Making Tax Incentives for Homeownership More Equitable and Efficient

Adam Carasso
C. Eugene Steuerle
Elizabeth Bell

Discussion Paper No. 21

June 2005

Adam Carasso is a research associate, C. Eugene Steuerle is a senior fellow, and Elizabeth Bell is a research assistant at the Urban Institute.

This paper is generously funded by the John D. and Catherine T. MacArthur Foundation. The authors would like to thank Jeffrey Rohaly for his valuable comments and Henry Chen and Mohammed Adeel Saleem for their excellent research assistance and programming.

The Urban–Brookings Tax Policy Center

The Tax Policy Center (TPC) aims to clarify and analyze the nation's tax policy choices by providing timely and accessible facts, analyses, and commentary to policymakers, journalists, citizens and researchers. TPC's nationally recognized experts in tax, budget and social policy carry out an integrated program of research and communication on four overarching issues: fair, simple and efficient taxation; long-term implications of tax policy choices; social policy in the tax code; and state tax issues.

Support for the Center comes from the Annie E. Casey Foundation, the Brodie Price Philanthropic Fund, the Charles Stewart Mott Foundation, the Ford Foundation, the George Gund Foundation, the Lumina Foundation, the Nathan Cummings Foundation, the Open Society Institute, the Sandler Family Supporting Foundation, and others.

Publisher: The Urban Institute, 2100 M Street, N.W., Washington, DC 20037

Contents

Making Tax Incentives for Homeownership More Equitable and Efficient

The U.S. government subsidizes homeownership for most households with ample means while subsidizing rent for only a fraction of those with the least means. A graph of average levels of federal subsidy in relation to the income of households would show a very odd-looking "U"-shaped curve, with the subsidies heaped at either end of the income distribution and little accruing to the substantial numbers of low- to- middle-income households.

In estimates for 2005, the government provides about $150 billion in subsidies to homeowners while paying about $50 billion to renters. The subsidies to owners take the form of such tax incentives as the mortgage interest or real estate tax deductions, while the subsidies to renters are mainly direct outlays, like Section 8 vouchers or public housing. Such massive subsidies affect consumer behavior and therefore, housing (and financial) markets, raising the prices of owner-occupied housing while saddling subsidized renters with a hefty opportunity cost should they consider owning.[1] By almost any standard, the distribution of housing benefits is inefficient and inequitable, with one consequence being a lower homeownership rate among low- and moderate-income individuals.

In this paper, we focus on several reforms that would level out this U-shaped curve and deliver ownership subsidies more equitably and efficiently to households at lower income levels. While we describe a range of options for accomplishing this goal, we specifically model several reforms that more broadly target federal housing tax incentives—such as the mortgage interest and real estate tax deductions. Some of these options have been suggested elsewhere in the research literature, yet even these options have pitfalls that we consider inadequately addressed—even if they do represent steps toward a more level distribution of housing benefits. We conclude with a number of considerations that need to be addressed in designing any comprehensive reform.

Homeownership and the Tax Code

Homes, like pensions, are tax-preferred investments. Homeowners are not taxed on the gross rental income that flows to them as a result of owning their own home,[2] nor are

[1] Economic theory asserts that all or most of any subsidy to households—like the mortgage interest tax deduction—raises their take-home income, consequently raises the price they are willing to pay for a product or service, and therefore eventually raises actual prices for this product or service. In the case of renters, receiving $10,000 a year to rent for instance means they would forfeit this amount if they opted to buy a home, in addition to the costs of owning. In theory, some rental subsidies could be converted to ownership, but in practice, for the most part, it simply is not allowed. For examples, see Rosen and Rosen (1980); Reschovsky and Green (1998); Green and Vandell (1999); Collins, Belsky, and Retsinas (1999); Olsen (2001); and Carasso, Bell, Olsen, and Steuerle (forthcoming).

[2] Since we typically think of the benefits of renting versus owning from the standpoint of cash flow, this concept can be elusive. A renter pays for the privilege to live somewhere whereas an owner pays himself equity while getting to live somewhere "rent free."

they taxed on the capital gains that result from the resale of the home.[3] To see the advantage of such ownership, compare a person receiving interest from bank savings and paying rent with someone who takes the principal from the bank and buys a house. The difference represents the tax saving from homeownership. Homeowners can also deduct their real estate taxes and their borrowing costs from their adjusted gross income. If homeowners were taxed on their gross rental income, then these deductions would have firmer economic grounding. By increasing demand, these special tax preferences likely contribute to higher housing prices for everyone, but especially where land is scarce.[4]

However, eliminating these tax incentives would have significant consequences as tax filers adjusted their behavior. As an example, let's take someone who has $50,000 in the bank and $50,000 of principal left on their mortgage. If the interest rates that apply to the bank account and the mortgage are the same, then the taxpayer pays tax on the interest on the bank account, but deducts the interest on the mortgage from taxes—for a wash. If the government repeals the mortgage interest deduction, however, these homeowners could just close the bank account and pay off the mortgage. The Treasury then has no more money to either reduce the deficit or redistribute to taxpayers in some other way.[5] On the other hand, if the $50,000 of assets is invested in tax-preferred retirement accounts, then the repeal does reduce the tax benefits.

Background on Homeownership and the Value and Constraints of Owning[6]

For most middle-income households, housing wealth is the largest single source of savings, exceeding other assets such as pensions and personal savings. Homeownership serves not only as a financial solidifier, but also as a hedge against economic uncertainty and inflation. Owning a home also correlates with greater educational attainment, greater likelihood of being married, better family outcomes, higher salaries, greater wealth, and increased ownership of other assets.[7]

Homeownership is not ideal for all families. Some who face income or job instability could see their asset position worsened by owning a home. The significant costs of homeownership, such as high mortgage payments and the cost of regular upkeep, make renting more economically feasible for some households. Others may prefer to participate in retirement accounts or other forms of saving. Yet, despite these financial and opportunity costs, homeownership rates reached an all-time high of 69.0 percent in 2004.

Various demographic characteristics, such as income class, marital status, education, and race, can greatly influence ownership. For example, Haveman and Wolff

[3] Assuming the seller lived in the home (as opposed to renting it out) for two of the prior five years. See IRS Publication 523 for details.
[4] More precisely, the increase in demand increases prices most where supply is more inelastic and supply factors, such as land, tend to be scarce.
[5] The financial ramifications and behavioral adjustments would concentrate more heavily among those who purchased homes more recently—as mortgage interest costs are front-loaded—or have larger mortgages.
[6] Much of this section is taken from Carasso et al. (forthcoming).
[7] The education and financial findings are indicated by direct correlation using the 2001 Survey of Consumer Finances. Duda and Belsky (2001) and Collins, Belsky, and Retsinas (1999) catalog the research that underlies the social findings.

(2000) find that asset poverty is particularly high among blacks and Hispanics, as well as household heads with less than a high school education. In terms of homeownership specifically, Bostic and Surette (2000) suggest that racial, ethnic, and income groups, while experiencing similar trends, are affected by different family-related characteristics.

An examination of the 2001 Survey of Consumer Finances confirms these conclusions. Blacks and Hispanics had markedly lower ownership rates than whites, even after adjusting for income and other socioeconomic characteristics (figure 1, first panel). In terms of education (second panel), college graduates had a homeownership rate above 76 percent, while high school dropouts had a homeownership rate of less than 50 percent. Although not shown in the chart, characteristics like age and marriage are also influential factors—married households are much more likely to own a home than unmarried households, and homeownership tends to increase with age (for a more detailed discussion, see Carasso, Bell, Olsen, and Steuerle forthcoming).

Significant disparities also appear among different income classes. By their 60s, persons earning at the 90th percentile of the income distribution have accumulated more than six times the average wage of about $35,000 in 2004,[8] or about $210,000 in home equity; those at the 70th percentile, more than three times; those at median are right at twice the average wage; and those at the 30th percentile, only about 70 percent of the average wage, or about $25,000. The data are reported relative to average wage to allow comparisons with living standards.

Current federal housing policy includes programs that benefit homeowners and renters through direct outlays and tax expenditures. Table 1 provides these spending amounts for a range of years. The largest outlays fall in the discretionary housing assistance category, which includes public housing and the Section 8 rental voucher program. The tax side includes various exclusions and deductions, as well as the Low Income Housing Tax Credit (LIHTC). The LIHTC expansion, seen in later years of the budget, subsidizes suppliers of housing for renters who live in these tax-subsidized projects. An increase in subsidies going through suppliers trends in the opposite direction to U.S. Department of Housing and Urban Development (HUD) outlay programs that have shifted away from suppliers and more directly to households through rental vouchers. Notably, in fiscal year 2005, $41.0 billion in direct outlays go to mainly the Section 8 rental voucher program, Section 8 construction, and public housing.

