

TAX
REFORM
AND
REAL
ESTATE



Edited by James R. Follain

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THE IMPACT OF TAX REFORM ON HOUSING DEMAND AND RESIDENTIAL CONSTRUCTION ACTIVITY

Michael S. Cartlner

Both the president's tax reform proposals and the bill passed by the House of Representatives (H.R. 3838) would cause the after-tax cost of homeownership to increase substantially and the returns to investment in rental housing to greatly decline: or, equivalently, the rents required to achieve a given after-tax return would have to increase.

Most housing services are provided by the stock of existing housing, with new construction accounting for small short-run changes at the margin. Short-run fluctuations in new construction as a result of changes in equilibrium values can be quite severe.

Over the longer term, the number of housing units demanded is probably not very sensitive to moderate changes in the relative after-tax cost of housing, because the number of units demanded is primarily a function of other demographic, social, and economic factors that determine household formations. However, the types of housing units demanded in the long run could be greatly affected.

Both in the short run and the long run, the proposed tax changes could have substantial impacts on the wealth and well-being of different segments of the population. For low-income renters, a relatively small change in rents would represent a very adverse impact that would greatly outweigh any positive benefits of reduced tax liability.

This chapter reviews the provisions in current law, in the president's proposals, and in the House bill which affect owner-occupied and rental housing. The impact of the proposals on the after-tax cost of homeownership and on the rent required to achieve a given after-tax return on rental housing is quantified. In addition, an attempt is made to translate these changes in after-tax costs into an estimate of construction activity.

Owner-Occupied Housing

The tax advantage of homeownership will be reduced under both the president's tax reform proposals and the House bill (H.R. 3838) in two ways: first, the effective total amount of itemized deductions will be reduced because the standard deduction will be increased while deductible expenses will be reduced, thereby creating a large excess standard deduction for most renters. Under H.R. 3838, moreover, itemized deductions will be reduced by \$500 for each personal exemption. Second, marginal tax rates will be reduced, so that each dollar in deductions will produce smaller tax savings. In addition, the president's proposals will eliminate the deductibility of property taxes.

The first factor will affect the total cost, but not the marginal cost, of homeownership and will have greatest impact on the number of people choosing ownership versus renting. The other two factors will affect the marginal cost of homeownership and will have greater impact on the size and amenities of homes chosen by those households that have already decided upon homeownership.

Table 29 shows the major provisions in each proposal affecting homeowners. The increase in the standard deduction is a subtle but significant change in the tax advantage of homeownership. Taxpayers must choose either to itemize deductions or to take the standard deduction. Where the standard deduction is greater than the taxpayer's nonhousing deductions, the net impact on taxable income of homeowner deductions for interest and property taxes is reduced or eliminated. The provision in H.R. 3838 linking itemized deductions and the personal exemption is a more blatant reduction in homeowner tax advantages.

The reduction in tax savings from homeownership translates into an increase in the after-tax cost of homeownership. Despite the fact that tax reform would reduce the tax burden on many homeowners, homeownership would become 8 percent to 14 percent more expensive, on an after-tax basis, relative to other goods and services, prompting households to consume less housing.

Another area in which the proposals adversely affect owner-occupied housing is the treatment of installment sales. Both proposals would eliminate installment sales treatment of builder bond-financed mortgages. Between 50,000 and 75,000 new home sales were financed by builder bonds in 1984.

The president's proposals would eliminate single-family mortgage revenue bonds. The House bill would retain these bonds, at least through 1987, but would impose more stringent volume limitations and targeting provisions. Mortgage revenue bonds financed the sales of about 120,000 new homes and about 175,000 existing homes in 1985 (see table 30).

