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Title
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Permalink
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Author
Cerf, Alan R.

Publication Date
1982

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WORKING PAPER 83-58

Homeownership: Tax Incentives and National Policy

by
Alan R. Cerf

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HOMEOWNERSHIP: TAX INCENTIVES AND NATIONAL POLICY

by

Alan R. Cerf, CPA, Ph.D.

The author is indebted to the Center for Real Estate and Urban Economics of the University of California, Berkeley, for support.

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ABSTRACT

The objective of this paper is to evaluate certain arguments for the removal of selected tax incentives to homeownership. The major tax provisions which are considered here include the deduction of mortgage interest and the non-taxability of imputed rent income. Consideration is given to principles of taxation which are useful in the evaluation of specific provisions of the law. Implications of tax preference for horizontal equity between taxpayers with equal income, vertical equity for taxpayers with different incomes, and the implications for substitution of housing and non-housing expenditures are examined.

Respected tax authorities question provisions of the current tax law which include failure to tax imputed rent income while at the same time allowing deductions for interest and property taxes. Tax preferences increase as income and marginal tax rates increase, raising questions as to vertical equity because the effect is to reduce the nominal progression of the income tax rates. Objections also are related to the lack of neutrality of the tax law between homeowners and renters and between housing and non-housing expenditures. Since most renters use the zero bracket amount and do not itemize, they often do not get the full benefit of newly itemized deductions.

A model is developed to examine the implications of changes in certain variables on different classifications of taxpayers. Variables include deduction of mortgage interest, taxability of imputed rent to homeowners, and deductibility of rent payments by renters. A static environment was first examined and subsequently additional assumptions were added to portray a

more realistic situation. These additional assumptions included consideration of inflation, length of time property held, and changes in tax brackets.

Tax benefits received by current owners under the existing tax rules are a function of their interest payments, property tax payments, and current tax bracket. Interest payments are a function of the price level when the house was purchased, the interest rate, and whether the mortgage was fixed or variable. As mortgage payments increase, the government shares more of the cost. Often, favorable leverage, a fixed rate mortgage, and a home that has increased with the price level places the earlier purchaser in a superior position relative to later purchasers.

Introducing the assumption that tax benefits are capitalized in house prices impacts the economic consequences of the tax benefits to the taxpayer. When it is assumed that certain tax benefits are removed, there are wealth losses to all owners. The same dollar wealth loss is likely to be more significant to recent purchasers. This is because they may have paid significant amounts for future tax benefits in the price of their house.

Recent purchasers would be in a position of having problems with meeting mortgage commitments if tax benefits were removed. Housing expenditures would be a much larger percentage of income, causing problems of budgeting and possibly influencing expenditures for housing relative to other items.

Decisions on tax preferences for housing require better data on the degree that housing prices reflect tax benefits. The removal of the mortgage interest deduction is not recommended. Significant drops in house prices as a possible result of removal of the mortgage interest deductions is likely to lead to significant wealth losses and problems of meeting home

payments by new owners. The burdens of removal of tax preferences are stronger the more recent the home purchase. Taxation of imputed rent would likely have similar results and is also subject to serious administrative problems.

Changes in tax preference to housing should be made only in conjunction with a review of the overall United States housing policy, and considerations of alternative stimuli for provision of shelter.

HOMEOWNERSHIP: TAX INCENTIVES AND NATIONAL POLICY

Large federal budget deficits have increased the search for methods of increasing the tax base. As a result provisions that impact homeownership are likely to be carefully scrutinized. At the same time there is need to increase the tax base, it is an extremely difficult time for potential home purchasers.

The availability of housing in the United States is undergoing significant change. The use of monetary policy to combat inflation and resultant high interest rates has significantly decreased the supply of new multi-family as well as new single family residences. High interest rates make it uneconomical for many builders to develop new homes as projected rates of return are not sufficient to justify the risk involved. Mortgage interest rates at high levels have eliminated many potential buyers from the market.

Homeownership is more difficult to accomplish at the same time as demographic forces cause a significant underlying desire for homeownership which because of the economics cannot be translated into effective demand. Rosen has documented the reasons to expect a large demand for shelter in the 1980's.[1] Homeownership is difficult to achieve because in many areas prices of homes have increased more rapidly than general inflation. The Supreme Court has decided that due on sales clauses can be implemented by Federal Savings and Loan Associations so that an important element of creative financing has been eliminated.

Both political parties are searching for methods to increase federal revenues. Support is developing in certain areas for a flat tax because of the complicated system of income, deductions and exclusions in the current law.[2] In some versions of a flat tax all itemized deductions would be elimi-

nated and in other versions selected itemized deductions would be allowed. Theoretically, the same amount of revenues that are raised now could be raised by a lower rate. It is in the context of search for additional revenue that tax preferences for homeownership are examined.

Objectives

The objective of this paper is to evaluate certain arguments for the removal of selected tax incentives to home ownership. Given an identified need to expand the tax base, is it desirable to eliminate or modify tax preferences for homeowners?

The major tax provisions which are considered here include the deduction of mortgage interest, the deduction of property taxes, and the non-taxability of imputed rent. Consideration is given to principles of taxation which are useful in the evaluation of specific provisions. Implications of tax preferences for horizontal equity between taxpayers with equal income, vertical equity for taxpayers with different incomes, and the implications for substitution of housing and non-housing expenditures are examined. Needless to say taxation cannot be easily separated from politics at the pragmatic level so political considerations are an important element.

