Evaluating the Anticipated Effects of Changes to the Mortgage Interest Deduction

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Executive Summary

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The U.S. Treasury estimates that in FY2017 American taxpayers deducted $65.6 billion in mortgage interest from their Federal tax liabilities (U.S. Department of the Treasury, 2017). Continued use of the mortgage interest deduction (MID) is likely to be affected by two key provisions of tax reform currently under debate. First, the doubling of the standard deduction is likely to reduce the number of tax units that itemize deductions, thereby prompting a lower use of the MID. Second, the current proposal in the House changes the mortgage cap on which interest can be deducted from $1 million to $500,000.

Changes in the number of itemizers are projected to be large under the increased standard deduction, falling from about 26 percent to 8 percent of filing tax units. This would indicate a substantial change in the use of the MID. At the same time, we estimate that the share of potential homeowners in the United States who would be affected by a change in the mortgage cap from $1 million to $500,000 is only 7 percent. The effects of the changing cap are concentrated in high-priced housing markets and at higher ends of the income distribution.

More broadly, although the stated goal of preferential tax treatment for mortgage interest is to increase homeownership, the empirical evidence indicates there is no significant positive effect of the MID on homeownership rates. This implies that changes in the standard deduction that serve to reduce the use of the MID are unlikely to lower homeownership rates. Moreover, because the program incentivizes homeowners to buy larger and more expensive houses, it results in inflated home prices in many regional markets. As a result of the subsidy's upward pressure on housing prices, the MID may artificially depress homeownership by putting homeownership out of reach for many households, implying that a reduction in the potency of the MID may actually serve to increase homeownership.

Applying recent empirical estimates of the MID's impact to the current proposed legislation, we conclude that minimizing the use of the MID may lead to a modest fall in home prices. In the most recent estimates in the literature, the full, unexpected elimination of the MID corresponds to an estimated housing price reduction of 2 percent immediately and a total of 4 percent in the long run. This modest price reduction results in an *increase* in homeownership over the long term by encouraging home buying. To be clear, the estimates in the literature are based on a full elimination of the MID; the proposals before Congress stop well short of full elimination. While we cannot precisely estimate the scale of the current proposals relative to full elimination, they certainly will be more limited. Thus, we consider these estimates to be an upper bound on the anticipated effects from Congress's proposed tax reforms.

Finally, we should note that the tax reform proposals may impact disposable income in other ways that, in turn, impact the demand for homeownership. For example, people may have higher disposable income post reform. We abstract from these details and focus exclusively on analyzing the reform proposals that directly affect the MID.

1. Tax Cuts and Jobs Act

Both Senate and House tax reform bills propose to nearly double the standard deduction (from $6350 to $12,000 for single filing households and from $12,700 to $24,000 for married filing jointly households) and eliminate most itemized deductions, with notable exceptions of the mortgage interest deduction and the deduction for charitable donations.[1] Moreover, the House bill proposes to lower the cap on mortgage debt incurred after November 2, 2017 from $1M to $500,000 on which a homeowner can deduct the associated interest paid from their federal tax bill. The House bill also restricts the deduction to the primary residence. The Senate bill retains current law for these last two provisions.[2]

In the discussion below, we focus on two main elements of these bills. First, we look at the increase in the standard deduction that decreases the value of the MID for all households, but in particular those who choose to no longer itemize under the new regime. Second, we look at the cap proposed by the House on new mortgages, which will impact fewer households overall but may be particularly relevant to a number of cities where home prices are much higher than the national average.

2. Distributional Impact of Changes to the MID

On average, according to IRS statistics, about 26 percent of tax units itemize their deductions. The MID provides no tax benefit to nonitemizers, and nonitemizers are concentrated at the lower end of the income distribution. Moreover, because the MID – as its name indicates – is a deduction from income (and not, say, a flat credit against taxes owed), the benefit is larger for households in higher marginal tax brackets and for those purchasing higher-priced homes. In sum, the MID is typically regarded as a fairly regressive subsidy.

Table 1 shows the breakdown of itemizers by income bracket. As the table shows, under current law, the fraction of itemizing households is generally increasing in income and can reach over 90 percent for higher income brackets. But, the projected fraction of households that would continue to itemize under the House version of the tax reform bill falls for each of the income brackets.[3] Overall, only 8 percent of households are projected to itemize deductions following the House version of the tax reform bill.

