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Who Benefits from the Housing Tax Deductions?

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The deductions for mortgage interest and real estate taxes are important and long-established tax provisions that benefit homeowners and stakeholders in the housing sector. As a result of recent proposal to increase taxes to address the long-term federal budget structural deficit, these deductions have been called into question.[1] The data and estimates in this paper demonstrate that the benefits of these deductions are collected primarily by middle-class taxpayers, with incomes between $50,000 and $200,000. Moreover, greater benefits are earned by larger households and families, such as those with children. The data also show that as a share of household income, larger benefits are collected by families with less than $200,000 income, meaning that these tax rules make the tax system more progressive.

Previous NAHB research has examined the distribution of the claims of these deductions by income and age classes of housing tax benefits.[2] This paper examines the actual tax benefits, or tax expenditures, of these tax rules by income and family-size using IRS Statistics of Income data.

Measuring Tax Benefits

When examining the impacts of tax rules, a key distinction must be made between the amount of a tax deduction claimed and the final tax benefit, or tax expenditure, that a taxpayer receives. A deduction is an amount subtracted from taxable income. On the other hand, the final tax benefit of the deduction is the amount of reduced tax liability that results from claiming a deduction.

As an approximation, the tax benefit of a deduction is equal to the amount of the deduction times the marginal tax rate against which it is applied. For example, if a taxpayer claims a deduction equal to $100 and faces a 25% tax rate, the deduction reduces the taxpayer's taxable income by $100. Thus, the final benefit of the deduction is equal to $100 times 25% or $25, the amount of reduced tax liability the taxpayer realizes from claiming the deduction.

However, a number of factors within the tax system complicate this stylized calculation. First, most of the major tax deductions are claimed on Schedule A of theirs 1040 income tax form. Collectively, these deductions are known as the itemized deductions because the sum of the individually reported deductions is used to reduce taxable income in lieu of the standard deduction. Taxpayers that would claim a relatively small amount of itemized deductions, such that the standard deduction is greater than this sum, will realize a greater tax benefit by forgoing Schedule A and claiming the standard deduction instead. While it is true that for such taxpayers,

[1] See for example, the National Commission on Fiscal Responsibility and Reform proposal at http://www.fiscalcommission.gov/. The commission would eliminate the capital gain exclusion for the sale of a principal residence and the deduction for real estate taxes, and transform the mortgage interest deduction into a generally less valuable 12% tax credit with a $500,000 principal cap.
[2] See: The Mortgage Interest and Real Estate Tax Deductions: Policy Issues July 2008. Housing Economics; and Housing Tax Incentives: Age Distribution Analysis. May 2010. Housing Economics.

the realized values of the Schedule A items, including the mortgage interest and real estate tax deductions, offer no direct tax benefit, it is also important to note that the standard deduction is claimed only because it offers a lower tax payment and not because the itemized deductions are somehow disallowed for these taxpayers.

Some other factors also potentially reduce the tax benefits of the itemized deductions. Taxpayers who pay Alternative Minimum Tax (AMT) can potentially lose the ability to claim certain itemized deductions. For example, the real estate tax deduction, along with the other state/local tax deductions, may not be claimed against AMT taxable income. On the other hand, most mortgage interest payments may be claimed against the AMT, exceptions being home equity loan interest payments made on debt used for non-home improvement purposes.

A final rule that has complicated the claim of deductions in past years is the so-called Pease rule that scales back the total amount of itemized deductions that can offset taxable income. Under the rule, established in 1990, taxpayers with adjusted gross income (AGI) of more than $169,550 (if in place for 2011[3]) lose an amount of their total from Schedule A equal to the amount AGI in excess of the Pease limit times 3%. However the total reduction of itemized deductions cannot exceed 20% of the Schedule A total. Moreover in 2001, legislation scaled back the Pease limitation, with total but temporary repeal in tax year 2010. Nonetheless, for years prior to 2010, the Pease rule has had the effect of imposing a haircut on the effective tax expenditure offered by the itemized deductions for 6 million or more taxpayers.

