compared with the nonrefundable credit, the refundable credit would provide more benefit to tax units in the bottom three quintiles of the income distribution, but because of its lower rate, it would provide less benefit (or impose higher taxes) for higher-income groups.



TABLE 1

Repeal the Home Mortgage Interest Deduction,
Assuming No Tax Units Pay Down Mortgage
by income percentile, calendar year 2019

Expanded cash income percentile	Share of tax units with tax increase	Change in after-tax income (% points)	Average federal tax change (\$)
Bottom quintile	0.2	0.00 ^a	0 ^a
Second quintile	1.3	-0.02	5
Middle quintile	5.4	-0.07	44
Fourth quintile	13.5	-0.18	180
Top quintile	33.2	-0.34	983
All	8.4	-0.22	179
Breakdown of top quintile			
80th to 90th percentiles	24.4	-0.27	427
90th to 95th percentiles	34.2	-0.36	792
95th to 99th percentiles	49.0	-0.51	1,866
Top 1 percent	60.9	-0.26	4,481
Top 0.1 percent	53.8	-0.06	4,766

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Notes: Baseline is the law in place as of January 1, 2020. Proposal would repeal the home mortgage interest deduction, assuming tax units do not pay down their mortgages.

^a Nonzero value rounded to zero.

TABLE 2

**Repeal the Home Mortgage Interest Deduction,
Assuming Tax Units Paying Down as Much as 25 Percent of Mortgage
by Selling Bonds and Stocks**

by income percentile, calendar year 2019



Expanded cash income percentile	Share of tax units with tax increase	Change in after-tax income (% points)	Average federal tax change (\$)
Bottom quintile	0.2	0.00 ^a	0 ^a
Second quintile	1.3	-0.02	5
Middle quintile	5.3	-0.07	43
Fourth quintile	13.4	-0.17	173
Top quintile	32.9	-0.31	899
All	8.3	-0.21	165
Breakdown of top quintile			
80th to 90th percentiles	24.0	-0.26	408
90th to 95th percentiles	33.7	-0.34	746
95th to 99th percentiles	48.7	-0.47	1,700
Top 1 percent	60.8	-0.22	3,806
Top 0.1 percent	53.8	-0.05	3,938

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Notes: Baseline is the law in place as of January 1, 2020. Proposal would repeal the home mortgage interest deduction, assuming tax units pay down as much as 25 percent of mortgage by selling bonds and stocks.

^a Nonzero value rounded to zero.

TABLE 3

**Repeal the Home Mortgage Interest Deduction,
Assuming Tax Units Paying Down as Much as 50 Percent of Mortgage
by Selling Bonds and Stocks**

by income percentile, calendar year 2019



Expanded cash income percentile	Share of tax units with tax increase	Change in after-tax income (% points)	Average federal tax change (\$)
Bottom quintile	0.2	0.00 ^a	0 ^a
Second quintile	1.3	-0.02	5
Middle quintile	5.3	-0.07	42
Fourth quintile	13.4	-0.17	172
Top quintile	32.8	-0.30	862
All	8.3	-0.20	160
Breakdown of top quintile			
80th to 90th percentiles	24.0	-0.26	403
90th to 95th percentiles	33.6	-0.33	733
95th to 99th percentiles	48.7	-0.45	1,644
Top 1 percent	60.8	-0.19	3,383
Top 0.1 percent	53.8	-0.04	3,198

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Notes: Baseline is the law in place as of January 1, 2020. Proposal would repeal the home mortgage interest deduction, assuming tax units pay down as much as 50 percent of mortgage by selling bonds and stocks.

^a Nonzero value rounded to zero.

TABLE 4

Repeal the Home Mortgage Interest Deduction, Assuming Tax Units Paying Down as Much as 100 Percent of Mortgage by Selling Bonds and Stocks

by income percentile, calendar year 2019



Expanded cash income percentile	Share of tax units with tax increase	Change in after-tax income (% points)	Average federal tax change (\$)
Bottom quintile	0.2	0.00 ^a	0 ^a
Second quintile	1.3	-0.02	5
Middle quintile	5.3	-0.07	42
Fourth quintile	13.3	-0.17	171
Top quintile	32.8	-0.29	837
All	8.2	-0.19	156
Breakdown of top quintile			
80th to 90th percentiles	23.9	-0.25	401
90th to 95th percentiles	33.6	-0.33	725
95th to 99th percentiles	48.7	-0.44	1,612
Top 1 percent	60.6	-0.18	3,042
Top 0.1 percent	53.7	-0.03	2,495

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Notes: Baseline is the law in place as of January 1, 2020. Proposal would repeal the home mortgage interest deduction, assuming tax units pay down as much as 100 percent of mortgage by selling bonds and stocks.