Meanwhile, the mortgage interest deduction ($68.9 billion), the capital gains exclusion on home sales ($32.8 billion), the exclusion of net imputed rental income on owner-occupied homes ($28.6 billion), and the property tax deduction ($16.6 billion)—at about $147 billion in total—represent more than three-and-a-half times all outlays on housing. For instance, while the government might subsidize a very low income renter household at about $4,800, a high-income homeowner (home value at $500,000) could realize twice that, at $9,990, through exclusion from tax of the gross rental value of the home (which equals deductions on mortgage interest and real estate taxes plus the net rental value after such deductions are taken). Even a family owning a home valued at $150,000 might receive a $1,350 annual subsidy from the government. (See the appendix table for more details). Moreover, the home-related tax deductions are effectively

[8] The average wage used here is that reported by the Social Security Administration.

universal programs for everyone with enough deductions and tax liability; by contrast, only a limited number of subsidies are available to those with incomes low enough to otherwise qualify for them.

At the beginning of this paper, we briefly described the U-shaped curve of federal housing subsidies. Figure 2 uses data from the March 2002 Current Population Survey and the Urban Institute's Transfer Income Model to plot this curve, showing average household subsides by income level. Families in the middle of the income distribution do not qualify for rental subsidies and may lack the means to buy a home; or, having bought one, lack the federal tax liability to itemize real estate taxes and mortgage interest payments. Low-income families receive the bulk of direct assistance, while high-income households benefit from housing tax expenditures. Thought of another way, the direct outlays that provide low-income families with housing subsidies are really *negative* homeownership subsidies because they represent the sums a low-income family must *forgo*—an opportunity cost, in other words—in buying a house. Seen in this light, the "U" curve becomes an "S" curve that effectively discourages homeownership at the low end of the income distribution (figure 3). The reform options we model in this paper are intended to improve the homeowning opportunities for these households.

Past Research and Findings

Many recent evaluations on the effects of tax deductibility on the choice between renting and owning are based on the work of Harvey Rosen (1979a, 1979b), who recently served as chair of the Council of Economic Advisers. Using data from the Federal Housing Administration for 1969 and the Panel Survey on Income Dynamics for 1970, Rosen estimates housing demand and probit tenure-choice functions to measure the absolute impact of current tax rules, and the relative impact of several tax reforms. He finds that repealing the various housing tax deductions would reduce homeownership by 2.4 to 4.8 percentage points. Rosen also estimates that by replacing these deductions with a fixed housing tax credit equal to a 25 percent deduction of mortgage interest, homeownership would rise 1.8 percent among low-income households but decrease 1.6 percent among higher-income households. The study also suggests that the failure to include tax effects in tenure-choice models biases estimated income and price elasticities.

In further research along this vein, Rosen and Rosen (1980) develop an aggregate model of choice between renting and owning, correcting for price elasticity biases from earlier models by explicitly allowing for the fact that the deductibility of local property taxes and mortgage interest payments helps determine the effective price of owner-occupied housing services. The authors conclude that, if all personal income tax benefits for homeownership were eliminated, the homeownership rate would decrease by 4 percentage points. By extension, they find that about one-fourth of the increase in homeownership since 1945 can be attributed to these federal tax incentives.

The modeling path that was laid out by Rosen and Rosen has more recently been taken up and modified by Reschovsky and Green (1998) and Green and Vandell (1999). In pursuit of a more efficient way to encourage homeownership through the income tax, Reschovsky and Green estimate housing tenure and housing expenditure equations using the 1990 Public-Use Micro Data (PUMS) file of 9,200 households, updating the income

and expenditure data to 1997 using the Consumer Price Index. They find that a 21 percent fixed mortgage interest credit would raise homeownership by 3 percentage points, while a fixed refundable credit of $850 would raise the ownership rate by 5.3 percentage points. A fixed dollar scheme boosts homeownership rates more than a fixed percentage and favors more the average low-income household. Regardless of the type of credit, the authors find that any movement from a mortgage interest deduction to a refundable credit produces a more equal distribution of tax benefits across income levels.

Green and Vandell devise a similar probit tenure-choice model to explore the effects of changes in homeownership deduction rules. They estimate this model from both a "micro" standpoint, using individual household PUMS data, and a "macro" standpoint, employing state-by-state data compiled from census information. Following the lead of Rosen and Rosen, to further correct for elasticity problems, they include state dummies in their "micro" model. Running simulations based on the results of these models, they find that tax deductibility of mortgage interest and property taxes has a substantial impact on tenure choice; the structure of these deductions affects the distribution of homeownership across income classes; and by replacing the current structure of deductions with a revenue-neutral level tax credit to all homeowners, homeownership would increase 3 to 5 percentage points in the aggregate and up to 8 percentage points for the lowest-income households.

Although they do model policy alternatives, both Reschovsky and Green and Green and Vandell focus their main attention on the policy response (elasticities) in terms of homeownership take-up generated by these tax reforms and less on details of the policy design or alternative portfolio realignments (among non-housing assets and liabilities) of affected households.

Collins, Belsky, and Retsinas (1999) detail the low homeownership rates for lower-income families and also note that our current system of housing subsidies pays the well-off to own while paying the poor to rent. They propose a targeted tax credit to boost low-income homeownership: the Low-Income Second-Mortgage Tax Credit (LISMTC). Under their intermediate assumption set, an LISMTC would assist nearly 66,000 low-income buyers at a cost of $100 million in annual allocations.

Though Olsen (2001) focuses primarily on subsidies for rental units, he nonetheless touches on the empirical and analytical problems that affect study of all housing programs. Examining the entire continuum of housing subsidies, he concludes that housing vouchers are the most effective way to encourage homeownership among low-income families.

In summary, past research has found that federal tax incentives have both a marked effect on peoples' decisions whether to rent or to own and on the price they pay to do either. Therefore, repealing or substantively altering current tax incentives might significantly affect households' decisions concerning buying a home or maintaining homeownership, with a positive effect on homeownership at lower incomes, by lowering the price of owning a home relative to renting. The authors say little about whether households might also realign their overall investment portfolios as a result. Meanwhile, simulations of revenue-neutral reforms to the existing tax incentives suggest that converting the mortgage interest tax deduction to a fixed percentage rate or flat credit has

more equitable or even distribution results, increasing benefits at the bottom and middle while reducing benefits at the top of the income distribution. Moreover, the gains to homeownership rates at the bottom and middle outweigh the losses at the top, boosting the overall homeownership rate by several percentage points. However, manipulating tax incentives may not be the only effective way to boost homeownership among desired groups. As we shall see, it should be viewed as one lever within a systemic remedy that would also include allowing households more readily to convert current Section 8 and public housing rental subsides (vouchers) into homeownership vouchers.

The Impact of Current Tax Incentives and How We Might Improve Them

Before we can discuss reform options, we should have an understanding of how the largesse of current tax incentives is distributed across households and income groups. To illustrate this, we draw on the Urban Institute–Brookings Institution Tax Policy Microsimulation Model to estimate who benefits from the mortgage interest and real estate tax deductions.[9] Table 2 gives the current, combined distribution of the mortgage interest and real estate tax deductions by quintiles of cash income.[10] The deductions were worth $80.9 billion in FY 2005.[11] Tax filers in the top quintile receive 82 percent of the benefits and filers in the fourth quintile receive 15 percent, while filers in the bottom quintile receive just 0.3 percent.

We simulate reform options that would level out this distribution of benefits across homeowners (and potential homeowners). At the same time, we try to provide greater realism in some options by avoiding major disruptions to markets. Following the guidelines of Reschovsky and Green (1998), the design of any new element to the current tax structure should be based on three principles: equity, efficiency, and simplicity. A mortgage interest credit should minimize distortional taxpayer behaviors, produce larger tax benefits for lower-income families, and, as one consequence, increase the overall

[9] Please see www.taxpolicycenter.org for details on the tax model and its data sources. Also, note that the revenue and distributional estimates produced for this paper are *static*, meaning that they do not factor in tax filers' behavioral responses to the changes in the tax law that are considered.

[10] A quintile is a fifth of the population of concern. The first or bottom quintile is the poorest fifth, the second quintile is the next poorest, on up until the fifth or top quintile, which is the richest fifth of the population. This top fifth can be further subdivided into the top 10 percent, top 5 percent, and so on, which is important to break out since a substantial fraction of U.S. wealth and income is concentrated in the hands of a modest fraction of the population.

Cash income includes wages and salaries, employee contribution to tax-deferred retirement savings plans, business income or loss, farm income or loss, Schedule E income, interest income, taxable dividends, realized net capital gains, Social Security benefits received, unemployment compensation, energy assistance, Temporary Assistance for Needy Families (TANF), workers' compensation, veterans benefits, Supplemental Security Income, child support, disability benefits, taxable IRA distributions, total pension income, alimony received, and other income including foreign earned income. Cash income also includes imputed corporate income tax liability and the employer's share of payroll taxes. This puts the income measure on a pretax basis.

[11] These estimates come from the tax model. Separately, the home mortgage interest deduction was worth $69.7 billion in FY 2005 and the real estate tax deduction was worth $18.6 billion. Note that, due to interaction effects, the cost of the two deductions taken together is $80.9 billion rather than $88.3 billion. That is, once one deduction is eliminated, the household is even less likely to be able to make full use of the other deduction since a standard deduction—offered in lieu of itemized deductions—is greater in value than remaining itemized deductions.

homeownership rate. It should also be easy for both taxpayers to use and the IRS to administer.