TABLE 29

MAJOR TAX PROVISIONS AFFECTING HOMEOWNERSHIP COSTS

<i>Homeowner Deductions</i>	<i>Current Law</i>	<i>President's Proposals</i>	<i>H.R. 3838</i>
Interest expense	No limit on noninvestment interest	Primary home mortgage plus \$5,000 plus net investment income	Net investment income plus \$20,000 (joint return) plus mortgage interest on two homes
State and local taxes	All property, income, and sales	No deductions	All property, income, and sales
<i>Other Homeowner Provisions</i>			
Mortgage revenue bonds (tax exemption)	Yes	No	Yes, with tighter volume caps and stricter targeting
Homeowner (builder) bonds (installment sale)	Yes	No	No
Rollover of capital gains	Yes	Yes	Yes
One-time \$125,000 exclusion of gains for home sellers over age 55	Yes	Yes	Yes
Special bad-debt allowance for thrift institutions	Yes	No	No
<i>General Provisions</i>			
Personal tax rates	14 brackets: 11%–50%	3 brackets: 15%–35%	4 brackets: 15%–38%
Personal exemption	\$1,080	\$2,000	\$2,000 (itemized deductions are reduced by \$500 per exemption)
Zero bracket amount/standard deduction	\$2,480 single 2,480 head of household 3,670 joint	\$2,900 single 3,600 head of household 4,000 joint	\$2,950 single 4,200 head of household 4,800 joint

TABLE 30
ESTIMATES OF SINGLE-FAMILY HOMES FINANCED BY MORTGAGE REVENUE BONDS
IN THE RECENT PAST^a

Year	Number of Homes (Thousands)		Total
	New	Existing	
1976	18	27	45
1977	21	31	52
1978	54	82	136
1979	106	159	264
1980	127	190	317
1981	52	77	129
1982	78	117	195
1983	93	158	251
1984	121	175	296
1985 ^b	118	177	295
Total	788	1,193	1,980

SOURCE: Council of State Housing Finance Agencies, June 1985.

a. These estimates of new and existing single-family homes financed by state and local housing finance agencies are based on existing reporting on mortgage revenue bond activity from *The Bond Buyer* and HUD and on program statistics from state Housing Finance Agency experience recorded in Council of State Housing Agency surveys of member state HFAs. However, homes financed by qualified veterans mortgage bonds issued by state and local HFAs are included in the table.

b. Estimates.

Mortgage revenue bonds and builder bonds are very important to construction activity, because both primarily serve the marginal first-time home-buyer and both tend to dampen cyclical changes in housing. Also, builder bonds are strictly for newly constructed homes and, for a variety of reasons, the share of mortgage revenue bond financing going to new homes rather than existing homes is disproportionately large compared with the share of home purchases and mortgage originations accounted for by new homes.

Second homes for seasonal or occasional use are not distinguishable in construction statistics, but they appear to have accounted for more than 100,000 annual housing starts before the announcement of the tax reform proposals, according to data on the stock of homes in the decennial Census and Annual Housing Survey which are "vacant, seasonal" or "vacant, held for occasional use." More than any other segment of the housing industry, construction of second homes has been adversely affected by the mere possibility of tax reform. To a large extent, the decline in this activity reflects the elasticity of second-home demand, rather than extraordinary impact of tax reform on the cost of owning a second home.

TABLE 31
MORTGAGE RATE EQUIVALENT OF AN INCREASE IN THE AFTER-TAX
HOMEOWNERSHIP COST DUE TO TAX CHANGES
(PERCENT UNLESS OTHERWISE INDICATED)^a

Adjusted Gross Income Level (Dollars)	President's Proposals	H.R. 3838
20,000	0.8	1.3
30,000	1.4	1.7
40,000	1.8	1.7
50,000	2.0	1.9
60,000	2.5	1.7
80,000	3.1	0.8

a. Assumptions about property taxes, utilities, and maintenance expenses are based on the average for new houses with FHA-insured mortgages. Tax savings assume that the household is married, filing jointly with two dependent children, and claiming personal deductions typical of a household in these income ranges, and that, if the household were not a homeowner, it would be reporting income on its investment of the down-payment amount in some other asset. Housing costs are based on 12 percent mortgage rate, 90 percent loan-to-value ratio, and house price such that the monthly mortgage payments equal 28 percent of the monthly income.

In addition to the provisions affecting owner-occupied primary houses and (for second homes that are rented part of the year) the provisions affecting rental housing, second-home costs to some households would be increased by proposed limits on interest expense deductions under the president's proposals. The president's proposals would limit interest expense deductions, other than for a trade or business or for primary home mortgage, to net investment income plus \$5,000. Under H.R. 3838, interest on first and second homes would be fully deductible.

Impact on Single-Family Home Construction

The increase in the after-tax cost of homeownership under the president's proposals and the House bill can be expressed in terms of an equivalent change in mortgage interest rates, which will vary with the income and other characteristics of each taxpayer. Table 31 shows the mortgage rate equivalent of the proposed tax changes for typical four-person families at various levels of income. The House bill, with its larger standard deduction and floor on itemized deductions based on the number of exemptions, would cause a much larger increase in the net after-tax cost of homeownership for a middle-income household facing the choice between owning and renting.

