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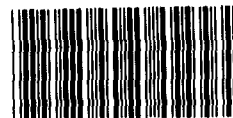
Testimony

For Release
on Delivery
Expected at
9:30 a.m. EST
Monday,
March 28, 1988

Role of Qualified Mortgage Bonds
in Providing Home Ownership
Opportunities

Statement of
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Before the
Subcommittee on Taxation and Debt Management
Committee on Finance
U.S. Senate



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Mr. Chairman and Members of the Subcommittee:

We appreciate this opportunity to discuss whether to extend the issuance authority for qualified mortgage bonds. As you know, we have just completed an extensive study for the Joint Committee on Taxation of the home ownership opportunities afforded by this tax-exempt financing method.¹ My remarks today summarize our findings.

I will preface my remarks by saying that our findings are not a criticism of housing agencies per se, but rather reflect the limited ability of bond-financing to provide assistance to first-time home buyers. That is, the tax-exempt financing mechanism is limited to providing a small subsidy. Thus, qualified mortgage bonds cannot be expected to make more than a marginal difference in affordability, despite the best efforts of the housing agencies that issue them.

Further, and not surprisingly, given the small subsidy provided, we found that financing below-market mortgage loans through tax-exempt borrowing does little to increase home ownership opportunities. The profile of those who received assistance strongly suggest that most of these assisted home owners would have been likely to become home owners if bond assistance had not been available. Also, most of these assisted buyers could have probably qualified for the same size, or slightly smaller, conventional loan at the time they received a bond-assisted mortgage.

Aside from helping many buyers who do not need assistance, qualified mortgage bonds are inefficient. Home buyers, on average, receive only about 36 to 39 cents in benefits for every dollar in tax revenue foregone. Moreover, changes made by the Tax Reform Act of 1986 could further reduce these benefits. Given our

¹Home Ownership: Mortgage bonds Are Costly and Provide Little Assistance to Those in Need (GAO/RCED-88-111, Mar. 28, 1988).

findings, we question whether authority to issue these bonds should be extended.

SCOPE OF GAO's STUDY

For our study, we contacted 32 state and local housing finance agencies across the country.² We asked each of them for computerized data on loans made from January 1983 to June 1987. Twenty-nine of the agencies supplied this information, giving us about 178,000 loans. We also spent considerable time with 25 of the agencies to learn how they operate their programs.

We are confident of our findings for several reasons. First, we performed several analyses, all of which produced the same results. Second, our large sample probably represents about one-third of the loan activity during this period. Third, our work at the housing agencies gave us a reality check for our computer analyses. And, finally, our results are consistent with the economic literature in the field.

BENEFIT RECEIVED BY THE HOME BUYER

As you know, qualified mortgage bond financing provides a fixed-rate loan at an interest rate below the market rate. Twenty-one of the 25 agencies we contacted said that they tried to achieve a 1.5 to 2.0 percentage point difference, or spread, between bond-assisted and unassisted loans. We found that the agencies achieved this spread about one-half of the time with the median spread being about 1.4 percentage points.

To determine what this spread means in dollars and cents to the assisted buyer, we compared the payments under the assisted loan with payments at the prevailing conventional rate. The median

²See exhibit I.

after-tax benefit was about \$477 annually, or about \$40 per month. A benefit of this size cannot be expected to make a material difference for any but the marginally unqualified buyer.³

In fact, we calculated that in some high cost metropolitan areas, the reduced interest rate is often not enough to make housing affordable for low- and sometimes, moderate-income buyers. Conversely, in more affordable areas, we calculated that many bond-assisted buyers would not need the assistance to purchase homes.⁴

CHARACTERISTICS OF THE ASSISTED BUYER

Given that qualified mortgage bonds provide only limited benefit, the results of our next two analyses are not surprising. First, we compared assisted buyers to other first-time buyers in the country. For this comparison we used HUD's 1983 American Housing Survey, which was the latest data available. The American Housing Survey includes the characteristics of first-time buyers across the country and is valid for nationwide inferences, but not area-by-area comparisons. To make income and purchase price comparisons, we converted these variables to 1986 dollars.

We found that assisted buyers have characteristics that are strongly associated with home ownership. Although some differences exist between the two groups, both typically were white, married, and young (under 30 or 35), with median incomes around \$26,000 for assisted buyers and \$27,000 for all first-time buyers. Assisted buyers were slightly younger than all first-time buyers: about 60 percent of the assisted buyers and 52 percent of the buyers in the Survey were less than 30 years old. However, the likelihood of becoming a home owner increases with age as income

³See exhibit II for typical reductions in monthly payments given different interest rates, spreads, and mortgage sizes.

