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Mortgage Interest Deductibility and Housing Prices

by Stephen G. Cecchetti and Peter Rupert

Over the past few years, there have been several proposals for replacing the income tax system with a system based on taxing consumption. Many of the proposed reforms include eliminating the deductibility of home-mortgage interest, but this provision raises a question: Since the deduction subsidizes home ownership, will eliminating it substantially reduce the value of owner-occupied housing?[1]

If Congress planned to end the home-mortgage interest deduction, leaving the rest of the tax code untouched, this concern would be well founded. To see why, consider that the decision to buy a house is based on the monthly cost of ownership. Individuals calculate an implicit rental equivalence that combines after-tax mortgage payments, property taxes, insurance, maintenance, and the opportunity cost of their down payment.[2] For a given mortgage interest rate, eliminating the tax deductibility of the payments increases the after-tax cost, leading to a decline in demand for owner-occupied housing and ultimately reducing housing prices. In other words, the simple experiment of removing the mortgage interest deduction, without changing anything else, has the result people seem to think it will. Moreover, the effect on housing prices differs across income levels. As we discuss below, most of the benefits of the home-mortgage interest deduction accrue to higher-income households, mainly because lower-income households do not itemize their tax returns.

The proposed tax changes, however, are not this simple. Most are modeled on the Hall-Rabushka proposal for taxing consumption at a flat rate.[3] One claim made by the authors of these proposals is that the tax code changes will increase aggregate saving. As the subsidy for purchased housing ends, the demand for other investments (like more productive business capital) will rise, increasing investment and saving. With such a major overhaul of the tax system, it is difficult to predict how much housing prices would change, or to anticipate the direction of interest rate changes, let alone their magnitude.

In this *Economic Commentary*, we analyze how implementing a flat tax on income and ending the deductibility of mortgage interest payments would affect housing prices. We argue that, to the extent that housing prices decline, more of the impact will be borne by those at higher income levels. However, since these households put a smaller fraction of their wealth in housing than do lower-income families, changes in the value of their other assets may mitigate the decline in the price of their homes.

Flat Taxes, Interest Rates, and Housing Prices

In its extreme form, the flat tax acts as a pure consumption tax, and, in nearly all of the proposed plans, replaces the current system with one that has a single standard deduction. Each individual's wage income, less that deduction, is taxed at a flat rate. In addition, firms pay a tax at the same rate on fringe benefits and other nonwage compensation. There are several ways to implement such a consumption tax, but the bottom line is that under a flat tax system, businesses are taxed on their profits and net interest paid, while individuals pay a flat wage tax.

An analysis of how implementing a flat tax on income and ending the deductibility of mortgage interest payments would affect housing prices. The authors show that, to the extent prices decline, higher-income households would bear most of the impact, but increases in the value of their other assets might mitigate the drop in the price of their homes.

In comparison, a value-added tax (VAT) taxes businesses on their profits, net interest paid, and wages. In the end, the two systems end up taxing exactly the same thing—consumption. This is most easily seen by considering the VAT. When a consumer buys a product from a retailer, he pays taxes on the difference between the purchase price and the inputs bought from other firms, that is, on the value added. Note that the difference between the purchase price and the inputs includes profits and wages paid.

We have said that removal of the mortgage interest rate deduction alone will lead to a decline in housing prices. The size of this decline depends on the homeowner's marginal tax bracket. It is easy to estimate the loss to homeowners that would result from a partial equilibrium change in the tax code. Suppose we look at an individual who has a 28 percent marginal income tax rate, a $100,000 house, and an $80,000 outstanding mortgage at 8 percent interest with 15 years remaining to be paid. Assuming that he item-

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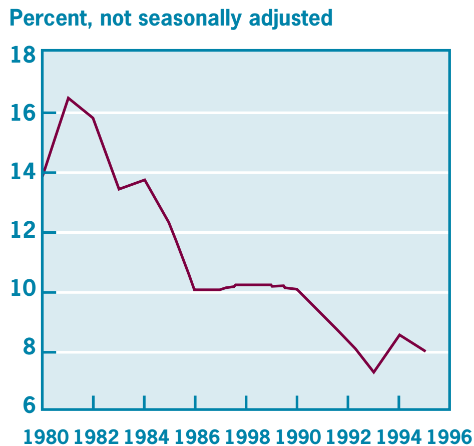
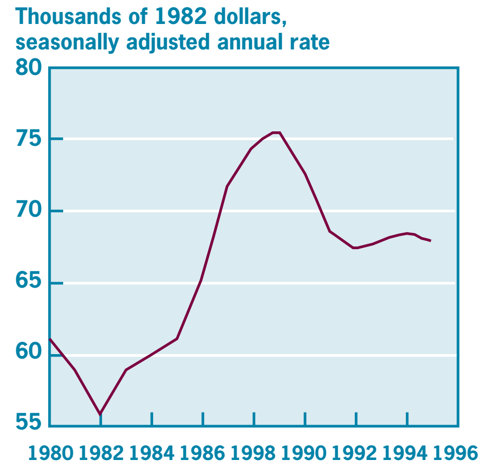
FIGURE 1 CONVENTIONAL FIRST MORTGAGE RATE FOR NEW HOMES



SOURCE: U.S. Department of Housing and Urban Development.

