Inequality and the Mortgage Interest Deduction

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INEQUALITY AND THE MORTGAGE INTEREST DEDUCTION

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Inequality and the Mortgage Interest Deduction

Daniel Hemel* & Kyle Rozema**

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The mortgage interest deduction is often criticized for contributing to after-tax income inequality. Yet the effects of the mortgage interest deduction on income inequality are more nuanced than the conventional wisdom would suggest. We show that the mortgage interest deduction causes high-income households (i.e., those in the top 10% and top 1%) to bear a larger share of the total tax burden than they would if the deduction were repealed. We further show that the effect of the mortgage interest deduction on income inequality is highly sensitive to the alternative scenario against which the deduction is evaluated. These findings demonstrate that claims about the distributional effects of the mortgage interest deduction depend critically on the counterfactual to which the status quo is compared. We extend our analysis to the deduction for state and local taxes and the charitable contribution deduction. We conclude that the appropriate counterfactual for distributional claims is dependent upon political context—and, in particular, on the feasible set of politically acceptable reforms up for consideration.

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** Post-Doctoral Fellow in Empirical Legal Studies, Northwestern University Pritzker School of Law, kyle.rozema@law.northwestern.edu. For helpful comments, the authors thank attendees at the 2016 Law & Society Association Annual Meeting in New Orleans, as well as participants in the Ohio State University Moritz College of Law Faculty Summer Workshop and the Big 10 Junior Scholars Workshop at Indiana University Maurer School of Law. All errors are our own.
Introduction

The home mortgage interest deduction (MID) is much loved by taxpayers\(^1\) and much maligned by commentators.\(^2\) One frequent critique of the MID in both the academy and the mainstream media is that it exacerbates inequality. On the academic side, for example, Professor Dennis Ventry has written that the MID is “the most inequitable” tax expenditure provision,\(^3\) while Professors Stephen Cecchetti and Kermit Schoenholtz say that “the tax deductibility of mortgage interest . . . raises inequality.”\(^4\) In the mainstream media, the Washington Post editorial board has called the MID “a significant cause of after-tax income inequality,”\(^5\) and U.S. News & World Report has said that the deduction “exacerbates economic inequality rather than promoting opportunity.”\(^6\)

There is more than a kernel of truth to these criticisms of the MID. Higher income households are more likely than lower income households to own homes and take out mortgages. Moreover, higher income households tend to have larger mortgages and thus generally make larger mortgage interest payments. So too, higher income households are

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\(^3\) Dennis J. Ventry Jr., The Fake Third Rail of Tax Reform, Tax Notes, Apr. 9, 2012, at 181, 182.

\(^4\) Stephen C. Cecchetti & Kermit L. Schoenholtz, Why the Mortgage Interest Tax Deduction Should Disappear, But Won’t, Money & Banking (June 8, 2015), http://www.moneyandbanking.com/commentary/2015/6/3/why-the-mortgage-interest-tax-deduction-should-disappear-but-wont; see also Andrew Hanson, Ike Brannon & Zackary Hawley, Rethinking Tax Benefits for Homeowners, National Affairs, Spring 2014, at 40, 41 (criticizing the mortgage interest deduction as “regressive”).


more likely than lower income households to itemize deductions on their tax returns, and higher income households also face higher marginal tax rates. For all these reasons, the benefits of the MID in dollar terms (i.e., the amount by which the MID reduces total tax liability) tend to be larger for higher income households than for lower income households.

Yet focusing on the benefits of the MID in dollar terms for households across the income distribution is only one way of assessing the MID’s distributional consequences. A “tax expenditure”7 such as the MID may provide larger benefits to higher income households in dollar terms, while at the same time increasing the share of the tax burden borne by higher income households relative to lower income households. This observation may seem surprising upon first glance,8 though we hope it will become less so over the course of the pages that follow. We further show that this observation applies to the MID. Households in the top 1% of the income distribution receive, on average, much larger monetary benefits from the MID compared to households in the bottom 99%; yet at the same time, the MID causes the top 1% to bear a larger share of the total tax burden than they otherwise would. A similar story emerges when we compare the top 10% to the bottom 90%.

Does the divergence across these various distributional measures imply that any conclusion about the distributional consequences of the MID is impossible? One author, Thomas Griffith, has suggested as much: under the “widely accepted view that inequality should be measured by the relative distribution of income,” Griffith writes, “the impact of

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7 The Congressional Budget and Impoundment Control Act of 1974 defines “tax expenditures” as “revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability.” Pub. L. No. 93-344, § 3(3), 88 Stat. 297, ___.

8 Martin Gervais and Manish Padney have made a similar observation, although only in passing. See Martin Gervais & Manish Padney, Who Cares About Mortgage Interest Deductibility?, 34 Canadian Public Policy 1, 12 (2008) (“It is interesting to note that even for the conventional measure[,] mortgage interest deductibility does not make the tax system less progressive at all income levels.”). The work most similar to our own appears to be Daniel H. Weinberg, The Distributional Implications of Tax Expenditures and Comprehensive Income Taxation, 40 Nat’l Tax J. 237 (1987), which estimates the distributional effects of a revenue-neutral elimination of all tax expenditures in the 1979 and 1983 tax codes. See also Adam J. Cole, Geoffrey Gee & Nicholas Turner, The Distributional and Revenue Consequences of Reforming the Mortgage Interest Deduction, 64 Nat’l Tax J. 977 (2011) (estimating distributional effects of revenue-positive MID reforms, but not considering reallocation under revenue-neutral scenarios); Francesco Figari et al., Removing Homeownership Bias in Taxation: The Distributional Effects of Including Net Imputed Rent in Taxable Income, Fiscal Studies (forthcoming 2016) (considering the distributional effects of eliminating the exclusion of imputed rent for homeowners in six EU countries).
tax expenditures on progressivity is ambiguous.” Our view is more optimistic. We suggest that the distributional consequences of a tax expenditure can be evaluated in comparison to a counterfactual in which the same tax expenditure were repealed. If repeal increases the after-tax income of the poor relative to the rich, then repeal is inequality-decreasing (i.e., the tax expenditure increases inequality relative to a counterfactual in which the expenditure did not exist). If repeal reduces the after-tax income of the poor relative to the rich, then repeal is inequality-increasing (i.e., the tax expenditure decreases inequality relative to a counterfactual in which the expenditure did not exist).

The challenge in evaluating the distributional consequences of a tax expenditure, then, is to define an appropriate counterfactual against which to compare the status quo. To elaborate: Repeal of the MID will cause federal tax revenue to rise, and the distributional effect of repeal will depend on how that additional revenue is allocated. Different methods of allocating the additional revenue will lead to different distributional consequences: for example, repeal of the MID will raise the after-tax income of the poor relative to the rich if the additional revenue is used to finance equal-sized rebates for all households, but repeal will raise the after-tax income of the rich relative to the poor if the additional revenue is used to reduce all households’ tax liabilities proportionally. If the additional revenue is used to finance the provision of additional government services, then the distributional consequences of repeal will depend on who benefits from those services. Whether a particular counterfactual better captures reality than any other will depend upon the political context in which repeal is most likely to occur. We conclude that claims regarding the distributional effects of tax expenditures should, as a general matter, be accompanied by a specification of the counterfactual that the distributional analysis assumes. Counterfactuals can then be evaluated in light of the political context in which such distributional claims are made.

This article proceeds in six parts. Part I offers an overview of the MID and the debate it has engendered. Part II illustrates through a simple numerical example how a tax provision can yield greater benefits in dollar terms for the rich while at the same time increasing the share of taxes that the rich pay. Part III examines the distributional effects of the MID under several revenue-allocation assumptions, and compares the distribution of tax burdens under the status quo to hypothetical scenarios involving the MID’s repeal. We show that claims regarding the distributional effects of the MID depend critically on (often undefended) assumptions about the manner in which additional revenues from an MID repeal would be allocated. Part IV shifts focus from MID repeal to MID modification: specifically, we examine a proposal by presidential candidate Hillary Clinton to impose a 28% cap on the MID and other itemized deductions. Part V discusses likely behavioral responses to MID repeal and investigates the effect of those responses on our findings. Part VI examines the implications of our approach for other tax expenditures.

I. The Mortgage Interest Deduction Debate

We begin with a brief background regarding the mechanics of the MID and the debate over the deduction. Our aim here is neither to provide a comprehensive treatment of the MID’s details nor to conduct an exhaustive survey of the literature on the MID. Rather, our goal is to situate our contribution within the larger conversation regarding the MID.

The deductibility of home mortgage interest is a longstanding feature of the federal tax code. The Revenue Act of 1913, the first tax law passed after the ratification of the Sixteenth Amendment, allowed taxpayers to deduct all personal interest—including but not limited to home mortgage interest. That changed with the Tax Reform Act of 1986, when Congress disallowed deductions for personal interest. But the 1986 Act carved out an exception for home mortgage interest (and, because home mortgage loans are the primary form of personal borrowing in the United States, the exception comes quite close to swallowing the rule). The disallowance of a deduction for personal interest generally and the exception for home mortgage interest specifically are codified in section 163(h).

Specifically, section 163(h)(3) allows taxpayers to claim a deduction for “qualified residence interest.” Qualified residence interest comes in two forms: interest paid on “acquisition indebtedness” and interest paid on “home equity indebtedness.” “Acquisition indebtedness” refers to debt incurred in acquiring, constructing, or improving a “qualified residence” of the taxpayer, provided that the debt is secured by such residence. The term “qualified residence” refers to a taxpayer’s principal residence and one other residence that the taxpayer can select (e.g., a vacation home). “Home equity indebtedness” refers to debt secured by a qualified residence that was not incurred in acquiring, constructing, or improving the home.