⁴See exhibit III for the results of this analysis.

risers and housing demand stabilizes. These attributes suggest that assisted buyers would be likely to become home owners in the future if bond assistance was not available.⁵

ASSISTANCE PROBABLY NOT NEEDED

Second, we estimated how many of the assisted buyers could have probably qualified for the same size loan at the same time at a conventional rate. Allowing 28 percent of income for housing expenses, which is a standard test of mortgage affordability, we found that 56 percent of the assisted buyers could have probably purchased the same house at the same time without bond assistance using a fixed-rate conventional loan. An additional 12 percent could have probably purchased the same house at the same time using a conventional adjustable-rate mortgage.

Other assisted buyers may have been able to purchase a slightly less expensive house. We found that for those buyers who could not have purchased the same house, 11 percent more probably could have purchased one with an adjustable-rate mortgage that was 1 to 10 percent (up to about \$5,000) smaller than the mortgage they actually received.⁶

We see no public purpose being served in assisting those who could buy the same house without assistance. Yet, we found only two agencies which tried to limit their loan activities to those who could not buy conventionally. The remaining 23 did not.

I would like to address a question raised about our work. We have been told that our analysis does not differentiate between buyers served before and after the 1986 Tax Reform Act tightened home purchase price restrictions and established a household income

⁵These results are depicted in exhibit IV.

⁶These results are presented in exhibit V.

eligibility standard. It has been asserted that, had we differentiated between pre- and post-act buyers, we would have found that the post-act buyers were substantially different, purchasing lower priced homes and having lower incomes. We disagree.

Fully 80 percent of the assisted buyers would have met the 1986 act's income eligibility requirements, and 84 percent would have met the act's purchase price requirements. These figures indicate that isolating post-act data would not have appreciably changed our results. I would also like to note that, while we attempted to make this distinction, housing agencies' files generally did not allow us to differentiate between pre- and post-act loans.

EFFICIENCY OF THE TAX-EXEMPT FINANCING MECHANISM

Up to now I have discussed the extent to which public policy goals are being achieved, which we believe is minimal. The next question is: "What do qualified mortgage bonds cost and are they worth it?" We found that bond-financing is very costly and the costs far outweigh the benefits. Published studies estimate the present value cost at between \$150 and \$200 million per \$1 billion in bonds issued. A recent Joint Committee on Taxation analysis estimates that extending qualified mortgage bond issuance authority will cost \$800 million in foregone tax revenue for the 1989 to 1993 period.

To compare the buyer's benefit with the cost to the federal government, we used different interest rate spreads and reasonable assumptions about the marginal tax rate of the assisted buyer and the expected life of the loan. In typical and best-case scenarios, we found that the benefits ranged from 12 cents to 45 cents in benefit for every dollar of cost. With the median spread that we observed of 1.4 percentage points and a typical interest rate for

the period, each dollar of foregone revenue is likely to generate benefits of about 36 to 39 cents.⁷ Considering that many of the buyers did not need the assistance to buy a home, the "real" benefit is markedly lower. Finally, spreads are not likely to get larger under tax reform. In fact, if tax reform causes spreads to narrow by a half of a percentage point, which has been suggested by some, the benefit may decrease to about 30 cents on the dollar.

STIMULATING CONSTRUCTION ACTIVITY

A secondary benefit cited by proponents of qualified mortgage bonds is that they stimulate the construction industry. If this occurs at all, its effects are most likely to be minimal. Available evidence indicates that the bonds probably do not significantly expand the pool of home owners. Therefore, qualified mortgage bonds are unlikely to significantly increase home-building and/or create many more construction or related jobs over time.

Even if qualified mortgage bonds increased the number of home owners over time, the increase in construction activity might not be commensurate for the following reasons. First, if there was a net increase in housing because of the bonds, the increase in jobs in the construction industry might come at the expense of jobs in other industries because the diversion of capital to housing may reduce activities in other industries. And, second, increased home ownership might reduce the number of renter households (unless the interest rate subsidy succeeds in creating more households). This reduction might eventually mean fewer rental housing units would be needed, and thus less rental housing construction would occur.

⁷See exhibit VI.

POSSIBLE EFFECT OF THE 1986 TAX REFORM ACT

My discussion so far has focused on what has happened over the past 4-1/2 years. Also important is the ability of housing agencies to provide below-market financing in the future. The effectiveness of the qualified mortgage bond program hinges on the ability of housing agencies to sell tax-exempt bonds at a rate significantly below that of conventional fixed-rate mortgages. This may be affected in the future by changes brought about by the Tax Reform Act of 1986.