Notably, we take a different tack than past researchers in the design of these credits. Both current tax incentives and these past proposals for reforms provide a greater subsidy for homebuyers who *borrow* more, regardless of income, assets, or, sometimes, cost of home. Some of the options we describe would convert the real estate tax deduction into a credit and so reward homeownership while diminishing the tax incentives to purchase ever-larger mortgages.

The options we discuss are all *revenue-neutral* and target families at lower and moderate incomes who, for the most part, do not currently itemize on their tax returns and may have little or no tax liability.[12] The tax credits are refundable—meaning that tax filers can claim the maximum amount even if they lack the tax liability to offset. They are financed by removal of some tax benefits for the mortgage interest deduction or the real estate tax deduction. These options are meant to illustrate alternatives to current law and expand upon the discussion in the literature. Still, they are not meant to be considered fully developed policy proposals. The literature does not yet deal with transition issues to a new world, potential restrictions on availability of benefits to newer homebuyers and, as discussed above, behavioral issues such as using existing saving to pay off mortgages when interest payments related to those mortgages are not deductible.

- Option 1–Fixed Percentage Mortgage Interest Credit

  Repeals the mortgage interest deduction and replaces it with a fully refundable tax credit equal to 16.7 percent of mortgage interest paid.

- Option 2–Flat Mortgage Interest Credit

  Repeals the mortgage interest deduction and replaces it with a fully refundable tax credit equal to 1.03 percent of home value up to $100,000 (maximum of $1,030).

- Option 3–Flat Real Estate Tax Credit

  Repeals the real estate tax deduction and replaces it with a fully refundable tax credit equal to the lesser of $280 or 50 percent of real estate taxes on the primary residence.

- Option 4–Flat Tax Credit in Lieu of Mortgage Interest and Real Estate Tax Deductions

  Repeals the mortgage interest and real estate tax deductions and replaces them with a single, fully refundable tax credit equal to the lesser of $1,400 or 100 percent of the real estate tax on the primary residence.

We considered several additional reforms that we do not model in this paper because of limitations on the model itself and on available information on behavioral adjustments. One design would provide a flat tax credit for first-time homebuyers,

[12] We define revenue-neutral as creating less than a $2 billion change to total tax revenues.

claimable for the first 10 or 20 years of ownership. Its costs to the Treasury would increase each year based on take-up, but even at maturity it would cost less than a credit available to all homeowners. Helping finance this credit might be a gradual ratcheting down of the mortgage interest deduction in the form of a descending cap on the maximum applicable loan value, currently $1 million for a primary residence. A second option would take a systemwide approach to reforming housing incentives, using the monies freed up by any capping of the mortgage interest and real estate tax deductions to expand housing ownership vouchers.

These attendant issues of implementation, behavioral adjustment, and administration that accompany the first four options plus the un-modeled reforms we briefly describe above are addressed later in the "Caveats, Considerations, and Alternative Reform Designs" section.

Summary of Methodology

Using the Urban–Brookings Tax Policy Microsimulation Model, we calculate the revenue and distributional effects of each reform option. The model uses the 2001 Statistics of Income (SOI) public-use file, which essentially replicates the data taxpayers enter on their tax forms—their sources of income, exemptions and exclusions, adjustments to income, deductions, credits, and tax liability—for about 140,000 records.[13] We then impute additional, pertinent wealth and tax values to each tax record, using a pooled sample of the 1998 and 2001 Survey of Consumer Finances (SCF). These values include home value, mortgage value, the interest component of monthly mortgage payments,[14] and real estate taxes.

The imputations are done by income class, tax filing status, and by whether households itemized and or took the standard deduction on their tax returns. Non-filers are included in these imputations, although it is primarily those over age 65 who receive positive housing wealth and related tax deductions.

- Different tax filing statuses exist for single persons, heads of household with dependents, and married couples. This consideration is key when making imputations, as married couples tend to own more, and more valuable, assets than single persons, for example.
- Itemizers file a Schedule A on their 1040 tax form usually whenever the deductions they claim—such as property taxes, mortgage interest, medical expenses, or a host of other deductions—exceed the standard deduction, whereas non-itemizers just take the standard deduction. We do *not* observe how much mortgage interest or real estate tax non-itemizers pay in the SOI, since they do not itemize these data on their tax forms, and so we must impute these amounts from

[13] Additionally, the tax model relies on data from the 2002 March Current Population Survey to synthesize a suitable number of *non-filer* records—persons who, for various reasons, such as being very low income or retired, report no taxable income.

[14] These values are not actually contained in the SCF but rather calculated based on survey respondents' answers to questions concerning the disposition of their mortgage loan. We thank Kevin Moore at the Federal Reserve in Washington, D.C., for extensive help in developing the calculator for mortgage interest as well as for other sources of itemizeable deductions in the SCF.

the SCF to our SOI tax records.[15] Note that the SCF's basic unit of analysis is the primary economic unit (basically, households) while the SOI's unit is called a tax unit,[16] or any person or collection of persons claimed on one tax return, so a matching process is necessary to ensure that, within each quintile, the numbers of records and the aggregate amounts (e.g., the aggregate amount of mortgage interest deduction claimed) are comparable between surveys.

We simulate the effects of the reform on the federal individual income tax code against a baseline of tax year 2005 current law. We adjust all parameters in the SOI and the SCF for price and income growth between 2001 and 2005. For more detail on the Urban–Brookings Tax Microsimulation Model and the methodology behind the wealth imputations, we refer the reader to Rohaly, Carasso, and Saleem (2005).

Results and Discussion

We detail the results of our tax reform simulations, providing the distributional impact by cash income class in tables for each option. Since each option modeled is revenue-neutral, the effect is to redistribute tax benefits from some households to others, which necessarily creates winners and losers. We define winners as those receiving greater tax relief and losers as those receiving less relief. These runs are static, so we do not model any changes to the homeownership rate, to the supply of owner-occupied housing, or changes in households' investment portfolios due to lost deductions that then change the aggregate amounts of income from other sources such as interest received that are subject to tax. The simulations, however, do take into account tax filers who might switch from being itemizers to non-itemizers as a consequence of losing the mortgage interest or real estate tax deductions.[17]

Table 3 shows the distributional implications for Option 1, which provides the equivalent of 16.7 percent of mortgage interest paid. The fixed percentage mortgage interest credit provides less than $100 in tax benefits on average to tax filers in the bottom two quintiles and about twice that to households in the third and fourth quintile. Those in the top quintile lose more than $500 in tax benefits due to the repeal of the mortgage interest deduction. Notably, though, the adjacent column shows that, in percentage terms, the tax benefit gains are very large for filers in the first and second

[15] Very briefly, we perform the imputations by first running separate probits for each tax filing status and for itemizers separate from non-itemizers (which are differentiated in both the SOI and the SCF) to gauge the likelihood that a household owns a certain asset or pays a certain tax. Then, we run ordinary least squares regressions to gauge the level of asset owned or tax paid. Finally, we adjust the imputed values to match real-world SCF totals.

[16] A tax unit is one tax return and equals one record in the SOI. For example, a single person who files a tax return and a married couple claiming three children who files a tax return are each considered a single tax unit. In the SCF, however, two or more individuals living together (e.g., single roommates or a married couple that files separate tax returns) may be considered one household although they file multiple tax returns.

[17] This point is important when tallying the cost and distributional impact of such tax reforms. For example, suppose the standard deduction is $5,000 and a homeowner claimed $6,000 of mortgage interest paid in the past year. If the mortgage interest deduction is repealed, the homeowner's taxable income does not suddenly increase by $6,000—the homeowner will now claim the standard deduction, so her taxable income effectively increases by only $1,000.

quintiles while the tax benefit losses are minute for filers in the top quintile—less than 2 percent. The next two columns show the share of federal housing tax benefits that goes to each quintile under the baseline and the reform. We see that the reform redistributes very modestly—most from the top quintile to the fourth and third quintiles. As a consequence of the reform, the top quintile receives only 63.7 percent of housing tax benefits, compared with 81.9 percent under current law.

The first option emulates the design of the reforms modeled by Rosen 1979 (a, b), Reschovsky and Green (1998), and Green and Vandell (1999). While this option produces a more progressive distribution of housing tax incentives relative to current law, it also provides a new, potentially positive incentive to hold onto borrowing for lower-income households, a somewhat negative feature. This holds especially when the credit rate is above the tax rate (which, with a refundable credit, may be zero for some households), since even borrowing against one's house to put money into interest-bearing assets can then make money. Like existing subsidies, Option 1 also tends to supply the greatest benefit to those households with the highest levels of housing value.

A related problem with tying subsidies to interest rates is that, especially in periods of inflation, the tax deduction for interest payments tends to subsidize borrowing, which in turn encourages households to make or maintain investments that may not otherwise be productive (or be less productive) and therefore, misallocate their wealth (Steuerle 1985). Hence, the second, third, and fourth options, which convert the home-related tax deductions into a capped, flat credit related to the amount of home value or real estate taxes paid, allow the tax code to favor homeownership while being more neutral toward borrowing levels.