The deductibility of mortgage interest is subject to certain constraints. Taxpayers are limited to $1 million in acquisition indebtedness and $100,000 in home equity indebtedness, and cannot deduct interest paid on debt exceeding those amounts.

12 On the history of the home mortgage interest deduction, see Dennis J. Ventry, Jr., The Accidental Deduction: A History and Critique of the Tax Subsidy for Mortgage Interest, 73 Law & Contemporary Problems 233 (2010).
13 I.R.C. § 163(h)(3)-(4). Mortgage insurance premiums are treated as home mortgage interest for deduction purposes.
Moreover, interest is only deductible if taxpayers itemize deductions, which most taxpayers do not.\textsuperscript{14} For itemizers, the MID is available regardless of the amount of other deductions that itemizers claim,\textsuperscript{15} and taxpayers subject to the alternative minimum tax can claim the MID as well.\textsuperscript{16}

Supporters of the MID have proffered several justifications for the deduction. One argument proceeds from the premise that homeownership generates positive externalities and should therefore be subsidized. As Edward Glaeser and Jesse Shapiro summarize, homeowners “own an asset whose value is tied to the strength of their community,” and thus “have an incentive to act (and vote) for policies and practices that will make their community more attractive.” Moreover, homeowners “face incentives to take better care of their homes than do renters,” and “[i]f some of this care creates aesthetic externalities, then homeownership may yield benefits through greater care.”\textsuperscript{17} Indeed, several studies find that homeownership generates positive externalities for children. For example, the children of homeowners appear to be more likely to graduate from high school than children of renters, even after controlling for income, residential stability, and additional household characteristics.\textsuperscript{18} Other studies have linked homeownership to lower crime rates,\textsuperscript{19} increased voter turnout,\textsuperscript{20} and higher participation in neighborhood activities.\textsuperscript{21}

Critics of the MID attack the deduction from several angles. One common argument against the MID is that the deduction distorts households’ decisions regarding home purchases, leading them to buy more expensive homes than they otherwise would (i.e., an inefficient allocation of resources). A second argument is that homeownership actually generates negative externalities. Specifically, a high rate of homeownership in a jurisdiction appears to make it more likely that the jurisdiction will adopt exclusionary

\textsuperscript{14} For the 2013 tax year, 68.5% of individual income tax returns claimed the standard deduction. This marks a slight increase from the 2010 tax year, when 65.6% of returns claimed the standard deduction. See Internal Revenue Serv., Statistics of Income—2013: Individual Income Tax Returns 6, 8 (2015) [hereinafter SOI 2013].
\textsuperscript{15} See 26 U.S.C. § 67(b)(1) (exempting the interest deduction from the 2% floor on miscellaneous itemized deductions).
\textsuperscript{16} See 26 U.S.C. § 56(e). While interest on acquisition indebtedness is deductible for AMT purposes, interest on home equity indebtedness is not.
\textsuperscript{17} Glaeser & Shapiro, supra note 10, at 60-61.
\textsuperscript{19} Karla Hoff & Arijit Sen, Homeownership, Community Interactions, and Segregation, 95 Am. Econ. Rev. 1167 (2005).
zoning policies, imposing costs on households that want to move to the area. A third argument is that even if homeownership ought to be subsidized, the MID is a blunt tool for accomplishing that objective, and that other policy instruments—such as a credit that does not depend on a household’s marginal tax rate—would do more to increase homeownership. A further drawback of the MID is that it undermines the tax system’s role as an automatic stabilizer: while the progressive nature the tax code provides insurance against macroeconomic swings by helping to stimulate demand in times of recession and taper demand during boom times, the MID appears to exacerbate macroeconomic swings.

A final criticism of the MID—and perhaps the most cited concern regarding the deduction—is that the MID is an “upside-down subsidy” that primarily benefits the rich. As noted in the introduction, the dollar benefits of the MID flow primarily to high-income taxpayers. Well over half of the tax benefits from the MID flow to households in the top income decile, with the large majority of households in the bottom half of the income distribution not benefiting at all. This aspect of the MID gives rise to claims such as those quoted in the introduction that the deduction exacerbates income inequality.

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22 Glaeser & Shapiro, supra note 17, at 69-70.
Our analysis focuses specifically on this last argument—the claim that the MID increases income inequality. In this article, we set aside efficiency questions and direct our attention to the distributional effects of the MID. In particular, we ask what exactly it means for a tax expenditure to be inequality-increasing, and whether the MID so qualifies. (We then ask the same questions about the deduction for state and local taxes and the charitable contribution deduction.) The answers turn out to be quite complicated—and quite dependent upon assumptions that often go undefended.

II. Inequality and Ambiguity

Before delving into the data on the MID in practice, we offer a simple (and hypothetical) example to show how a provision of the tax code can provide a disproportionate share of dollar benefits to the rich while also causing the rich to bear a larger share of total tax liabilities. Imagine a society with two households—a rich household with pre-tax income of $100, and a poor household with pre-tax income of $50. Further imagine that the rich household pays $12 in mortgage interest and the poor household pays $9 in mortgage interest. Say that the tax system is structured such that the tax rate on the first $50 of income is 20% and the tax rate on all income above the $50 threshold is 40%. If the tax system does not allow a deduction for mortgage interest, the rich household would pay a tax of $30 ($10 on the first $50 and $20 on the next $50), and the poor household would pay a tax of $10. Thus the government would collect a total of $40 in revenue; the rich household would bear 75% of the total tax burden ($30 divided by $40); and the poor household would bear the remaining 25%.

If the tax system allows each household to deduct mortgage interest, the rich household would receive a benefit from the deduction of $4.80 ($12 times 40%), and the poor household would receive a benefit from the deduction of $1.80 ($9 times 20%). The benefit of the MID in dollar terms is clearly greater for the rich household than for the poor household. In percentage terms, the rich household received 72.7% of total MID benefits, while the poor household received 27.3% of total MID benefits. And yet the rich household now bears 75.45% of the total tax burden ($25.20 divided by $33.40), as compared to 75.0% before, while the poor household now bears 24.55% of the total tax burden ($8.20 divided by $33.40), as compared to 25.0% before. (Government revenue decreases from $40 without the MID to $33.40 with the MID.)


30 Using an example involving the deduction for medical expenses, Thomas Griffith showed nearly three decades ago that a deduction could generate dollar benefits that flow disproportionately to the rich while at the same time “increase[ing] the progressivity of the tax system.” See Thomas D. Griffith, Theories of Personal Deductions in the Income Tax, 40 Hastings L.J. 343, 357 (1989). Our contribution is to show that Griffith’s observation, which was based on a hypothetical he constructed, in fact applies to the real-world MID and to several other provisions often identified as “tax expenditures.”
These different ways of analyzing the distributional consequences of the MID thus yield divergent conclusions regarding its effects on the rich and the poor. If we focus on distribution of MID benefits in dollar or percentage terms, the MID appears to benefit the rich more than the poor. If we focus on the way in which the MID affects the distribution of the tax burden, we arrive at a different conclusion: the presence of the MID increases the share of the total tax burden for the rich household.

One can imagine several other ways to assess a provision’s effect on rich and poor households. David Kamin has suggested three other such measures. In addition to calculating (1) the percentage of dollar benefits that accrue to the rich versus the poor and (2) the effect of the provision on the percentage of tax liabilities borne by the rich and the poor, Kamin suggests that distributional effects can be assessed by analyzing:

(3) the percent change in taxes paid by the rich and poor as a result of the provision;

(4) the percentage-point change in the average tax rate of the rich and the poor as a result of the provision; and

(5) the percent change in after-tax income as a result of the provision.

In the above example, the MID reduces the taxes paid by the rich household from $30 to $25.20, or 16%, and reduces the taxes paid by the poor household from $10 to $8.20, or 18%. So in percentage terms, the hypothetical MID reduces the tax bill of the poor household more than the rich household. If we focus on the percentage-point change in average tax rates, we arrive at a different conclusion: the MID reduces the average tax rate of the rich household by 4.8 percentage points (from 30% to 25.2%) but reduces the average tax rate of the poor household by only 3.6 percentage points (from 20% to 16.4%). Likewise, the MID increases the after-tax income of the rich household by 6.9% (from $70 to $74.80) while raising the after-tax income of the poor household by only 4.5% (from $40 to $41.80). So when we focus on the percentage-point change in average

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tax rates or the percentage change in after-tax income, the rich household benefits more from the MID than the poor household.

### Table 2: Distributional Effects of Hypothetical MID (Additional Measures)

<table>
<thead>
<tr>
<th>Household</th>
<th>Income</th>
<th>Mortgage Interest</th>
<th>( \Delta ) Taxes Paid (%)</th>
<th>( \Delta )Average Tax Rate (ppt)</th>
<th>( \Delta ) After-Tax Income (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rich</td>
<td>$100</td>
<td>$12</td>
<td>-16%</td>
<td>-4.8ppt</td>
<td>+6.9%</td>
</tr>
<tr>
<td>Poor</td>
<td>$50</td>
<td>$9</td>
<td>-18%</td>
<td>-3.6ppt</td>
<td>+4.5%</td>
</tr>
</tbody>
</table>

*Note: See text for details of hypothetical.*

What, then, is the right way to evaluate the distributional consequences of the MID? We make the following (modest) suggestion: If repeal of the MID raises the after-tax income of the rich household and reduces the after-tax income of the poor household, then repeal of the MID is inequality-increasing. Likewise, if repeal of the MID reduces the after-tax income of the rich and increases the after-tax income of the poor, then repeal of the MID is inequality-reducing. To be sure, income is not the same thing as happiness (utility); our analysis focuses on the former rather than the latter. Some other studies of taxation and inequality convert income measures into utility measures; we decline to do so here for the sake of preserving readability for generalist audiences.