[1] The Senate bill retains a number of other current deductions like qualified medical expenses.

[2] The two bills also differ on the deductibility of refinancing debt. The House bill allows for a deduction of such debt while the Senate bill does not.

[3] As the Senate bill is a bit more generous with retaining current itemized deductions, the decrease will be less severe. However, the biggest deduction for state and local taxes is eliminated in both bills.

Table 1: The Simulated Percentage of Tax Units that Itemize under Current Law and under the House Plan

Income Bin	Amount	Percent Itemizers Under Current Law	Percent Itemizers Under the House Tax Plan
1	< 0	0.0%	0.0%
2	0 - $10,000	0.1%	0.1%
3	$10,000 - 20,000	3.8%	0.6%
4	$20,000 - $30,000	9.5%	1.4%
5	$30,000 - $40,000	15.6%	2.4%
6	$40,000 - $50,000	22.4%	3.5%
7	$50,000 - $75,000	36.0%	7.5%
8	$75,000 - $100,000	49.8%	11.0%
9	$100,000 - $200,000	72.7%	19.6%
10	$200,000 - $500,000	92.2%	47.2%
11	$500,000 - $1,000,000	91.6%	66.3%
12	> $1,000,000	86.5%	74.8%
Overall		26.3%	7.6%

Source: IRS Statistics of Income Public Use File, 2009 and CPS 2014. CEA Staff Calculations via Open Source Policy Center Tax-Calculator.

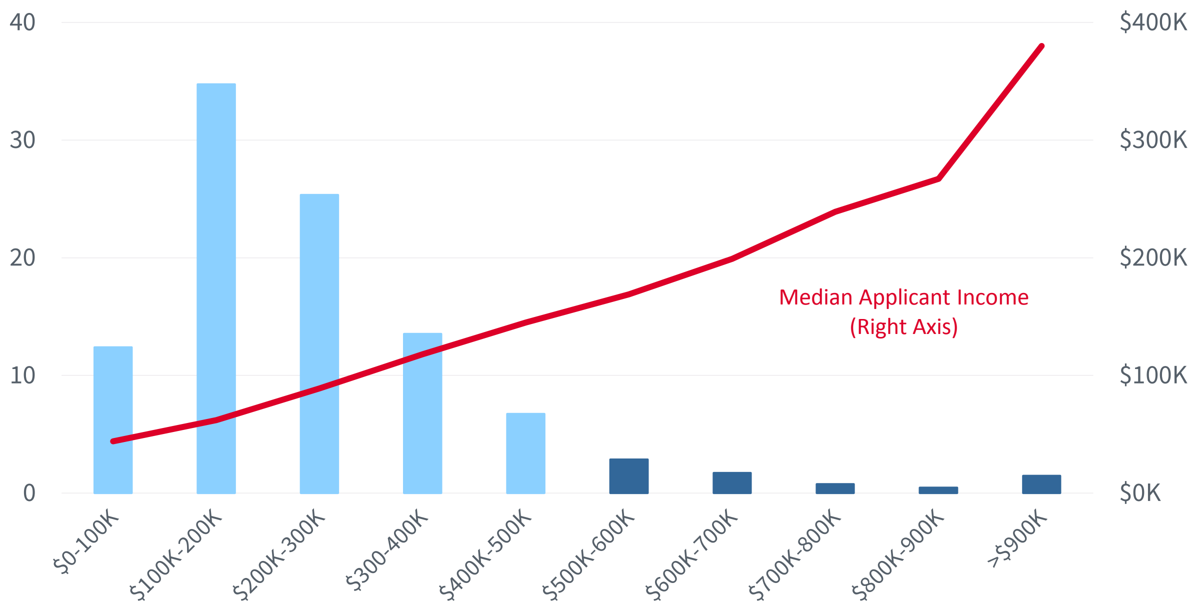
In addition to doubling the standard deduction, the House plan also alters the cap on mortgage values for the purpose of calculating deductible interest, lowering the cap from $1M to $500,000. The cap is relevant for new mortgages issued after November 2; previously issued mortgages would not be affected by the change. But data on recent mortgage transactions can provide an estimate of the scale of the effect going forward. Using data available through the Consumer Financial Protection Bureau on new mortgages issued in 2016, we find that 7.1 percent of home mortgages are greater than $500,000 in loan value, implying that roughly 7 percent of future homeowners would be affected by the change in the MID cap under stable housing prices. Because the first $500,000 of the mortgage value would remain eligible for the MID, even homeowners with mortgage values above the cap would continue to benefit from the MID. Based on mortgages issued in 2016, we estimate that the average mortgage above the proposed $500,000 cap would still receive preferential tax treatment on three-fourths of its total value. These calculations are based on all new mortgages issued in 2016, including refinances and home improvement loans, but results are similar for the sample limited only to home purchases.[4]