These three factors, the standard deduction, the AMT and the Pease rule, significantly complicate calculating the direct tax benefit offered by the itemized deductions over a larger number of taxpayers. As a result, the official government scorekeepers, such as the economists at the Joint Committee on Taxation (JCT), employ a sophisticated individual tax model (ITM) that acts like a Turbo-Tax calculator and aggregator using millions of statistically-matched and weighted taxpayers, based on IRS income tax returns. The ITM allows a complete accounting of tax data from income tax returns plus additional estimates from other government data such as the Current Population Survey and the ability to take into account accurate tax form calculation with all applicable tax rules active.

The Tax Benefits of the Mortgage Interest and Real Estate Tax Deductions

Using their ITM, JCT economists can calculate the tax benefit (tax expenditure) of tax law provisions. For the major itemized deductions, including the mortgage interest and real estate tax deductions, JCT produces an income-distribution of these benefits in its annual tax expenditure report.

The following tables present the tax-year 2008 JCT distribution data for the mortgage interest and real estate tax deductions as measured by the amount of total reduced tax liability.[4]

[3] However, the enactment of H.R. 4853 in December 2010 extends the repeal of the Pease rule for tax years 2011 and 2012.

[4] http://www.jct.gov/publications.html?func=select&id=5. Estimates of Federal Tax Expenditures for Fiscal Years 2009-2013. JCS-1-10. Joint Committee on Taxation.

Table 1: Mortgage Interest Deduction

Economic Income	Returns		Amount	
	Number (Ths)	Share	Amount ($M)	Share
Under $10,000	3	0%	-	0%
$10,000 under $20,000	247	1%	75	0%
$20,000 under $30,000	732	2%	358	0%
$30,000 under $40,000	1,478	4%	944	1%
$40,000 under $50,000	2,426	7%	1,836	2%
$50,000 under $75,000	7,033	19%	8,370	10%
$75,000 under $100,000	7,044	19%	10,136	12%
$100,000 under $200,000	13,622	37%	36,278	42%
$200,000+	4,082	11%	27,468	32%
Total	36,668	100%	85,465	100%

Source: Joint Committee on Taxation, JCS-1-10.

Table 2: Real Estate Tax Deduction

Economic Income	Returns		Amount	
	Number (Ths)	Share	Amount ($M)	Share
Under $10,000	3	0%	-	0%
$10,000 under $20,000	151	0%	17	0%
$20,000 under $30,000	604	2%	113	0%
$30,000 under $40,000	1,321	4%	276	1%
$40,000 under $50,000	2,425	7%	602	2%
$50,000 under $75,000	7,405	20%	2,772	11%
$75,000 under $100,000	7,633	21%	3,485	14%
$100,000 under $200,000	14,611	39%	12,042	48%
$200,000+	2,949	8%	5,732	23%
Total	37,101	100%	25,039	100%

Source: Joint Committee on Taxation, JCS-1-10.

One issue to note with this presentation is the income classifier. The JCT uses an income concept that is probably not intuitive to most people. Rather than using gross income or a tax-form definition such as AGI, JCT uses a broader measure of economic income. This definition is equal to AGI plus tax-exempt interest (much of this is bond income), employer-paid FICA tax, employer payments for health and life insurance, workers' compensation, nontaxable Social Security benefits, insurance value of Medicare benefits, AMT preference items (deductions that may be claimed under AMT, such as most mortgage interest payments), and certain foreign income excluded from tax. It is doubtful most people would be able to immediately determine what their economic income is according to this definition. For example, the idea that certain mortgage interest payments are actually income, when claimed as an AMT preference item, distances this definition from what

most people refer to as income. Yet the JCT distribution tables are the only government source of tax expenditure distribution information by income class.[5]

The net effect of using economic income, as opposed to AGI for example, is that most taxpayers would be classified as earning income ten thousand dollars or more higher than the AGI reported on their IRS 1040 return. For tax expenditure reporting, this results in more tax benefit being allocated to the top income classes; classes which taxpayers may not realize include them due to the use of an unfamiliar income concept. Nonetheless, using this income definition, JCT also produces data concerning the income-distribution of tax returns filed, taxes paid and itemization.