On first glance, it might appear in our hypothetical that repeal of the MID would reduce the after-tax income of both the rich household and the poor household, since both households’ tax liabilities would rise and thus their after-tax incomes would fall (by $4.80 for the rich household and $1.80 for the poor household). Yet repeal of the MID would also mean that the government would have $6.60 in additional revenue—revenue that it could be reallocated among households. First, imagine that the government spends the additional $6.60 to provide a rebate of $3.30 to each household. From this perspective, repeal of the MID looks like an inequality-decreasing change. Repeal of the MID plus the use of additional revenue to provide each household with a $3.30 rebate has increased the after-tax income of the poor household by $1.50 ($3.30 minus $1.80) and reduced the after-tax income of the rich household by the same amount ($3.30 minus $4.80). Next, imagine that instead of providing each household with a rebate, the government spends the $6.60 to produce a public good that the rich and poor household each value at $3.30. While the value of the public good would not be reflected in each household’s income, the practical consequences are similar to the scenario in which each household receives a $3.30 rebate.

The government might use the revenue from repeal of the MID in ways other than writing an equal-sized refund check to all households or providing additional public goods that all households value uniformly. One possibility is that the government would use the revenue from repealing the MID to reduce all taxpayers’ liabilities proportionately. To elaborate: Repealing the MID would cause the government’s revenue to rise from $33.40 to $40 (or put differently, the MID causes revenue to decline by 16.5%, and repealing the MID would bring that revenue back). The government could make repeal of the MID revenue-neutral by calculating each household’s tax liability without the MID and then reducing that number by 16.5% so that the government continues to collect $33.40. In this iteration, the rich household would pay taxes of $30 reduced by 16.5%, or $25.05, and the poor household would pay taxes of $10 reduced by 16.5%, or $8.35. As compared to a world with the MID, this counterfactual leaves the rich household with 15 cents more (paying $25.05 instead of $25.20) and the poor household with 15 cents less (paying $8.35 instead of $8.20).

Another possibility is that the government might use the additional revenue from repealing the MID to reduce all rates in the income tax schedule by a uniform amount, such that the entire package of changes—repeal of the MID plus the reduction in rates—is revenue-neutral. In our hypothetical, the government could maintain revenue neutrality by reducing all rates in the schedule by 4.4 percentage points, taxing the first $50 at a 15.6% rate and income over that at a 35.6% rate. The rich household would now pay $25.60 (as compared to $25.20 with the MID), and the poor household would now pay $7.80 (as compared to $8.20 with the MID).

In the context of counterfactuals, then, we can make concrete claims about the effect of the MID on inequality. Repealing the MID and redistributing the additional revenue to all households in equal-sized checks would raise the after-tax income of the poor relative to the rich (i.e., repeal would be inequality-decreasing). Repealing the MID and redistributing the additional revenue through a pro rata reduction in tax liabilities would raise the after-tax income of the rich relative to the poor (i.e., repeal would be inequality-increasing). Repealing the MID and redistributing the additional revenue through a uniform percentage-point reduction in tax rates would be modestly inequality-decreasing, with results somewhere in between the per-household refund check scenario and the pro-rata tax liability reduction scenario.\(^{33}\)

\(^{33}\)Kamin likewise notes that distributional analysis is straightforward in the context of a revenue-neutral change. See Kamin, supra note 31, at 259. The same is true if (a) the change is not revenue neutral but leads to more or less government spending, and (b) the beneficiaries of the additional government spending can be identified. See id. at 264. He argues, though, that “determining the likely distribution of financing often requires much difficult and potentially inaccurate guesswork.” Id. at 265. He therefore proposes that we adjudicate among various measures of progressivity based on theories of distributive justice. See id. at 266-83.

We are sympathetic to this effort, and we recommend that serious students of taxation and inequality read Kamin’s work. We note, though, that the philosophical
We have simplified our distributional analysis by modeling society as having only two households: rich and poor. The income distribution in the United States is, of course, much more nuanced. Political and academic debates often focus on the distinction between households in the top 1% of the income distribution (“the rich”) and the bottom 99% (“the rest”). Thirty years ago, distributional claims were as likely to focus on comparisons between top 10% and the bottom 90% as the top 1% versus the bottom 99%. Many readers also will be familiar with the use of the Gini coefficient; we include Gini terms as well in our analysis below but will not rely exclusively on Gini coefficients (which reduce the complexities of distributional consequences into a single number).

Our two-household hypothetical also abstracts away from heterogeneity within income groups. In the real world, repeal of a tax expenditure may have different effects on different households within the same income group. That is, repeal of a tax expenditure affects “vertical equity” (the way in which tax liabilities vary in proportion to income) as well as “horizontal equity” (the way in which tax liabilities vary for households with the same income). The MID decreases horizontal equity under virtually any definition of horizontal equity. We interpret the claims cited in the Introduction regarding the distributional effects of the MID to be making the more ambitious assertion that the MID also decreases vertical equity, and the vertical equity implications of the MID are our primary focus.

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36 Cf. Andrew Leigh, How Closely Do Top Income Shares Track Other Measures of Inequality?, 117 Econ. J. F618, F629 (2007) (noting trend toward use of top income shares rather than Gini coefficient to measure inequality, and concluding that “top income shares are a useful proxy for inequality across the income distribution”).
37 For an overview of the concepts of vertical and horizontal equity—and a defense of the latter—see Ira K. Lindsay, Tax Fairness by Convention: A Defense of Horizontal Equity, 19 Fla. Tax. Rev. 79 (2016).
III. Who Benefits from the MID—and Who Would Benefit from Its Repeal?

Our discussion of the MID so far has focused on an imaginary two-household society. In this part we examine how the MID affects after-tax income inequality. In section III.A we describe our data and empirical methods. In section III.B we illustrate the dual character of the MID: the dollar benefits flow disproportionately to the rich, but the presence of the MID causes the top 10% and top 1% to bear a larger share of federal tax liabilities than they would bear in the deduction’s absence. In section III.C we evaluate the effect of the MID repeal on the after-tax income of households in different income groups, and we show that the effect of the MID on inequality depends critically on how the resulting revenue would be reallocated.

A. Data and Empirical Framework

We use data from the 2010 Public Use Tax File produced by the IRS Statistics of Income Division (herein referred to as SOI). The SOI contains 159,791 records drawn from actual 2010 individual income tax returns, and is designed to be representative of the total population of 142.9 million returns filed for that year. The SOI provides a wealth of information on sampled returns, including salaries and wages, interest income, dividends, and capital gains. The SOI is particularly valuable for our purposes because it includes information on itemized deductions claimed on tax returns, including home mortgage interest paid. As of this writing, the 2010 file was the most recent available installment of the SOI.

To estimate each household’s federal income tax liability with and without the MID, we use the National Bureau of Economic Research’s TAXSIM calculator. TAXSIM allows us to estimate the change in a household’s federal income tax liability in the event that the MID is repealed while holding other features of the federal tax code constant. Note that TAXSIM optimizes aspects of each household’s income tax return so as to minimize tax liability, assigning each household to the most advantageous itemization status. Imagine, for example, a pair of married taxpayers filing jointly who pay $10,000 in deductible home mortgage interest, make $10,000 in deductible charitable contributions, and claim no other itemized deductions. Assume that the standard deduction for married taxpayers filing jointly is $12,600. TAXSIM projects that the couple will itemize deductions if the MID is available (because their $20,000 in itemized deductions exceeds the $12,600 standard deduction), but that the couple will claim the standard deduction if the MID is repealed (because the $12,600 standard deduction is larger than the $10,000 in remaining itemized deductions).

We should note here that our approach—which follows the approach taken by the Treasury Department’s Office of Tax Analysis and the Congressional Joint Committee on Taxation, as well as virtually every other analysis of the distributional effects of tax expenditures—assumes that if the MID were repealed, the standard deduction would remain the same. This assumption is contestable. The standard deduction was originally justified as a substitute for personal deductions such as the deduction for interest, state and local taxes, and charitable contributions. The idea was that these deductions “could
be expected to be relatively uniformly distributed across all taxpayers,” and that allowing taxpayers to claim a standard deduction rather than tracking and calculating itemized deductions would spare them record-keeping and return-preparation costs. In more recent decades, the justification for the standard deduction on simplification grounds has been joined by a “progressivity” justification: the standard deduction effectively expands the zero-percent tax bracket already created by the personal exemption.

Insofar as the standard deduction is justified on simplification grounds—as an approximation of the itemized deductions that low- and middle-income taxpayers would otherwise be able to claim—then the elimination of the MID might give rise to an argument for a smaller standard deduction. After all, the MID accounts for roughly one quarter of all itemized deductions. Insofar as the standard deduction is justified on progressivity grounds as a zero-rate tax bracket, however, elimination of the MID would not translate into an argument for reducing the standard deduction (or, at least, not straightforwardly).

B. Empirical Analysis

Following a standard approach for assessing the benefits of tax expenditures, we group households according to “household size adjusted pre-tax income.” To adjust for household size, we divide income by the square root of the number of members in the household. We then calculate the income percentile for each household. For households below the 90th income percentile, we group households by income deciles. For households at or above the 90th income percentile, we create the following four groups: 90th to less-than-95th percentile, 95th to less-than-99th percentile, 99th to less-than-99.9th percentile, and 99.9th percentile or higher. For each income group, we then sum together household tax liability and household MID tax expenditures, and calculate average household income. Table 3 shows the distribution of MID benefits in dollar and percentage terms.