Shelter is a basic human need. Availability of desirable shelter has many economic, sociological, political and psychological aspects. The purpose here is to set out the basic issues and to determine what further analysis and research is likely to be useful for a reasoned analysis of the problem.

Tax Principles and Complications with Principles

Consideration of tax reform alternatives require a conceptual framework to be used for judgment. Although there are certain tax principles which

are appealing and fairly generally accepted they are often difficult to apply to a particular situation.

A benefit criteria in which a person would pay in relation to benefits received from public services is not sufficient to guide the individual income tax. As a result, the ability to pay criteria has been applied to tax structure design. Ability to pay involves consideration of both horizontal and vertical equity. The concept of horizontal equity considers that people with the same income should pay the same amount of tax. Vertical equity requires that people with greater ability to pay should pay more taxes.

Implementation of the concepts of either horizontal or vertical equity require a quantitative measure of ability to pay. Most students of taxation use a comprehensive definition of income.[3] Income would include a person's entire accretion to his or her wealth and would include money income, imputed income and appreciation in value of assets realized or unrealized.[4] Income is equal to the increase in net worth, plus consumption during the period. Taxable income departs from this definition in a number of respects; i.e., capital gains are included only when realized and imputed income such as imputed income from owner-occupied housing is not included. Transfer payments are not taxed.

A tax system should be neutral in the sense it should minimize as far as possible the impact of the tax structure on economic behavior of agents in the economy. Tax allowances should be evaluated in whether they promote or distort the efficient allocation of resources.

Considerations of tax preferences are difficult because they require a hypothesis concerning what would have happened if the tax preference did not exist. Removal of tax preferences would change the behavior of agents in the economy leading to different decisions than were made with the

existence of the tax preference.[5] For example, if the deduction for mortgage interest was removed it would impact decisions on renting versus buying which in turn would impact demand for homes and home prices. It would also affect the flow of revenue to the government which in turn could impact a variety of policies such as tax rates, and governmental expenditures. Changes in tax rates and governmental expenditures would impact other economic variables. Evaluation of removal of tax preferences requires specification as to whether income tax rates would be lowered, public expenditure items increased and/or budget deficits decreased.

An important consideration in this analysis is whether the market has capitalized tax benefits to homeownership. Kay and King in an evaluation of the United Kingdom tax system indicate that home prices do incorporate tax benefits.[6] If home prices incorporate tax benefits then new purchasers are not necessarily benefitting since they pay for future tax benefits in the price of the home. This raises significant problems if tax benefits are removed. Owners would have to pay more in tax in each year and anticipated capital gains would fail to materialize and might be turned into capital losses.[7]

Analysis of changes in tax provisions require consideration of the fact that resources diverted to the government leaves taxpayers worse off unless the public services provided are more valuable than private consumption lost.

Administration and compliance cost should be as low as compatible with the other objectives in a good tax structure.[8] These costs include costs of internal revenue agents and time spent by taxpayers. Added to this is the cost of advisors for compliance and tax minimization purposes and the psychological distress caused by the system.[9]

Considerations of vertical equity involve problems in respect to political attitudes towards redistribution of income and to impact on incentives to invest and to work. Effective tax rates do not equal the nominal tax rates, because of tax preferences.[10] Depending on a person's circumstances this may be unfortunate because it means there is a greater differential in income distribution than there should be. An alternative viewpoint is that this encourages investment and effort which in turn provides benefit to the economy as a whole.

Tax principles sometimes conflict. Desire for equity, for example, may conflict with encouragement of a particular behavior. Where tax principles conflict in respect to encouragement to homeownership will be considered in the following.

Tax Preferences to Homeownership

A taxpayer has the opportunity of itemizing certain deductions and if these deductions exceed the zero bracket amount the excess creates a deduction from adjusted gross income to arrive at taxable income. These deductions are only of benefit to a taxpayer if they exceed the zero bracket amount. The tax reduction caused by the deduction is a function of the tax bracket of the taxpayer.

Interest and property taxes are both itemized deductions under current income tax rules. These provide incentives to homeownership rather than renting and provide incentives to expenditure on housing relative to nonhousing expenditures.

Imputed Rent

Individuals alternatively may own a home or invest their funds in another investment and secure the services of shelter by renting. If a

person owns a home, a portion of the cost of their shelter is covered by the imputed return on their equity. National income accounts include imputed return on homeowners' equity. However, imputed income from owner occupied housing is currently free of tax.

At one time in the United Kingdom a tax was imposed on the "income" from an owner-occupied house. This tax has since been abandoned.

Example of Tax Implications

If Owner (O) owns her own home, no rent is paid and no taxable income is created. However, if Renter (R) rents his home from Landlord (L) then the rent paid to L is taxable income. For simplicity, ignore the effects of interest and property tax deductions and assume that tax benefits are not passed from landlords to renters in the form of lower rents.

Observe the tax consequences for O, R, and OM. OM is an owner with a mortgage. Assume each have $100,000 to invest. R invests $100,000 in a money fund and rents a house for $12,000 per annum. O invests the $100,000 in a home which she occupies. OM invests $80,000 in a home which she occupies. Assume capital cost is 12%. Income taxes paid are as follows: R $3,600, O zero, and OM $2,880. O has invested $100,000 and gets no cash investment return, O pays no rent and pays no tax. R earns $12,000 on the money fund on which he pays $3,600 tax at a 30% tax rate. He has $8,400 left which does not cover his $12,000 rent. OM gets a gross return of $9,600 from an $80,000 investment in her money fund and pays $2,880 tax on this amount. She pays no rent and pays no tax on the service of a house.