^a Nonzero value rounded to zero.

TABLE 5

**Repeal the Home Mortgage Interest Deduction,
Comparison between Not Paying Down Mortgage and Paying Down as
Much as 25 Percent of Mortgage by Selling Bonds and Stocks**

by income percentile, calendar year 2019



Expanded cash income percentile	Share of tax units benefiting from mortgage paydown	Average federal tax change (\$)	Reduction in tax increase (%)
Bottom quintile	9.5	0 ^a	2.7
Second quintile	13.9	0 ^a	2.1
Middle quintile	23.9	-1	3.0
Fourth quintile	35.3	-7	3.7
Top quintile	61.9	-84	8.6
All	47.8	-13	7.4
Breakdown of top quintile			
80th to 90th percentiles	45.7	-18	4.3
90th to 95th percentiles	59.5	-47	5.9
95th to 99th percentiles	76.5	-165	8.9
Top 1 percent	92.1	-674	15.1
Top 0.1 percent	92.5	-828	17.4

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Notes: Baseline is the law in place as of January 1, 2020 with home mortgage interest deduction repealed, assuming tax units not paying down their mortgages. Proposal would repeal the home mortgage interest deduction, assuming tax units paying down as much as 25 percent of mortgage by selling bonds and stocks.

^a Nonzero value rounded to zero.

TABLE 6

Replace the Home Mortgage Interest Deduction with an 8.3 Percent Nonrefundable Credit

by income percentile, calendar year 2019



Expanded cash income percentile	Share of tax units with tax cut	Share of tax units with tax increase	Change in after-tax income (% points)
Bottom quintile	0.8	0.0 ^a	0.01
Second quintile	7.9	0.4	0.05
Middle quintile	27.9	2.8	0.10
Fourth quintile	48.3	9.2	0.10
Top quintile	49.4	24.4	-0.11
All	22.6	5.6	-0.02
Breakdown of top quintile			
80th to 90th percentiles	56.1	16.1	0.06
90th to 95th percentiles	51.8	24.2	-0.06
95th to 99th percentiles	38.3	38.9	-0.27
Top 1 percent	8.3	58.1	-0.19
Top 0.1 percent	1.9	52.6	-0.04

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Notes: Baseline is the law in place as of January 1, 2020. Proposal would replace the home mortgage interest deduction with an 8.3 percent nonrefundable credit.

^a Nonzero value rounded to zero.

TABLE 7

Replace the Home Mortgage Interest Deduction with a 7.3 Percent Refundable Credit

by income percentile, calendar year 2019



Expanded Cash Income Percentile	Percent of Tax Units with Tax Cut	Percent of Tax Units with Tax Increase	Change in After-Tax Income (% points)
Bottom quintile	6.7	0.0 ^a	0.10
Second quintile	19.1	0.5	0.12
Middle quintile	36.4	2.8	0.13
Fourth quintile	50.8	9.3	0.09
Top quintile	48.8	25.5	-0.14
All	28.7	5.8	-0.02
Breakdown of Top Quintile			
80th to 90th percentiles	55.6	17.1	0.02
90th to 95th percentiles	50.9	25.3	-0.09
95th to 99th percentiles	37.7	40.2	-0.29
Top 1 percent	8.3	58.6	-0.20
Top 0.1 percent	2.1	52.6	-0.05

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Notes: Baseline is the law in place as of January 1, 2020. Proposal would replace the home mortgage interest deduction with a 7.3 percent refundable credit.

^a Nonzero value rounded to zero.

REFERENCES

Urban-Brookings Tax Policy Center. 2020. [T20-0187](#) - Repeal the Itemized Deduction for Home Mortgage Interest, Impact on Tax Revenue, Calendar Year 2019.

