

eral subsidies) for a period of 10 years in projects in which a sufficient number of people have qualifying incomes (either 20% of the units are occupied by people with incomes under area median income or 40% of the units are occupied by people earning below 60% of the area median income). If tenants receive other federal subsidies, the tax credit would be 4%. Newly constructed, purchased, or rehabilitated units would be eligible for this credit. If the use of the units is changed within 15 years, the credit has to be repaid along with penalties.

Making the new tax credit even more attractive was a provision in the Omnibus Budget Reconciliation Act of 1986 (P.L. 99-509) that allowed investors to claim as part of their investment the loans they had received to buy low-income housing—instead of being able to claim only those funds of their own that they had invested. This provision increased the tax credit that investors received. (SEE ALSO: *Tax Incentives*)

—Nathan H. Schwartz

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### ► Taxation of Owner-Occupied Housing

Owner-occupied housing is accorded unusual and special treatment under the tax laws of many nations. Except in a few countries (e.g., Scandinavian countries), no attempt is made to tax the annual return on investment in owner occupancy. In many countries (e.g., Australia), the capital gains arising from housing investment are untaxed. In other countries (e.g., Germany), the depreciation of owner-occupied housing is considered a deductible personal expense in computing tax liability. The tax benefits given to homeowners in the United States are among the most generous in the developed world.

Consider an individual who chooses between an investment in owner-occupied housing and an equivalent investment of some other form, say, in common stocks. The investment in owner-occupied housing offers three kinds of tax advantages. First, under the U.S. Internal Revenue Code, the returns on investment in owner-occupied housing are untaxed. In contrast, the dividends yielded by common stock are reported as income and taxed in the year accrued. Second, any capital gains arising from the investment can be deferred. Moreover, a large capital gains exclusion is available to those over the age of 55. In contrast, capital gains in the stock market are taxed in the year they are realized. Third, some of the expenses associated with homeownership, notably property taxes and interest payments, can be itemized as deductions in computing federal tax liability under the personal income tax. No other interest payments are deductible as personal expenses under the Internal Revenue Code. This favorable treatment also

### ► Tax Reform Act of 1986

The Tax Reform Act of 1986 (P.L. 99-514) instituted a new tax credit for owners of low-income rental housing to encourage the creation of housing for low-income people. The tax credit was contained in Title II of the landmark tax legislation adopted that year, which is best known for reducing tax rates and curtailing many special tax breaks.

The tax credit is 9% a year of the value of the units occupied by low-income tenants (not receiving other fed-

extends to personal income taxation under the laws of all of the 50 states.

The net effect of these provisions of the U.S. tax law is to reduce the price of homeownership, relative to renting, by a sizable amount. Moreover, as a result of these policies, the relative price of homeownership varies by income level and the level of inflation.

It is useful to think of the annual cost of homeownership as the cost of using the stock of residential capital. Under standard simplified conditions, the user cost of residential capital (in equilibrium, the annual rent  $R_1$  of the stock) will be related to the value of the stock,  $V$ , according to

$$R_1 = iV, \quad [1]$$

where  $i$  is the rate of interest. In equilibrium, the annual rent generated will be equal to the annual cost of owning the capital stock. Housing is subject to an annual property tax, at an effective rate  $t$ . Annual expenditures of  $100d\%$  of house value are required for maintenance and to offset depreciation. In addition, the owner can expect capital gains of  $100g\%$ .

This means that in the absence of income tax considerations, the user cost relationship is

$$R_2 = (i + t + d - g)V, \quad [2]$$

where the term in parentheses is the user cost of residential capital. This is the cost of holding the stock for one year. Note that, in the absence of income taxes, the user cost does not vary with the level of inflation. Suppose, for example, interest rates are  $i^* + a$  and capital gains rates are  $g^* + a$ , where the asterisks represent real values and  $a$  is the level of inflation. On substitution into Equation 2,

$$R_3 = ([i^* + a] + t - d - [g^* - a])V, \quad [3]$$

the  $a$ 's simply cancel each other out, and  $R_3 = R_2$ .

Now suppose nominal capital gains are untaxed, mortgage interest payments are deductible from gross income, and property taxes are similarly deductible. Suppose net income is taxed at a marginal rate of  $T\%$ . Under these circumstances, the expression relating equilibrium rents to values is

$$R_4 = ([i^* + a] [1 - T] + t[1 - T] + d - g^* - a)V. \quad [4]$$

The expression in parentheses is the net after-tax user cost of residential capital. First, note that inflation is no longer neutral. The asymmetry between the tax treatment of interest payments and capital gains means that the after-tax cost of homeownership varies inversely with the level of inflation in the economy. Note also that the net cost of homeownership declines with the tax rate on income and the value of the house:

$$R_4 = R_3 - T(i^* + a + t)V. \quad [5]$$

If federal tax rates increase with income or if higher-income households live in jurisdictions with higher prop-

erty tax rates, the cost of homeownership declines with income. More important, as long as housing is a normal good with a positive income elasticity, the net cost of homeownership declines with income. Furthermore, a given level of inflation in the economy reduces the user cost more for higher-income owners than for lower-income homeowners.

More generally, the analysis shows that the costs of homeownership are sensitive to macroeconomic stabilization policies and to the structure of income tax rates. As the marginal tax rates of the highest-income U.S. households fell from 70% to 30% and then rose to 40% during the course of the decade 1983 to 1993, although the inflation rate plummeted from 15% to 5%, the implicit policy toward housing and homeownership varied substantially.