Goode suggests that "under a net income tax the amount to be included in income would be imputed net rent, defined as gross rental value

minus necessary expenses of ownership."[11] Expenses of homeownership include interest on mortgage debt, property taxes, depreciation, repairs and maintenance, and casualty insurance. Since interest and taxes are already deductible, taxation of imputed net rent would add to the tax base an amount equal to gross rent minus expenses other than interest and taxes.

Quantitative Importance of Deductions

Musgrave and Musgrave report that interest deductions comprise 32 percent of total itemized deductions.[12] Mortgage interest accounts for the larger part of interest deductions. Estimated revenue loss for 1979 is 5.5 billion from mortgage interest and 5.2 billion from property tax on owner occupied homes.[13] This is a portion of a total of 102.2 billion of tax preferences for individuals. M and M also compute the percentage of various tax preferences as a percentage of tax liability by "expanded income class for 1977." Expanded income class is adjusted gross income plus the untaxed half of capital gains and certain other preference items. Homeowner items amount to 12.8 percent of income at the 0-$5 thousand level, 4.4 percent for the $10-15 thousand level, 10.5 percent for the $30-50 thousand level and 2.6 percent at the $200 thousand level. In all brackets homeowner items amount to 7.2 percent.[14] Homeowner items include deduction for mortgage interest and real estate taxes and deferral of capital gain on home sales.

Goode examines an earlier period and finds imputed net rent rising from 8.9 billion in 1960 to 13.9 in 1970, mortgage interest from 6.5 billion to 16.9 and property taxes from 5.4 billion in 1960 to 12.6 billion in 1970.[15] Goode's interpretation is that there is a substantial discrimination in favor

of owners versus renters and indicates that in 1970, net rent, mortgage interest, and property taxes amounted to 73 percent of the gross rental value of owner-occupied non farm dwellings.[16]

There is evidence of a significant variation in benefits according to family income.[17] Tax savings increase as income and tax rates increase. The result is that the exclusion and deductions reduce the progressivity of the income tax.

Deduction for Property Taxes

Over time the deduction for federal excise tax and other minor taxes have been eliminated. Deductions for general sales taxes and for property taxes are still allowed. Pechman indicates that the rationale for the property tax deduction is that some federal relief for these taxes is needed to encourage state and local governments to raise revenue without providing an incentive for them to use a particular source because of federal tax consequences.[18]

Goode reports that the amount of property taxes paid by non-farm homeowners is substantially greater than their special income tax benefits. In 1970 property taxes were $12.6 billion as against 8.9 billion benefits.[19] Property taxes, of course, apply to rental property as well. Goode considers that since the property tax deduction is available only to homeowners, "it gravely discriminated against renters who bear a large part of the property tax on their dwellings."[20]

Arguments For and Against the Preference to Housing

Failure to tax imputed rent means the stream of benefits is not taxed while interest on mortgages are deductible. This is contrasted to a busi-

ness in which interest can be deducted but the corresponding revenue stream is subject to tax.

Goode suggests a discrimination results because imputed rent is not taxed and interest and property taxes are deductible. He reasons that the omission of imputed net rent from AGI (adjusted gross income) and the personal deductions for mortgage interest and property taxes discriminate in favor of homeowners compared with renters and with other investors.[21]

Pechman expressed a similar view:

> Since the rental value of an owner-occupied house is not included in the owner's income, the deduction of expenses--including interest and taxes--connected with the home is not warranted.[22]

He also points out that homeowners receive an additional benefit on top of the deductions for interest and taxes and the exclusion of imputed rent in that they are more likely than renters to be able to utilize other itemized deductions.[23] Many renters will not accumulate itemized deductions in excess of the zero bracket amount. Homeowners receive the benefits of newly enacted itemized deductions because they already have itemized deductions in excess of the zero bracket amount whereas renters may not.

Taxpayers at different income levels are impacted in a manner that changes the nominal progression of the income tax structure. Pechman indicated that tenants with low and middle incomes rarely accumulate deductions that are more than the standard deduction.[24]

Goode also suggests the saving from tax benefits to homeownership rises with income and tax rates.[25] This is in his opinion objectional because "whatever assistance is afforded for housing and homeownership varies directly with the family's taxable income and marginal tax rate, which seems unfair and inefficient."[26]

Musgrave and Musgrave also find difficulty in the current tax pro-

visions. They argue that equal treatment should apply to people who consume housing in a different form and also in the treatment of consumption of housing relative to other items.[27]

Preferential treatment possibly can be justified on the basis of providing an incentive to homeownership which in turn perhaps assumes homeowners will provide the community with greater benefits than renters. There is a conflict in taxation goals. The goal of equal taxation conflicts with the goal of encouragng a particular action which in this case is a purchase of a home.

Current rules provide incentive to ownership as different from housing expenditure in general. Objectors to this incentive cite the fact that low income housing is generally more in rental form and does not receive this benefit. Musgrave and Musgrave for example, suggest that support for low cost housing in particular may be more desirable. This would call for limitation of deductions to rental payments and interest deductions on low income housing.[28] However, since low income families pay little or no tax, these tax preferences do not help and therefore M and M suggest that rental subsidies and direct provision for low-cost housing offer superior approaches.[29]

In addition to objecting that housing preferences seem unfair because they vary with the family's taxable income and marginal tax rate, Goode points out that the loss of tax revenue is large relative to the cost of other federal government programs for housing.[30] Other programs include low-rent public housing, rent supplements, and direct homeownership assistance through subsidized mortgages and mortgage insurance.