———. 2020. [T20-0189](#) - Repeal the Itemized Deduction for Home Mortgage Interest, Assuming No Mortgage Paydown, Baseline: Current Law, by Expanded Cash Income Percentile, 2019.

———. 2020. [T20-0197](#) - Repeal the Itemized Deduction for Home Mortgage Interest, Assuming up to 25% Mortgage Paydown with Bonds and Stocks, by Expanded Cash Income Percentile, 2019

———. 2020. [T20-0199](#) - Repeal the Itemized Deduction for Home Mortgage Interest, Assuming up to 50% Mortgage Paydown with Bonds and Stocks, by Expanded Cash Income Percentile, 2019

———. 2020. [T20-0201](#) - Repeal the Itemized Deduction for Home Mortgage Interest, Assuming up to 100% Mortgage Paydown with Bonds and Stocks, by Expanded Cash Income Percentile, 2019

———. 2020. [T20-0203](#) - Replace the Home Mortgage Interest Deduction with an 8.3 Percent Nonrefundable Tax Credit, by Expanded Cash Income Percentile, 2019

———. 2020. [T20-0205](#) - Replace the Home Mortgage Interest Deduction with a 7.3 Percent Refundable Tax Credit, by Expanded Cash Income Percentile, 2019

ABOUT THE AUTHORS

Chenxi Lu is a research associate in the Urban-Brookings Tax Policy Center at the Urban Institute, where she works on the microsimulation model of the federal tax system. Lu earned her BA in mathematical economics from Fudan University and her MPP from Georgetown University.

Eric Toder is an Institute fellow at the Urban Institute and co-director of the Urban-Brookings Tax Policy Center. In this position, he oversees the Tax Policy Center's modeling team, serves as its leading expert on corporate and international taxation and tax compliance issues, and authors and directs research studies. Before joining Urban, Toder held a number of senior-level position in tax policy offices in the US government and overseas, including service as deputy assistant secretary for tax analysis at the US Department of the Treasury, director of research at the Internal Revenue Services, deputy assistant director of the Tax Analysis Division at the Congressional Budget Office, and consultant to the New Zealand Treasury. He received his PhD in economics from the University of Rochester.

Surachai Khitatrakun is a senior research associate in the Urban-Brookings Tax Policy Center, where he specializes in analysis of retirement savings incentives and retirement policy. He received his PhD in economics from the University of Wisconsin.

Robert McClelland is a senior fellow in the Urban-Brookings Tax Policy Center. Previously, he worked in the tax analysis division of the Congressional Budget Office (CBO), where he examined the impact of federal tax policy on charitable giving and bequests, the realization of capital gains, labor supply, and small businesses. He worked for the CBO from 1999 to 2005 and from 2011 to 2016, and in between, he directed the division of price and index number research at the Bureau of Labor Statistics. He has published articles in journals such as the American Economic Review, Journal of Applied Econometrics, Journal of Public Economics, National Tax Journal, and the Review of Income and Statistics. He is a member of the Conference on Research in Income and Wealth. He received his PhD in economics from the University of California, Davis.

This report was funded by the Peter G. Peterson Foundation. We are grateful to the organization and to all our funders, who make it possible for the Urban-Brookings Tax Policy Center to advance its mission. The authors thank Jeffrey Rohaly for modeling and data advice, Mark Mazur for reviews of previous drafts, Michael Marazzi for expert editing, Ragan Anderson and Ann Clevon for administrative supports, and Noah Zwiefel for excellent research assistance. Any errors that remain are the authors.

The views expressed are those of the authors and should not be attributed to the Urban-Brookings Tax Policy Center, the Urban Institute, the Brookings Institution, their trustees, or their funders. Funders do not determine research findings or the insights and recommendations of our experts. Further information on Urban's funding principles is available at <http://www.urban.org/aboutus/our-funding/funding-principles>; further information on Brookings' donor guidelines is available at <http://www.brookings.edu/support-brookings/donor-guidelines>.

Copyright © 2020. Tax Policy Center. Permission is granted for reproduction of this file, with attribution to the Urban-Brookings Tax Policy Center.



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



BROOKINGS

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