Most econometric models and economic forecasters estimate that the change in single-family housing starts that would result from a 1 percent change in mortgage rates could be on the order of 100,000 units. The pres-

ident's proposals will increase the weighted average mortgage rate equivalent among all homeowners by 1.6 percent; the increase will be 1.5 percent under the House bill. This suggests that the change in after-tax homeownership costs would cause single-family housing starts to decline by as much as 160,000 units under the President's proposals and as much as 150,000 units under the House bill.

There are, however, several important differences between the proposed tax changes and a change in interest rates: Prospective home buyers might delay purchases as a result of higher interest rates because they expected lower rates in the future—producing a temporary decline in starts. A permanent tax change would not similarly encourage delay. Also, lenders base their qualification criteria on the ratio of mortgage payments to pretax income. A change in tax laws would not affect that ratio, but a change in interest rates would. Therefore the impact of the change in the after-tax cost of homeownership cost on housing starts is likely to be less than the reduction from a comparable increase in interest rates. We estimate the first-year impact of the changes in deductions, the standard deduction, and tax rates to be about 65,000 units under the president's proposals and 75,000 units under the House bill. The greater impact under the House bill reflects the larger increase in after-tax costs for marginal, middle-income home buyers. The president's proposals would probably encourage high-income home buyers to choose somewhat smaller homes.

Elimination of mortgage revenue bonds under the president's proposals would probably result in an additional first-year decline of 35,000 single-family housing starts. The restrictions on mortgage revenue bonds under the House bill would probably cost 10,000 starts.

The elimination of tax preference for homeowner bonds, which finance about 50,000 to 75,000 new home sales per year, also would remove some marginal buyers from the market. We estimate that this factor would produce a decline in single-family housing starts of about 10,000 units.

The market for second homes is inherently more sensitive than the market for primary homes. The demand for primary houses, at least in terms of the number of units demanded, is protected by the truism that everyone has to live somewhere. Not so for second homes. The proposed restriction on consumer and investment interest deductions under the president's proposals (which would be phased in over a ten-year period), the proposed allocation of expenses between rental and personal use, and the proposals affecting rental housing could substantially reduce the total number of second homes demanded. Furthermore, any change in the demand for the stock of second homes would have a greatly magnified impact on new construction. The National Association of Home Builders estimates that recent production of

new single-family second homes (prior to the announcement of tax reform) has been on the order of 100,000 units per year. Despite the gradual phase-in of the limit on interest deductions under the president's proposals, starts would probably decline initially by 20,000 units.

Offsetting these adverse impacts is an assumed twenty-basis-point decline in interest rates, which would increase first-year starts by about 20,000.

Everything considered, single-family housing starts under the president's proposals would be likely to decline by approximately 110,000 units (65,000 + 35,000 + 10,000 + 20,000 - 20,000) in the first year of implementation, representing a decline of about 9 percent from what would otherwise be likely to occur. Under the House bill, the first-year decline would be about 75,000 units (75,000 + 10,000 + 10,000 - 20,000), with more of the decline coming from the low end of the market. In subsequent years, the loss in starts relative to the current law baseline would be less severe because of the reentry of households that had initially deferred purchases and because of increases in rents that would encourage a shift to ownership for those households that can afford it. The net loss in single-family housing starts in years two through five would range from 60,000 to zero under the president's proposals and somewhat less under the House bill.

Rental Housing

Investors in rental housing and, therefore, tenants of rental housing, enjoy significant benefits from preferences in the Internal Revenue Code. These preferences include accelerated depreciation and other provisions that allow investors to defer tax liability and to convert ordinary income into capital gains. The extent of the implicit subsidy is such that, for a typical rental housing project, the rents required to produce a given after-tax return are substantially lower under the current tax environment than would be the case if taxes were zero (assuming interest rates and other factors were unchanged). For the hypothetical development shown in table 32, the required rent under a zero-tax environment would be \$502 per month, versus \$410 under current tax law. Required rents and pretax returns for current law and the proposed tax changes are shown in table 33. These calculations are based upon a pro forma model described in the appendix to this chapter.