The imposition of a tax on imputed income from homeownership or disallowance of mortgage interest or property tax deductions would raise

considerable revenue. However, there are significant problems in accomplishing this which evolve partially around the question of whether house prices incorporate tax benefits. Market observation indicates that a similar house in a similar location can be rented for less than the capital cost of a house. This may be because tax benefits are capitalized in the house price or because of inflationary expectations, or for both reasons. If tax benefits are capitalized, then current house buyers only receive benefit to the extent the benefit is not capitalized in the house price. As illustrated in a later example, serious problems would be caused by removal of benefits for current homeowners.

Goode computes an imputed rate of return on home owners' equity for several time periods in order to obtain indirect evidence concerning the influence of the income tax provisions on the market price of houses.[31] He reports that the return appears to be consistently and surprisingly low relative to dividend yields on common stocks and yields of high grade tax exempt bonds.

He concludes:

> The evidence, however, is consistent with the hypothesis that, contrary to the deductive arguments stated above, the potential benefits to homeowners have been offset in part by a rise in house prices, resulting from their efforts to take advantage of the income tax benefits.[32]

Administration and Compliance

Taxation of imputed rent raises serious problems of administration and compliance. The administrative problem of taxing imputed net rent involves establishment of a rental value. This could be accomplished by direct appraisal. Property tax assessments involving valuation are already made in many areas, but there is significant variation in how well they are done.

Musgrave and Musgrave feel that "however strong the case for inclusion of imputed rent may be in principle, it is politically unpopular and not in the cards."[33]

United Kingdom Experience

Kay and King discuss the United Kingdom experience in which tax was imposed on imputed rent.[34] The imputed rent was purported to be the amount for which the property could have been rented in 1939. Kay and King state the figures became increasingly ludicrous and the Government abolished it altogether in 1963. It was abolished because of the problem "of facing angry reaction to enormous increases in the tax payable."[35]

Kay and King indicate that one of the most serious possibilities for broadening the U.K. income tax base is to modify the treatment of owner occupied housing and note that this action would produce substantial revenue. They consider, however, that given the capitalization of these tax benefits, the case in equity for withdrawing them has little merit. They do not recommend elimination of tax preferences for housing except as part of an overall review of housing policy. Further, they note that withdrawal of these preferences would cause extreme public hostility.[36]

Diverse Tax Treatments

The tax impact of obtaining shelter by owning or renting varies under the current income tax rules. It also is influenced by whether or not there is a mortgage on the property. This raises questions in respect to horizontal equity between different taxpayers. Horizontal equity refers to the principle that taxpayers with equal income should pay equal taxes.

In addition to the impact of the tax treatment on horizontal equity, the analysis will consider tax preferences to owning versus renting. Consideration will also be given to tax preferences to housing relative to other expenditures. Provisions benefitting housing such as the deductibility of interest reduce the after tax cost of housing and thus makes housing expenditures more attractive relative to expenditures which cannot be financed by debt on which interest is deductible.

To illustrate the equity problem, assume there are three taxpayers each with $100,000 to invest.[37] Renter (R) invests the $100,000 in a money market fund and earns $12,000 per year income on this investment. R pays $12,000 rent per annum for his home. Owner (O) invests her $100,000 in a home. She has no interest income and pays no rent. (OM) invests $100,000 in a money market fund and earns $12,000 interest. She obtains a $100,000 mortgage and purchases a home and therefore pays $12,000 interest annually. For purposes of this example, the term capital cost will be used to represent the interest rate times the current value of the home. This approximates the interest cost for a currently obtained mortgage plus a return on equity equal to the same percentage. Assume capital earns 12 percent per year and that rentals are $12,000 per year. Each taxpayer is assumed to be in the 30% tax bracket.

The tax impact of the above assumptions will be determined. Then the assumption of rental value will be varied according to market observation. Finally assumptions in respect to inflation will be added.

Various proposals for a flat tax suggest removal of the interest deduction. Other proposals for tax reform have suggested the taxability of imputed rent and still others the deduction of rental payments. To suggest the impact of these proposals on the taxpayers in the model presented,

taxes are computed under each alternative.

Table I sets forth the taxation assumptions under different alternatives. Under current law imputed rent is not taxable, interest paid on a mortgage is an itemized deduction and rental payments are not deductible. Each alternative varies either the taxability of imputed rent, the deductibility of the interest paid on the mortgage, or the deductibility of rental payments.

Taxes Paid Under Alternative Assumptions

Under current law (Table II) R pays $3,600 in tax. Neither of the owners pay tax and the government receives $3,600. R pays 30% tax on his $12,000 interest income and gets no deductions. O has no investment income or home related income or deductions and pays no tax. OM has $12,000 interest income which is offset by a $12,000 interest deduction and pays no tax. Under current law the principle of horizontal equity is violated as R pays tax and O and OM do not. Recall all taxpayers started with the same income and same capital. Each has a similar house but R is the only one that pays tax.

Alternative I follows a version of the flat tax proposal and removes the interest deduction. The result is OM has lost her interest deduction and now pays tax as well as R. O still pays no tax and the governmental revenue has increased.[38] The law is still not neutral between parties. O is not taxed on the services from her house. There is still a preference for home ownership relative to non-housing expenditures in so far as O avoids tax.