For example, at reasonable values of the variables in Equation 4 (say,  $i^* = g = 3\%$ ,  $t = d = 2\%$ ,  $T = 30\%$ ), then as inflation goes from 6% to 1%, the after-tax user cost of residential capital roughly doubles. Similarly, at reasonable values of the variables (for example,  $a = 3\%$  and, as before,  $i^* = g = 3\%$ ,  $t = d = 2\%$ ), then as income tax rates go from 40% to 20%, the after-tax cost of owner occupancy increases by more than one-third. These are substantial price changes induced entirely by taxation and macroeconomic considerations. There are a number of predictable effects of this subsidy to owner-occupants.

First, the fluctuations in tax rates can be expected to induce changes in the quantity of housing consumed by households. Reductions in the user cost of owner occupancy can be expected to increase consumption. Second, changes in the relative price of owning versus renting can be expected to affect the homeownership propensities of households. Third, the magnitude of the implicit subsidy, and its distribution across income classes, is sensitive to tax policy. Finally, the social loss to society from mispricing owner-occupied housing is sensitive to the extent of mispricing.

Econometric research suggests that the demand for housing is moderately price inelastic. A price elasticity of  $-0.6$  or  $-0.7$  is reasonable. Based on these numbers, a 15% change in user cost arising from tax rate policy or stabilization policy (well within the changes in the past decade) could lead to a change of roughly 10% in housing consumption.

In the United States at least, it appears that homeownership probabilities are more responsive to income and household demographics than to the relative price of owning versus renting. In fact, it has been estimated that the entire subsidy to owner-occupied housing that arises through the tax treatment of housing increases homeownership rates by only a couple of percentage points. The magnitude of the implicit subsidy arising through the personal income tax code is large and extremely regressive. The subsidy is available only to owners, who are usually more affluent than renters, and only to those who find it advantageous to itemize their deductions. The propensity to itemize deductions increases with income. Finally, as noted above, for those owners who do itemize deductions, the magnitude of the subsidy increases with income.

The absolute value of the revenues foregone by the federal treasury as a result of the tax treatment of owner-occupied housing are routinely estimated by the Congress-

sional Budget Office and the Joint Committee on Taxation of the Congress. The revenue costs of these tax subsidies are large, and more than half of the revenue losses accrue to the top 15% of the income distribution. A more relevant benchmark of the costs of the tax treatment of homeownership may be in comparison with other government housing programs (whose principal beneficiaries are lower-income households). When compared with other housing assistance programs (principally public housing, low- and moderate-income subsidies, housing rehabilitation, etc.), the value of homeowner subsidies is large—more than the entire budget of the Department of Housing and Urban Development, for example. The social cost of the disparities introduced by favorable tax treatment of owner-occupied housing is even larger than the budgetary costs to the government—because the mispricing of housing assets entails an additional deadweight loss to the economy.

Proposals to change the combination of deductions and exclusions that characterize the tax treatment of housing are routinely advanced, but they do not receive strong political support. Some changes have been wrought by imposing a cap on interest deductions (for second homes). Such a cap could easily be extended to principal residences. Similarly, it would be rather easy to include imputed rent as taxable income, using rules of thumb in much the same way that depreciation is estimated for business property. Moreover, it would be easy, as an administrative matter, to structure the cap or the imputed rental adjustment so as to affect tax liability only at the high end of the income distribution. (SEE ALSO: *Homeownership; Imputed Rental Income; Tax Expenditures; Tax Incentives*)

—John M. Quigley

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### ► Temporarily Obsolete Abandoned Derelict Sites

The name temporarily obsolete abandoned derelict sites (TOADS) appeared in 1990 to describe closed, boarded-up, or decaying housing projects, factories, warehouses, schools, dump sites, mines, railroad lines, canals, waterfronts, and tracts of overgrown undeveloped land. TOADS are usually superannuated (locally unwanted land uses, or LULUs), often literally burned-out sites. TOADS have hit bottom on the land use cycle. Without some form of treatment or reclamation, they will not rise on that cycle.

Meanwhile, they become eyesores or worse—the sites of fire hazards, drug trades, illegal garbage and toxic dumping, and other dangers to public safety and the environment.

TOADS show up in cities, suburbs, small towns, and rural areas but especially in inner-city neighborhoods. Studies of the 15 largest U.S. cities and of medium-sized cities in New Jersey demonstrate that TOADS are economic pariahs: They produce no revenues, lower nearby property values, create public costs, and are expensive to secure and clean up.

TOADS are often so repellent that frightened individuals, families, and business owners leave their vicinity, producing further abandonment and more TOADS and LULUs. Those who remain in TOADS neighborhoods are almost always the poor and elderly who cannot afford to leave. These marginalized people suffer from extraordinarily high rates of family and street violence, drug abuse, infant mortality, AIDS, and other illnesses and injuries.

Historically, TOADS have appeared in the wake of economic changes that resulted in bankruptcies and closings—for example, of tanning plants, slaughterhouses, shipyards, or railroad lines. More recently, large numbers of big-city companies, such as those in the textile, steel, and pharmaceutical industries, have moved to the suburbs, outside the region, or abroad. The resulting closings and abandonment have created large numbers of TOADS. Urban renewal programs, gentrification, and the ongoing siting of LULUs also have often produced abandonment in surrounding areas—and thus, more TOADS.

The TOADS problem appears to be worsening in the United States and other industrialized societies. Economic stress means that resources to redevelop TOADS are often not available. TOADS are unwanted, except as sites to dump pariah land uses and people, and they do not have a powerful public to promote their rehabilitation. In the United States in particular, TOADS neighborhoods exemplify the urban malaise of the 1990s. (SEE ALSO: *Brownfields; Environmental Contamination: Toxic Waste; Infill Housing; Locally Unwanted Land Uses; Not in My Back Yard*)

—Michael R. Greenberg and Frank J. Popper

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