The distribution for Option 2—which turns the mortgage interest deduction into a flat, capped credit of $1,030 for those owning a home worth $100,000 or more—is shown in table 4. Option 2 achieves a much greater amount of redistribution than the first option: more than $200 on average to the first quintile of households, nearly $350 to the second quintile, and more than $300 and $200 to the third and fourth quintiles, respectively. The top quintile loses about $1,135 per tax filer, since the credit is a flat amount and no longer provides any additional tax incentive to those who borrowed more than $100,000. Again, in percentage terms, the adjacent column shows large gains for those lower down on the income ladder and minor losses (2.5 percent for the fifth quintile) for those at the top. Option 2 consequently makes a more dramatic impact on overall redistribution—those earning in the top quintile now receive 41.5 percent of all housing tax benefits, half of what they received under current law. The redistributed housing tax benefits go to the bottom four quintiles in comparable amounts.

Note that this proposal must be distinguished from those in the earlier literature that gave a flat credit for those holding onto mortgages. Limiting the credit to mortgage holders at first appears to save money by denying the credit to those who own their homes outright, as do many of those in later stages of their lives. However, in point of fact, under such a new law these households would simply take out another mortgage to qualify for the credit.

Table 5 gives the distribution of tax benefits for Option 3, which would offer the minimum of a $280 credit or 50 percent rebate against real estate taxes paid in lieu of the

current real estate tax deduction. Crediting tax filers for their real estate taxes involves lesser amounts of money to redistribute. Filers in the bottom quintile receive $80, while those in the second and third quintiles each receive about $100, and filers in the fourth quintile receive $52 on average. Filers in the top quintile lose $288 on average. This option provides the least redistribution from top to bottom of the four we model, although it benefits the four lower quintiles roughly equally.

In table 6, we see the distribution of tax benefits for Option 4, which is one combination of options 2 and 3: a refundable tax credit equal to the lesser of $1,400 or 100 percent of real estate taxes paid and financed by the repeal of both the mortgage interest and real estate tax deductions. Under this reform, tax filers in the second and third quintiles receive the most tax benefits—more than $350 on average. Even those in the bottom quintile receive more than $200. Tax filers at the top lose $1,264 on average, a 2.8 percent increase in their tax liability. The top quintile receives 37.3 percent of total housing tax benefits under the reform, compared with 81.9 percent under current law; the lowest quintile, by comparison, rises from a virtual 0 percent share to 8.2 percent of all benefits, the second quintile rises from 0.5 to 13.2 percent, and the third from 3.0 to 16.2 percent. These increases are substantial and slightly greater than under Option 2.

In summary, the reforms we simulate generally produce a number of moderate-size winners at the bottom and middle of the income distribution and a few bigger losers at the top, in dollar terms. However, we note that the tax benefit loss to tax filers at the top is still moderate in relation to their overall tax liability. Of course, there would be exceptions, such as the taxpayer who now takes very large deductions for purchases of very expensive home and second homes.

Note that we have not adjusted these estimates for increases or decreases in homeownership. A primary emphasis of earlier studies was to measure these changes in patterns of homeownership rather that to provide details on reform design. As a consequence, these simulations really do not take into account many other types of behavioral adjustments that would also affect the revenue estimates if reform design issues were taken more seriously. The adjustments from changes in homeownership patterns they discover would probably be fairly moderate, perhaps on the order of 10 percent.

We discuss the two other reform options that we do not model—a first-time homebuyer credit and an expanded housing voucher program—in the following section. The framework of the former might be applied to any of the four options we model, while the latter requires some broader thinking and reflection.

Caveats, Considerations, and Alternative Reform Designs

Proposals to convert deductions into tax credits—in particular, deductions that affect pricing within one of the nation's largest economic sectors as well as the investment portfolio choices of a large swath of the nation's owners *and* renters—require careful consideration as to how they are designed. Our goals in this paper are not merely to note the inequities and inefficiencies of existing subsidies, nor even to show the approximate redistribution that might take place if some alternative world was somehow fully in place. We also want to advance the discussion of how some redistribution of housing subsidies

might realistically be designed and to address some of the major issues that drafters of an alternative law would face. This section, therefore, covers four broad, interrelated categories: tax credit design and targeting, coordination with other programs, behavioral adjustments and credit take-up, and credit and tax administration.[18]

Credit Design and Targeting

The models estimated here and in the previous literature assume that some new world has been fully implemented, replacing an old one. In point of fact, transition rules would be required to mitigate the tax burden and behavioral adjustment on those who currently take advantage of existing subsidies. The $1 million limitation in current law on home mortgages for which interest deductions are allowed, for instance, is not adjusted for inflation. Recent years of low inflation, however, have effectively meant that the real value of that limitation is no longer falling at the rate that once applied. One could speed up that process over time by applying a gradual reduction in that cap. Ratcheting down the cap, therefore, might be one way to gradually implement reform.

A second design issue is how much of any new credit should be spent on existing homeowners. No reform is really going to eliminate the effective exclusion of the gross rental value of homeownership. Giving an additional subsidy to those who have already paid off their mortgages, therefore, probably does not make sense. As a related matter, if the goal is to increase homeownership, granting tax benefits to those already owning homes, even if they do hold onto mortgages, would do little to increase their incentives to buy homes (although it might affect their incentives to retain them). These considerations imply that any new subsidy might be better directed to new or recent homebuyers. A credit might be provided only for the first, say, 20 years of homeownership (whether consecutive or not). Homebuyers, however, would not immediately qualify if they had already owned a home for more than 20 years, and were simply selling an old house and moving into a new one.

A third issue is that any credit based on real estate taxes paid could give state and local governments incentives to assess such taxes. However, the real estate tax deduction does that to some extent now. While economists often object to incentives that change behavior, a case can be made that some incentive for real estate might make the tax system more neutral toward real estate investment, especially among higher-income households. In effect, when it comes to capital in the form of homeownership, the real estate tax functions like a back-door income tax. That is, real estate taxes the value of owner-occupied housing while the income tax exempts the returns from such capital. Hence, even if a credit did provide states some incentive to assess real estate taxes, that particular distortion may be limited given the other preferences for homeownership already present.

Fourth, a credit for all homeowners could increase complexity of tax filing. Those currently not taking interest and property tax deductions instead get a standard deduction

[18] We dodge the question of a new credit's impact on the supply and demand of housing. Properly addressing this question is a study worth undertaking in its own right and prices also depend on the related supply and demand for rental housing. For example, some supply changes might involve merely converting more rental units to condominiums.

that is above the amount of interest and property taxes they pay. If all taxpayers would now have to report interest and property taxes, tax filing burdens would rise. The simpler the design of the credit, the less this issue would arise.

Fifth, the existing alternative minimum tax (AMT) is gradually reducing already the number of taxpayers who can make use of any state and local tax deduction. Any attempt to cap mortgage interest or real estate tax deductions would need to be coordinated with the AMT (and, we believe, its inevitable reform) in future years.

Coordination with Other Programs

While this paper has focused on redesigning tax incentives alone, two very important and related developments in the housing expenditure area have not been coordinated at all with housing tax policy. Currently, several barriers block a large-scale conversion of rental vouchers to ownership vouchers. No uniform national system is available to rank families on a waiting list. Federally mandated requirements impose administrative inflexibility and disincentives on local jurisdictions—housing authorities receive fees for rental vouchers, which makes it more likely they will offer such vouchers over homeownership ones. Most important, housing authorities have no incentive to grant vouchers to individuals that might purchase housing elsewhere (Carasso, Bell, Olsen, and Steuerle 2005).

HUD has made modest proposals to expand these ownership opportunities, but so far these proposals have not really dealt with the constraints just noted. One viable reform that would not entail large changes in tax administration would be to gradually expand ownership options among those who now receive housing vouchers. This might be achieved by taking the revenues gained from capping other existing housing tax benefits.

Along a separate track, the government has legislated and begun funding Individual Development Accounts (IDAs). A primary use of such IDAs is to help individuals save for the down payment and closing costs for a first-time home purchase. The types of housing credits we have suggested here might be expanded to include credits for those saving for home purchase, not just those who buy or have bought. If IDAs are continued, it would be worthwhile to consider marrying any new tax incentives to the present IDA structure. One potential advantage is that such a reform would make the tax system more neutral toward those saving to buy homes and to those who buy homes with very high amounts of debt relative to equity. Over the long run, the former type of purchaser may be more likely to withstand downturns in the housing market better resist the threat of foreclosure in such a market. If IDAs are to survive, bringing them more into the mainstream of saving policy is an important step forward.

Behavioral Adjustments and Credit Take-Up

The previous literature on conversion of tax incentives has dealt somewhat with the question of whether homeownership would increase if lawmakers legislated a more even distribution of ownership benefits that better rewarded low- and moderate-income households. The answer clearly seems to be “yes.” If the price of housing is lowered for low- and moderate-income taxpayers, they will be more likely to purchase homes. Meanwhile, restrictions for higher-income households would more likely affect the

amount of housing they purchase rather than the decision to own. However, many other adjustments also require consideration.

For refundable credits—whether related to interest payments or not—a number of those already owning homes and itemizing their deductions would end up winners under a new system. That is, winners would not just be those who currently do not claim deductions or even those who fall in lower tax brackets because of reform. Take the case of a person with $5,001 of itemized deductions, which she would take in lieu of a standard deduction of $5,000. In effect, a maximum of only $1 of interest and property tax deduction is taken on net. But the taxpayer would almost assuredly claim a new tax credit, along with the standard deduction, in lieu of getting one more dollar of deduction under the old law.[19]

We have estimated the number of such "switchers" to a standard deduction under the reform options considered here. In general, their gains from switching use up about 5 to 20 percent of the total gains to all "winners" under various reforms. The more a reform option reduces allowable deductions, the larger the number of taxpayers who become probable switchers. Or put another way, some of those currently itemizing do not get to use all their housing deductions. This subgroup can still gain from an alternative subsidy even though they lose some of the subsidy they have now.