There are three ways in which the Tax Reform Act may reduce the interest differential between taxable and tax-exempt bonds. First, the reduction in the marginal tax rates for higher income individuals increases the value of taxable bonds relative to tax-exempt bonds. Second, the expansion of the alternative minimum tax reduces the value of all tax preferences, including tax-exempt bonds. Third, commercial banks' loss of special interest deductions will reduce their demand for tax-exempt bonds.⁸ The combined effect of these three factors will be to lower demand for tax-exempt bonds, thus increasing the yield, relative to taxable bonds, that issuers will have to offer.

On the other hand, the loss of other tax preferences may, to some extent, increase the demand for tax-exempt bonds. Among these losses is the change in the preferential tax treatment of capital gains. This provision is expected to shift funds from equity investments (e.g., stocks) to both taxable and tax-exempt debt investments. At the same time, the loss of this and other tax preferences may lead investors to increase their participation in the tax-exempt bond market compared with the taxable bond market in order to reduce their taxes owed.

⁸Prior to the act, commercial banks could deduct 80 percent of the interest cost when they borrowed money to purchase tax-exempt securities. In general, the 1986 act repealed this deduction.

The complexity of the tax changes precludes any firm prediction about the final impact of tax reform on tax-exempt bond rates. However, two recent studies suggest that rates will rise, or at best stay steady, relative to the rates on taxable bonds.⁹ If the differential narrows, housing agencies would likely find it more difficult to provide an interest rate at much below the conventional rate.

ALTERNATIVES TO QUALIFIED MORTGAGE BONDS

Of course, we still have to ask if preferable alternatives exist. Although several alternatives come to mind, such as direct buy downs of loan amounts, non-interest bearing second mortgages, and tax credits, we did not study these and therefore cannot recommend alternatives. We are firm in our belief, however, that qualified mortgage bond financed loans are an ineffective and inefficient mechanism for assisting home buyers.

If the Congress does not extend issuance authority, we believe that the private activity bond volume cap should be reduced accordingly. If the cap is not reduced, then the revenue loss would remain the same if the issuers choose to use their full annual issuance authority by increasing the issuance of other types of private activity bonds.

Finally, should the Congress choose to extend bond issuance authority, we believe that it should limit assistance to those who could not otherwise purchase a home. However, the buyer's

⁹Galper, Lucke, and Toder, "The Economic Effects of Tax Reform: A General Equilibrium Analysis." Prepared for the Conference on Tax Policy at the Brookings Institution, October 30-31, 1986; J. E. Petersen, "Tax Exempts and Tax Reform: Assessing the Consequences of the Tax Reform Act of 1986 for the Municipal Securities Markets." (Washington, D.C.: Academy for State and Local Government, Feb. 1987).

benefit will be relatively small and the bond-financing mechanism will remain cost-ineffective.

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Mr. Chairman, this concludes my prepared statement, and I welcome the opportunity to answer any questions that you may have.

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STATE AND LOCAL HOUSING FINANCE
AGENCIES INCLUDED IN GAO's REVIEW

STATE HOUSING FINANCE AGENCIES

California Housing Finance Agency
Florida Housing Finance Agency
Illinois Housing Development Authority
Indiana Housing Finance Authority
Iowa Finance Authority
Maryland Community Development Authority
Michigan State Housing Development Authority
Ohio Housing Finance Agency
Oklahoma Housing Finance Agency
Oregon Department of Commerce, Division of Housing
Pennsylvania Housing Finance Agency
State of New York Mortgage Agency
Texas Housing Agency
Utah Housing Finance Agency
Virginia Housing Development Authority
Washington State Housing Commission
Wisconsin Housing and Economic Development Authority
Wyoming Community Development Authority

LOCAL HOUSING FINANCE AGENCIES

California

City of Los Angeles, Community Development Department
City of Los Angeles, Community Redevelopment Agency
Contra Costa Community Development Department
Los Angeles County, Community Development Commission
Sacramento Housing and Redevelopment Agency
Yolo County Housing Authority

Illinois

Cook County (Comptroller's Office)

Maryland

Montgomery County Housing Opportunities Commission

Pennsylvania

Allegheny County Residential Finance Authority
City of Philadelphia Redevelopment Authority

EXHIBIT I

EXHIBIT I

Texas

Corpus Christi Housing Finance Corporation
Dallas Housing Finance Corporation
Harris County Housing Finance Corporation
Houston Housing Finance Corporation