39 See id. at 212-18.
40 In 2013, the dollar amount of mortgage interest deductions on individual income tax returns was 24.9% of the itemized deduction total. See SOI 2013, supra note 14, at tbl. 2.1.
Table 3: Distribution of MID Benefits Under Current Law

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Average Income ($)</th>
<th>Average MID Benefits ($)</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10</td>
<td>-9877</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>[10, 20)</td>
<td>9691</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>[20, 30)</td>
<td>15451</td>
<td>3</td>
<td>0.05</td>
</tr>
<tr>
<td>[30, 40)</td>
<td>21746</td>
<td>20</td>
<td>0.35</td>
</tr>
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<td>[40, 50)</td>
<td>29017</td>
<td>68</td>
<td>1.22</td>
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<td>[50, 60)</td>
<td>38722</td>
<td>180</td>
<td>3.23</td>
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<td>[60, 70)</td>
<td>51405</td>
<td>327</td>
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</tr>
<tr>
<td>[70, 80)</td>
<td>67731</td>
<td>608</td>
<td>10.87</td>
</tr>
<tr>
<td>[80, 90)</td>
<td>91169</td>
<td>1215</td>
<td>21.77</td>
</tr>
<tr>
<td>[90, 95)</td>
<td>126168</td>
<td>2031</td>
<td>18.19</td>
</tr>
<tr>
<td>[95, 99)</td>
<td>208162</td>
<td>3516</td>
<td>25.17</td>
</tr>
<tr>
<td>[99, 99.9)</td>
<td>602262</td>
<td>5907</td>
<td>9.52</td>
</tr>
<tr>
<td>&gt;99.9</td>
<td>5174290</td>
<td>20999</td>
<td>3.76</td>
</tr>
</tbody>
</table>

(< 90)        | 35006             | 269                      | 43.36          |
| ≥ 90         | 252295            | 3164                     | 56.64          |

(< 99)        | 65594             | 489                      | 86.72          |
| ≥ 99         | 1059465           | 7416                     | 13.28          |

Note: Own illustration using data from the 2010 Public Use Tax File produced by the IRS Statistics of Income Division. See text for sample construction.

Table 3 is consistent with the standard account of the MID as a tax provision that increases inequality. Clearly, the dollar benefits of the MID are concentrated among high income households. For the average household in the top income decile, the MID reduces federal income tax liabilities by $3,164, while the average household in the bottom 90% derives a benefit of just $269 from the MID. The distribution of dollar benefits appears to be even more skewed in favor of the rich when we compare the top 1% to the bottom 99%, with the average household in the top 1% deriving a tax benefit of $7,416 from the MID, compared to $498 for households in the bottom 99%. All in all, 56.6% of the

Note that the top 0.1% are not, in fact, the biggest beneficiaries from the MID in dollar terms: households in that stratum actually benefit less on average in dollar terms from the
dollar benefits from the MID flow to households in the top 10%, with 13% of benefits going to the top 1%.

Table 4 tells a very different story. It shows the distribution of the tax burden in percentage terms without the MID (Column 2) and with the MID (Column 3). Several features of Table 4 are worth highlighting. The share of all federal individual income taxes paid by households in the top decile is lower without the MID than with the MID.\footnote{That is, the presence of the MID increases the share of the overall tax burden borne by the top 10%.} Focusing on the very top of the income distribution, the percentage of all federal income taxes paid by households in the top 1% is also lower without the MID than with the deduction. Again, the MID shifts more of the overall tax burden to households at the very top.

Significantly, every income decile from the lowest to the second-highest bears a smaller share of federal income tax liabilities with the MID than without. The biggest “winners” from the MID on this view are households in the 80th to 90th percentiles; the biggest “losers” are households in the top percentile (and, in particular, households in the top 0.1%). To be sure, many households with incomes that place them in the 80th to 90th percentiles do not benefit from the MID (i.e., they do not own their own homes, or have paid off all loans, or claim the standard deduction). We note that our analysis sheds light on the broad distributional effects of the MID for the specified income groups, and ignores the heterogeneous effects within each income group. Of course, the situations of specific households within an income group will differ, with some households benefitting from the MID even though the average household within their income group does not, and other households losing out from the MID even though the average household within their income group benefits from it.

We next evaluate the distributional consequences of the MID according to the additional measures proposed by Kamin. Specifically, we show:

— the percentage change in taxes paid by the rich and poor as a result of the provision;
— the percentage-point change in the average tax rate of the rich and the poor as a result of the provision; and
— the percentage change in after-tax income as a result of the provision.

\footnote{We focus specifically on individual income taxes—including dividends and capital gains taxes but excluding payroll, estate, and gift taxes. Our analysis also assumes no changes affecting the corporate income tax burden.}

MID than households in the 95th-to-99th and 99th-to-99.9th percentile ranges. This reflects the fact that the very wealthiest households are less likely to borrow in order to buy their homes and more likely to pay cash instead.
Table 4: Distribution of Individual Income Tax Burden Without and With MID

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Tax Burden (%)</th>
<th>without MID</th>
<th>with MID</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10</td>
<td>-0.85</td>
<td>-0.94</td>
<td></td>
</tr>
<tr>
<td>[10, 20)</td>
<td>-3.56</td>
<td>-3.90</td>
<td></td>
</tr>
<tr>
<td>[20, 30)</td>
<td>-3.41</td>
<td>-3.74</td>
<td></td>
</tr>
<tr>
<td>[30, 40)</td>
<td>-2.14</td>
<td>-2.38</td>
<td></td>
</tr>
<tr>
<td>[40, 50)</td>
<td>-0.18</td>
<td>-0.31</td>
<td></td>
</tr>
<tr>
<td>[50, 60)</td>
<td>2.10</td>
<td>1.99</td>
<td></td>
</tr>
<tr>
<td>[60, 70)</td>
<td>4.73</td>
<td>4.63</td>
<td></td>
</tr>
<tr>
<td>[70, 80)</td>
<td>8.60</td>
<td>8.39</td>
<td></td>
</tr>
<tr>
<td>[80, 90)</td>
<td>16.07</td>
<td>15.53</td>
<td></td>
</tr>
<tr>
<td>[90, 95)</td>
<td>14.38</td>
<td>14.02</td>
<td></td>
</tr>
<tr>
<td>[95, 99)</td>
<td>25.00</td>
<td>24.98</td>
<td></td>
</tr>
<tr>
<td>[99, 99.9)</td>
<td>20.86</td>
<td>21.93</td>
<td></td>
</tr>
<tr>
<td>&gt;99.9</td>
<td>18.42</td>
<td>19.80</td>
<td></td>
</tr>
</tbody>
</table>

(< 90)       | 21.35          | 19.27       |
(≥ 90)       | 78.65          | 80.73       |

(< 99)       | 60.73          | 58.27       |
(≥ 99)       | 39.27          | 41.73       |

*Note:* Own illustration using data from the 2010 Public Use Tax File produced by the IRS Statistics of Income Division. The “without MID” column shows the mean individual income tax liability of households in the relevant income group divided by total individual income tax liabilities for all households, calculated under the assumption that mortgage interest is not deductible. The “with MID” column shows the mean individual income tax liability of households in the relevant income group divided by total individual income tax liabilities for all households calculated under current law (i.e., allowing for the mortgage interest deduction). See text for additional details.
Table 5 displays these results. In the second column, we display the percent change in taxes paid as a result of the MID for different income groups. The effect of the MID on taxes paid is larger in percentage terms for households in the bottom 90% and bottom 99% than for households in the top 10% and top 1%. On this view, the bottom 90% and bottom 99% benefit more from the MID than the top 10% and 1%. On the other hand, when we consider the effect of the MID on the average tax rate of households in various income group (Column 3), the results are quite different: the average tax rate of households in the top 10% and top 1% decreases more in percentage-point terms as a result of the MID than the average tax rate for households in the bottom 90% and bottom 99%. Finally, we consider the change in after-tax income for households in different income groups as a result of the MID (Column 4). Here, the results are less straightforward: the MID leads to a larger percentage increase in after-tax income for the top 10% than for the bottom 90%. And yet the MID leads to a smaller increase in after-tax income for the top 1% than for the bottom 99%.

C. Counterfactuals

The results above do not yet address this article’s motivating question: how would repeal of the MID affect income inequality? Repealing the MID would, of course, raise revenues, and the distributional effects of MID repeal will depend on how those additional revenues might be allocated. One possibility is that the additional revenues would be used to fund an equal-size rebate for each household. In practical terms, this is analogous to a scenario in which the government uses the revenues from repeal of the MID to finance the provision of additional public goods (e.g., roads, national defense) that all households value uniformly. To be sure, the revenue from repealing the MID

<table>
<thead>
<tr>
<th>Household</th>
<th>Δ Taxes Paid (%)</th>
<th>ΔAverage Tax Rate (ppt)</th>
<th>Δ After-Tax Income (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(&lt;90)</td>
<td>-21.3%</td>
<td>-0.3ppt</td>
<td>+0.8%</td>
</tr>
<tr>
<td>(≥90)</td>
<td>-6.6%</td>
<td>-1.5ppt</td>
<td>+1.5%</td>
</tr>
<tr>
<td>(&lt;99)</td>
<td>-14.1%</td>
<td>-0.5ppt</td>
<td>+1.1%</td>
</tr>
<tr>
<td>(≥99)</td>
<td>-3.0%</td>
<td>-1.0ppt</td>
<td>+0.9%</td>
</tr>
</tbody>
</table>

Note: Own illustration using data from the 2010 Public Use Tax File produced by the IRS Statistics of Income Division. See text for sample construction.
might be used to finance the provision of additional government services that households value disuniformly. Moreover, the value that households derive from public goods and government services may be greater than or less than the dollar amount spent. We use the equal-size rebate as an analytical starting point (imagining that the rebate comes in the form of cash reflected in each household’s after-tax income rather than arriving in-kind).

