

GAO

Report to the Honorable
William J. Coyne, House of
Representatives

March 1993

TAX POLICY

Many Factors Contributed to the Growth in Home Equity Financing in the 1980s



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March 25, 1993

The Honorable William J. Coyne
House of Representatives

Dear Mr. Coyne:

In response to your request GAO reviewed the use of home equity financing, including both home equity loans and home equity lines of credit. In particular, you were interested in how the Tax Reform Act of 1986 affected household use of home equity financing compared with other forms of consumer credit.

This report discusses (1) trends in home equity as well as mortgage-backed financing and other types of consumer credit used between 1981 and 1991; (2) who is using home equity financing and for what purposes; (3) what factors caused the growth in home equity financing; (4) what problems, if any, are arising from this type of borrowing; and (5) the implications of various tax policy options that might be instituted to constrain home equity borrowing.

Results in Brief

Home equity financing, estimated to represent about 12 percent of all housing debt, or \$357 billion in 1991, grew at an average annual rate of about 20 percent between 1981 and 1991. Total housing debt, which included first mortgages in addition to home equity loans and home equity lines of credit,¹ increased at an average annual rate of 6.6 percent² during this period. In contrast, total nonhousing consumer debt had an annual growth rate of about 4 percent.

We identified several factors that played a role in the growth in housing debt, especially home equity debt, including rising home values, changes in banking laws, and lenders' aggressive marketing campaigns. The elimination of the tax deductibility of interest expenses for many forms of consumer debt, but not mortgage debt, under the Tax Reform Act of 1986 contributed to the continuing growth and popularity of home equity financing.

¹Throughout this report, when referring to home equity lines of credit, the values we report are those on lines of credit homeowners have used and on which they had outstanding balances when the data was collected.

²All the dollars used in time series analysis, except for the revenue estimates from the Joint Committee on Taxation and the Congressional Budget Office, have been adjusted for inflation.

Information on the use of home equity financing is available from surveys of borrowers and lenders. However, although we have information on how the funds were used, we do not know whether consumer behavior changed with the availability of this financing. For example, we do not know if the existence of home equity financing allowed borrowers to (1) finance something they would not have otherwise done or (2) finance something they would have done anyway, so that using home equity freed resources for other uses.

We found that studies on home equity financing showed different results. For example, the data from the 1989 Survey of Consumer Finances³ indicated that the primary use of home equity financing was for making home improvements. On the other hand, a 1989 economics study⁴ assessing the influence of home equity financing on consumer behavior found that funds were used, in some cases, to finance additional consumption.

There is little difference in the characteristics of borrowers using home equity loans versus home equity lines of credit. For example, according to the Consumer Bankers Association's (CBA) 1992 Home Equity Loan Study,⁵ the average homeowner using home equity loans and lines of credit in 1991 had owned a home for about 9 years. In addition, more than half of the borrowers of each type of financing were in the age bracket of 35 to 49 years old. However, this study showed that the borrowers differed in the amount of income earned in 1991. While the average home equity line of credit borrower earned \$51,398 in 1991, the average borrower with a home equity loan earned only \$43,339.

Home equity financing, while tax-preferred due to interest deductibility, also has disadvantages. Risks of using housing-based debt, even as a replacement for other debt, include the potential for losing the home should the borrower default. In addition, the costs of obtaining home equity financing and application processing time are disadvantages.

To date, the delinquency rates for home equity loans are similar to those of other types of consumer debt, while the rates for home equity lines of credit are the lowest of all types of debt. There is little evidence of lender

³This survey is conducted about every 3 years by the Survey Research Center at the University of Michigan for the Federal Reserve. This most recent survey, conducted between August 1989 and March 1990, was designed to "gather family-level information" on consumer finances.

⁴J. M. Manchester and J. M. Poterba, "Second Mortgages and Household Saving," Regional Science and Urban Economics (1989), pp. 325-346.

⁵The study included both home equity loans and home equity lines of credit.

or homeowner hardship from home equity financing, although the recent recession and declining home values in the early 1990s are giving bank regulatory agencies and lenders cause for concern. As a result, they are working to tighten underwriting practices and are improving monitoring efforts of outstanding home equity debt, as well as other consumer credit.

If either the amounts or uses of home equity financing raise congressional concerns, several options exist to alleviate such concerns. For example, Congress could decide to eliminate the tax deductibility of interest paid on home equity financing. The staff of the Joint Committee on Taxation estimates that this option would raise over \$45 billion in revenue between 1993 and 1997. However, unless the interest on deductible and nondeductible mortgage financing were reported separately to the Internal Revenue Service (IRS), such distinctions would be difficult to monitor. In addition, alternative ways of tapping home equity exist, such as refinancing, which may raise enforcement difficulties.