EXHIBIT II

EXHIBIT II

FIRST YEAR AFTER TAX REDUCTION IN MONTHLY PAYMENTS OF PRINCIPAL
AND INTEREST REALIZED BY HOME BUYER WITH BOND FINANCING

<u>Conventional interest rate</u>	<u>After tax conventional monthly payment</u>	<u>After tax reduction in monthly payments for different interest spreads^a</u>			
		<u>0.5%</u>	<u>1.0%</u>	<u>1.5%</u>	<u>2.0%</u>
<u>Smaller mortgage (\$40,000) at 3 interest rates</u>					
9	\$277	\$12	\$23	\$35	\$46
11	326	13	25	37	49
13	378	13	26	39	52
<u>Mid-sized mortgage (\$60,000) at 3 interest rates</u>					
9	\$415	18	35	52	69
11	489	19	37	56	74
13	566	20	39	58	77
<u>Larger mortgage (\$80,000) at 3 interest rates</u>					
9	\$554	24	47	69	91
11	652	25	50	74	98
13	755	26	52	78	103

^aWe assumed a fixed-rate, 30-year loan. Monthly payments are for principal and interest only. Interest rate spreads are representative for the closed loans we reviewed. We assumed buyers would be in the 15-percent tax bracket (lowest rate for 1988). Pre-1986 Tax Reform Act brackets were higher, further limiting the monthly payment reduction.

EXHIBIT III

EXHIBIT III

INTEREST RATE THAT A TYPICAL FIRST-TIME BUYER
COULD AFFORD TO PAY IN DIFFERENT HOUSING MARKETS

	Area median income	Typical first- time buyer purchase price ^a	Housing afford- ability ratio ^b	Interest rate that a buyer could afford to pay		
				Maximum eligible income ^c	Moderate income ^c	Low income ^c
<u>More affordable areas^d</u>						
Illinois	\$34,500	\$33,100	1:1	32.0	27.8	22.2
Iowa	29,100	47,200	1.6:1	18.9	16.3	12.9
Pennsylvania	29,600	42,500	1.4:1	21.3	18.5	14.7
Michigan	32,600	36,400	1.1:1	27.4	23.9	19.0
<u>Mid-range affordable areas^d</u>						
Alabama	23,900	55,000	2.3:1	13.0	11.2	8.5
California	33,600	75,600	2.3:1	13.4	11.5	8.8
Massachusetts	34,500	88,500	2.6:1	11.6	9.9	7.4
Oklahoma	27,700	57,800	2.1:1	14.5	12.5	9.7
<u>Less affordable areas</u>						
Phoenix, Ariz.	30,200	86,000	2.8:1	10.3	8.7	6.4
San Francisco, Ca.	29,800	125,900	4.2:1	6.1	4.8	3.0
Atlanta, Ga.	25,300	75,900	3:1	9.7	8.1	5.9
New York, N.Y.	29,500	107,300	3.6:1	7.6	6.2	4.2

^aIn 1987, first-time buyers, on average, purchased houses that cost 73 percent of the average area purchase price. This column shows house prices at 73 percent of the 1987 area average purchase price.

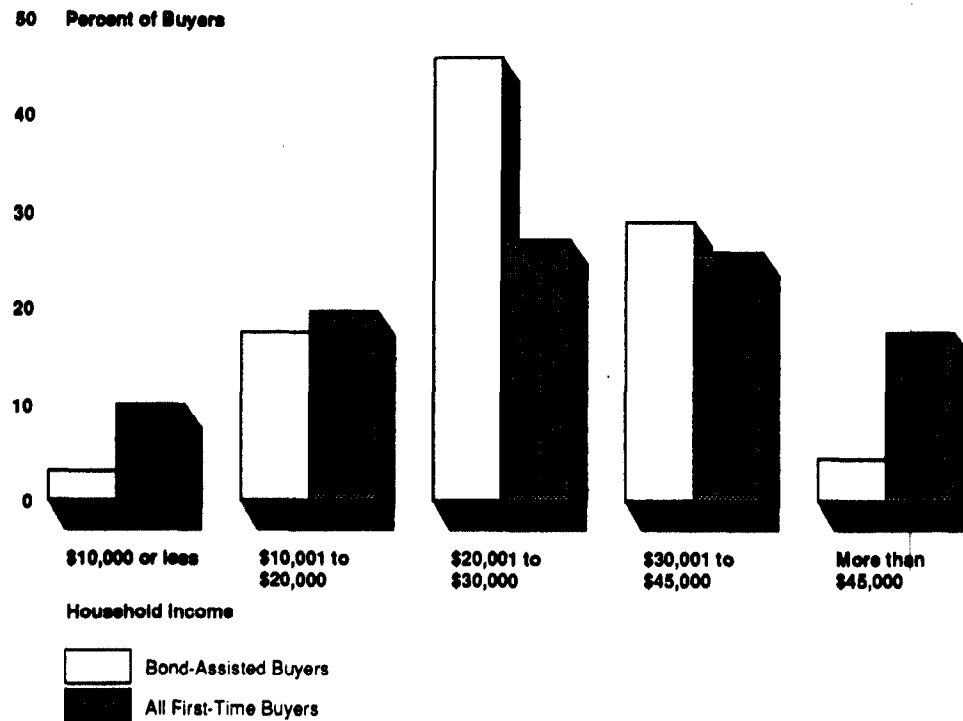
^bThe affordability ratio is the typical first-time buyer purchase price divided by the area median income. The greater the ratio, the less affordable the home.