As noted previously, the MID is a regressive subsidy that provides more value to higher income tax units. Reducing the cap on the MID would also primarily affect higher income homeowners. In 2016, the median income for homeowners initiating new mortgages of less than $500,000 was $79,000. For homeowners initiating new mortgages above that threshold, the median income was $219,000. (Again, for homeowners taking out new mortgages above the $500,000 cap, the first $500,000 remains eligible

[4] Sample is restricted to all first-lien mortgages on owner occupied homes of 1-4 families, including manufactured housing.

for the interest deduction.) Figure 1 shows the distribution of mortgages across loan value as well as the median income by loan value.

Figure 1. Distribution of Mortgages and Applicant Income by Loan Amount



Note: Includes loans issued for home improvement, purchase, and refinancing.
Source: Consumer Financial Protection Bureau Home Mortgage Disclosure Act Data, CEA Calculations.

Sommer and Sullivan (2017) confirm these distributional assessments when they find that the greatest welfare losses from an unexpected and complete elimination of the MID accrue to landlords and high-income homeowners who live in large houses with large mortgages and face high marginal tax rates. In contrast, potential homeowners and current owners in modestly sized homes, with smaller mortgages and facing lower marginal tax rates, gain the most from the elimination of the MID due to declining prices. One of the more surprising results in their paper is that 55 percent of current homeowners with mortgages would benefit from the elimination of the MID, even though they lose a tax deduction and incur a capital loss due to the fall in home prices. These households gain, however, from lower prices that allow them to make an eventual upward move to a larger house. We discuss the Sommer and Sullivan (2017) findings in more detail below.

Finally, home mortgages issued for greater than $500,000 are rare except for a select few urban areas in the United States. Of the 409 metropolitan statistical areas (MSAs) tracked in the data on mortgages issued, 93 percent of these areas had less than 10 percent of mortgages above $500,000. And 50 percent of areas had less than 1 percent of mortgages above $500,000. Thus, the majority of housing markets will have minimal exposure to any impact of a lowered MID cap.

3. Homeownership—Positive Externalities

Taking a step back from the distributional impacts of the MID, for the government to subsidize homeownership, as a tax credit for mortgage interest purports to do, there should be some social benefit to homeownership beyond the benefit to the homeowner themselves. Oddly enough, promoting homeownership was not the original objective of the deduction. Rather, the mortgage interest deduction was inadvertently created following the passage of the Sixteenth Amendment in 1913, which authorized a Federal income tax. At a time when fewer than 40 percent of non-farm homes were owner-occupied and, of these, only a third were secured by a mortgage, and, moreover, the line between small-proprietor business and personal expenses was often difficult to discern, the new income tax enacted by Congress allowed for the deduction of all debt interest expenses, making them analogous to other business expenses (U.S. Census Bureau, 1910; Ventry, 2009).

The rationale for maintaining the deduction, though, often lies in arguments that homeowners are more invested in their residences, making them cleaner and safer and thereby increasing home values for others. Homeowners are also more involved politically and have more social connection to their neighborhoods. (See Glaeser and Shapiro (2003) for a review of this literature.) Despite strong positive correlations between homeownership and these positive externalities, a causal relationship between homeownership and these behaviors has not been rigorously established. [5]

4. The Impact of the MID on Homeownership Rates

Given the stated purpose of continuing Federal investment in the MID, a key empirical question is the relationship between the subsidization of home mortgages and homeownership rates. The academic literature has generally been interested in understanding the impacts of the MID compared to an economy with no preferential tax treatment of mortgage interest. The consensus is that the mortgage interest deduction fails to achieve the aim of increasing homeownership. The findings are summarized in Gale, Gruber, and Stephens-Davidowitz (2007), and a number of notable recent working papers since have solidified this conclusion. Hilber and Turner (2014), find that, *in aggregate*, the MID has no statistically significant impact on homeownership rates. Taking a closer look at smaller geographical markets, they find that the MID boosts homeownership attainment in elastically supplied markets, where supply responds more readily to price increases, but only for higher-income households. In more restrictive places (i.e. inelastic supply), the MID serves to raise prices, and effectively reduces homeownership, though again only for higher income households. They find that the MID has no impact on homeownership rates of low-income households, regardless of elasticity of supply.