Limiting the amounts of deductible home equity financing or further limiting the total amount of mortgage debt eligible for the interest deduction would be difficult for IRS to enforce under current information reporting requirements. Proper enforcement would require more detailed information reporting, such as reporting mortgage value in addition to the interest paid. On the other hand, if Congress introduced a cap on deductible mortgage interest, current information reporting would be sufficient for enforcement.

Background

While all mortgage debt that is secured by a home is home equity financing, the term home equity borrowing or financing is usually applied to mortgages other than the original acquisition loan or any subsequent refinancing of that loan. Two basic types of home equity financing are available to homeowners: home equity loans and home equity lines of credit.

Home equity loans, sometimes called second mortgages, are usually for a specific amount of money. They typically require repayment of interest and principal in equal monthly installments over a specified period of time. Home equity lines of credit, on the other hand, are relatively new products. Most lines of credit typically have a variable interest rate; the amount of credit available can be reused; the line frequently has no fixed term of repayment; and, in many cases, only the interest has to be paid each month to keep the line open.

Because the interest on home equity financing is considered "qualified residence interest," it is generally tax deductible. Both the Tax Reform Act of 1986 (P.L. 99-514) and the Omnibus Budget Reconciliation Act of 1987 (P.L. 100-203) made changes to the tax laws that affected this deduction.

Prior to the Tax Reform Act of 1986, taxpayers were allowed to deduct interest paid on borrowed funds, whether they financed assets that produced taxed or untaxed income, or financed consumption purchases. Thus, interest that was deductible prior to the Tax Reform Act of 1986 included, for example, interest expenses from credit cards, school loans, and mortgages. Concerned that the incentive to borrow for the purchase of consumption goods was reducing private saving, Congress acted to reduce that incentive. Under the Tax Reform Act, the interest deduction on most personal interest expenses of individuals was gradually phased out, beginning in 1987, and completely eliminated in 1991.⁶ The Joint Committee on Taxation staff estimated that the revenue gains from phasing out the personal interest deductions between fiscal years 1987 and 1991 would total more than \$29 billion.

The deduction for interest expenses not subject to the limitations of the Tax Reform Act included qualified residence or mortgage interest.⁷ Because this act introduced a distinction between interest paid on mortgage-backed debt and other personal interest, the need arose for a definition of qualified residence interest, more commonly known as mortgage interest, in the tax code. The 1986 act defined deductible mortgage interest as that paid on debt secured by the taxpayer's principal or secondary residence up to the cost basis of the residence, plus the amount of qualified medical and educational expenses. The total value of the debt could not exceed the fair market value of the residence. Thus, taxpayers were allowed to deduct the interest paid on mortgage debt (including the cost of home improvements) used for housing, educational, and medical expenses, as long as the total debt did not exceed the fair market value of the residence.

The Omnibus Budget Reconciliation Act of 1987 changed several provisions of the Tax Reform Act. It redefined deductible mortgage interest as interest on acquisition and home equity indebtedness applied to

⁶The interest expenses for school loans phased out by this act were only those related to nonmortgage-based loans. Similar expenses from mortgage-based loans continued to be deductible, as discussed in the next paragraph.

⁷In addition, the deduction for investment interest expenses was also limited by this act. However, this subject will not be covered by this report.

a principal or secondary residence. Acquisition indebtedness was defined as the amount borrowed to acquire, construct, or substantially improve the taxpayer's principal or secondary residence. Home equity indebtedness was defined as debt secured by the taxpayer's principal or secondary residence, to the extent that the aggregate amount of such debt did not exceed the difference between total acquisition debt of the residence and its fair market value. To constrain the benefits of the interest deduction for high-income taxpayers, the act limited the deductibility of this interest to the interest paid on \$1 million of acquisition indebtedness and \$100,000 of home equity indebtedness.⁸

In addition, the 1987 act simplified certain tax rules. For example, in the Tax Reform Act of 1986, Congress intended to provide special treatment for taxpayers who borrowed to finance medical and educational expenses by allowing the interest on these expenses to be deductible if mortgage financing was used. However, since this special rule created administrative difficulties for IRS and taxpayers in determining the amount of interest that was deductible, the 1987 act deleted it. As a result of all these changes, interest expenses incurred on any mortgage-backed financing remained deductible up to the dollar ceiling, regardless of how the funds are used.