We estimate that if the additional revenue from repealing the MID were allocated on a per-household basis, the per-household benefit would be $558. Note that we are not considering any behavioral responses to MID repeal: we are not yet taking into account, for instance, the possibility that individuals will respond to MID repeal by rebalancing their portfolios and liquidating non-housing financial assets to pay down their mortgages. To the extent that those liquidated assets previously generated taxable investment income, these portfolio rebalances will decrease future taxable income and thus future tax liabilities. (We investigate the impact of likely behavioral responses on the findings in Part IV.) Through TAXSIM, however, we are taking into account the possibility that some taxpayers will switch from itemizing to claiming the standard deduction if the MID is eliminated.
Table 6: Distributional Effects of MID Repeal (Various Counterfactuals)

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Difference in MID Benefits Between Current Law and Counterfactual ($</th>
<th>Per Household</th>
<th>Proportionate</th>
<th>Rate Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10</td>
<td>558</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>[10, 20)</td>
<td>558</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>[20, 30)</td>
<td>556</td>
<td>0</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>[30, 40)</td>
<td>539</td>
<td>-8</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>[40, 50)</td>
<td>490</td>
<td>-26</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>[50, 60)</td>
<td>378</td>
<td>-64</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>[60, 70)</td>
<td>231</td>
<td>-93</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td>[70, 80)</td>
<td>-50</td>
<td>-191</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>[80, 90)</td>
<td>-657</td>
<td>-448</td>
<td>-254</td>
<td></td>
</tr>
<tr>
<td>[90, 95)</td>
<td>-1473</td>
<td>-645</td>
<td>-636</td>
<td></td>
</tr>
<tr>
<td>[95, 99)</td>
<td>-2958</td>
<td>-427</td>
<td>-1125</td>
<td></td>
</tr>
<tr>
<td>[99, 99.9)</td>
<td>-5349</td>
<td>6134</td>
<td>1243</td>
<td></td>
</tr>
<tr>
<td>&gt;99.9</td>
<td>-20441</td>
<td>76874</td>
<td>41111</td>
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</tr>
</tbody>
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(< 90) 289 -92 27  
(≥ 90) -2605 827 -245

(< 99) 69 -133 -53  
(≥ 99) -6858 13208 5230

*Note:* Own illustration using data from the 2010 Public Use Tax File produced by the IRS Statistics of Income Division. The columns show the average of the difference between benefits from the MID under current law and under the specified counterfactuals for households in each income group. See text for additional details.

The second column of Table 6 illustrates these effects by income group. Here we report the net benefit for households in each income group from repealing the MID and using the revenues to provide an equal-sized rebate to each household. Based on the second column of Table 6, the MID appears to be inequality-increasing—or, more precisely, repealing the MID and using the additional revenue to provide each household with an equal-sized rebate appears to be inequality-decreasing. The biggest beneficiaries from
such a reform would be households at the bottom of the income distribution. The largest losses would be incurred by households at or near the top (in particular, households with incomes that place them in the top 1% but not the top 0.1%).

The equal-sized rebate scenario is only one way that revenues from repealing the MID might be reallocated. We consider two other plausible alternatives here: reducing each household’s federal income tax liability in the same proportion, which we refer to as the “proportionate” counterfactual, and cutting tax rates uniformly across the board, which we refer to as the “rate reduction” counterfactual. We do not claim that these are the only possible ways that revenues might be reallocated; rather, we use these two examples to illustrate that distributional claims regarding the MID are highly dependent upon the counterfactual against which the MID is assessed.

For the “proportionate” counterfactual, we assume that the new policy would be implemented as follows: First, each household’s tax liability would be computed without allowing any deduction for home mortgage interest. We estimate total federal individual income tax revenue without the MID, and calculate the proportion of such revenue attributable to MID elimination (7.7%). We then imagine that each household’s liability, calculated without the MID, would be reduced by 7.7% to restore revenue neutrality. For households with negative federal income tax liability (e.g., households that receive earned income tax credit refunds), we assume no change in liability. The third column of Table 6 shows the distributional effects of the first of these two revenue-neutral reforms. Again, we show the net effect on after-tax income for households in each income group if the hypothetical policy is adopted (relative to the status quo).

The “proportionate” counterfactual casts the MID in a light similar to Table 4. From this perspective, the MID appears to be inequality-decreasing. The biggest beneficiaries from repeal are households in the top 1%. Repeal of the MID accompanied by a proportionate reduction in all households’ tax liability would reduce the after-tax income of households in most other income groups, with the exception of households in the bottom three deciles, whose tax liabilities would be virtually unchanged.

For the rate reduction counterfactual, we assume that the reform is implemented as follows: First, the MID would be repealed, resulting in additional revenues. Next,

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44 The results do not significantly change if we increase the size of the net tax transfer to households with negative tax liabilities.

45 These findings are consistent with the effects anticipated by Dennis Capozza and coauthors two decades ago. See Dennis R. Capozza, Richard K. Green & Patric H. Hendershot, Taxes, Mortgage Borrowing, and Residential Land Prices, in Economic Effects of Fundamental Tax Reform 171, 174 (Henry J. Aaron & William G. Gale, eds., 1996) (“[R]emoving the deduction and using added revenue to cut tax rates proportionately would significantly redistribute the U.S. tax burden. . . . The loss of the deductions would hurt higher-income households, but they would also gain a lot from the tax cut because they pay a disproportionate share of taxes. Lower-income households would lose less from repeal of the deduction but would also gain less from the rate cut.”).
Congress would reduce every rate in the marginal rate schedule such that total revenues fall by just enough to offset the gains from repealing the MID. We estimate that the rate reduction that leads to a perfect offset is 1.36 percentage points. That is, the 10% bracket would become a 8.64% bracket; the 15% bracket would become a 13.64% bracket, and so on. We simulate the reform by adjusting both ordinary income tax rates and capital gains rates. The final column of Table 6 shows the distributional effects of the second of the two revenue-neutral reforms described above: an across-the-board reduction in rates.

The distributional effects of an across-the-board rate reduction are nuanced. Relative to the current tax system, the reform leaves households in the top percentile better off on average, and leaves households in the bottom 99% worse off on average. These results again underscore the fact that even though the dollar benefits from the MID flow disproportionately to the top 1%, the dollar benefits from a revenue-neutral repeal of the MID may flow even more disproportionately to the top 1%. When we focus on the top decile rather than the top percentile, however, the story that emerges is somewhat different: the reform leaves households in the bottom 90% better off, while leaving households in the top 10% worse off. The differences between the top decile and top percentile are driven by substantial heterogeneity within the top decile. Households in the 90th-95th and 95th-99th percentiles are left worse off by the contemplated reform, while households in the top 1% are left better off. Table 6 thus highlights the fact that distributional claims about tax reforms are highly sensitive to measurement choices such as the definition of income groups.

To illustrate the results of Table 6 graphically, we show in Figure 1 the change in the income group’s share of the total tax burden in the event of a transition from current law to the counterfactual. As illustrated in Figure 1, the share of the total tax burden borne by lower income households decreases under the per-household allocation scenario and is relatively unaffected by the other reforms. The share of the total tax burden borne by the top 1% of households decreases when MID repeal results in a proportionate reduction in tax liabilities or an across-the-board reduction in rates, and increases with per-household reallocation. Households in the 80th to 99th percentile income groups see their share of total tax liabilities increase as a result of MID repeal under any of the scenarios.
Finally, we examine the distributional effects of the MID by considering the change in income inequality that would result from eliminating the deduction. To assess effects on the distribution of after-tax incomes, we employ the Gini coefficient, the most common measure of inequality. The Gini coefficient ranges from 0 to 1, with higher values representing more inequality. Estimates for the Gini coefficient vary depending on the specific definition of income (e.g., before or after government transfers), and whether wealth is transformed to a flow measure and added to income.\textsuperscript{46} For present purposes, we focus on the Gini coefficient of after-tax income (including any rebate received by households as part of the reforms we contemplate). Table 7 presents changes in the Gini coefficient induced by various tax reforms.\textsuperscript{47} We estimate the change in the Gini


\textsuperscript{47} For technical reasons, we treat households with incomes less than $1 as having an income of $1, which is standard in the literature because the Gini coefficient cannot be estimated with incomes less than $1. Other ways to handle negative income in the calculation of Gini coefficients are possible. See, e.g., Chau-Nan Chen, Tien-Wang Tsauren
coefficient if revenues are reallocated on a per household basis; if revenues are reallocated proportionately according to total tax liability; and if revenues are used to fund an across-the-board reduction in rates. If revenues are reallocated proportionately according to total tax liability, MID repeal leads to greater inequality (an increase in the Gini coefficient). Under each of the other scenarios, MID repeal leads to lower inequality (a decrease in the Gini coefficient).

Table 7: Gini Coefficient of After-Tax Income With MID Repeal (Various Counterfactuals)

<table>
<thead>
<tr>
<th>Counterfactuals</th>
<th>Gini Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>0.5428</td>
</tr>
<tr>
<td>Per Household</td>
<td>0.5347</td>
</tr>
<tr>
<td>Proportionate</td>
<td>0.5432</td>
</tr>
<tr>
<td>Rate Reduction</td>
<td>0.5420</td>
</tr>
</tbody>
</table>

Note: Own illustration using data from the 2010 Public Use Tax File produced by the IRS Statistics of Income Division. We report the Gini coefficient of after-tax income under current law and the counterfactuals described in Table 6.