Gruber, Jensen and Kleven (2017) make use of a natural experiment from Denmark in the 1980s to look at the long-run impacts of scaling back the mortgage deduction on homeownership rates, home size, and home values. The authors find that the mortgage deduction has a moderate impact on the

[5] In an attempt to address the causality problem, Engelhardt et al (2010) find that low-income households that were randomly offered a subsidized saving account for home purchases were more likely to purchase a home but were no more likely to engage politically or provide more social capital.

intensive margin of housing demand, inducing homeowners to buy larger and more expensive houses but, at the same time, has no impact on homeownership. These findings suggest that the mortgage interest deduction affects the size and value of homes purchased – where there is no clear social benefit – and is ineffective at promoting homeownership where the social benefit arguments are generally made.

Finally, Sommer and Sullivan (2017) develop a general equilibrium model in which both the price of owner-occupied housing and the price of rental housing are endogenous. They study the impact of the mortgage interest deduction on homeownership rates (among other factors) and find that eliminating the mortgage interest deduction reduces home prices enough to induce an *increase* in homeownership. This increase in homeownership comes from relatively lower-income households; in the Sommer and Sullivan model, eliminating the MID is a progressive reform that transfers value from high-income households to the remainder of the income distribution by removing a subsidy that is relatively more valuable to higher income homeowners and passing the benefits to individuals who otherwise would have been priced out of homeownership and opted to rent.

5. The Impact of the MID on House Prices

A related line of research has studied the effect of the MID on housing prices, again comparing the existence of the MID to an economy with no preferential tax treatment of mortgage interest. Early studies found substantial impacts on housing prices. For example, Poterba (1984) estimates a very large housing price response to the elimination of the MID—on the magnitude of a 26 percent decline. However, this is in an environment of 10 percent inflation and is perhaps not relevant for today's economic setting. Capozza et al. (1996) estimate that eliminating the MID (along with ending the deduction for property taxes) would decrease home prices by an estimated 13 percent. Harris (2013) estimates that eliminating the MID would reduce home prices by 12 percent. PricewaterhouseCoopers (2017), in a report for the National Association of Realtors, estimates that tax reform plans very similar to those currently being considered reduce home prices by 10 percent.