Home Equity Financing Grew Faster Than First Mortgages and Other Forms of Consumer Financing

During the 1980s, the amount borrowed and the number of outstanding home equity loans and lines of credit increased. In fact, all forms of consumer debt increased, both housing-related debt (first mortgages and home equity financing) and nonhousing debt (auto, revolving credit, and other). Housing debt, particularly home equity, increased at a greater rate than other debt. The amount of untapped equity suggests the opportunity for future growth in home equity financing exists. While growth in home equity financing may continue, it may not be at the same rate as in the past. For example, a recent surge in mortgage refinancing may have reduced the amount of equity available.

Housing debt, as a proportion of all consumer debt, increased to about 80 percent of all debt, or \$2.9 trillion, by 1991. First mortgage debt continued to represent the bulk of debt, at about 70.2 percent, or \$2.5 trillion, in 1991. However, the proportion of home equity debt to total consumer debt increased by more than 200 percent between 1981 and

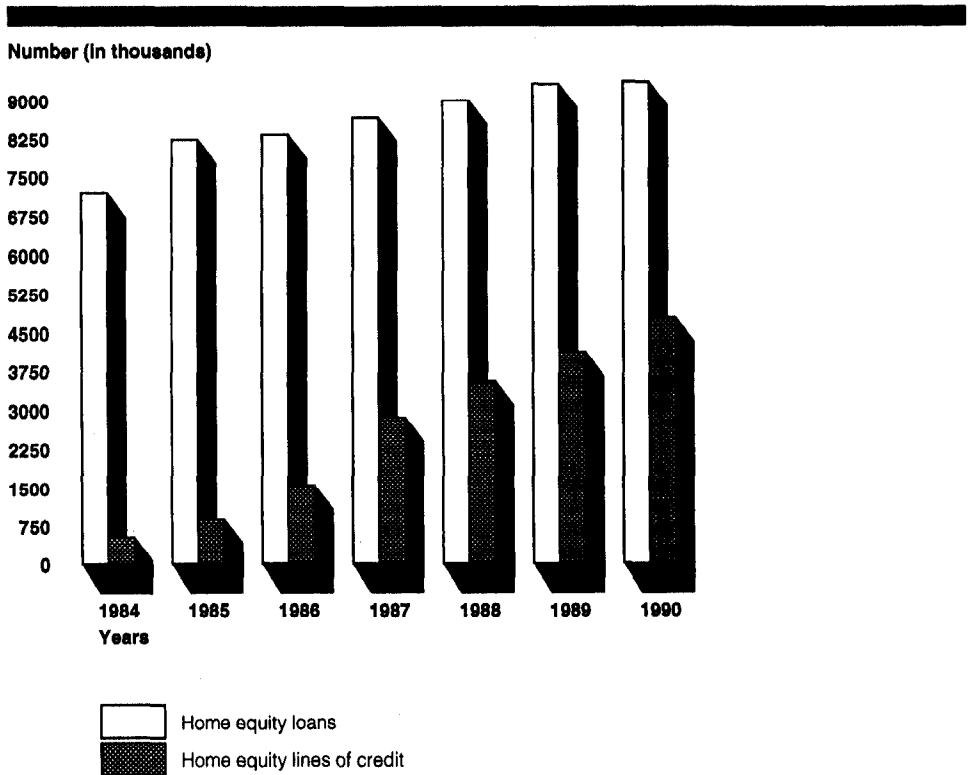
⁸These ceilings are overall limitations. The limits are reduced by half for married individuals filing separate returns.

1991, rising from 2.9 percent to 9.8 percent.⁹ By 1991, there was \$225 billion outstanding in home equity loans and \$132 billion outstanding in home equity lines of credit.

Home Equity Financing Increased Greatly

Both the number and dollars outstanding in home equity loans and home equity lines of credit increased greatly during the 1980s. Figure 1 shows that the number of outstanding home equity loans and lines of credit increased between 1984 and 1990, with the lines of credit increasing faster than the loans.