While we report these results as one assessment of income inequality under the different counterfactuals, we do so with a note of caution: the benefit of collapsing inequality to a single statistic comes at the cost of obscuring the rich information contained within each of the income groups. Table 7 nonetheless underscores a theme that we have emphasized throughout. To summarize: Whether the MID increases or decreases inequality depends on the baseline against which the MID is assessed. And the details of the counterfactual will affect not only the magnitude of the MID’s observed effect on inequality, but also the sign.

& Tong-Shieng Rhai, 34 Oxford Econ. Papers 473 (1982). While the treatment of negative income may affect inequality analysis under certain circumstances, our direction-of-change results are robust to a range of alternative specifications.
IV. Capping the MID at 28%

With a majority of voters saying that they support the MID, one might expect that the deduction is not going away anytime soon. Yet even if elimination of the MID is unlikely, modification of the MID is more plausible. Most notably, presidential candidate Hillary Clinton has proposed capping the deduction at 28%. Under Clinton’s plan, a household in the 39.6% bracket would still be able to claim the deduction, but instead of the MID reducing the household’s tax liability by 39.6% times the dollar amount of deductible mortgage interest for the taxable income subject to the 39.6% marginal rate, the MID would reduce the household’s liability by 28% times the dollar amount of deductible mortgage interest. Senator Bernie Sanders included the same proposal in his platform, and the Obama administration has included a similar proposal in the “Greenbooks” that it has sent to Congress each year since 2010.

Adam Cole, Geoffrey Gee, and Nicholas Turner of the Treasury Department’s Office of Tax Analysis have published estimates of the distributional and revenue consequences of a 28% cap on the MID. Cole and coauthors do not, however, specify how revenue raised by the 28% cap would be reallocated, nor do they discuss how revenue reallocation might affect the distributional consequences of the 28% cap. It turns out, however, that the distributional consequences of the 28% cap are less sensitive to the choice of counterfactual than the distributional consequences of outright MID repeal. Under any of the reallocation scenarios discussed in Part III, the 28% cap has an inequality-decreasing effect.

\[\text{References}\]

48 See supra note 1.
52 See Cole et al., supra note 8.
More concretely, capping the MID at 28% would raise an additional $2.718 billion in revenue—equal to $19.04 per household. For households in the bottom 90% of the income distribution, the 28% cap would be nonbinding, so the only effect of capping the MID and reallocating revenues on a per-household basis would be the additional $19.04 (which could come in kind via the provision a uniformly valued public good, or in cash via a refund check). The additional $2.718 billion also could be used to reduce households’ tax liabilities pro rata by 0.2857%, or could be used to reduce each rate in the marginal rate schedule by 0.049 percentage points. Table 8 illustrates the consequences of each counterfactual for households across the income distribution in dollar terms.
Perhaps the most striking finding from our analysis of the 28% cap is not that the
distributional consequences are so progressive, but that the revenue consequences are so
limited. All in all, the 28% cap would reduce the static cost of the MID by approximately
3.4% and would raise total federal tax revenue by roughly 0.1%. This is not to suggest
that the proposal is misguided, but that it is modest: it would indeed result in a reduction
in after-tax income inequality, but by a barely noticeable amount.

Table 8: Distributional Effects of 28% Cap on MID (Various Counterfactuals)

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Difference in MID Benefits Between Current Law and 28% Counterfactual ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Household</td>
</tr>
<tr>
<td>&lt; 10</td>
<td>19</td>
</tr>
<tr>
<td>[10, 20)</td>
<td>19</td>
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<tr>
<td>[20, 30)</td>
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<td>[40, 50)</td>
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<td>[50, 60)</td>
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<td>[60, 70)</td>
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<td>[70, 80)</td>
<td>19</td>
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<td>[80, 90)</td>
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<td>-1074</td>
</tr>
<tr>
<td>&gt;99.9</td>
<td>-4263</td>
</tr>
</tbody>
</table>

(< 90) | 19 | 6 | 10 |
(≥ 90) | -171 | -54 | -90 |

(< 99) | 14 | 7 | 10 |
(≥ 99) | -1393 | -708 | -966 |

Note: Own illustration using data from the 2010 Public Use Tax File
produced by the IRS Statistics of Income Division. The columns show
the average of the difference between benefits from the MID under
current law and under the specified counterfactuals for households in
each income group. See text for additional details.
V. Behavioral Responses

As noted above, our preceding analysis did not account for potential behavioral responses to an MID repeal. It did not take into account, for example, the possibility that some households would take out smaller mortgages absent the MID, and that other households might switch from buying to renting as a result of repeal. It also did not account for the effect of eliminating the MID on market rents or home prices. These behavioral effects are no doubt important but are unlikely—as we discuss below—to alter our main conclusions.53

Consider again our example from Part II of a household with $50 of income, $9 of deductible mortgage interest, and a 20% tax rate. (This is the household labeled “Poor” in Table 1 and “Household A” in Table 9.) How would repeal of the MID affect this household’s total tax liability? Assuming no behavioral response, the answer is straightforward. With the MID, Household A deducts $9 from its $50 of income and pays a 20% tax on $41 (i.e., $8.20). Without the MID, Household A pays a 20% tax on all $50 (i.e., $10). Repeal of the MID raises Household A’s liability by $1.80.

Now imagine another household, Household B, again with $50 of income, $9 of mortgage interest, and a 20% tax rate. Unlike Household A, Household B responds to repeal of the MID by renting an apartment for $9 a year instead of buying a home. Again, the household pays a 20% tax on all $50 of income (i.e., $10). The household’s behavioral response does not change the fact that repeal of the MID raised its taxes by $1.80.

There are, to be sure, scenarios in which repeal of the MID might cause a household’s liability to rise by less than the dollar amount of MID benefits that the household previously received. Most significantly for our purposes, it is likely that some households would respond to the elimination of the MID by rebalancing their portfolios and liquidating non-housing financial assets to pay down their mortgage loans. If those non-housing financial assets were previously held in taxable accounts, and if the assets generated taxable investment income, then these portfolio shifts will decrease taxable

53 Yair Listokin has made a similar point in the context of revenue estimates. See Yair Listokin, Tax Expenditure Estimates Approximate Revenue Estimates, 145 Tax Notes 701 (2014). Listokin notes that in estimating the additional revenue that would be raised from repealing a tax expenditure, a “naïve” approach that assumes no behavioral response is “almost as good” as an estimate that accounts for behavioral effects because, at least as a general matter, “[m]ost or all of the substitute spending (on other goods instead of the good that was formerly tax preferred) would be subject to taxation.” Id. at 701. Behavioral responses will affect revenue estimates only when spending “move[s] from a good that previously benefited from a tax expenditure to a good that continues to enjoy a tax expenditure,” but “[g]enerally, that is not an important concern.” Id. at 702.
income and thus tax liability. An example will serve to illustrate: Imagine a hypothetical Household C that has a $100 mortgage balance at a 9% interest rate (thus $9 of mortgage interest). Suppose that the household also holds a $100 bond that pays a 10% interest rate (so it earns $10 of interest income). Assume that Household C has no other income and faces a 20% tax rate. With the MID, Household C has taxable income of $1 ($10 of interest income minus $9 of deductible mortgage expense), and thus pays $0.20 in taxes. Now imagine that when the MID is repealed, Household C sells the $100 bond and pays off its mortgage. It now has no income and pays no tax. In this scenario, repeal of the MID actually led Household’s D’s liability to fall.

### Table 9: Distributional Effects of Hypothetical MID With Behavioral Responses

<table>
<thead>
<tr>
<th></th>
<th>Household A</th>
<th>Household B</th>
<th>Household C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Tax Income ($)</td>
<td>50</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Mortgage Interest ($)</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Rent ($)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Claim the MID?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Taxable Income ($)</td>
<td>41</td>
<td>50</td>
<td>1</td>
</tr>
<tr>
<td>Tax Rate (%)</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Tax ($)</td>
<td>8.2</td>
<td>10</td>
<td>0.2</td>
</tr>
</tbody>
</table>

*Note: See text for details of hypotheticals.*

William Gale, Jonathan Gruber, and Seth Stephens-Davidowitz have proposed one way to estimate the “dynamic” effects of MID repeal (i.e., the effects after accounting for portfolio rebalancing). They assume that taxpayers will respond to MID repeal by drawing down financial assets in their taxable accounts to repay their mortgage debt. We apply this method and use it as a robustness check to assess the sensitivity of the above findings. Specifically, we assume that households will draw down their financial assets first by selling fixed-income assets that generate interest income, and then by investments that generate dividends and capital gains. The logic behind this approach is that interest income is generally taxed at a higher rate than qualified dividends and long-

---

54 See Gale et al., supra note 26, at 1171; see also Gervais & Padney, supra note 8; James M. Poterba & Todd Sinai, Revenue Costs and Incentive Effects of the Mortgage Interest Deduction for Owner-Occupied Housing, 64 Nat’l Tax J. 531 (2011).
term capital gains, and so households would sell their most tax-disadvantaged assets first.\footnote{Following Cole et al., supra note 8, at 990 we assume that households would sell off tax-exempt bonds before selling investments that generate qualified dividends and long-term capital gains (even though a zero rate of tax is, of course, lower than the preferential but still positive rate of tax on qualified dividends and long-term capital gains). Motivating this modeling decision is the apparent fact that “individual investors are the marginal prices in the municipal bond market at an aggregate level,” and so the yield on municipal bonds (the primary type of tax-exempt bonds in the United States) will be such that individual investors are indifferent between taxable and tax-exempt fixed-income assets. See Andrew Ang, Vineer Bhansali & Yuhang Xing, Taxes on Tax-Exempt Bonds, 55 J. Fin. 565, 566 (2010). If yields on tax-exempt bonds match after-tax yields on taxable fixed-income assets, then we would expect households to liquidate tax-exempt fixed-income assets at the same time as taxable fixed-income assets rather than after liquidating assets that yield preferentially taxed dividends and capital gains.}