Although there are substantial lags in adjustment in rental housing, the rental housing market is highly competitive and the tax savings provided to investors in rental housing are reflected mainly in lower rents, as the after-tax, risk-adjusted rates of return tend toward comparability with returns from other investments. Of course, to the extent that factors of production—especially land—are subject to monopolistic control, the tax benefits may be

TABLE 32
CHARACTERISTICS OF THE RENTAL PROJECT

Measure	Number
Number of units	100
Initial monthly operating expense per unit	\$150
Land cost per unit	\$5,000
Construction cost per unit ^a	\$35,000
Mortgage term (years)	30
Loan-to-value ratio	80%
Vacancy rate	5%
Selling expense (percent of sales price)	3%
Expected inflation rate	5%
Nominal yearly appreciation rates (real rate + inflation rate)	
Rent	3.5%
Operating cost	5%
Structure value	3.5%
Land value	5%
Nominal interest rates	
Construction loan	12.0%
Mortgage loan	11.5%
Equity yield	13.0%

a. Excludes construction period interest and taxes.

captured by the owners of these factors. Because of the tax preferences afforded rental housing, investors are willing to accept subpar pretax returns. The ability to defer and reduce taxes on other income, plus the anticipation of eventual gains on resale, results in market rent levels that fail to cover the cost of operation and debt service in most newly constructed rental housing.

The Proposals

The president's tax reform proposals and the House bill would make a number of changes in the taxation of rental housing, as listed in table 34. For a non-low-income housing project, we estimate that the impact of the changes in marginal tax rates, depreciation, capital gains, and construction period interest and taxes in the president's proposals would be to increase the rent required to provide an equivalent after-tax rate of return on a typical development from \$410 to \$489—assuming no changes in other costs. The additional impact of the limitation on interest expense of limited partners, assuming no offsetting behavioral changes, would bring the increase in required rents to \$512—25 percent above current law.

The House bill would have an even greater impact on rental housing (other than low-income housing). Taking into account only the provisions for

TABLE 33
REQUIRED RENTS AND PRETAX RETURNS ON SAMPLE PROJECT YIELDING THIRTEEN PERCENT AFTER-TAX RETURN ON EQUITY

Item	Required Rent (Dollars)	Pretax Internal Rate of Return (Percent)
Current law		
Base case	410	6.0
IDB-financed ^a	361	6.0
IDB plus 20 percent low-income depreciation	349	5.1
Tax free	502	13.0
President's proposals		
Excluding interest limit and at-risk	489	12.0
Including interest limit and at-risk	512	13.7
House bill		
Excluding interest limit	509	13.5
Including interest limit	523	14.4
IDB-financed, moderate to low income	441	12.1
IDB-financed, very low income	415	10.3
a. Industrial Development Bond.		

marginal tax rates, depreciation, capital gains, and construction period interest and taxes, the required rent would be 24 percent higher than under current law. The additional impact of the at risk and interest-expense limitations would bring the total impact on required rents to 28 percent. The required rents under current law and under the proposals are shown graphically in figure 2.

The president's proposals make no distinction between low-income rental housing and other real estate. The House bill includes a significant differential for depreciation of low-income housing and would continue to allow tax-exempt financing of some rental housing. The definition of low income for depreciation treatment is more liberal under H.R. 3838 than under current law.

Tax-Exempt Financing

Under current law, state and local government agencies are permitted to issue tax-exempt Industrial Development Bonds (IDBs) to finance new construction of privately owned rental housing, provided that a portion (generally

TABLE 34
MAJOR TAX PROVISIONS AFFECTING RENTAL HOUSING

<i>Tax Provisions</i>	<i>Current Law</i>	<i>President's Proposals</i>	<i>House Bill (H.R. 3838)^b</i>
<i>General Rental Housing</i>			
Depreciation	18-year, 175% declining balance (DB)	28-year, 112% DB (4% per year) indexed basis	30-year, 100% DB (straight-line) with depreciation (not basis) partly indexed
Depreciation windfall tax	n.a.	Yes, over \$300,000 excess	No
Construction period interest and taxes	10-year amortization	Depreciated	Depreciated
Capital gains on land	60% exclusion	50% exclusion, index option beginning 1991	42% exclusion
Capital gains on structures	60% exclusion	No exclusion, indexed basis	42% exclusion
Depreciation subject to recapture	Excess of accumulated ACRS ^a over straight line	n.a.	None
Subject limited partners to interest expense limit	No	Yes	Yes, for limited and nonactive partners
At-risk exemption	Yes	No	Yes, for third-party financing
Historic rehabilitation tax credit	Yes (25%)	No	Yes (20%)
Maximum personal tax rate	50%	35%	38%