^cFor qualified mortgage bond assistance, the maximum eligible household income, generally, is 115 percent of the median area income. Moderate and low income are defined by IRS to be 100 percent and 80 percent of median area income, respectively.

^dAreas are statewide, exclusive of metropolitan areas.

**CHARACTERISTICS OF BOND-ASSISTED AND ALL
FIRST-TIME METROPOLITAN AREA HOME BUYERS**

**Incomes of Bond-Assisted and All Metropolitan
Area First-Time Home Buyers**



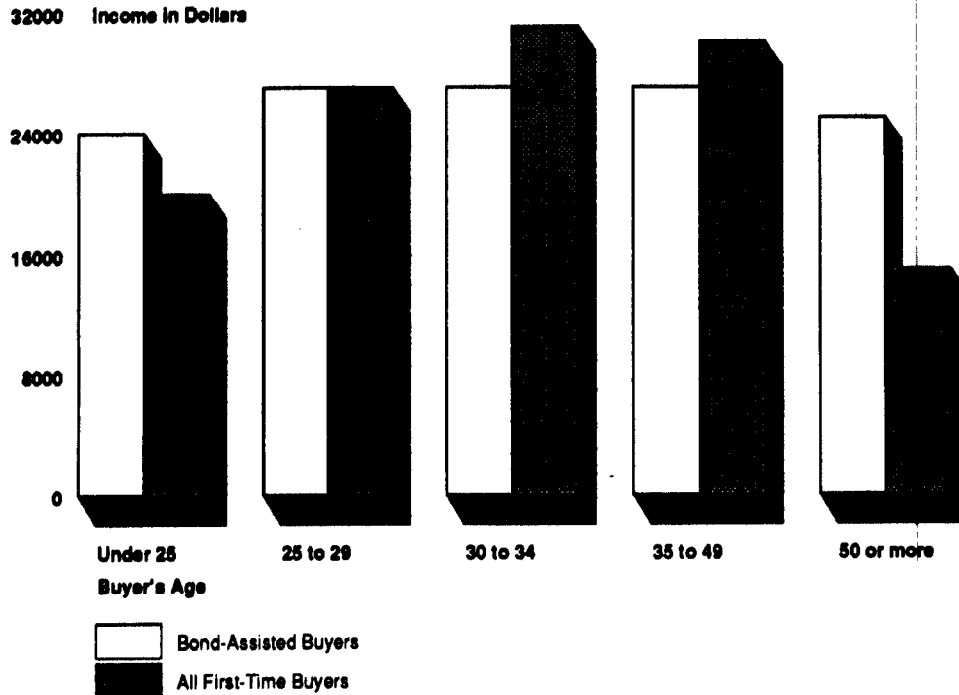
Note: Distribution of bond-assisted buyers contains 149,619 observations; 28,167 missing values excluded. Distribution of all first-time buyers represents 1 million buyers. Incomes are in 1986 constant dollars.

Sources: GAO data base and American Housing Survey.

EXHIBIT IV

EXHIBIT IV

Median Income of Bond-Assisted and All Metropolitan
Area First-Time Buyers, Adjusted for Age