Taxing imputed rent, allowing interest to be deductible and not allowing the deduction for rental payments puts all three on an equal basis and

TABLE I

ASSUMPTIONS FOR COMPARISON OF
ALTERNATIVE TAX IMPACT ON
DIFFERENT METHODS OF OBTAINING SHELTER

	Current Law	Alternative I	Alternative II	Alternative III	Alternative IV
Imputed Rent	Not Taxable	Not Taxable	Taxable	Not Taxable	Taxable
Interest on Mortgage	Deductible	Not Deductible	Deductible	Deductible	Deductible
Rental Payments	Not Deductible	Not Deductible	Not Deductible	Deductible	Deductible

TABLE II

TAXES PAID UNDER ALTERNATIVE TAX RULES GIVEN VARIOUS ASSUMPTIONS OF FORM OF OBTAINING SHELTER[1]

	Current Law	Alternative I	Alternative II	Alternative III	Alternative IV	Alternative V[2]
Renter	3,600	3,600	3,600	θ	θ	3,600
100% Owner	θ	θ	3,600	θ	3,600	2,160
Owner with Mortgage	θ	3,600	3,600	θ	3,600	2,160
Government Receipts	3,600	7,200	10,800	θ	7,200	7,920

[1] See Table I for description of alternatives.

[2] Alternative V is the same as Alternative II except imputed rent is $7,200.

each pays $3,600 in tax in Alternative II. This also raised the governmental revenue to $10,800. Also it does not give homeownership a tax preference relative to other expenditures.

As noted earlier, the taxing of imputed rent is politically unpopular. Further, the United Kingdom experience referred to earlier seems to have been unfortunate. Establishing the amount of imputed rent also creates serious administrative problems. Once established, the updating of the amount to be taxed as imputed rent creates more administrative difficulties.

Another possibility as illustrated under alternative three is to keep the current provisions of the law except to make rental payments deductible. The result is no tax for either of the three taxpayers. R's investment income is offset by a deductible rental payment. O has no income or deductions. OM's interest income is offset by interest paid. Thus it appears we have horizontal equity. Governmental receipts are of course at the lowest point. Housing receives preference relative to other expenditures as mortgage interest is deductible as well as rental payments. Many renters tend to pay little or no tax, thus the desirability of providing a preference to housing over other expenditures may be questioned. If there would still be a system which included deduction of a zero bracket amount, rental deductions would not reduce tax for many low income taxpayers.

Alternative IV makes imputed rent taxable, interest paid deductible and rent deductible. Result is O and OM pay tax and R does not. Here we have the opposite from current law where renting would be encouraged. Rental housing would be encouraged relative to other expenditures but homeownership would not.

Market Rents

Examination of rents relative to payments on mortgages indicates that rents are significantly lower than mortgage payments. This is also consistent with Rick's example in his article on "Managing the Best Financial Asset." Accordingly, Alternative II was varied and imputed rent was lowered to $7,200 from $12,000. This is based on 60% of capital cost of $100,000.[39] The result is the horizontal equity which appeared when imputed rent was taxed on $12,000 value is lost. Now R pays $3,600 in tax whereas O and OM each pay $2,160 tax. O and OM each pay 30% tax on $7,200 imputed rent.

Factors causing rental payments to be less than mortgage payments include the possibility that tax benefits are impacted in the market price of homes, the build up of equity value, the inclusion of inflationary expectations in home prices, and tax factors accruing to real estate investors which allow the provision of rentals at less than before tax interest and principal payments on similar properties. Real estate investors obtain tax advantages through the deduction of interest and other expenses and through deduction for tax depreciation. Real estate investors may defer gain on the sale of a home by exchanging under Section 1031 I.R.C.

Current Inflationary Expectations

It is not necessary here to document the increases in cost of living and in home prices. At this writing the rate of increase in housing prices is declining as well as the rate of increase in the cost of living. However, inflationary expectations still exist and a model will be presented incorporating inflationary expectations to determine the impact on R, O, and OM in an inflationary environment.

TABLE III

ASSUMPTIONS FOR INFLATIONARY EXPECTATIONS

	Year 1	Year 10	Year 20
Price Level	Index 100	Index 200	Index 400
Home Prices	Index 100 $50,000	Index 200 $100,000	Index 400 $200,000
Rents[1]	$2,100	$7,200	$21,600[2]
Interest Rate and Dollar Cost of Mortgage			
OMt	7% (3,500)		
OMt + 10	–	12% (12,000)	18% (18,000)
Type of Mortgage			
OMt	Fixed 30 Years	Fixed	Fixed
OMt + 10	-	Variable	Variable
Tax Bracket			
OMt	20%	40%	50%
OMt + 10	-	30%	40%

[1] 60% of current cost to amortize 100% value of house at current interest rates.

[2] 18% of 200,000 = 36,000; 60% of 36,000 = 21,600.

Inflationary Expectations

The purpose of this section is to illustrate how different variables interact to determine how taxpayers fare in an inflationary environment. Important variables are inflation in house prices, overall cost of living, and rents. The year in which individuals enter the housing market, whether the mortgage obtained was fixed or variable and the interest rate on the mortgage are important as well as tax rules and tax brackets. The impact on various tax payers assuming the deduction for mortgage interest was not allowed is analyzed.