FIGURE 2 MEDIAN PRICE OF NEW SINGLE-FAMILY HOMES



SOURCE: U.S. Department of Commerce, Bureau of the Census.

izes, the $6,400 interest deduction is worth $1,792. The sum of the savings over the remaining years of the loan, discounted to its present value, is about $12,000, or 12 percent of the house's value. That is, the immediate elimination of the tax preference for owner-occupied housing would create a 12 percent capital loss for such a person. A recent report by Data Resources International conjectures that housing prices would decline by roughly 10 to 15 percent of the current value of the housing stock, or as much as $1.7 trillion.[4]

These calculations, however, are based on a constant interest rate. Under the various flat tax plans, many forces might act to change the new equilibrium interest rate. Although there will be no mortgage interest deduction, neither will there be taxes on interest or capital income. There is a direct effect that would push the interest rate down toward that of tax-free investments, which is roughly one to two percentage points lower than the return from taxable investments. Interest rate changes of this magnitude are not uncommon, as figure 1 shows. The impact of the change on after-tax mortgage rates is roughly comparable to the increase we saw between the low in 1993 and the peak in 1994.

Again, however, the world is not so simple, and other effects must be considered. Insofar as capital is mobile worldwide, the interest rate will not fall (or not nearly as much as the two percentage points implied here), since a small change in the tax structure may not change the prevailing world interest rate. Second, altering the tax code almost certainly will bring with it a shift in the type of investments—from the housing sector to the business sector. To the extent that this stimulates growth in the economy, interest rates would rise.[5]

There are additional forces at work, however, that suggest interest rates may fall—an intertemporal price effect and a wealth effect. Changing to a flat tax system would mean taxing future consumption only once (compared to income taxes, which tax it more than once), leading to a decline in the price of future consumption and a consequent increase in aggregate saving.[6] However, this effect would be somewhat mitigated, since much saving (for example, pensions, IRAs, 401(k) s, and unrealized capital gains) are currently not taxed. In addition, to the extent that housing prices do decline, a wealth effect would transfer resources from older to younger generations — because the young could now purchase housing at a lower price. This effect would also lead to an increase in aggregate saving, since younger people save more than older ones. Both of these forces act to decrease interest rates, when all other things are held constant.

If interest rates did fall on net, individuals could refinance their current homes, which would help offset the loss in value caused by the decline in housing prices. Also, as the return to other investments falls, housing becomes a more attractive investment, further mitigating the drop in housing prices.

As a point of comparison, figure 2 indicates that 15 percent changes in housing prices, both up and down, are not so uncommon.7 Although such a decline in the value of the housing asset reduces wealth, that is not the end of the story; other asset prices will rise, at least partially offsetting this effect.

Moreover, normal swings in the housing market are likely to swamp the effects of tax code changes. As figures 1 and 2 show, when marginal tax rates were decreased in the early and mid-1980s, reducing the benefit of the mortgage interest deduction, housing prices actually rose. The opposite occurred in the early 1990s. Therefore, to the extent that housing prices declined due to the removal of the mortgage interest deduction alone, these effects could be partially offset (if not outweighed) for the reasons we have listed.

■ Who Benefits from the Mortgage Interest Deduction?

Suppose that, despite these mitigating factors, housing prices still drop when the mortgage interest deduction is removed. In that case, the decline in prices, as well as its effect on household wealth, is likely to vary among families at different income and wealth levels.

The first column of table 1 shows that the percent of U.S. families owning a primary residence rises sharply with income: Roughly 85 percent of families making more than $50,000 a year own their homes, while far less than

TABLE 1 HOME OWNERSHIP AND WEALTH

Annual family income	Percent owning family residence	Percent of wealth attributable to housing
Less than $10,000	38.8	90.3
$10,000 to $24,999	54.2	68.5
$25,000 to $49,999	68.8	52.0
$50,000 to $99,999	84.2	40.5
$100,000 and over	87.6	17.0

SOURCE: Board of Governors of the Federal Reserve System, 1992 Survey of Consumer Finances.

TABLE 2 BENEFITS OF THE MORTGAGE INTEREST DEDUCTION

	Tax returns			
Annual family income	Percent itemized	Percent with deduction	Tax savings (millions)	Percent of total tax savings
Less than $10,000	0.7	0.1	$47	0.1
$10,000 to $19,999	3.5	1.6	$173	0.3
$20,000 to $29,999	9.9	6.6	$685	1.2
$30,000 to $39,999	21.0	16.0	$1,919	3.3
$40,000 to $49,999	34.2	28.1	$3,270	5.6
$50,000 to $74,999	55.7	48.1	$11,005	18.9
$75,000 to $99,999	79.0	71.5	$12,253	21.0
$100,000 to $199,999	89.7	77.8	$16,359	28.0
$200,000 and over	93.7	82.5	$12,624	21.6

SOURCE: Estimates of Federal Tax Expenditures for Fiscal Years 1996–2000, U.S. Congress, Joint Committee on Taxation, 1995.