Another major behavioral response of households is to reshuffle their investment portfolios in response to imposed limitations on the interest deductions they may take. The housing literature to date has taken little account of the possibility of such "tax arbitrage" opportunities. To see this, note that the tax code contains incentives to invest not just in housing, but also in other tax-preferred assets. And both types of investment may be leveraged up through borrowing in such a way that the taxpayer may (a) take interest deductions on the borrowing while (b) buying assets whose returns are not included in taxable income.

We have already noted that the gross rental value of the home is not taxed for homeowners, so for some taxpayers, limitations on interest deductions are ineffective. They can simply reduce their deposits into taxable saving instruments and wind up in the same tax position as before. However, that is not the end of the story. It turns out that taxpayers often hold only modest amounts of taxable assets, often for liquidity purposes. If their remaining savings is also in other tax-preferred forms, such as 401(k) and other retirement plans, then limitations on interest deductions can be constraining after all. For instance, the taxpayer who switches out of a 401(k) or makes fewer deposits to pay off a mortgage will still wind up with higher taxable income.

Still, as a bottom line, the simplified estimates provided above and in the existing literature concerning a wholesale removal of the mortgage interest deduction must be discounted significantly. For instance, once these other portfolio shifts take place, the size of the maximum credit financed by Option 2 (which repeals the mortgage interest deduction) might fall from $1,370 to, say, $1,000. These portfolio shifts, however, do not occur with respect to limitations on the real estate tax deduction.

[19] There are other types of switchers as well. Some tax filers may get bumped up to a higher marginal tax rates by the loss of a deduction or the conversion of a deduction (which lowers taxable income) to a credit.

Credit and Tax Administration

To implement a credit scheme requires basing the credit on items of information that are easily obtainable and can be administered relatively easily by the IRS. That is one reason we have suggested that a credit might be based upon real estate taxes paid—an item that can be tracked with some ease. Despite many problems with basing a credit on mortgage interest paid, from an administrative standpoint, there *are* reports made to IRS and taxpayers on the value of these payments.

The new credit would face some problems that exist under current law as well. For example, even a second mortgage in current law must be treated differently if the purchased property is rented out to others rather than used by the homeowner. Debates have arisen over how to treat boats and recreational vehicles when people use them as primary or secondary residences. Some similar issues would arise in the case of a credit.

What could make tax administration more complex is the greater universality of reporting that accompanies a more universal subsidy. Low-income taxpayers, for instance, generate significant errors in reporting to the IRS for a variety of reasons, including changing around household arrangements when receipt of (or maximization of the value of) some tax benefit is conditioned on the presence of a spouse or children. These concerns may also lead to a consideration of a direct expenditure program rather than a tax expenditure one—although the issues do not disappear simply because they move beyond IRS's responsibility. Significant simplification might also be possible if the credit were based on real estate taxes paid and the payments made more directly to localities, thereby bypassing some reporting responsibilities for households.

Conclusion

Federal housing benefits are not distributed very rationally, efficiently, or equitably. Instead, the government bestows some rental subsidies in the form of direct outlays on only some households with modest means, while providing generous ownership subsidies in the form of tax incentives to most of those with ample means. The rental subsidies *in and of themselves* provide an additional barrier for low-income families to own, while the ownership subsidies encourage excessive borrowing and inefficient wealth allocation among households that by and large *already* possess the means to own a home. While homeownership is not realistic for all people—given the costs of ownership and risks involved and particular needs of some households—there is little excuse for creating a subsidy system that strongly discourages many moderate-income people from owning.

Converting home-related tax deductions into refundable tax credits introduces greater progressivity into the system and encourages homeownership among low- and middle-income taxpayers. A flat, capped credit is more progressive than a fixed percentage rate credit tied to interest paid and potentially does not contain some of the undesirable incentives to hold onto debt. Any loss of mortgage tax relief by households at the top may do less to affect the rates of homeownership than to reduce demand for very high value homes or second homes. Overall, the reforms we simulated generally produce many modest-size winners at the bottom and middle of the income distribution and some

larger losers at the top—although even then, the losses are usually only a moderate percentage of income.

Thinking more broadly about reform requires moving beyond these types of calculations to a number of very important issues of design. Policymakers may decide they do not wish to provide a blanket subsidy to all groups—such as those who have paid off their mortgages or who own multiple homes—but rather, to concentrate scarce budgetary resources on those who are about to buy their first home or are in the early stages of home tenure. A credit that applies to the first 10 or 20 years of ownership and is financed by a very gradual phasedown of current home-related tax deductions may better align federal policy with homeownership promotion while minimizing federal interference with existing household investment decisions. More broadly, a variety of reforms should be considered that would tend to level out the U-shaped curve of *rental and ownership* subsidies for housing, as well as reduce or remove the negative incentives for *ownership* among low- and moderate-income households.

References

Bostic, Raphael W., and Brian J. Surette. 2000. "Have the Doors Opened Wider? Trends in Homeownership Rates by Race and Income." Working Paper. Washington, DC: Federal Reserve Board.

Carasso, Adam, Elizabeth Bell, Edgar O. Olsen, and C. Eugene Steuerle. Forthcoming. "Improving Homeownership among Poor and Moderate-Income Households." Washington, DC: The Urban Institute.

Collins, J. Michael, Eric S. Belsky, and Nicolas P. Retsinas. 1999. "Towards a Targeted Homeownership Tax Credit." Washington, DC: The Brookings Institution.

Duda, Mark, and Eric S. Belsky. 2001. "The Anatomy of the Low-Income Homeownership Boom in the 1990s." Low-Income Homeownership Working Paper Series. Cambridge, MA: Joint Center for Housing Studies, Harvard University.

Green, Richard K., and Kerry D. Vandell. 1999. "Giving Households Credit: How Changes in Tax Policy Could Promote Homeownership." *Regional Science and Urban Economics* 29(4): 419–44.

Haveman, Robert, and Edward N. Wolff. 2000. "Who are the Asset Poor? Levels, Trends, and Composition, 1983–1998." Working Paper 00-12. St. Louis: Center for Social Development, Washington University in St. Louis.

Internal Revenue Service. 2005. *IRS Publication 523: Selling Your Home*. Washington, DC: The Internal Revenue Service.

Olsen, Edgar O. 2001. "Housing Programs for Low-Income Households." Working Paper 8208. Cambridge, MA: National Bureau of Economic Research.

Reschovsky, Andrew, and Richard K. Green. 1998. "Tax Credits and Tenure Choices." In *Proceedings of the National Tax Association Ninety-First Annual Conference* (401–10). Washington, DC: National Tax Association.

Rohaly, Jeffrey, Adam Carasso, and Mohammed Adeel Saleem. 2005. "The Urban–Brookings Tax Policy Microsimulation Model: Documentation and Methodology for Version 0304." Washington, DC: The Urban Institute.

Rosen, Harvey S. 1979a. "Owner-occupied housing and the Federal Income Tax: Estimates and Simulations." *Journal of Urban Economics* 6(2): 247–66.

———. 1979b. "Housing Decisions and the U.S. Income Tax: An Econometric Analysis." *Journal of Public Economics* 11(1): 1–23.

Rosen, Harvey S., and Kenneth T. Rosen. 1980. "Federal Taxes and Homeownership: Evidence from Time Series." *The Journal of Political Economy* Vol. 88(1): 59–75.

Steuerle, C. Eugene. 1985. *Taxes, Loans, and Inflation: How the Nation's Wealth Becomes Misallocated*. Washington, DC: Brookings Institution Press.

Appendix

This table demonstrates in a simple manner how different households tend to benefit from various federal subsidies. Some low-income households get rental subsidies, some do not, but generally speaking, none benefit from ownership subsidies in the tax code. Middle-income borrowers benefit from tax subsidies for ownership, with such subsidies proportional in value to the value of a home that is owned and the marginal tax rate of the homeowner. Higher-income households usually benefit the most because of higher tax rates and higher home valuation. Note that the tax preferences are indifferent to the interest and real estate tax deductions made, and that removal of those deductions would reduce the preferences the most for those with the most debt.