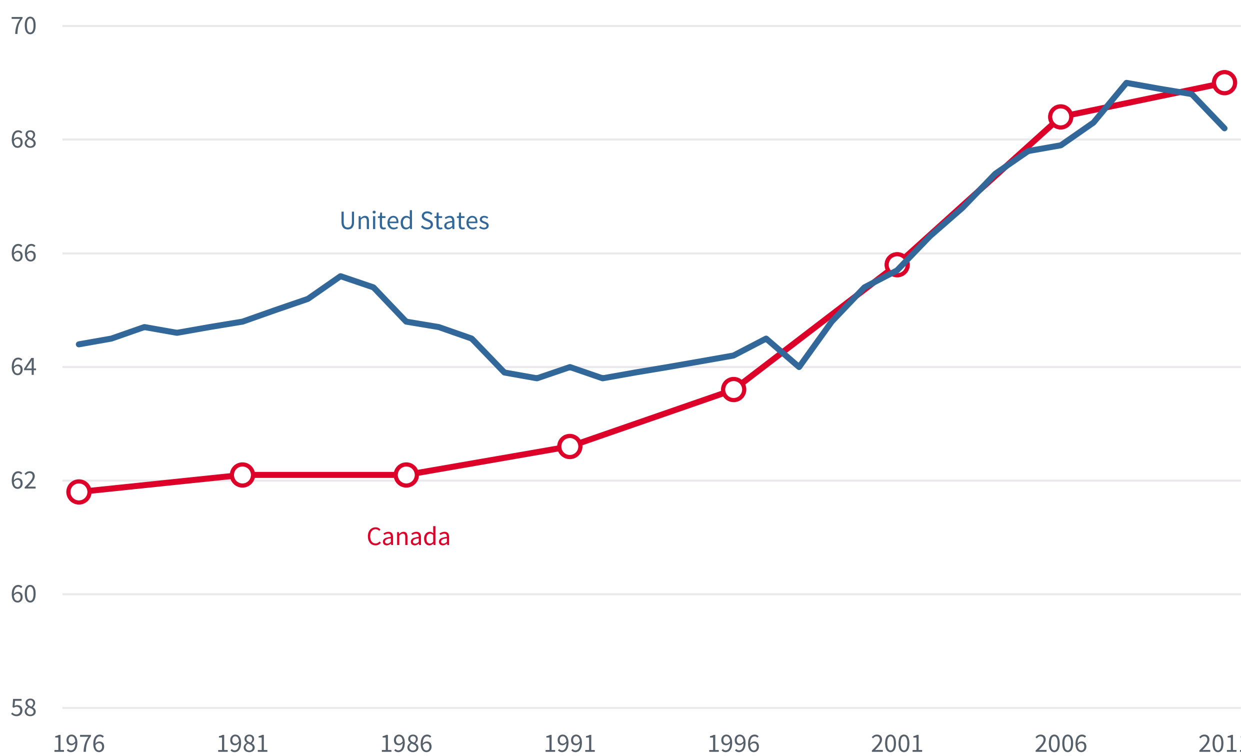
However, other academic literature that considers the MID within the context of the larger economy finds significantly lower price effects from elimination of the MID. These studies more flexibly model housing markets by allowing housing supply to respond to reductions in the demand for housing, or by incorporating spillover effects in the rental housing market. Most recently, Sommer and Sullivan (2017) find that eliminating the MID would reduce home prices by 4.2 percent in the long run, although the effect is only half this size in an environment with the low interest rates observed today. In a similar model, Floetotto, Kirker and Strobel (2016) estimate that eliminating the MID would decrease home prices by only 1 percent in the long run. As housing wealth is equal to roughly 30 percent of total household wealth, even a 4 percent fall in price translates into about a 1.2 percent decline in total household net wealth (Federal Reserve Board Financial Accounts of the United States, 2017).

Recent research also indicates that the impact of eliminating the MID would vary depending on the elasticity of supply of housing in different areas. In markets where supply is constrained, eliminating the MID is more likely to reduce prices because supply does not adjust downward in the long run. As described above, Hilber and Turner (2014) find that the impact of the MID on homeownership depends on the elasticity of the supply of housing. In areas with inelastic supply, there is no increase in homeownership, and eliminating the MID would likely decrease home prices in these areas more than in areas with elastic housing supply. Rappoport (2016) uses a structural model which allows housing supply elasticities to vary across areas and finds that eliminating the MID would decrease home prices by 6.9 percent on average, but with considerable variation across markets depending on the elasticity of supply. In sum, the most recent state-of-the-art academic literature suggests that the impact of eliminating the MID on house prices is likely to be modest, and its magnitude in different areas will depend on the extent to which housing supply can respond to reduced demand. Cities like San Francisco, California, where the housing stock is relatively inelastic, may experience greater price responses compared to relatively unregulated cities like Dallas, Texas.

6. International Comparisons

Figure 2. Rates of Homeownership in the United States and Canada

(Percent)