Table 3: Income Taxes Paid and Itemized Returns

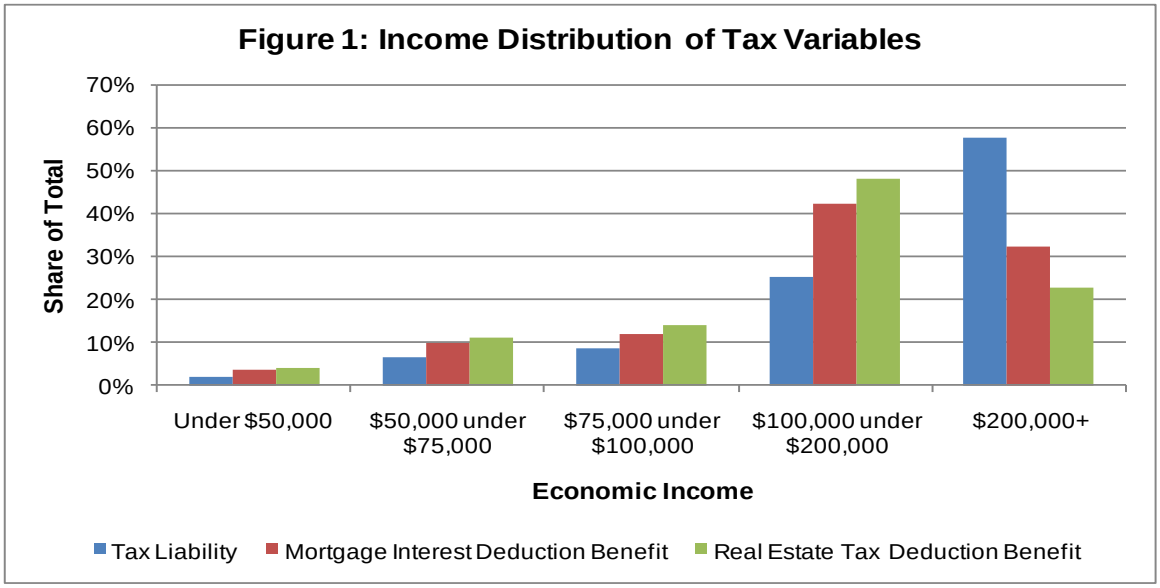
Economic Income	Returns		Tax Liability		Itemized Returns	
	Number (Ths)	Share	Amount ($M)	Share	Number (Ths)	Share
Under $10,000	26,489	17%	(7,847)	NA	670	1%
$10,000 under $20,000	20,806	13%	(17,934)	NA	1,187	2%
$20,000 under $30,000	15,638	10%	(10,037)	NA	1,990	4%
$30,000 under $40,000	14,339	9%	3,839	0%	3,080	6%
$40,000 under $50,000	12,889	8%	16,504	2%	4,246	8%
$50,000 under $75,000	23,329	15%	69,030	7%	10,547	20%
$75,000 under $100,000	15,454	10%	86,568	9%	9,247	17%
$100,000 under $200,000	20,409	13%	255,927	25%	16,506	31%
$200,000+	5,742	4%	582,838	57%	5,397	10%
Total	155,095	100%	978,888	100%	52,871	100%

Source: Joint Committee on Taxation, JCS-1-10.

One striking element of these data, and consistent with the principles of a progressive income tax, is the degree to which the share of total taxes paid is concentrated among the top income classes. For example, those with economic income of more than $100,000 (i.e. those with AGI perhaps as low as $85,000) constitute 17% of all tax filers, yet these individuals and households pay 82% of all income taxes.