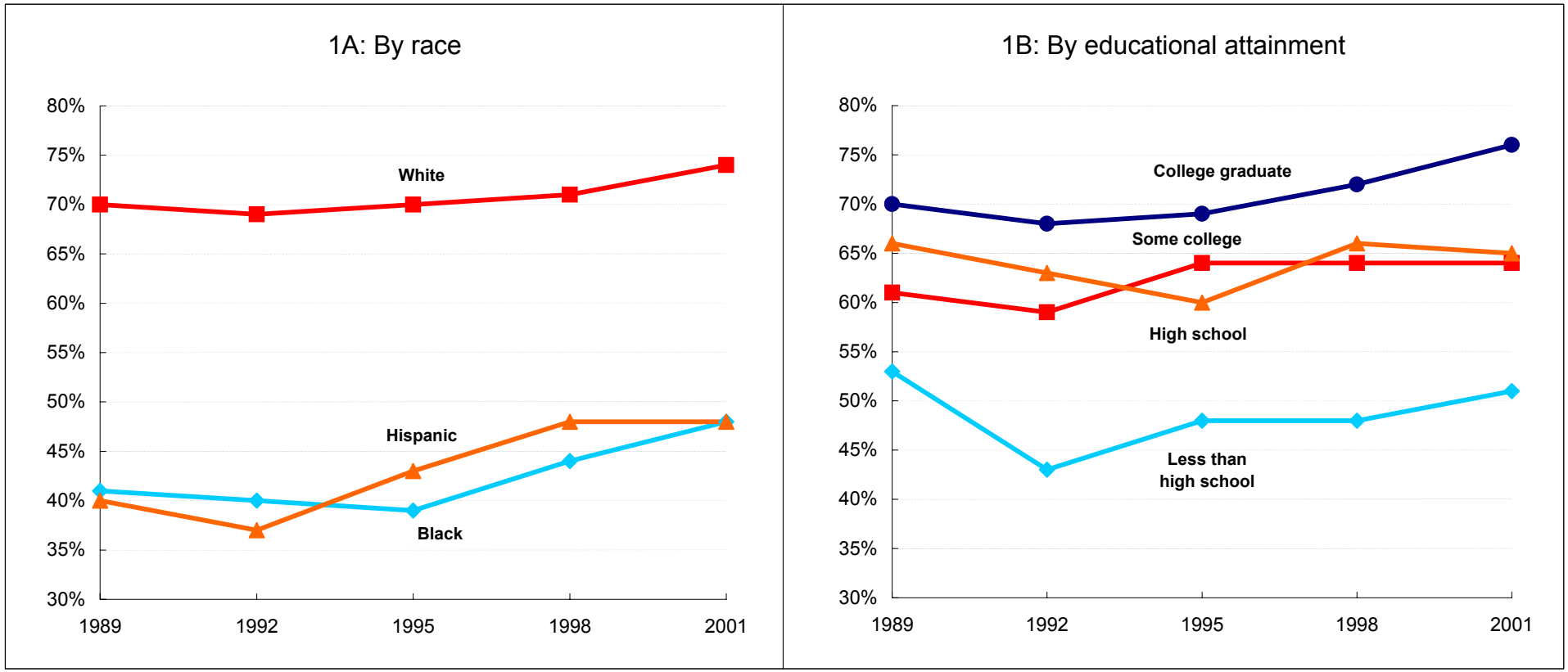
APPENDIX TABLE. How Families Might Benefit from Owning or Renting Housing

Item	Renters		Homeowners			
	Low-income subsidized	Low-income non-subsidized	Middle-income borrower	Middle-income non-borrower	High-income borrower	High-income non-borrower
A. Rental subsidy	$4,800[a]	$0	$0	$0	$0	$0
B. Value of own house	$0	$0	$150,000	$150,000	$500,000	$500,000
C. Nontaxable rental value of own home	$0	$0	$9,000	$9,000	$30,000	$30,000
D. Interest on mortgage & real estate taxes (@1% of value) = Declared income from owning home	$0	$0	-$6,500	-$1,500	-$20,000	-$5,000
E. Actual net income (not declared) from owning a home (C - D)	$0	$0	$2,500	$7,500	$10,000	$25,000
F. Tax bracket	0%	0%	15%	15%	33%	33%
G. Tax subsidy = F x (E - D) or F x C	**$0**	**$0**	**$1,350**	**$1,350**	**$9,990**	**$9,990**
H. Net government subsidy = A + H	**$4,800**	**$0**	**$1,350**	**$1,350**	**$9,990**	**$9,990**
ADDENDUM: Tax subsidy if interest and real estate taxes not deductible = F x E	$0	$0	$375	$1,350	$3,330	$9,990

Source: C. Eugene Steuerle, The Urban Institute, 2005.

[a] Average federal housing subsidy value for persons receiving a subsidy with $0 to $10,000 of earnings. Based on data from the March 2002 CPS. Sample includes individuals less than 65 years old.

FIGURE 1. Homeownership Rates by Race and Educational Attainment, 1989–2001



Source: The Urban Institute 2005. Tabulations based on 1989, 1992, 1995, 1998, and 2001 Survey of Consumer Finances data

TABLE 1. Total Federal Housing Spending by Category and Size, 1996–2010

(billions of 2005 dollars)

	1996	2000	2005	2010
Outlays				
Discretionary housing assistance[a]	$31.34	$31.80	$37.22	$33.84
Military family housing	4.50	3.77	3.94	3.98
Veterans housing (mandatory plus discretionary)	0.08	0.38	0.79	0.21
Mandatory housing assistance	0.11	0.01	0.03	0.03
Mortgage credit (mandatory plus discretionary)	-5.59	-3.68	-1.03	-4.58
Total outlays	*30.44*	*32.27*	*40.96*	*33.47*
Tax Expenditures				
Deductibility of mortgage interest on owner-occupied homes	$55.87	$66.57	$68.87	$92.79
Capital gains exclusion/deferral on home sales	23.08	20.48	32.84	64.98
Exclusion of net imputed rental income on owner-occupied homes	22.91	27.29	28.60	40.44
Deductibility of state and local property tax on owner-occupied homes	18.69	24.45	16.59	11.56
Credit for low-income housing investments	3.06	3.55	3.85	4.38
Other[b]	10.13	12.61	7.36	1.24
Total Tax Expenditures[c]	*133.74*	*154.95*	*158.11*	*215.38*
Total Federal Housing Spending	**$164.18**	**$187.22**	**$199.07**	**$248.84**

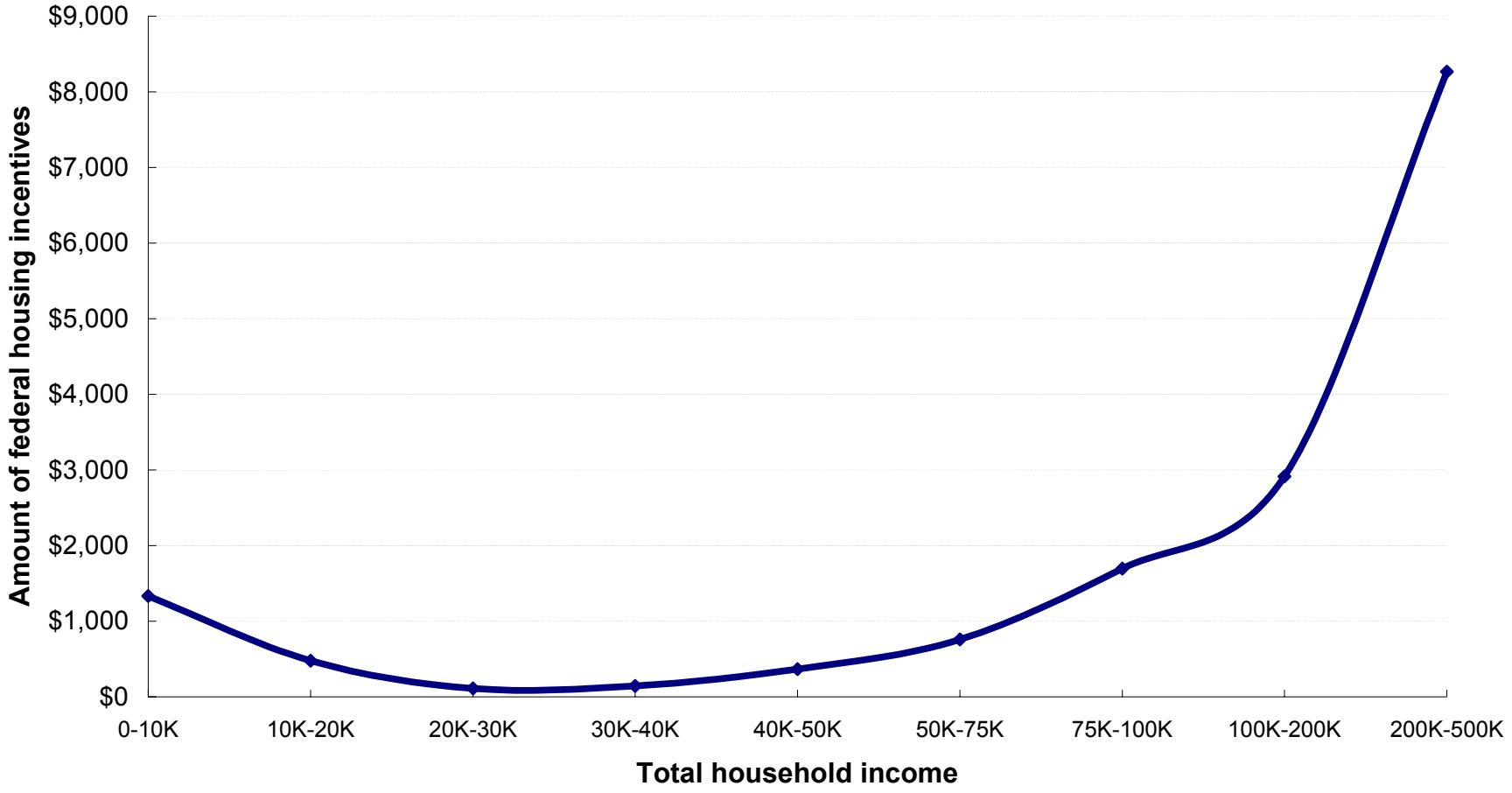
Source: The Urban Institute 2005. Based on data from the *Budget of the United States FY 2006: Analytical Perspectives,* table 19-1 and unpublished table 25-13. Converted to 2005 dollars using GDP implicit price deflator.