TAX REFORM AND REAL ESTATE

TABLE 34 (Continued)

<i>Tax Provisions</i>	<i>Current Law</i>	<i>President's Proposals</i>	<i>House Bill (H.R. 3838)^b</i>
<i>Low-Income Housing</i>			
Depreciation	15-year, 200% DB	28-year, 112% DB (4% per year), indexed basis	30-year, 200% DB
Construction period interest and taxes	Expensed	Depreciated	Depreciated
Recapture	Excess of accumulated ACRS over straight-line, reduced if property held 100 months or more	n.a.	Excess over straight-line
Tax-exempt financing by Industrial Development Bonds	Yes, if 20% of units are below 80% median income	No	Yes, if 20% of tenants are below 70% of median income, or 25% of tenants are below 80% of median income
Rapid amortization of low-income rehabilitation	Yes	No	Yes, with higher maximum investment

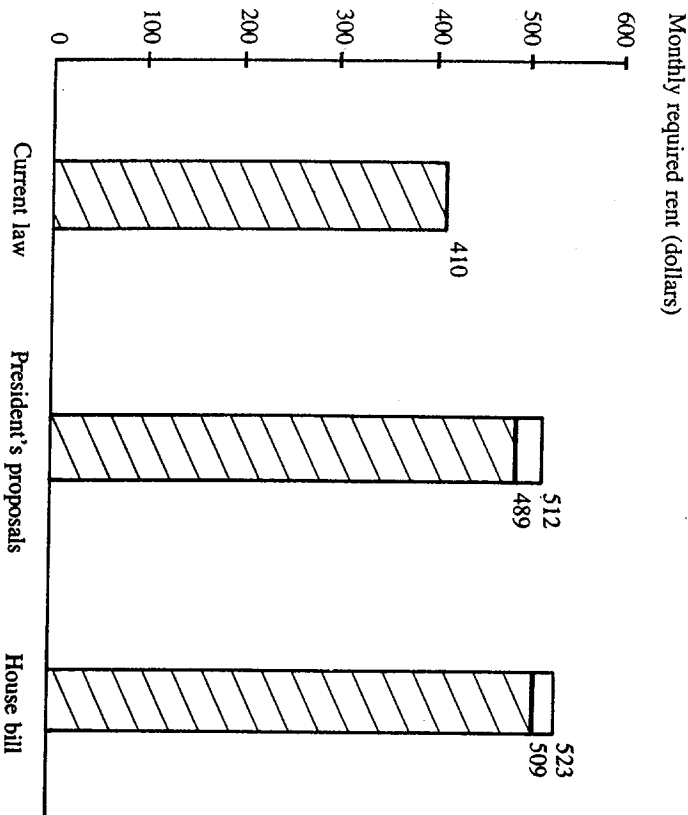
n.a. = Not applicable.

a. Accelerated Cost Recovery System.

b. H.R. 3838 introduced the category "moderately low income," which includes projects in which 20 percent of tenants are below 70 percent of the median income or 25 percent are below 80 percent of the median income.

M. Carliner

FIGURE 2
REQUIRED RENT FOR TYPICAL NEW RENTAL UNITS^a



SOURCE: National Association of Home Builders simulation model.

a. The shaded area includes provisions affecting depreciation, construction period interest and taxes, marginal tax rates, and capital gains. The unshaded area represents interest limitation and at-risk provisions under the president's proposals and only interest limitation under the House bill.

20 percent) of the units are set aside for households with incomes below 80 percent of the area median income.¹

1. The authority for multifamily IDBs is provided in Section 103(b)(4)(A) of the Internal Revenue Code. The restrictions are discussed in Joint Committee on Taxation, *Tax-Exempt Bonds for Multifamily Residential Rental Property* (JCS-19-85), June 17, 1985. In addition to the federal restrictions required to qualify for tax exemption, many of the state and local agencies impose further restrictions such as lower income limits on set-aside units or a larger share of set-aside units. See statement of Ralph Carbone, General Accounting Office, before Subcommittee on Oversight, Committee on Ways and Means, U.S. House of Representatives, June 21, 1985.

The use of tax-exempt financing has meant production of new rental housing targeted at income levels below those where new production would otherwise be directed. This may be reflected in the fact that the average asking rent for newly constructed apartments rose only 2.3 percent from \$385 in 1982 to \$394 in 1984,² whereas the rental component of the CPI increased 11.08 percent over the same period.