Putting all the JCT distributional data together, we gain a picture of the income-distribution of the housing-related itemized deductions. Figure 1 charts these data for various income classes.

[5] The reason for using this income definition is for some taxpayers who wealth may be invested primarily in tax-exempt bonds that may be classified as AGI-poor when in fact they are high-income. While this may be a complicating factor that requires a solution for some tax expenditure analysis, it is not an issue for the housing tax expenditures.



Source: Joint Committee on Taxation, JCS-1-10.

First, contrary to the claims of some economists, the benefits of the mortgage interest and real estate tax deductions are collected primarily by the middle class. Of the total, 68% of the benefits of the mortgage interest deduction, and 77% of the real estate tax benefits are claimed by those earning less than $200,000 (with JCT's broader income measure). These same taxpayers pay only 43% of all income taxes.

Economists typically evaluate the equity of a tax system by determining whether it is progressive (meaning higher income taxpayers pay a larger share of their income in tax), neutral (the same share of income is paid as tax by all taxpayers regardless of income), or regressive (a larger share of income is paid by lower-income taxpayer in terms of tax). A key way of determining this is by measuring each taxpayer's average tax rate, which is equal to the tax paid divided by income. If the average tax rates increase as the taxpayers' income increases, then the tax is said to be progressive.

However, the terminology is often incorrectly used when evaluating the distribution of itemized deductions, and the mortgage interest deduction in particular. Typically, the total tax benefit of the deduction is compared for two taxpayers of differing incomes. In these examples, the higher income taxpayer is shown to have a larger nominal tax benefit (in part because they pay a higher marginal tax rate) with respect to the mortgage interest deduction than the lower-income taxpayer. From this example, it is then claimed the mortgage interest deduction is "regressive."

This is an incorrect approach for measuring equity and progressivity. The correct approach in economics is to measure the burden/benefit of a tax rule with respect to income. For example, suppose two taxpayers: one with $50,000 and a second with $100,000 in income. Further, suppose a tax system in which the first taxpayer pays $5,000 in tax and the second pays $9,000 in tax. Is the tax system progressive? The correct answer is no. The first taxpayer pays 10% of their income in tax, as measured by the average tax rate, and the second taxpayer pays 9%. Because the average rate falls as income increases, the tax system is regressive despite the fact that the second taxpayer pays a larger nominal amount of tax.

The same mistake is being made by many when claiming that because a higher income taxpayer has a larger nominal tax benefit from the mortgage interest deduction, then that stylized example is sufficient to claim that the mortgage interest deduction is regressive.

In fact, the data reported in the tables above demonstrate that the mortgage interest and real estate tax deductions make the U.S. tax system more progressive, not less as is often claimed. This can be seen clearly in the chart above, for which the shares of the total benefits of these two deductions exceed the shares of taxes paid for every income class except the last one, those earning more than $200,000. Eliminating these tax deductions would raise taxes, more than proportionately relative to income, for those earning less than $200,000 and therefore make the tax system less progressive.

To look at this from another angle, taxpayers with less than $200,000 in economic income paid $396 billion in taxes in 2008 according to the JCT figures and earned tax savings of $58 billion from the MID and $19.3 billion from the real estate tax deduction (19.5% tax savings as a share of final tax liability). For taxpayers with incomes of less than $100,000 in income, $142.1 billion in taxes were paid and tax savings of $27.1 billion due to mortgage interest and $7.3 billion due to real estate tax were earned (24% tax savings as a share of final tax liability).

This progressive feature of these tax benefits is explored in more detail below.

Measuring the Tax Benefits Using Adjusted Gross Income

As we noted earlier, the broad income classifier is somewhat misleading and allocates more benefit to higher income classes than is warranted relative to other, more intuitive income measures, such as AGI. To compensate for the lack of distribution data by AGI class, we used the 2004 Public Use IRS Statistics of Income (SOI) data to estimate the tax expenditure totals for the mortgage interest and real estate tax deductions.