Assumptions for an inflationary environment are shown in Table III. Year 10 approximates the current time. Year 1 is ten years before now at which time the house cost $50,000. House prices as well as the overall cost of living are assumed to have doubled each ten years. Rents are calculated at 60% of the capital cost times the prices of the house at that year. At year one, at a cost of $50,000 for a house, and an interest rate of 7 percent, capital cost would be $3,500 per year. Rents at 60% of capital costs are $2,100.

To designate taxpayers in the following discussion consider the following:

Renter	R
Owner, purchase made in year 1	OMt
Owner, purchase made in year 10	OMt + 10
Owner, purchase made in year 20	OMt + 20

Tax brackets are considered to rise over time to allow for increase in total income as taxpayers' careers progress.

After tax cost services of a house are illustrated in Table IV. Consider the results in year 10. Recall house prices have increased from

TABLE IV

COST OF SERVICES OF A HOUSE IN INFLATIONARY PERIOD

	Year 1	Year 10	Year 20	Year 20 Cost in dollars of Year 10	Year 20 Cost in dollars of Year 1
OMt, Owner with mortgage purchased Year 1					
Gross Cost	3,500	3,500	3,500	1,750	875.00
Tax Benefit	700	1,400	1,750	875	437.50
After Tax Cost	2,800	2,100	1,750	875	437.50
OMt + 10, Owner with mortgage purchased Year 10					
Gross Cost	-	12,000	18,000	9,000	4,500
Tax Benefit	-	3,600	7,200	3,600	1,800
Net Cost	-	8,400	10,800	5,400	2,700
R, Renter					
Rent Cost	2,100	7,200	21,600	10,800	5,400
OMT + 20, New owner with mortgage purchased Year 20					
Gross Cost	-	-	36,000	18,000	9,000
Tax Benefit	-	-	10,800	5,400	2,700
Net Cost	-	-	25,200	12,600	6,300

$50,000 to $100,000 over the ten years.

Because of a fixed mortgage at 7 percent OMt is paying the same amount before tax for housing services as she did 10 years earlier. Given the assumption of increase in tax brackets from 20 percent in year 1 to 40% in year 10 she is getting a larger percentage tax benefit and is benefitting paying a mortgage back with dollars worth only half as much as ten years previously. A likely career path would indicate higher tax brackets and therefore a higher percentage of deductible interest over time.

R's rent increases as the cost of living increases and as a result he is now paying $7,200 in year 10 dollars for use of shelter that costs OMt $2,100 after tax. Adjusting for price level change, year 10 stated in year 1 dollars shows R paying $3,600 versus $1,050 for Omt. R may have other advantages such as gain in other income because of superior mobility.

OMt + 10 purchases her first residence in year 10. Mortgage rates are now 12% and the house costs $100,000. She pays $12,000 which results in an after tax cost of $8,400 as tax benefits of 30% amount to $3,600. She pays more than R and considerably more than OMt who benefits from low interest rates computed on a lower house price.

Ten Years Later (year t + 20)

House prices have again doubled by year 20 and the house is now selling for a market price of $200,000. OMt is still paying $3,500 on her mortgage (Table IV). However, she now is in the 50% tax bracket and as a result the after tax cost is $1,750. Stated in year 1 dollars the cost is $437.50. She is still gaining by the fact she has an asset that increases with the price level together with a fixed rate mortgage in a period of rising prices.

TABLE V

AFTER TAX COST OF HOUSE IN YEAR 20
ADJUSTED FOR PRICE CHANGES

	Year 20 Dollars	Year 1 Dollars
OMt	1,750	437.50
OMt + 10	10,800	2,700
OMt + 20	25,200	6,300
R	21,600	5,400

OMt + 10 entered the market in year 10. Her interest payments with the variable loan have increased to $18,000. This is 18% of the $100,000 value of the house at time of purchase. At a tax bracket of 40%, the government eases the burden and the net cost is reduced to $10,800. After tax cost in year 10 dollars is $5,400 compared to OMt at $875.

R is now paying rent at $21,600. Homes are selling at $200,000 and given an 18% interest rate a new owner in year 20 has to pay 18% of $200,000 or $36,000. Rents are assumed to be 60% of this capital cost.

A new owner (OMt + 20) in year 20 would have to pay $36,000 interest. This is the current interest rate (18%) times the current house price of $200,000. Assuming a 30% tax bracket, the government will allow the deduction of $10,800 and net cost would be $25,200.

Table V compares the costs of the different taxpayers in year 20 dollars and year one dollars. OM is in a superior position as she has locked in a fixed payment and is receiving increasing tax benefits as she gets into higher tax brackets. OMt + 10 has a fixed mortgage principal but pays more because of the variable interest rate. Part of the burden is eased by the deduction of interest. R is still renting and paying more based on current house prices.

Tax Law Changed - Mortgage Interest Not Deductible

Assume the tax deduction for interest is removed. To begin with, assume house prices do not adjust. This assumption will be varied later. Results for the various taxpayers are shown in Table VI.