50 percent of families earning under $25,000 do. However, as column 2 shows, homes represent a much larger fraction of family wealth at low income levels, reaching 90 percent at very low incomes. At the other end of the spectrum, families whose incomes exceed $100,000 have less than 20 percent of their wealth in their primary residence.

Obviously, to benefit from the mortgage interest deduction, a family must itemize its tax returns. The first column of table 2 shows the fraction of returns itemized, arranged according to income group. At low income levels, very few returns itemize deductions, while at very high income levels, nearly all do. The second column, which shows the fraction of households that take advantage of the mortgage interest deduction, looks similar to the first. So, even though most of the wealth at low income levels is in the form of housing, the mortgage interest deduction is scarcely used.

The third column shows taxpayers' savings due to the mortgage interest rate deduction, by income group. This number represents the amount of tax revenue lost because of the deduction. The last column reports what percentage of the taxpayers' total savings can be attributed to each group, and demonstrates that most of the gains accrue to those in higher income brackets.

One conclusion that can be drawn from tables 1 and 2 is that the mortgage interest deduction is regressive, that is, more of the benefits are derived by higher income groups. As a result, ending the deductibility of mortgage interest would have different impacts on different segments of the population. Wealthier people tend to own larger homes and, to the extent that home prices adjust, the more expensive ones would change more.

Finally, while analysts have recently focused on the impact these changes will have on the market for buying homes, it is important to note that renters will also be affected. Since renting is a substitute (though perhaps an imperfect one) for owning, market forces drive the prices of equivalent rented and owned units together. As a result, ending the tax deduction for mortgage interest would change the price of all housing units, affecting everyone.

■ Conclusion

Needless to say, predicting the outcome of such large tax changes on interest rates and home values is difficult. To model such changes, it is necessary to capture the effects throughout the economy, which requires an elaborate framework. It is evident, however, that the effects will not be borne equally across households at different income and wealth levels.

Because higher-income families now enjoy most of the benefits of the mortgage interest deduction, they would be expected to suffer most from its elimination. However, it is exactly the higher income groups who would benefit from other aspects of the proposed flat tax systems. As we can infer from tables 1 and 2, those most affected by removal of the mortgage interest deduction are those who also have invested much less of their overall wealth in their homes. If the tax change leads to increased economic growth, then their income from other sources will rise. The value of other assets will also increase as the distorting effects of the preference for owner-occupied housing are taken away.

Although there may be deleterious effects on housing prices, the welfare of individuals need not diminish because of such changes in the tax code as adopting a flat tax and eliminating the mortgage interest deduction.

This *Economic Commentary* has focused exclusively on mortgage interest rates and housing prices, but a similar calculus is also relevant to other policies that may affect taxes or benefits. Well-intentioned proposals directed toward specific areas may have unanticipated, yet far-reaching, effects. As relative prices change (for example, as a result of making college tuition deductible, removing farm price supports, decreasing tariffs, or allow-

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ing a tax credit for children), there will be changes in other markets as consumers substitute away from costlier products to cheaper ones. To determine the final outcome of such policies, it is important to examine their possible effects throughout the economy as it settles into a new equilibrium.

■ Footnotes

1. In the current tax system, the deductibility of home-mortgage interest follows logically from the fact that interest income is taxable, while corporate tax payments are not.

2. They might also consider the prospect for capital appreciation. During some periods, the belief in ever-increasing housing prices seems to have led some people to purchase more costly homes than they otherwise would have.

3. Proposals have been made by Congressmen Richard Armey and Richard Shelby, Sam Nunn and Peter Domenici, Richard Gephardt, and Arlen Specter. For comprehensive descriptions of several, see Eric Toder, "Comments on Proposals for Fundamental Tax Reform," T*ax Notes*, vol. 66, no. 14 (March 27, 1995), pp. 2003-15, and Martin A. Sullivan, "Housing and the Flat Tax: Visible Pain, Subtle Benefits," *Tax Notes*, vol. 70, no. 4 (January 22, 1996), pp. 340-45.

4. See Roger Brimer, Mark Lasky, and David Wyss, "The Real Estate Market Impacts of a Flat Tax," *Data Resources International*, May 1995.

5. One would expect that eliminating the tax preference for housing would shift capital toward the corporate sector. As Martin Feldstein has shown, there is a distinct possibility this would raise the equilibrium interest rate. See "The Effect of a Consumption Tax on the Rate of Interest," NBER Working Paper No. 5397, December 1995.

6. With an income tax you are taxed twice: Because most savings are after tax, you pay on income before you save and again on any income that those savings generate.

7. James Poterba describes the impact of the 1984 and 1986 tax changes on housing prices in "Taxation and Housing: Old Questions, New Answers," *American Economic Review*, vol. 82, no. 2 (May 1992), pp. 237-42.

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