We re-estimate the effect of MID repeal on inequality using these portfolio reallocation assumptions. Whereas repeal of the MID raised revenue by $79.723 billion in our static model in Part III, repeal raises only $68.010 billion in our dynamic model incorporating portfolio rebalancing. This is sufficient to provide a $476 refund check for each household (as compared to a $558 refund check in our static analysis). If the resulting revenues were used to reduce households’ tax liabilities pro rata, the proportionate reduction would be 7.15% (as compared to 7.7% in our static analysis). If the resulting revenues were used to reduce all rates in the schedule uniformly, the resulting reduction would be 1.17 percentage points (as compared to 1.36 percentage points in our static model).
Table 10: Accounting for Behavioral Responses—Distributional Effects of MID Repeal (Various Counterfactuals)

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Difference in MID Benefits Between Current Law and Counterfactual with Behavioral Responses ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Household</td>
</tr>
<tr>
<td>&lt; 10</td>
<td>476</td>
</tr>
<tr>
<td>[10, 20)</td>
<td>476</td>
</tr>
<tr>
<td>[20, 30)</td>
<td>475</td>
</tr>
<tr>
<td>[30, 40)</td>
<td>460</td>
</tr>
<tr>
<td>[40, 50)</td>
<td>415</td>
</tr>
<tr>
<td>[50, 60)</td>
<td>309</td>
</tr>
<tr>
<td>[60, 70)</td>
<td>175</td>
</tr>
<tr>
<td>[70, 80)</td>
<td>-80</td>
</tr>
<tr>
<td>[80, 90)</td>
<td>-631</td>
</tr>
<tr>
<td>[90, 95)</td>
<td>-1332</td>
</tr>
<tr>
<td>[95, 99)</td>
<td>-2483</td>
</tr>
<tr>
<td>[99, 99.9]</td>
<td>-3630</td>
</tr>
<tr>
<td>&gt;99.9</td>
<td>-9173</td>
</tr>
</tbody>
</table>

(< 90)        | 231           | -94           | 8              |
(≥ 90)        | -2078         | 850           | -70            |

(< 99)        | 42            | -131          | -62            |
(≥ 99)        | -4184         | 12934         | 6104           |

Note: Own illustration using data from the 2010 Public Use Tax File produced by the IRS Statistics of Income Division. The columns show the average of the difference between benefits from the MID under current law and under the specified counterfactuals for households in each income group. See text for additional details.

Table 10 displays the distributional consequences of repealing the MID under each of the three counterfactuals, this time incorporating portfolio reallocation. While the resulting estimates of the distributional consequences of MID repeal are smaller in magnitude, the signs do not change. In the scenario in which the MID is repealed and each household receives a refund check of equal size, repeal of the MID reduces average after-tax income.
for the top 10% and top 1%, and increases average after-tax income for the bottom 90% and bottom 99%. In the scenario in which the MID is repealed and each household’s tax liability is reduced proportionately, repeal increases the average after-tax income for the top 10% and top 1% (and reduces average after-tax income for the bottom 90% and the bottom 99%). Once again, the distributional consequences of repeal plus a uniform rate reduction depend on whether we focus on the top percentile or the top decile. Households in the top percentile are better off on average in after-tax income terms (and households in the bottom 99% are worse off on average) if the MID is repealed and revenues are used to reduce all rates in the schedule uniformly. However, households in the top decile are worse off on average (and households in the bottom 90% are better off on average) under the uniform rate reduction scenario. Again, the driving factor is that the gains from this reform are concentrated in the top 1%, and the losses are heaviest for households in the 90th to 99th percentiles.

As Gale, Gruber, and Stephens-Davidowitz note, the assumptions embedded in this portfolio reallocation model “imply that taxpayers do a tremendous amount of tax avoidance in response to MID repeal.” In all likelihood, the resulting estimate is an outer bound estimate, and the behavioral response to MID repeal would be less dramatic than this. Yet even at the outer bound, the results here suggest that portfolio rebalancing is unlikely to alter the conclusions drawn from the results from the static framework. The distributional effects of repealing the MID will depend critically on what happens to the resulting revenues.

VI. SALT, the CCD, and Beyond

Up to this point, our focus has been limited to the MID. Yet much of our analysis applies beyond the MID domain. Here, we extend our analysis to the two other itemized deductions that lead to the largest revenue losses: the deduction for state and local taxes (SALT) and the charitable contribution deduction (CCD).

A. The Deduction for State and Local Taxes

Like the MID, the SALT deduction traces its origins back to the Revenue Act of 1913. From then until 1986, state and local income, sales, and property taxes were generally deductible for federal income tax purposes. The Tax Reform Act of 1986 repealed deductibility for sales taxes, while leaving the deduction for state and local income and property taxes in place. The American Jobs Creation Act of 2004 gave taxpayers the option to deduct state and local income taxes or state and local sales taxes (but not both).

56 Gale et al., supra note 26, at 1178.
57 See U.S. Dep’t of the Treasury, Office of Tax Analysis, Tax Expenditures 33 tbl. 3 (Nov. 11, 2015). The exclusion of employer contributions for health care and health insurance premiums is a larger expenditure in dollar terms, but is not implemented as an itemized deduction.
That provision was initially temporary, but was made permanent by Congress at the end of 2015.\textsuperscript{58}

The SALT deduction, like the MID, is only available to itemizers. Like the MID, it is not subject to the 2% floor on certain miscellaneous itemized deductions. Unlike the MID, however, the SALT deduction is limited by the alternative minimum tax (AMT). The primary effect of the AMT is to take away the SALT deduction for (some) high-earning households.\textsuperscript{59}

The SALT deduction is sometimes criticized in the mainstream media on distributional grounds. The \textit{National Review}, for example, has called the SALT deduction “a regressive subsidy.”\textsuperscript{60} The former chief economist to Vice President Biden, Jared Bernstein, recently wrote in the \textit{Washington Post} that SALT (along with the MID and the CCD) is “regressive.”\textsuperscript{61} Scholarship on the SALT deduction generally acknowledges that the provision’s effects on inequality are more nuanced. Gilbert Metcalf, for example, observes that the deduction “is quite regressive at the federal level,” but also “appears to lead to a greater reliance on progressive income taxes at the state and local level.”\textsuperscript{62}

Yet even at the federal level, the effect of the SALT deduction on income inequality is not so clear cut. Much of what we say above regarding the MID applies as well to the SALT deduction: as Table 11 shows, the dollar benefits of the SALT deduction flow disproportionately to households in the top 10% and top 1%, while at the same time the share of federal tax liabilities borne by the top 10% and top 1% is larger with the SALT deduction than without. For this reason, the distributional effects of repealing the SALT deduction will depend critically on how the additional revenues would be reallocated.

\textsuperscript{58} See U.S. Dep’t of the Treasury, Office of Tax Analysis, Tax Expenditures 33 tbl. 3 (Nov. 11, 2015). The exclusion of employer contributions for health care and health insurance premiums is a larger expenditure in dollar terms, but is not implemented as an itemized deduction.


Table 11: Distribution of SALT Deduction Benefits; Distribution of Individual Income Tax Burden Without and With the SALT Deduction

<table>
<thead>
<tr>
<th>Income Group</th>
<th>SALT Benefits Average ($)</th>
<th>SALT Benefits Proportion (%)</th>
<th>Tax Burden without SALT</th>
<th>Tax Burden with SALT</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10</td>
<td>0</td>
<td>0.00</td>
<td>-0.86</td>
<td>-0.94</td>
</tr>
<tr>
<td>[10, 20)</td>
<td>0</td>
<td>0.00</td>
<td>-3.58</td>
<td>-3.90</td>
</tr>
<tr>
<td>[20, 30)</td>
<td>2</td>
<td>0.04</td>
<td>-3.42</td>
<td>-3.74</td>
</tr>
<tr>
<td>[30, 40)</td>
<td>14</td>
<td>0.26</td>
<td>-2.16</td>
<td>-2.38</td>
</tr>
<tr>
<td>[40, 50)</td>
<td>45</td>
<td>0.83</td>
<td>-0.21</td>
<td>-0.31</td>
</tr>
<tr>
<td>[50, 60)</td>
<td>120</td>
<td>2.25</td>
<td>2.01</td>
<td>1.99</td>
</tr>
<tr>
<td>[60, 70)</td>
<td>234</td>
<td>4.38</td>
<td>4.61</td>
<td>4.63</td>
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<tr>
<td>[70, 80)</td>
<td>460</td>
<td>8.58</td>
<td>8.40</td>
<td>8.39</td>
</tr>
<tr>
<td>[80, 90)</td>
<td>984</td>
<td>18.37</td>
<td>15.76</td>
<td>15.53</td>
</tr>
<tr>
<td>[90, 95)</td>
<td>1737</td>
<td>16.21</td>
<td>14.20</td>
<td>14.02</td>
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<tr>
<td>[95, 99]</td>
<td>2453</td>
<td>18.30</td>
<td>24.42</td>
<td>24.98</td>
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<tr>
<td>[99, 99.9)</td>
<td>7890</td>
<td>13.25</td>
<td>21.21</td>
<td>21.93</td>
</tr>
<tr>
<td>&gt;99.9</td>
<td>93924</td>
<td>17.53</td>
<td>19.62</td>
<td>19.80</td>
</tr>
</tbody>
</table>

For 190 and above:
- (< 90) 207 34.71 20.55 19.27
- (≥ 90) 3499 65.29 79.45 80.73

For 99 and above:
- (< 99) 375 69.22 59.18 58.27
- (≥ 99) 14693 30.78 40.82 41.73

Note: Own illustration using data from the 2010 Public Use Tax File produced by the IRS Statistics of Income Division. See text for sample construction.