OMt, OMt + 10, and OMt +20 all pay more without the interest deduction and R pays the same. OMt + 10 and OMt + 20 have their housing cost increased significantly in dollar and percentage terms requiring a much

TABLE VI

COMPARISON OF COST OF HOUSE SERVICES IN YEAR 20
IF MORTGAGE INTEREST IS DEDUCTIBLE OR NOT DEDUCTIBLE

Taxpayer	Interest Deductible	Interest Not Deductible	Dollar Increase	Percentage Increase
OMt	1,750	3,500	1,750	100.0
OMt + 10	10,800	18,000	7,200	66.67
OMt + 20	25,200	36,000	10,800	42.8
R	21,600	21,600	-	-

TABLE VII

IMPACT ON COST OF SHELTER AND TAXPAYER WEALTH
OF REMOVING DEDUCTION OF MORTGAGE INTEREST IN YEAR 20

Taxpayer	Deduction Allowed	No Deduction	Change in Wealth
OMt	1,750	3,500	(80,000)
OMt + 10	10,800	18,000	(80,000)
OMt + 20	25,200	36,000	(80,000)
R	21,600	21,600	-
OMt + 20b	21,600	21,600	-

higher percentage of their income to be spent on housing. OMt has the highest percentage increase but the dollar increase related to income is likely to be much less significant than for the others.

Capitalizaton of Tax Benefits

Assume that tax benefits are reflected in the market price of homes. Further consider, for purposes of this example, that after tax benefits are removed so that rents are equal to the capital cost of a new owner. Assuming 18 percent is the before tax return on capital than for a capital cost of $21,600, the house should sell for $120,000. Using the assumption that house prices do drop to $120,000 because of the removal of the tax benefit, Table VII shows the impact on owners and renters. This is likely a larger drop in prices than would occur with removal of tax benefits. The difference between rental and capital cost of a new owner also reflect inflationary expectations as well as the pass through of tax benefits of landlords to renters. Nevertheless, the example is useful to show the impact of removal of tax benefits on various taxpayers.

A new taxpayer is added to the example. OMt + 20b purchases her house after the market adjusts at a price of $120,000. New interest and principle costs are $21,600. Assume OMt + 20a bought her house just before the deduction was removed.

R pays 21,600 as before. OMt, OMt + 10, and OMt + 20a each have their wealth reduced by $80,000 as a result of the drop in house prices from $200,000 to $120,000. OMt + 20b and R are now on an equal basis.

Problem of Debt Service

A serious problem of servicing debt may be created for taxpayers who

purchased a home on the basis that mortgage interest was deductible. Consider OMt + 20a's position. She already bought the house before the withdrawal of tax benefits and resultant drop in house price. Her ability to service the debt was based on an after tax cost of $25,200, which was at the time of purchase one-third of her income of $75,600. Given the loss of $10,800 in tax benefits per annum her housing cost has risen to $36,000 or 47.6 percent of her income of $75,600. This amount is likely significant enough to severely disrupt her budget and expenditure for non-housing items.

Wealth Loss

Homeowners would have another serious problem with the drop in home prices resulting from the removal of tax benefits. This is a wealth loss caused by a drop in house prices. This is the same in dollars regardless of how long the taxpayer has owned the property.

In the above example house prices are assumed to have doubled each ten years along with the cost of living. Removing tax benefits with a resultant drop to $120,000 causes a capital loss in real terms as well as nominal terms. The current price of $120,000 in year 20 dollars is equal to $60,000 in year 10 dollars and $30,000 in year one dollars. Recall a house cost $100,000 in year 10 dollars and $50,000 in year one dollars.

Although this example overstates the problem because house prices also reflect inflationary expectations as well as tax benefits, it does, however, reflect the serious problems to homeowners of removing tax benefits. These are loss in wealth and problems with ability to service debt. The latter problem is more significant the shorter the time the property was held.

Summary and Conclusions

Tax rules related to homeownership involve consideration of principles of horizontal equity, tax preferences to owning versus renting, and to expenditures for housing relative to other expenditures.

Respected tax authorities question provisions of the current tax law. Objections include failure to tax imputed rent while at the same time allowing deductions for interest and property taxes. Tax preferences increase as income and marginal tax rates increase raising questions as to vertical equity because the effect is to reduce the nominal progression of the income tax rates. Objections also are related to the lack of neutrality of the tax law. This involves decisions to own or rent and encouragement of housing expenditures relative to non-housing expenditures. Since most renters use the zero bracket amount and do not itemize, they often do not get the full benefit of newly enacted itemized deductions.

A model was developed which was designed to illustrate the impact of changes in certain variables on selected taxpayers. Variables include deduction of mortgage interest, taxability of imputed rent to homeowners, and deductibility of rent payments by renters. A static environment was first examined and subsequently additional assumptions were added to allow a more realistic environment. These assumptions included consideration of inflation, length of time property held, and different tax brackets.

In a static environment horizontal equity between owners and renters was achieved by making imputed rent taxable. Owners would be worse off then under the current tax law and the government would receive more revenue. Housing expenditures would not receive preference over other expenditures. Horizontal equity between owners and renters can also be achieved by making rent deductible and leaving interest deductible and

imputed rent non-taxable. Governmental revenue is reduced and housing still receives tax preference relative to other expenditures.

A more realistic environment is considered in which house prices double each ten years. Recognition is also given to the replacement of a fixed rate mortgage by variable mortgages. Tax benefits received by current owners under the present tax rules are a function of their mortgage payments and tax bracket. Mortgage payments are a function of the price level when the house was purchased, the interest rate, and whether the mortgage was fixed or variable. As mortgage payments increase, the government shares more of the cost. Nevertheless, the owners who purchased at an earlier lower price level are paying the lowest amount after tax for their shelter. They are even better off if they have favorable leverage and a home that increases in value with the price level together with a fixed rate mortgage.

Homeowners' economic circumstances vary depending on when they purchased their homes. The first group purchased their home before large increases in home prices and generally were able to obtain fixed-interest rate, thirty-year mortgages. The second group purchased their home subject to variable interest rates or with mortgages with baloon payments allowing for increases in interest rates.