[a] The lion's share goes to Section 8 and public housing, but also includes homeless assistance, rural housing assistance, and other HUD programs.

[b] Totals the following items: exception from passive loss rules for $25,000 of rental loss, exclusion of interest on owner-occupied mortgage subsidy bonds, deferral of income from post-1987 installment sales, and accelerated depreciation on rental housing (normal tax method).

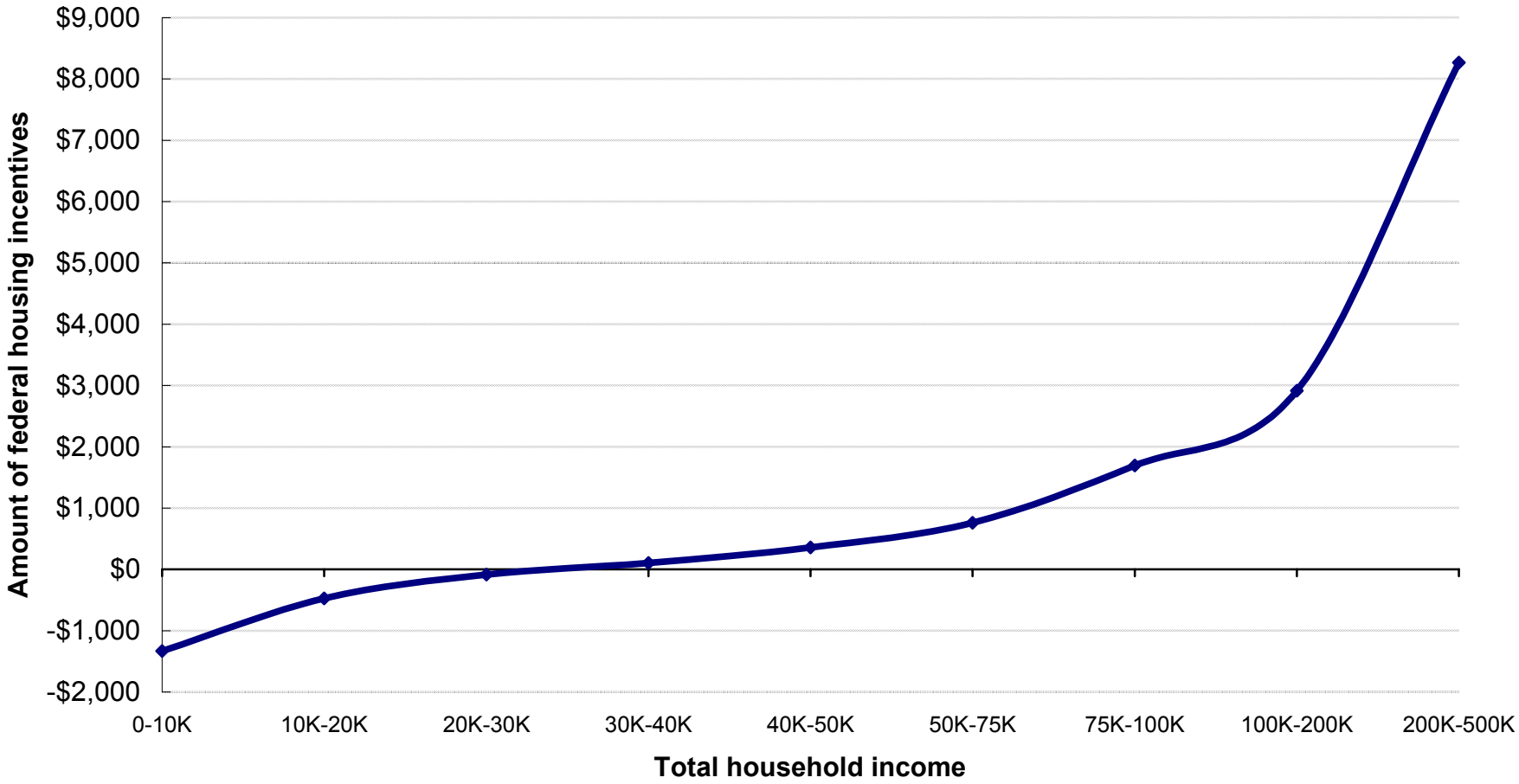
[c] Tax expenditures are not strictly additive owing in part to interaction effects among different tax provisions.

FIGURE 2. U-Shaped Curve: Average Annual Federal Housing *Benefits* (Subsidies and Tax Deductions) by Total Household Income



Source: The Urban Institute Transfer Income Model 2004.
Notes: Includes households without subsidies. The sample is restricted to individuals under 65 years old. Housing subsidies include federal public or subsidized housing subsidies. Deductions include mortgage and property tax deductions. Not included are the exclusion of net imputed rental income, deductions such as exception from passive loss rules for $25,000 of rental loss, or accelerated depreciation on rental housing.

FIGURE 3. S-Shaped Curve: Average Annual Federal Housing *Incentives* (Subsidies and Tax Deductions) by Total Household Income



Source: The Urban Institute Transfer Income Model 2004.
Notes: Includes households without subsidies and counts federal public or subsidized rental subsidies as *negative* housing incentives. The sample is restricted to individuals under 65 years old. Deductions include mortgage and property tax deductions. Not included are the exclusion of net imputed rental income, deductions such as the exception from passive loss rules for $25,000 of rental loss, or accelerated depreciation on rental housing.

TABLE 2. Deductions for Home Mortgage Interest and Real Estate Taxes
Distribution of Federal Tax Benefits by Cash Income Percentile, 2005

Cash income percentile[a]	Percent of tax units with tax benefit[b]	Share of total federal tax benefits	Average Federal Tax Benefit	
			Dollars	Percent
Lowest quintile	0.44	0.03	-1	-0.3
Second quintile	3.47	0.45	-13	-0.9
Middle quintile	13.93	3.01	-85	-1.7
Fourth quintile	37.55	14.62	-411	-3.6
Top quintile	72.77	81.90	-2,303	-4.9
All	25.63	100.00	-562	-4.3

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0305-1A).

Notes: Calendar year. Baseline is current law without the deductions for home mortgage interest and real estate taxes. Proposal allows these two deductions.

[a] Income cut-offs for each quintile is as follows: lowest quintile: $0 - $13,286; second quintile: $13,287 - $25,633; third quintile: $25,634 - $44,601; fourth quintile: $44,602 - $78,646; top quintile: > $78,646. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm.

[b] Includes both filing and non-filing units. Tax units that are dependents of other taxpayers are excluded from the analysis.

TABLE 3. Option 1 - Credit Equals 16.7% of Mortgage Interest Paid (Primary Residence) Repeals the Mortgage Interest Tax Deduction
Distribution of Federal Tax Benefits by Cash Income Percentile, 2005

Cash income percentile[a]	Percent of Tax Units[b]		Average Federal Tax Change		Share of Federal Housing Tax Benefits[c]		Average Federal Tax Rate[d]		
	With tax cut	With tax increase	Dollars	Percent	Current law	Proposal	Current law	Change (% points)	Proposal
Lowest quintile	9.9	0.0	-47	-19.5	0.0	1.7	3.2	-0.6	2.6
Second quintile	19.5	0.0	-95	-6.9	0.5	3.9	7.2	-0.5	6.7
Middle quintile	30.8	0.2	-168	-3.4	3.0	9.2	14.2	-0.5	13.7
Fourth quintile	38.9	9.4	-182	-1.7	14.6	21.5	18.4	-0.3	18.1
Top quintile	25.2	46.8	542	1.2	81.9	63.7	24.7	0.3	25.0
All	24.8	11.3	9	0.1	100.0	100.0	20.7	0.0	20.8

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0305-1A).

Notes: Calendar year. Baseline is current law.

[a] Income cut-offs for each quintile is as follows: lowest quintile: $0 - $13,286; second quintile: $13,287 - $25,633; third quintile: $25,634 - $44,601; fourth quintile: $44,602 - $78,646; top quintile: > $78,646. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm.

[b] Includes both filing and non-filing units. Tax units that are dependents of other taxpayers are excluded from the analysis.

[c] Under current law, includes the benefits of the mortgage interest deduction and the real estate deduction. Under the proposal, includes the benefits of the particular reform option simulated.

[d] Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, and the estate tax) as a percentage of average cash income.