The results indeed show that the JCT tables overstate the distribution to the top income class given a more approachable income classifier. Using AGI instead of economic income, and taking into account the itemization, AMT and Pease rules that applied in 2004, we report in Table 4 our estimates of the income distribution of the tax benefit (tax expenditure) of the mortgage interest deduction. In 2004, JCT found that 75% of the MID benefit was collected by those earning less than $200,000 in economic income, while we estimate with the IRS data that 79% of was collected by those with less than $200,000 in AGI.[6]

Table 4: Mortgage Interest Deduction

Adjusted Gross Income (AGI)	Returns		Amount		Average MID Benefit, Percentage of AGI
	Number, thousands	Share	Amount, $mil	Share	
Under $10,000	8	0%	$1	0%	1.1%
$10,000 under $20,000	547	2%	$157	0%	1.8%
$20,000 under $30,000	1,875	5%	$833	1%	1.7%
$30,000 under $40,000	3,207	9%	$1,853	3%	1.6%
$40,000 under $50,000	3,829	11%	$3,204	6%	1.9%
$50,000 under $75,000	9,113	25%	$9,561	16%	1.7%
$75,000 under $100,000	6,951	19%	$10,098	17%	1.7%
$100,000 under $200,000	7,813	22%	$20,051	35%	1.9%
200,000+	2,395	7%	$12,239	21%	1.5%
Total	35,738	100%	$57,997	100%	1.7%

Source: 2004 Statistics of Income (SOI), IRS, NAHB Estimates

[6] http://www.jct.gov/publications.html?func=startdown&id=1602 Correction of Error in Table3: Estimates of Federal Tax Expenditures for Fiscal Years 2005-2009. JCX-13-05. Joint Committee on Taxation.

With respect to whether these tax expenditures are progressive or regressive in the distribution of their benefits, we also estimated the average benefit as a share of taxpayer AGI taxpayer-by-taxpayer. We averaged these shares within the income classes used by JCT and reported the results in the last column of Table 4 (and Table 5 below for the real estate tax deduction). As can be seen above, as a share of household income, the distribution of MID benefits is solidly collected by middle-class taxpayers (those with less than $200,000 in AGI, which is below the often-used $250,000 AGI threshold separating rich from middle class). In fact, for taxpayers with less than $200,000 in AGI, the average tax benefit of the MID is equal to 1.76% of AGI. For taxpayers with more than $200,000 in AGI, it is equal to 1.5%. This is clearly indicative of a progressive tax benefit.

We repeat these estimates with the data for the real estate tax deduction and find similar results. In 2004, JCT find 82% of the benefit falls to those with less than $200,000 in economic income, and we find that 85% of the benefits of the real estate tax deduction are collected by those with less than $200,000 of AGI.

Table 5: Real Estate Tax Deduction

Adjusted Gross Income (AGI)	Returns		Amount		Average RE Tax Benefit, Percentage of AGI
	Number, thousands	Share	Amount, $mil	Share	
Under $10,000	4	0%	$0	0%	0.6%
$10,000 under $20,000	757	2%	$107	1%	0.9%
$20,000 under $30,000	2,027	6%	$399	2%	0.8%
$30,000 under $40,000	3,340	10%	$739	4%	0.6%
$40,000 under $50,000	3,940	11%	$1,231	6%	0.7%
$50,000 under $75,000	9,366	27%	$3,747	19%	0.6%
$75,000 under $100,000	7,110	20%	$3,889	20%	0.6%
$100,000 under $200,000	7,342	21%	$6,757	34%	0.7%
200,000+	1,103	3%	$2,918	15%	0.5%
Total	34,989	100%	$19,788	100%	0.7%

Source: 2004 Statistics of Income (SOI), IRS, NAHB Estimates

As with the MID, the results in Table 5 indicate the benefits of the deduction are greater for middle-class taxpayers. The average benefit for taxpayers with less than $200,000 in AGI is equal to 0.7% of AGI. For taxpayers with more than $200,000 in AGI, the average benefit is equal to 0.5% of AGI. Again, this is proof that the real estate tax deduction's benefits increase the progressivity of the tax system.