Neither the federal legislation nor Treasury Department regulations for IDB eligibility contained household income limitations that depended on household size. As a result, developers were encouraged to build efficiency or one-bedroom units aimed at single-person households. New regulations reduce the maximum household income for households with fewer than four persons. Some of the IDB activity in 1985 was therefore influenced not only by the tax reform proposals but also apparently by the prospect of these more stringent regulations.

Other Low-Income Preferences

The mere fact that a project qualifies for IDB financing under current law does not automatically imply that it is eligible for preferred treatment on depreciation, recapture, construction period interest and taxes, or other tax provisions governed by Section 1250 of the Internal Revenue Code. In many cases, however, developers take advantage of these other tax preferences in addition to lower mortgage rates available with IDBs. Often, these low-income preferences are applied to the set-aside units only; other units in the same development are accounted for separately.

To gauge the impact of IDB financing and other low-income preferences, we used the same hypothetical development as in our other simulations, but applied the preferential interest rate and equity investor tax preferences to find the average³ required rent for the project as a whole.

Taking into account only the advantage of IDB financing (assumed to be a 200-basis-point reduction in interest rates), the average required rent under current law is \$361, as opposed to \$410 in the current-law base case. If the entire project were also subject to low-income treatment for depreciation, tax on sale, and construction period interest and taxes, the required average rent would be \$301 under current law. Assuming that 20 percent of the project qualifies for more favorable treatment of depreciation and so on, the average required rent is \$349.

2. Bureau of the Census, *Current Housing Reports: Market Absorption of Apartments* (Series H 130).

3. The rents on set-aside units in IDB-financed projects may or may not have lower rents than similar unrestricted units.

The president's proposals would eliminate all special treatment of low- and moderate-income housing, so that the corresponding required rent would be \$489 to \$512, the same as for projects without income restrictions. This overwhelming difference in required rents, as well as the elimination of the differential incentives for low- and moderate-income rental construction, virtually guarantees that if the president's proposals are adopted, any new rental housing in the future will be directed toward higher-income households.

The House bill does provide for special depreciation treatment of low-income housing. Although the criteria for qualifying to receive tax-exempt bond financing are more stringent than under current law, the criteria for depreciation are more liberal. However, H.R. 3838 provides for recapture of all accumulated depreciation in excess of straight-line (taxation at ordinary income rates) at the time of sale. Under current law, the amount subject to recapture for low-income housing is only a fraction of the excess over straight-line. Because most rental housing is resold, the incentive effect of favorable depreciation would be reduced by greater recapture. Also, construction period interest and taxes would have to be depreciated, rather than expensed as in current law.

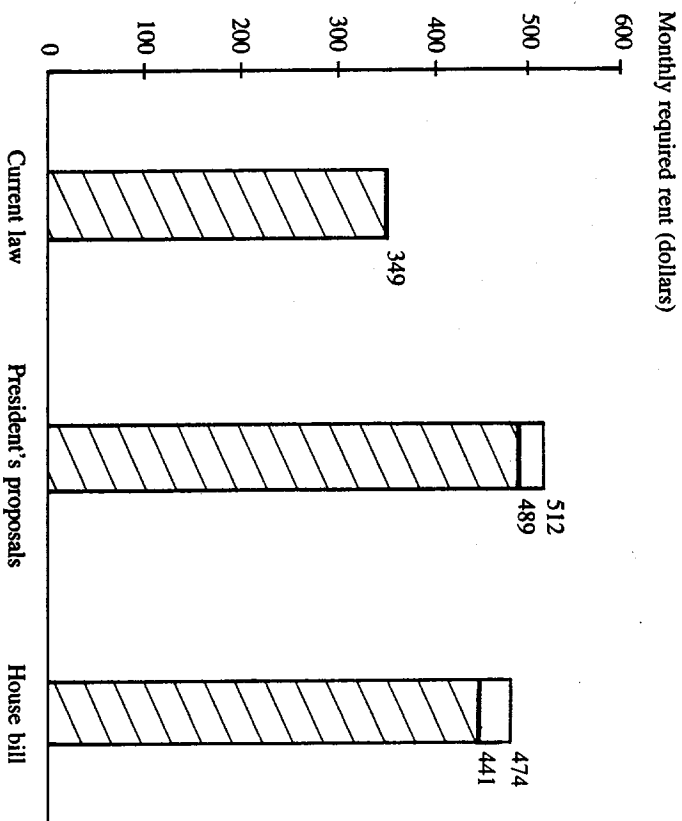
If the entire project received IDB financing and low-income depreciation under H.R. 3838, the required average rent (corresponding to \$349 under current law with IDB financing and 20 percent low-income depreciation) would be \$441, a difference of 26 percent, ignoring the impact of the minimum tax and interest limitations provisions. Figure 3 shows the required rents for low-income units under current law and under the two proposals.