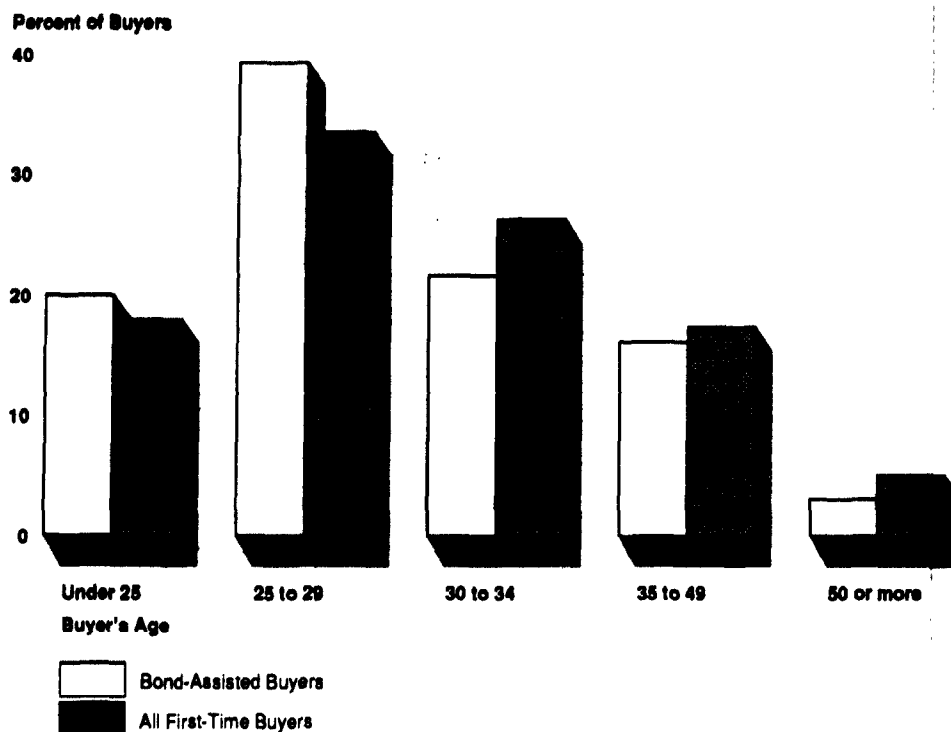
Note: Distribution of bond-assisted buyers contains 101,094 observations; 76,692 missing values excluded. Distribution of all first-time buyers represents about 1 million buyers. Incomes are in 1986 constant dollars.

Sources: GAO data base and American Housing Survey.

EXHIBIT IV

EXHIBIT IV

Age Distribution of Bond-Assisted and
All Metropolitan Area First-Time Buyers



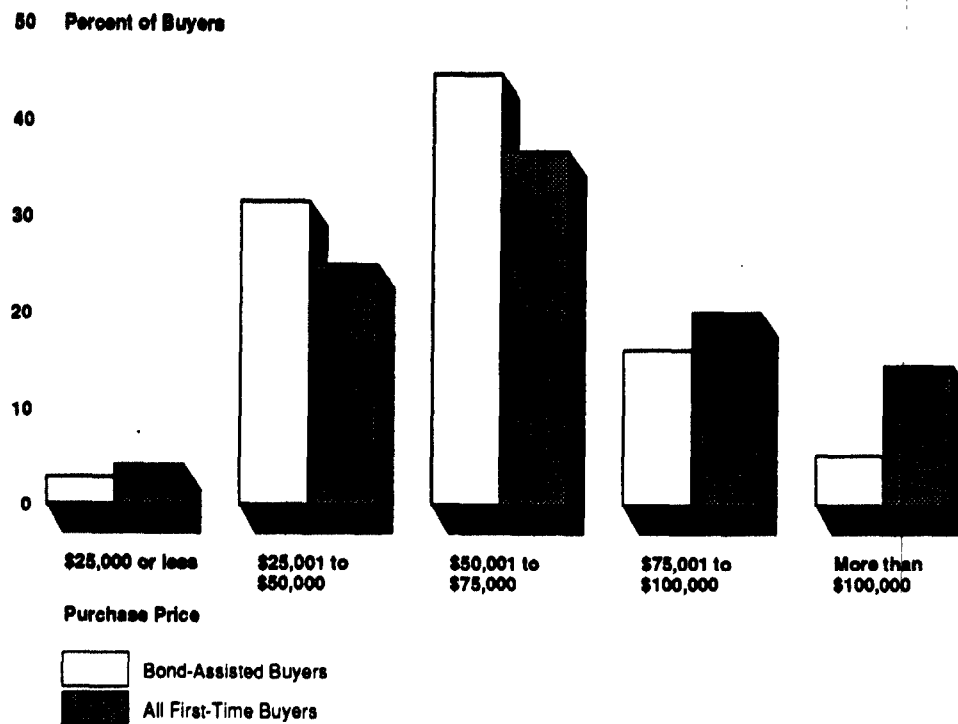
Note: Distribution of bond-assisted buyers contains 111,148 observations; 66,638 missing values excluded. Distribution of all first-time buyers represents about 1 million buyers.

Sources: GAO data base and American Housing Survey.