Figure 1: Number of Home Equity Loans and Lines of Credit With Outstanding Balances From 1984-1990



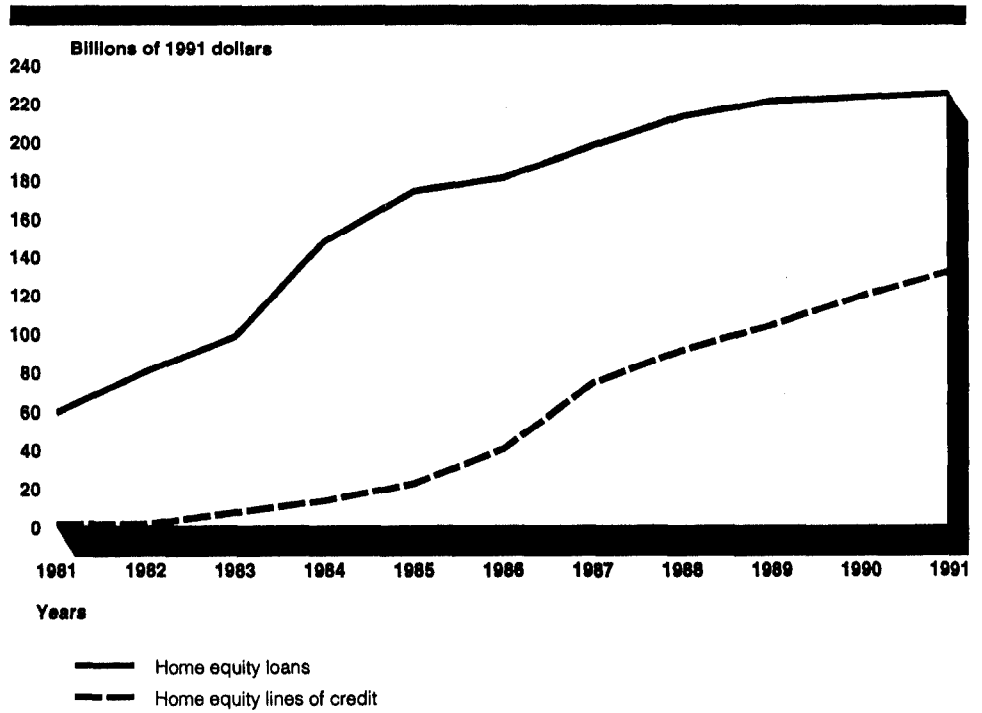
Note: The number of home equity lines of credit reflects those lines of credit for which the borrower had an outstanding balance at the time the data were collected.

Source: David Olson Research Co.

⁹Our 1991 data on home equity financing was an estimate provided by the David Olson Research Company.

A similar trend is noted with the dollars outstanding for the period of 1981 through 1991 (see fig. 2).

Figure 2: Outstanding Dollars Owed on Home Equity Financing for 1981-1991



Note 1: Dollars outstanding on home equity lines of credit represent amounts actually borrowed.

Note 2: The 1991 data on this chart were estimated.

Source: David Olson Research Co.

As shown in table 1, the annual growth rate of dollars outstanding in home equity loans and lines of credit was lower in the second half of the 1980s than in the first part of the decade.

Table 1: Dollars Outstanding and Growth Rates for Home Equity Financing

Year	Annual percentage growth rates for home equity financing between 1981 and 1991			
	Home equity loans		Home equity lines of credit	
	Dollars ^a	Annual growth rate	Dollars ^a	Annual growth rate
1981	\$59	•	\$1	•
1982	80	35.6%	1	0.0%
1983	98	22.5	7	600.0
1984	148	51.0	13	85.7
1985	174	17.6	22	69.2
1986	181	4.0	40	81.8
1987	198	9.4	74	85.0
1988	213	7.6	91	23.0
1989	221	3.8	104	14.3
1990	223	0.9	119	14.4
1991	225	0.9	132	10.9

^aBillions of 1991 dollars.

Source: GAO analysis of data from David Olson Research Co.

Although the annual growth rates were much higher prior to the tax code changes of 1986 and 1987, these changes may have further increased the use of such financing because the growth rate probably would have been lower in their absence. For example, some households may be substituting home equity financing for other types of consumer debt.

Continued growth in home equity borrowing is likely. The David Olson Research Company estimated that beginning in 1991, the dollars outstanding in home equity lines of credit will increase at an average annual rate of 15 percent, while the home equity loans will increase at 5 percent. However, according to a company official, this projection may be too high as it was made before the surge of refinancing in 1991 and, therefore, does not include any estimates of the impact that refinancing might have had on the use of home equity financing. It is likely that many of the households, in addition to replacing existing mortgage debt, also liquidated some of their home equity.

However, while some homeowners may have drawn down some of their home equity through home equity financing or refinancing existing

mortgage debt, we believe a significant amount of home equity still remains untapped. One such group of homeowners includes those who currently have no outstanding mortgage debt. The American Housing Survey of 1989 showed that this was more than 40 percent of all homeowners. Therefore, we believe it is likely that the use of home equity financing will continue to grow, especially in those regions of the country where there has been and continues to be appreciation in home values.