TABLE 4. Option 2 - Credit Equals 1.03% of Home Value up to $100,000 (Primary Residence)
Repeals the Mortgage Interest Tax Deduction
Distribution of Federal Tax Benefits by Cash Income Percentile, 2005

Cash income percentile[a]	Percent of Tax Units[b]		Average Federal Tax Change		Share of Federal Housing Tax Benefits[c]		Average Federal Tax Rate[d]		
	With tax cut	With tax increase	Dollars	Percent	Current law	Proposal	Current law	Change (% points)	Proposal
Lowest quintile	26.2	0.0	-225	-93.5	0.0	7.9	3.2	-3.0	0.2
Second quintile	39.2	0.1	-349	-25.4	0.5	12.9	7.2	-1.8	5.4
Middle quintile	40.6	1.1	-328	-6.7	3.0	14.7	14.2	-1.0	13.3
Fourth quintile	43.2	2.8	-233	-2.1	14.6	22.9	18.4	-0.4	18.0
Top quintile	43.6	7.6	1,135	2.5	81.9	41.5	24.7	0.6	25.3
All	48.5	16.0	0	0.0	100.0	100.0	20.7	0.0	20.7

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0305-1A).
Notes: Calendar year. Baseline is current law.
[a] Income cut-offs for each quintile is as follows: lowest quintile: $0 - $13,286; second quintile: $13,287 - $25,633; third quintile: $25,634 - $44,601; fourth quintile: $44,602 - $78,646; top quintile: > $78,646. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm.
[b] Includes both filing and non-filing units. Tax units that are dependents of other taxpayers are excluded from the analysis.
[c] Under current law, includes the benefits of the mortgage interest deduction and the real estate deduction. Under the proposal, includes the benefits of the particular reform option simulated.
[d] Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, and the estate tax) as a percentage of average cash income.

TABLE 5. Option 3 - Credit Equals Minimum of $280 or 50% of Real Estate Taxes (Primary Residence)
Repeals the Real Estate Tax Deduction
Distribution of Federal Tax Benefits by Cash Income Percentile, 2005

Cash income percentile[a]	Percent of Tax Units[b]		Average Federal Tax Change		Share of Federal Housing Tax Benefits[c]		Average Federal Tax Rate[d]		
	With tax cut	With tax increase	Dollars	Percent	Current law	Proposal	Current law	Change (% points)	Proposal
Lowest quintile	29.8	0.0	-80	-33.2	0.0	2.8	3.2	-1.1	2.2
Second quintile	40.0	0.3	-106	-7.7	0.5	4.1	7.2	-0.6	6.6
Middle quintile	42.5	2.3	-99	-2.0	3.0	6.4	14.2	-0.3	13.9
Fourth quintile	45.0	15.6	-52	-0.5	14.6	16.2	18.4	-0.1	18.3
Top quintile	31.6	50.0	288	0.6	81.9	70.4	24.7	0.2	24.8
All	37.8	13.6	-10	-0.1	100.0	100.0	20.7	0.0	20.7

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0305-1A).

Notes: Calendar year. Baseline is current law.

[a] Income cut-offs for each quintile is as follows: lowest quintile: $0 - $13,286; second quintile: $13,287 - $25,633; third quintile: $25,634 - $44,601; fourth quintile: $44,602 - $78,646; top quintile: > $78,646. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm.

[b] Includes both filing and non-filing units. Tax units that are dependents of other taxpayers are excluded from the analysis.

[c] Under current law, includes the benefits of the mortgage interest deduction and the real estate deduction. Under the proposal, includes the benefits of the particular reform option simulated.

[d] Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, and the estate tax) as a percentage of average cash income.

TABLE 6. Option 4 - Credit Equals Minimum of $1,400 or 100% of Real Estate Taxes (Primary Residence)
Repeals the Mortgage Interest and Real Estate Tax Deductions
Distribution of Federal Tax Benefits by Cash Income Percentile, 2005

Cash income percentile[a]	Percent of Tax Units[b]		Average Federal Tax Change		Share of Federal Housing Tax Benefits[c]		Average Federal Tax Rate[d]		
	With tax cut	With tax increase	Dollars	Percent	Current law	Proposal	Current law	Change (% points)	Proposal
Lowest quintile	29.8	0.0	-233	-96.9	0.0	8.2	3.2	-3.1	0.1
Second quintile	40.1	0.4	-355	-25.8	0.5	13.2	7.2	-1.9	5.3
Middle quintile	42.6	3.3	-367	-7.5	3.0	16.2	14.2	-1.1	13.1
Fourth quintile	46.5	15.8	-280	-2.6	14.6	24.8	18.4	-0.5	17.9
Top quintile	32.3	51.3	1,264	2.8	81.9	37.3	24.7	0.7	25.4
All	38.3	14.2	5	0.0	100.0	100.0	20.7	0.0	20.8

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0305-1A).
Notes: Calendar year. Baseline is current law.
[a] Income cut-offs for each quintile is as follows: lowest quintile: $0 - $13,286; second quintile: $13,287 - $25,633; third quintile: $25,634 - $44,601; fourth quintile: $44,602 - $78,646; top quintile: > $78,646. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm.
[b] Includes both filing and non-filing units. Tax units that are dependents of other taxpayers are excluded from the analysis.
[c] Under current law, includes the benefits of the mortgage interest deduction and the real estate deduction. Under the proposal, includes the benefits of the particular reform option simulated.
[d] Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, and the estate tax) as a percentage of average cash income.

Other Publications by the Tax Policy Center

Discussion Paper Series

Number	Title	Authors	Date
20	Designing a Work-Friendly Tax System: Options and Trade-Offs	Jonathan Barry Forman, Adam Carasso, and Mohammed Adeel Saleem	June 2005
19	Tax Credits for Health Insurance	Leonard E. Burman and Jonathan Gruber	June 2005
18	Executive Compensation Reform and the Limits of Tax Policy	Michael Doran	November 2004
17	Economic Effects of Making the 2001 and 2003 Tax Cuts Permanent	William G. Gale and Peter R. Orszag	October 2004
16	Distributional Effects of Defined Contribution Plans and Individual Retirement Arrangements	Leonard E. Burman, William G. Gale, Matthew Hall, and Peter R. Orszag	June 2004
15	Effects of Recent Fiscal Policies on Today's Children and Future Generations	William G. Gale and Laurence J. Kotlikoff	July 2004
14	Pensions, Health Insurance, and Tax Incentives	Leonard E. Burman, Richard W. Johnson, and Deborah I. Kobes	January 2004
13	Searching for a Just Tax System	Rudolph G. Penner	December 2003
12	Tax Incentives for Health Insurance	Leonard E. Burman, Cori E. Uccello, Laura L. Wheaton, and Deborah Kobes	May 2003
11	State Fiscal Constraints and Higher Education Spending	Thomas J. Kane, Peter R. Orszag, and David L. Gunter	May 2003
10	Budget Blues: The Fiscal Outlook and Options for Reform	Alan J. Auerbach, William G. Gale, Peter R. Orszag, and Samara R. Potter	May 2003
9	Private Pensions: Issues and Options	William G. Gale and Peter Orszag	April 2003
8	The Economic Effects of Long-Term Fiscal Discipline	William G. Gale and Peter Orszag	April 2003
7	Charitable Bequests and Taxes on Inheritances and Estates: Aggregate Evidence from across States and Time	Jon Bakija, William G. Gale, and Joel Slemrod	April 2003
6	The Enron Debacle: Lessons for Tax Policy	Jane G. Gravelle	February 2003
5	The Individual AMT: Problems and Potential Solutions	Leonard E. Burman, William G. Gale, Jeffrey Rohaly, and Benjamin H. Harris	September 2002
4	Providing Federal Assistance for Low-Income Families through the Tax System: A Primer	Frank Sammartino, Eric Toder, and Elaine Maag	July 2002

Number	Title	Authors	Date
3	An Economic Evaluation of the Economic Growth and Tax Relief Reconciliation Act of 2001	William G. Gale and Samara R. Potter	March 2002
2	How Marriage Penalties Change under the 2001 Tax Bill	Adam Carasso and C. Eugene Steuerle	May 2002
1	The Effect of the 2001 Tax Cut on Low- and Middle- Income Families and Children	Leonard E. Burman, Elaine Maag, and Jeff Rohaly	April 2002

Issues and Options Series

Number	Title	Author	Date
10	Options to Reform the Estate Tax	Leonard E. Burman, William G. Gale, and Jeffrey Rohaly	March 2005
9	High-Income Families Benefit Most from New Education Savings Incentives	Susan Dynarski	February 2005
8	The American Jobs Creation Act of 2004: Creating Jobs for Accountants and Lawyers	Kimberly A. Clausing	December 2004
7	Promoting 401(k) Security	J. Mark Iwry	September 2003
6	Effects of Estate Tax Reform on Charitable Giving	Jon M. Bakija and William G. Gale	July 2003
5	The AMT: Out of Control	Leonard E. Burman, William G. Gale, Jeffrey Rohaly, and Benjamin H. Harris	September 2002
4	Saying “I Do” after the 2001 Tax Cuts	Adam Carasso and C. Eugene Steuerle	August 2002
3	EGTRRA: Which Provisions Spell the Most Relief?	Leonard E. Burman, Elaine Maag, and Jeff Rohaly	June 2002
2	The Estate Tax Is Down, But Not Out	Leonard E. Burman and William G. Gale	December 2001
1	Designing Tax Cuts to Benefit Low-Income Families	Frank Sammartino	June 2001