Housing Tax Benefits and Household Size

Given the importance of housing demand and individual's life cycle (marriage, children, etc), it is also revealing to examine the claims of the housing-related tax benefits as classified by household or family size. In particularly, one claim made against the mortgage interest deduction is that it incentivizes people to buy a larger (i.e. more expensive) home. While the conflation of size and cost is not exact, particularly if you consider a more expensive home may mean a more energy efficient home that is ultimately more economically efficient and valuable, it may also be the case that the causality is in fact reversed for this claim. It is more likely the case that larger families demand larger homes, and the tax incentives help these families more to finance these homes with debt, particularly for first-time homebuyers who may have less equity in housing.

Using the IRS SOI data, we can proxy for household size by using the taxpayer data that records the number of exemptions on a tax return. In general, the number of exemptions claimed (even if the exemption amount benefit itself is phased-out due to high AGI) is found by counting the taxpayer and, if any, the spouse of the

taxpayer, the children of the taxpayer, and any other relatives and individuals for whom the taxpayer provided at least one-half of their financial support. For most taxpayers, dependents represent the household.

The following tables are the tax expenditure totals by exemption claims on individual income tax returns for the 2004 SOI data.

Table 6: Mortgage Interest Deduction

Number of Exemptions	Returns		Amount		
	Number (Ths)	Share	Amount ($M)	Share	Average
1	8,696	24%	$11,341	20%	$1,304
2	11,074	31%	$16,615	29%	$1,500
3	5,945	17%	$10,313	18%	$1,735
4	6,584	18%	$12,820	22%	$1,947
5+	3,439	10%	$6,907	12%	$2,008
Total	35,738	100%	$57,997	100%	$1,623

Source: 2004 Statistics of Income (SOI), IRS, NAHB Estimates

Table 7: Real Estate Tax Deduction

Number of exemptions	Returns		Amount		
	Number (Ths)	Share	Amount ($M)	Share	Average
1	9,361	27%	$4,339	22%	$464
2	11,395	33%	$6,703	34%	$588
3	5,470	16%	$3,160	16%	$578
4	5,885	17%	$3,779	19%	$642
5+	2,878	8%	$1,806	9%	$628
Total	34,989	100%	$19,788	100%	$566

Source: 2004 Statistics of Income (SOI), IRS, NAHB Estimates

The tables above are consistent with the explanation that larger tax benefits for the deductions for mortgage interest and real estate taxes are collected by larger households. For both deductions, the largest average benefits are collected by households with five or exemptions.

These results are consistent with intuition. Larger households and families require larger homes. And larger homes require additional mortgage debt to finance, particularly for younger homebuyers, who are or may be in the process of having children. These greater home finance costs imply larger deductions for mortgage interest and real estate taxes, and similarly greater tax expenditure totals for the same. And the SOI data is consistent with this interpretation.

Conclusion

The estimates and data in this paper prove the mortgage interest and real estate tax deductions are progressive tax rules that provide the majority of their benefits to middle class taxpayers. Further, the paper demonstrates the larger tax benefits for these deductions are realized by families and households with larger numbers of members, which is consistent with such groups having higher housing demand and costs. Curtailing or eliminating these deductions would thus constitute a tax increase on homeowning families, particularly those with children, as well as younger households who rely more on mortgage debt as a share of household income to achieve homeownership. These findings also mark the importance of analyzing any tax

proposal with respect to income considerations, but also to such variables as age of taxpayer (or generation cohort) and family size.