Introducing the assumption that tax benefits are capitalized in house prices changes the tax consequences. When it is assumed that these tax benefits are removed, there are wealth losses to all owners and significant problems for recent purchasers in meeting current mortgage commitments. The same dollar wealth loss is likely to be more significant to recent purchasers. This is because they may have paid for future tax benefits in the price of their house whereas those who have owned the home for a long

period owned the house while the price increased.

Recent purchasers would also be in a position of having problems with meeting mortgage commitments if tax benefits were removed. Housing expenditures would be a much larger percentage of income causing problems of budgeting and impacting expenditures for housing relative to other items.

Issues Requiring Study

Decisions on tax preferences for housing require better data on the degree that housing prices reflect tax benefits. Since tax preferences involve encouragement to certain activities at the cost of loss of equity, more consideration should be given to the reasons for tax preferences for homeownership and the methods to provide this preference.

Careful consideration needs to be given to whether tax preferences are superior to alternative stimulus to housing such as direct subsidies. If tax preferences are desirable, tax credits as well as tax deductions may be considered. Stimulus to rental housing can be achieved by providing a tax credit to renters or to those who provide rental housing. Problems with vertical equity might be alleviated by placing a limit on the amount of mortgage interest that can be deducted.

What to Do Now

Because it is not clear to what degree housing prices incorporate estimated future tax benefits, the removal of the mortgage interest deduction is not recommended. Significant drops in house prices as a possible result of removal of the mortgage interest deduction is likely to lead to significant wealth losses and problems of meeting home payments by new

owners. The burden of removal of tax preferences are stronger the more recent the home purchase. Taxability of imputed rent would likely have similar results and is also subject to serious administrative problems. The unfortunate United Kingdom experience as well as problems with property tax assessments in the United States support this view. Changes in tax preference to housing should be made in conjunction with a review of the overall United States housing policy.

FOOTNOTES

1. K. T. Rosen, "The Demand for Housing Units in th 1980s," Working Paper #80-14, Center for Real Estate and Urban Economics, University of California, Berkeley, September 1980.

2. See, for example, "Level Levy?" Wall Street Journal, July 9, 1982. Senator Bill Bradley of New Jersey has a proposal (S.2817) which continues the deduction for mortgage interest and property taxes. Senator Helms (S.2200), Representative Panetta (HR.6070) and Senator DeConcini (S.2147) have different proposals.

3. R. A. Musgrave and P. B. Musgrave, Public Finance in Theory and Practice, 3rd ed., McGraw-Hill, Inc., 1980, 242-43. See also, J. A. Pechman, Federal Tax Policy, rev. ed., 1971 (New York: W. W. Norton and Co., Inc.), p. 68.

4. Musgrave and Musgrave, op. cit., pp. 343-47.

5. An interesting discussion of behavioral assumptions of equity theorists and efficiency theorists is in B. I. Bittker, "Equity, Efficiency, and Income Tax Theory: Do Misallocations Drive Out Inequalities?" in H. J. Aaron and Michael J. Boskin (eds.), The Economics of Taxation (Washington, D.C.: The Brookings Institution, 1980).

6. J. A. Kay and M. A. King, The British Tax System, 2nd ed., Oxford University Press, 1980, p. 236.

7. Ibid., p. 12.

8. Musgrave and Musgrave, op. cit., p. 235.

9. Kay and King, op. cit., p. 13.

10. See, for example, Goode, The Individual Income Tax, rev. ed., 1976 (Washington, D.C.: The Brookings Institution), pp. 251, 155, 158.

11. Ibid., p. 118.

12. H. J. Aaron, "Shelter and Subsidies: Who Benefits from Federal Housing Policies?" (Washington, D.C.: The Brookings Institution, 1972), pp. 58, 223-24.

13. Musgrave and Musgrave, op. cit., p. 359.

14. Ibid., p. 369.

15. *Ibid.*, p. 370. See also, H. Aaron, "Income Taxes and Housing," *American Economic Review*, December 1970; and M. White and A. White, "Horizontal Inequality in the Federal Income Tax Treatment of Homeowners and Tenants," *National Tax Journal*, September 1965.

16. Goode, *op. cit.*, p. 119.

17. *Ibid*.

18. Pechman, *op. cit.*, p. 83.

19. Goode, *op. cit.*, p. 123.

20. *Ibid.*, p. 171.

21. *Ibid.*, p. 118.

22. Pechman, *op. cit.*, p. 82.

23. *Ibid*.

24. *Ibid*.

25. Goode, *op. cit.*, p. 119.

26. *Ibid.*, p. 123.

27. Musgrave and Musgrave, *op. cit.*, p. 360.

28. *Ibid.*, pp. 360-61.

29. *Ibid*.

30. *Ibid.*, p. 121; periods included are 1950-1951, 1956-1957, 1960-1961, 1970-1971.

32. *Ibid.*, p. 122.

33. Musgrave and Musgrave, *op. cit.*, p. 361.

34. Kay and King, *op. cit.*, p. 51.

35. *Ibid*.

36. *Ibid.*, p. 236.

37. This adapts an example in Musgrave and Musgrave, *op. cit.*, p. 360, and expands it.

38. Taxable income for R and OM is $12,000. This is the income from the money fund. O has the entire investment in the house and therefore has no taxable income.

39. R. B. Ricks, "Managing the Best Financial Asset," *California Management Review*, XVIII:3 (Spring 1976), pp. 96-101.

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