To further illustrate the anticipated effects on inequality of repealing the SALT deduction, we repeat the analyses in Part III, replacing the MID with the SALT deduction and reporting the results in Table 12. Repealing the SALT deduction would cause federal revenue to increase by $76.497 billion—or $536 per household. Using that revenue to provide a refund check of equal size to each household would make the average household in the top two income deciles worse off in after-tax income terms, and would make the average household in the bottom eight income deciles better off. Alternatively, the additional revenue could be used to reduce each household’s tax liability proportionately—or, more precisely, each household’s tax liability could be calculated without the SALT deduction and then reduced by by 6.8%, with the result being revenue-
neutral relative to the status quo. That reform would make the average household in the
top 10% and top 1% better off in after-tax income terms, and would make the average
household in the bottom 90% and bottom 99% worse off. Finally, the additional revenue
from repealing the SALT deduction could be used to reduce each rate in the schedule by
1.30 percentage points. This reform would make the average household in the top two
income deciles worse off, and would make the average household in the bottom eight
income deciles better off.
Again, we do not claim that any one of these counterfactuals makes more sense analytically than any other. Moreover, any comprehensive analysis of the distributional effects of the SALT deduction should account for the dynamic effects of the SALT deduction on the structure of state and local tax systems. Our insight is that even in a static sense, the effect of the SALT deduction on after-tax income inequality depends critically on the counterfactual against which the deduction is compared.

Note: Own illustration using data from the 2010 Public Use Tax File produced by the IRS Statistics of Income Division. The columns show the average of the difference between benefits from the SALT deduction under current law and under the specified counterfactuals for households in each income group. See text for additional details.
B. The Charitable Contribution Deduction

The charitable contribution deduction is almost as longstanding as the MID and the SALT deduction, dating back to 1917. Like the MID and the SALT deduction, the charitable contribution deduction is sometimes criticized on distributional grounds; unlike the MID and the SALT deduction, repeal of the charitable contribution deduction would be inequality-decreasing under any of the counterfactuals we consider. As Table 13 illustrates, the dollar benefits of the charitable contribution deduction flow disproportionately to the top 1%, who capture more than 40% of the benefits in dollar terms (compared to approximately 31% in the case of the SALT deduction and 13% in the case of the MID). The dollar benefits of the charitable contribution deduction are sufficiently skewed toward top earners that the share of the tax burden borne by the top 1% is larger without the charitable contribution deduction than with.

As with the MID and the SALT deduction, we simulate the distributional effects of repealing the charitable contribution deduction (reporting the results in Table 14). Repealing the charitable contribution deduction would raise approximately $39.947 billion in revenue—which could be redistributed to each household through a $280 check, or applied to reducing each household’s tax liability by 3.8%, or used to reduce each rate in the schedule by 0.705 percentage-points. Regardless of which hypothetical we choose, the bottom line result is the same: repeal of the charitable contribution deduction would reduce the after-tax income of the average household in the top decile and percentile, and would raise the after-tax income of the average household in the bottom 90%.

<table>
<thead>
<tr>
<th>Income Group</th>
<th>CCD Benefits</th>
<th>Tax Burden</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average ($)</td>
<td>Proportion (%)</td>
</tr>
<tr>
<td>&lt; 10</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>[10, 20)</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>[20, 30)</td>
<td>1</td>
<td>0.03</td>
</tr>
<tr>
<td>[30, 40)</td>
<td>6</td>
<td>0.23</td>
</tr>
<tr>
<td>[40, 50)</td>
<td>23</td>
<td>0.81</td>
</tr>
<tr>
<td>[50, 60)</td>
<td>54</td>
<td>1.92</td>
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<tr>
<td>[60, 70)</td>
<td>104</td>
<td>3.73</td>
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<tr>
<td>[70, 80)</td>
<td>178</td>
<td>6.36</td>
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<tr>
<td>[80, 90)</td>
<td>374</td>
<td>13.37</td>
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<tr>
<td>[90, 95)</td>
<td>703</td>
<td>12.57</td>
</tr>
<tr>
<td>[95, 99)</td>
<td>1427</td>
<td>20.39</td>
</tr>
<tr>
<td>[99, 99.9)</td>
<td>4816</td>
<td>15.49</td>
</tr>
<tr>
<td>&gt;99.9</td>
<td>70208</td>
<td>25.09</td>
</tr>
</tbody>
</table>

| Total        | 82           | 26.46       | 19.59       | 19.27    |
| Total        | 2058         | 73.54       | 80.41       | 80.73    |

| Total        | 168          | 59.41       | 58.32       | 58.27    |
| Total        | 11355        | 40.59       | 41.68       | 41.73    |

*Note:* Own illustration using data from the 2010 Public Use Tax File produced by the IRS Statistics of Income Division. See text for sample construction.
Table 14: Distributional Effects of CCD Repeal (Various Counterfactuals)

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Difference in CCD Benefits Between Current Law and Counterfactual ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Household</td>
</tr>
<tr>
<td>&lt; 10</td>
<td>280</td>
</tr>
<tr>
<td>[10, 20)</td>
<td>280</td>
</tr>
<tr>
<td>[20, 30)</td>
<td>279</td>
</tr>
<tr>
<td>[30, 40)</td>
<td>273</td>
</tr>
<tr>
<td>[40, 50)</td>
<td>257</td>
</tr>
<tr>
<td>[50, 60)</td>
<td>226</td>
</tr>
<tr>
<td>[60, 70)</td>
<td>176</td>
</tr>
<tr>
<td>[70, 80)</td>
<td>102</td>
</tr>
<tr>
<td>[80, 90)</td>
<td>-94</td>
</tr>
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<td>[90, 95)</td>
<td>-423</td>
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<tr>
<td>[95, 99)</td>
<td>-1148</td>
</tr>
<tr>
<td>[99, 99.9)</td>
<td>-4536</td>
</tr>
<tr>
<td>&gt;99.9</td>
<td>-69928</td>
</tr>
</tbody>
</table>

(< 90) 198     | 6              | 64                             |
(≥ 90) -1778  | -58            | -576                           |

(< 99) 112     | 10             | 48                             |
(≥ 99) -11075 | -1021          | -4727                          |

Note: Own illustration using data from the 2010 Public Use Tax File produced by the IRS Statistics of Income Division. The columns show the average of the difference between benefits from the SALT deduction under current law and under the specified counterfactuals for households in each income group. See text for additional details.

We emphasize that our conclusions regarding the effect of the charitable contribution deduction on inequality do not take into account the possibility that the deduction encourages more charitable giving, and that such giving itself has a redistributive effect.\footnote{See, e.g., Stephen L. Carter, Ending Charity Tax Break Will Hurt Poor Most, BloombergView (Nov. 22, 2011), https://www.bloomberg.com/view/articles/2011-11-23/ending-charity-tax-break-would-hurt-poor-commentary-by-stephen-l-carter.} We simply note that as compared to the MID and SALT deduction, the charitable
contribution deduction is much more skewed to the very rich in terms of the direct dollar benefits that it provides, so much so that repeal of the charitable contribution deduction has an inequality-decreasing effect under any of the counterfactuals we consider. Interestingly, despite the fact that the charitable contribution deduction is so much more skewed to the very rich in terms of the dollar benefits that it provides, the charitable contribution deduction would be spared by presidential candidate Hillary Clinton’s proposal to cap itemized deductions at a 28% rate (a proposal that in its current form would apply to the MID and the SALT deduction).66

Conclusion

Our analysis simultaneously confirms and challenges widespread beliefs regarding the effect of tax expenditures on inequality. The mortgage interest deduction does indeed appear to be inequality-increasing relative to a counterfactual in which the deduction is repealed and revenues are reallocated to all households on a equal basis; when the mortgage interest deduction is evaluated against other counterfactuals, however, the distributional effects are more nuanced. A similar story emerges with respect to the deduction for state and local taxes: distributional claims regarding the provision are contingent upon the counterfactual that such claims presume. Distributional claims about the charitable contribution deduction are less sensitive to the choice of counterfactual (though, of course, repeal of the charitable contribution deduction could conceivably have an inequality-increasing effect in an extreme case—e.g., if the additional revenues were used to reduce rates for taxpayers in the top bracket and no one else).

We have chosen to evaluate these tax expenditures against a number of plausible counterfactuals, but the possibilities that we consider are by no means exhaustive. For example, one might imagine that the revenues raised via repeal would be used to close the deficit. The distributional effects of repeal in that case would be intergenerational as well as among income groups.

Does this mean that distributional claims regarding tax expenditures are inherently indeterminate?67 Our conclusion is not so pessimistic. Distributional claims are meaningful when the measure of distributional effects is defined and the counterfactual is clearly specified. We do not believe that any one baseline is clearly “better” than any other: the relevant counterfactual will depend upon the political environment in which the distributional debate occurs.

Context is key. At the extreme, almost any tax expenditure increases inequality relative to a counterfactual in which the additional revenues are reallocated to households below the poverty line. Likewise, almost any tax expenditure decreases inequality relative to a

67 See Griffith, supra note 30, at 359-60.
counterfactual in which the additional revenue is reallocated to Bill Gates. Our modest suggestion is that participants in debates about the distributional effects of tax expenditures should be specific about the counterfactual against which they are assessing the status quo. Statements such as “the MID raises inequality” would then carry a meaning that is comprehensible. Our hope is that careful attention to the counterfactual assumptions underlying distributional claims will make debates about taxation and inequality more meaningful.