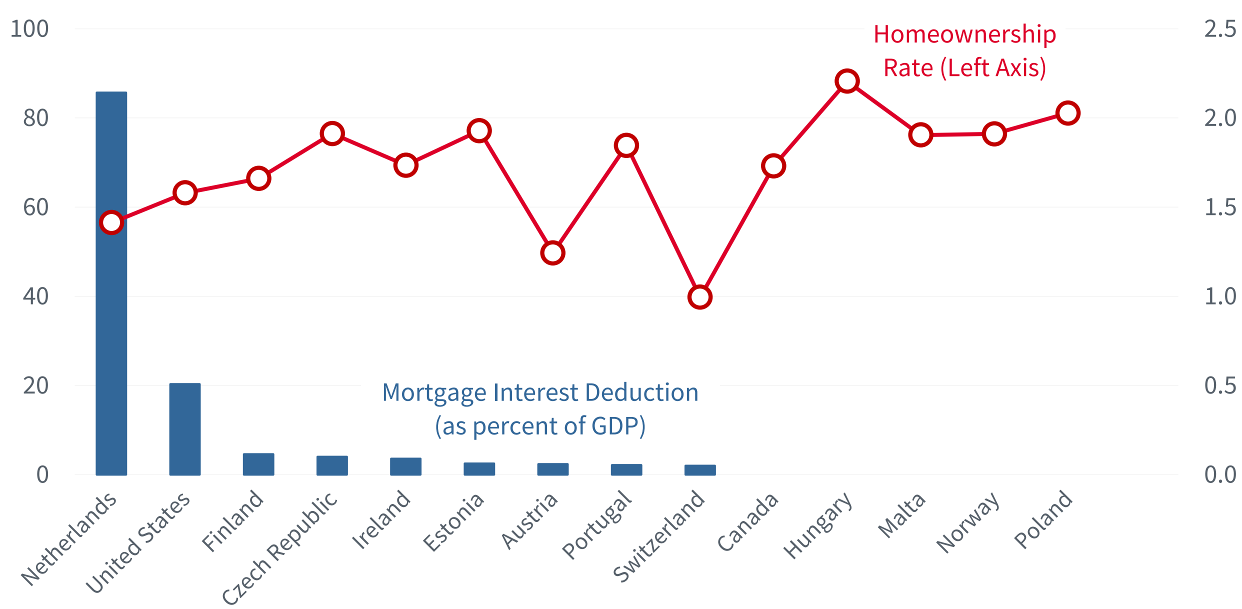
Source: U.S. Census Bureau via Federal Reserve Economic Data; Statistics Canada and National Housing Survey

The experience of other developed countries indicates homeownership subsidies are neither necessary nor sufficient to ensure high rates of ownership. For example, unlike the United States, Canada does not provide preferential treatment for mortgage debt. Nonetheless, the homeownership rate in Canada is very similar to that in the United States. (See Figure 2.) Although the United States had higher homeownership rates in the 1970s and 1980s, the rates converged by the mid-1990s and have moved in almost lockstep in the period since. In the last year of available data, 2011, Canada's rate was slightly above that in the United States. To be clear, this comparison does not imply that homeownership in Canada would not be higher with a preferential tax treatment of mortgage interest.

That the MID is neither necessary nor sufficient to ensure homeownership is confirmed by a simple analysis of OECD countries more broadly. Tax relief for homeownership is relatively rare in the OECD. Figure 3 shows the relevant comparisons for countries that report both the value of mortgage interest deductions (frequently zero) and homeownership rates. Although the United States has the second highest level of tax relief for homeownership among reporting member countries (at 0.5 percent of GDP), the homeownership rate is lower than 10 out of the 13 OECD countries reporting both homeownership and MID value data. A more complete tabulation of homeownership rates in the OECD, including 37 nations, ranks the United States 28th. To be sure, there are other government policies in OECD countries, including the United States, to promote homeownership beyond preferential tax treatment of mortgage interest expenses, such as mortgage guarantees and down payment or direct interest subsidies. But the data still indicate that the MID is not a critical component of a developed country's homeownership policy agenda.

Figure 3. Mortgage Interest Deduction Subsidies and Homeownership Rates in OECD countries

(Percent)



Note: Cyprus, France, Germany, Korea, Latvia, Lithuania, Mexico and Slovenia do not apply tax relief for access to homeownership. No information was provided for Belgium, Turkey, Bulgaria, Greece, Korea, Israel, Italy, Romania, the Slovak Republic, and the United Kingdom.

Source: OECD Questionnaire on Affordable and Social Housing (2016).

7. Conclusion

It is important to note that the tax reform bills do not propose the elimination of the MID. By doubling the standard deduction and eliminating most other itemized deductions, many households will find it beneficial to choose the standard deduction rather than to itemize. Evidence from recent mortgage activity in the United States indicates that up to 7 percent of new borrowers would be affected by a reduction in the mortgage value cap from $1M to $500,000. Because the proposals before Congress fall short of a full elimination of the MID, measured impacts of eliminating the MID from academic literature should be considered an upper bound on potential changes to housing prices and homeownership. We project that equilibrium housing prices will experience a muted reduction of less than 4 percent, while homeownership rates may rise modestly as a result of the current tax reform proposals before Congress.

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