Impact on Multifamily Housing Construction

With vacancy rates at near-record levels and a large volume of new construction currently in the pipeline, extraordinary rent increases in the short term are unlikely. New construction accounts for a very small share of housing supply in the short run. Rental demand could increase somewhat in the short term, because homeownership costs will increase immediately as a result of tax reform, making rental housing appear temporarily more attractive. The increase in rental demand and the cutback in new supply will eventually cause rents to increase. But this process is likely to take several years, and market forces may not be allowed to freely operate in many localities.

A key factor in determining the volume of multifamily housing construction in the short term is the expectation of investors about future rent increases. If investors expect rents and property values to increase in the future, they might be willing to invest despite unattractive current rent levels. Given the sharp difference between required rents under the proposals and under current

FIGURE 3
REQUIRED RENT FOR NEW LOW-INCOME RENTAL UNIT^a



SOURCE: National Association of Home Builders simulation model.

a. Same as figure 2. The figure assumes that under current law and the House bill, the entire project qualifies for tax-exempt financing. Current law assumes that 20 percent of the project qualifies for special depreciation, whereas under the House bill the entire project qualifies for moderately low depreciation treatment.

law, and the unlikelihood of an immediate substantial increase in market rents, it is hard to see how any new rental housing would be built in the short term. However, experience has shown that some construction activity continues even under the most adverse circumstances.

As with the single-family housing sector, the proposed change in tax treatment can be equated to an equivalent change in interest rates. For units that are not eligible for IDB financing or for special low-income preference, the impact of the president's proposals would be equivalent to an increase of perhaps 3 or 4 percent in interest rates. For units that are currently eligible

for IDB financing, the effect would be similar to an interest rate increase of 5.5 percent to 6.5 percent.

The interest rate equivalent of the tax changes proposed in the House bill for non-low-income housing is about 4 percent. For low-income housing fully subject to both IDB financing and favorable depreciation, the increase in after-tax cost would be equivalent to an interest rate increase of 3.5 percent.

We estimate that starts of units in rental structures of five or more units would fall from about 300,000 under a continuation of current law to about 125,000 in the first year of implementation of the president's proposals; units in condominium structures of five or more (many of which are typically sold to investors or held by the developer and rented out) would fall from 150,000 to 125,000. Units in structures of two to four units are likely to fall from a level of 100,000 under a current-law base case to about 70,000 in the first year of implementation of the president's proposals. The House bill would have a similarly adverse impact on the number of units constructed, with the positive impact of tax-exempt financing offset by less favorable treatment of equity investment.

Over time, as vacancy rates fell and rents increased, multifamily housing starts should recover, but starts would remain somewhat below the level that would be achieved under a continuation of current law, reflecting the negative influence of rents on household formations and some increase in the supply of units from conversions.

Under the president's proposals, with the elimination of incentives for construction of moderate-income units, the average size and average value of new multifamily units should increase. Moreover, the share of units built for sale as condominiums would increase from about 30 percent recently to as much as 50 percent, as the tax advantage of homeownership increased relative to rental housing. There will be a similar impetus to convert existing multifamily buildings to condominium status, and the prospect of rent controls would accentuate that trend. Under the House bill, the size and value of units built would fall, and fewer condominium units would be built.

Impact on Renters

Over the past decade, rental housing has become increasingly synonymous with low-income housing, as homeownership rates have risen for high-income households and fallen for low-income households. Low-income renters also pay a much larger share of their incomes for rent than higher-income renters do.