EXHIBIT IV

EXHIBIT IV

Prices of Homes Purchased by Bond-Assisted and
All Metropolitan Area First-Time Buyers



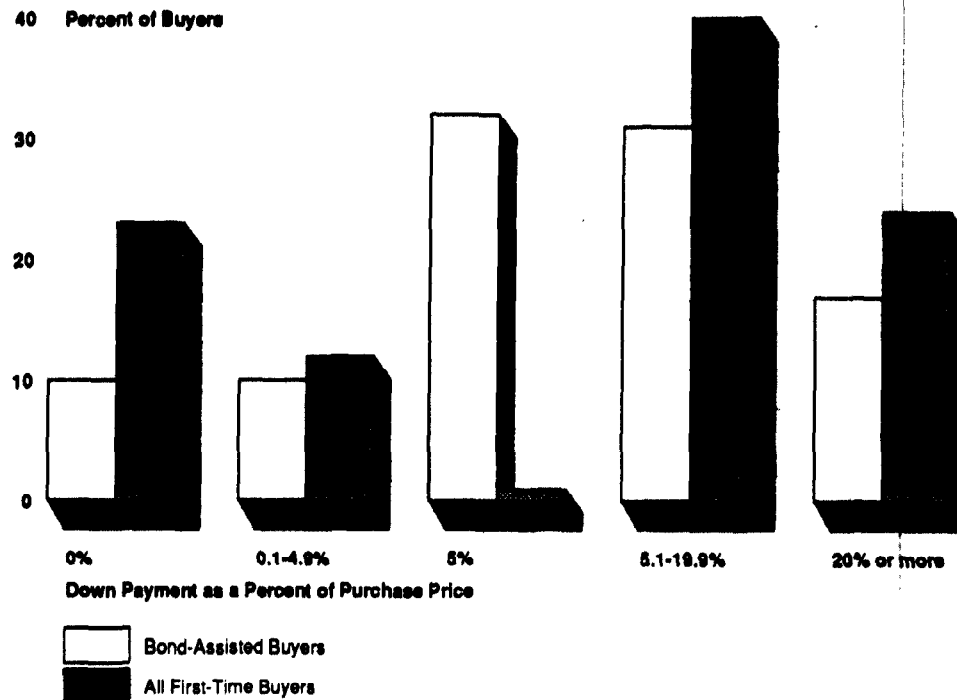
Note: Distribution of bond-assisted buyers contains 157,244 observations; 20,542 missing values excluded. Distribution of all first-time buyers represents about 1 million buyers. Prices are in 1986 constant dollars.

Sources: GAO data base and American Housing Survey.

EXHIBIT IV

EXHIBIT IV

Down Payments Made by Bond-Assisted and
All Metropolitan Area First-Time Buyers



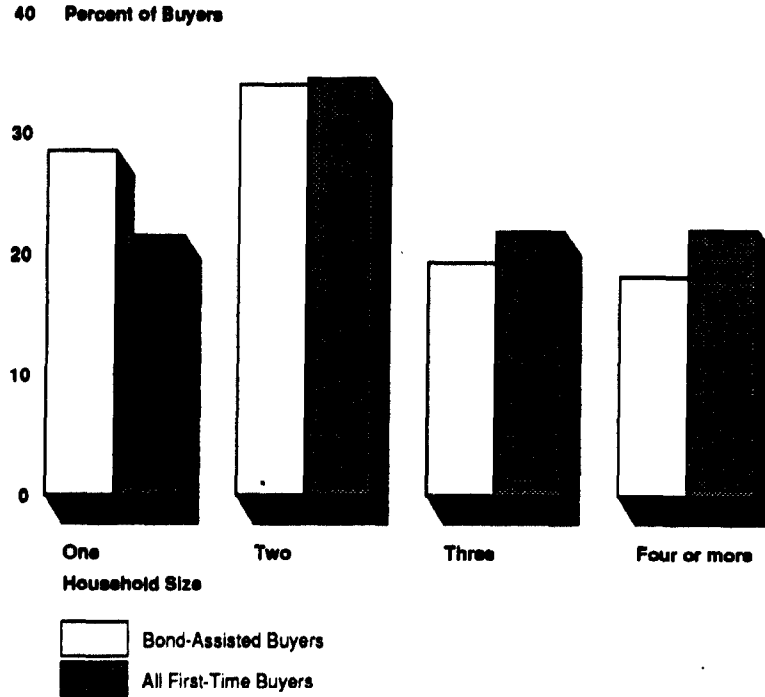
Note: Distribution of bond-assisted buyers contains 160,133 observations; 17,653 missing values excluded. Distribution of all first-time buyers represents about 600,000 buyers.

Sources: GAO data base and American Housing Survey.