The discussion of the impact of tax reform on different income groups has generally not taken account of the indirect impact due to changes in prices

TABLE 35
COMPARISON OF RENT INCREASES WITH TAX CUTS UNDER THE
PRESIDENT'S PROPOSALS

Adjusted Gross Income (Dollars)	Annual Rent ^a (Dollars)	Typical Tax Decrease ^b (Dollars)	Percentage Rent Increase to Equal Tax Cut
5,000	2,700	25	0.9
10,000	3,600	70	1.9
15,000	3,900	105	2.7
20,000	4,200	120	2.9

a. Based on data from *Annual Housing Survey: 1983* (1984), table A-1.

b. Based on chart 8, p. 16, of the president's proposals. Calculated from changes in average tax rates, applied to income amount.

such as rents. For most renters, though, rent represents a much larger expense than federal income taxes, and a small percentage change in rents would outweigh a large percentage change in tax liability. This situation is illustrated in table 35, which compares tax cuts under the president's proposals with the rent expenses.

The elimination or dilution of special incentives for investment in low- and moderate-income rental housing will increase required rents on such housing more than proportionately relative to other rental housing. At the same time, rising rents will encourage renters to trade down to less expensive units, putting disproportionate demand pressure on the low end of the rental market. Moreover, current vacancy rates are significantly lower for less expensive units. The net result would be larger and quicker rent increases for low- and moderate-income renters, especially under the president's proposals.

Appendix

RENTAL MODEL

In analyzing the impact of the tax proposals on rental housing, I have used a simple pro forma model of an apartment project as my primary tool. The assumptions used are believed to be reasonably typical of a new medium-size, low-rise, moderate-income development. The calculations I have employed are similar to those a developer, investor, or lender might use in determining the feasibility of a project. But I have ignored complications such as the syndication process or the usual lag in reaching the long-term average occupancy rate.

This appendix describes the overall structure of the model and the impact of the proposed changes in tax rates, depreciation, treatment of construction period interest and taxes, and capital gains for both conventional and low-income housing.

The project is assumed to take a year to build, with construction starting on January 1, 1986. On January 1, 1987, the building is placed in service and is 95 percent occupied. At the time construction began, the equity investors contributed an amount equal to 20 percent of the total development cost (land and structure plus construction period interest and taxes). A construction loan covers the remaining construction period outlays, and the average principal on that loan is equal to 65 percent of the value of the structure. The construction loan is replaced by a permanent, fixed-rate mortgage loan on January 1, 1987, with principal equal to 80 percent of total development cost. Any cash shortfall during the initial years of operation is made up by additional contributions from the investors, and any cash flow generated is distributed to the investors.

The investors are assumed to be in the top personal tax bracket and all the equity and all the rewards are assumed to belong to the limited partners (for the purpose of assessing the impact of the proposed limitation on interest expense deductions). The mortgage loan is assumed to be a nonrecourse obligation secured only by the project.

The characteristics of the project are assumed to be as follows:

Number of units	100
Initial monthly operating expense per unit	\$150
Land cost per unit	\$5,000
Construction cost per unit	\$35,000

Mortgage term	30 years
Vacancy rate	5 percent
Selling expense	3 percent of sales price

The base case assumption for the expected inflation rate is 5 percent. Rents, operating costs, land value, and value of the structure are assumed to change at a rate that equals the inflation rate plus a real appreciation rate, as follows:

	Real Rent (Percent)	Nominal Rate at 5 Percent Inflation (Percent)
Rent	-1.5	3
Operating cost	0.0	5
Structure value	-1.5	3
Land value	0.0	5

Interest rates and the required after-tax yield to the equity investors are similarly assumed to be equal to the inflation rate plus a real rate, as follows:

	Real Rate	Nominal Rate at 5 Percent Inflation
Construction loan	7.0	12.0
Mortgage loan	6.5	11.5
Equity yield	8.0	13.0

For current law, the following tax parameters are set:

Investor tax rate	50 percent
Capital gains rate on structures	20 percent
Capital gains rate on land	20 percent
Depreciation method	ACRS
Length of depreciation term	19 years
Percentage declining balance	175 percent
Amortize construction period interest + taxes	Yes

The model takes a specified initial rent level and calculates the rate of return to investors and the net present value (discounting, using the specified required yield on equity). By specifying alternative initial rents in each iteration, the model determines the rent required to produce a rate of return equal to the required yield (and therefore a net present value of zero). The

holding period can either be specified in advance or chosen by the model as that holding period with the maximum net present value.

This appendix illustrates the rental model for a conventional housing project. The differences applying to low-income housing are discussed in the text.

REFERENCES

- Annual Housing Survey: 1983*. 1984. Part C, *Financial Characteristics of the Housing Industry*. Washington, D.C.: U.S. Departments of Commerce and Housing and Urban Development. December. Table A-1.
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