EXHIBIT IV

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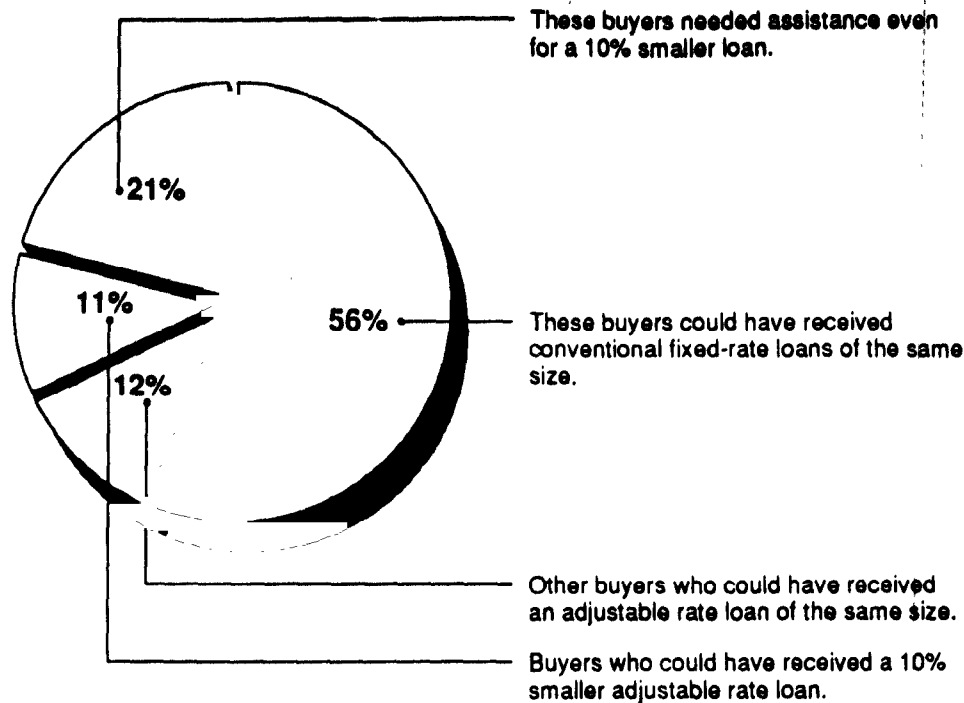
Household Size Distribution of Bond-Assisted
and All Metropolitan Area First-Time Buyers



Note: Distribution of bond-assisted buyers contains 136,715 observations; 41,071 missing values excluded. Distribution of all first-time buyers represents about 1 million buyers.

Sources: GAO data base and American Housing Survey.

**MOST ASSISTED BUYERS COULD HAVE PROBABLY
BOUGHT THE SAME HOME WITHOUT BOND ASSISTANCE**



Note: This analysis is based on an industry standard that allows 28 percent of income to be applied to housing expense.

Using this standard, we compared the size of the conventional mortgage that the household could have received at the prevailing interest rate with the size of the mortgage actually received.

If the size of the conventional mortgage the household could have received was the same or larger, we concluded that the assisted buyer could have bought the same home without bond assistance.

This analysis is based on published loan series data and 149,423 observations in GAO's data base, 28,363 missing values excluded.

Source: GAO.

EXHIBIT VI

EXHIBIT VI

HYPOTHETICAL BENEFITS PER DOLLAR OF FEDERAL REVENUE LOST

<u>Conventional interest rate</u>	<u>Typical case</u> <u>90% of proceeds loaned</u> <u>25% capitalization rate</u> <u>on 30% of proceeds</u>			<u>Best case</u> <u>95% of proceeds loaned</u> <u>No capitalization occurs</u>		
	<u>Spread^a</u>			<u>Spread^a</u>		
	<u>50</u>	<u>100</u>	<u>150</u>	<u>50</u>	<u>100</u>	<u>150</u>
10%	\$0.12	0.24	0.36	\$0.13	0.26	0.39
14%	0.14	0.28	0.41	0.15	0.30	0.45

^aIn basis points.

Note: The benefit calculations are made using the following assumptions: (1) the household marginal tax rate is 15 percent (1988 bottom rate); (2) households live in bond-assisted houses 10 years; (3) benefits are discounted at the conventional rate shown; and (4) mortgages are 30-year fixed-rate loans.

This table presents a "typical case" and a "best case" and shows that for each dollar cost to the federal government, only 12 to 45 cents of benefits are received. When the spread is three times larger, 150 basis points instead of 50, benefits are three times larger as well. Under the best-case scenario for bond efficiency, eliminating capitalization and increasing the ratio of lendable funds per bond issue from 90 percent to 95 percent increases the efficiency of the benefits generated by about 10 percent. The impact of tax reform on future spreads is not precisely known. However, spreads are unlikely to get larger due to tax reform. Thus, each dollar of foregone federal revenue is likely to generate less than 30 cents in benefit. For a given conventional interest rate, the federal cost is constant. However, as the spread increases, benefits increase proportionately without an increase in cost if the conventional rate stays constant.