Overall Mortgage Debt Increased at Faster Rate Than Home Values

Our analysis of mortgage debt data and home values from 1981 through 1991 showed that, in 1991 dollars, the dollars outstanding for first mortgage debt increased at a faster pace than home values. During this period, outstanding first mortgage debt increased by 72 percent to \$2.5 trillion. This was an average annual growth rate of 5.7 percent. At the same time, existing and new home prices in 1991 dollars grew at average annual rates of 1.0 and 1.9 percent, respectively. As a result, the ratio of first mortgage debt to housing value has increased over the last decade.¹⁰

While the dollars outstanding increased for first mortgage debt, the proportion of the total outstanding housing debt represented by first mortgages declined in 1991 dollars from about 96 percent in 1981 to almost 88 percent in 1991. However, when first mortgage debt is combined with home equity financing, total housing debt grew at an average annual rate of 6.6 percent to \$2.9 trillion in 1991. Therefore, the ratio of total housing debt to housing value clearly increased over the decade.

One of the reasons for the change in outstanding first mortgage debt is the increased use of refinancing during the 1980s. In 1989, about 20 percent of homeowners reported in the Survey of Consumer Attitudes¹¹ that they had refinanced their first mortgages. If homeowners only refinanced their existing first mortgage, the amount of total outstanding mortgage debt would not change. However, if they also liquidated some of their home equity at the same time, the dollars outstanding would increase. As discussed earlier, many of those who refinanced loans in 1989 also liquidated some of their equity.

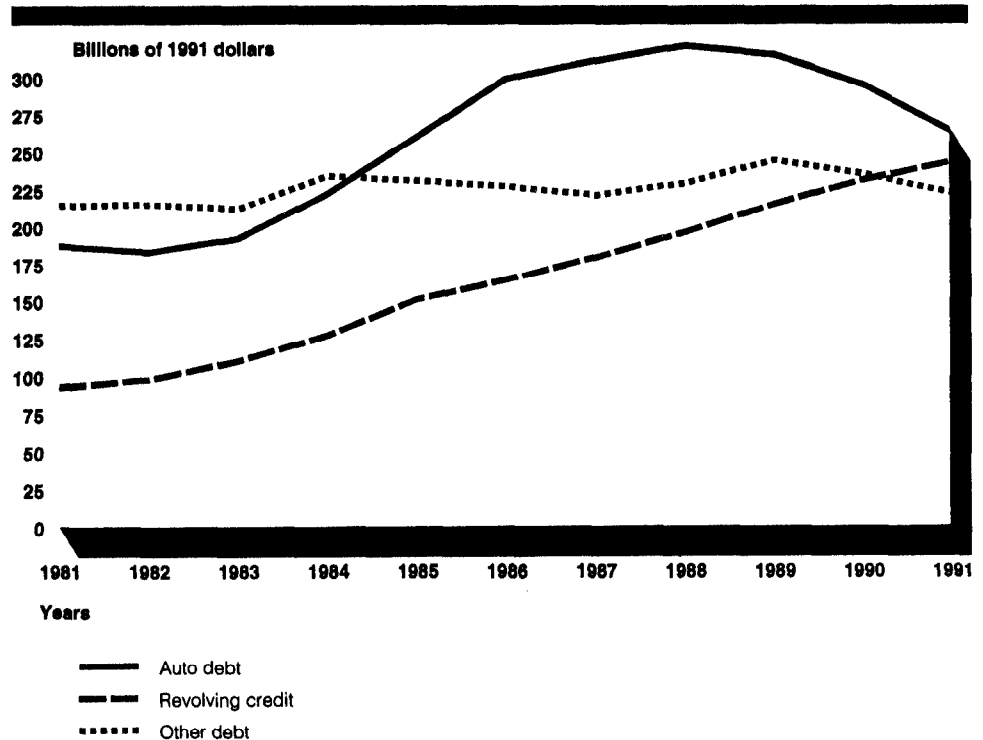
¹⁰According to the article Housing and Savings in the United States (Jonathan Skinner, National Bureau of Economic Research Working Paper Series, No. 3874, Cambridge, MA, October 1991), the mortgage/housing value ratio declined between 1965 and about 1981, from about 47 percent to about 37 percent. Since then the trend has reversed itself and reached an all-time high. In 1990, this ratio increased to about 58 percent.

¹¹Similar to the Survey of Consumer Finances, this survey is conducted for the Federal Reserve. The survey is done by the Survey Research Center at the University of Michigan. It differs from the Survey of Consumer Finances in that it is conducted four times a year using questions sponsored by the Federal Reserve and other agencies.

Consumer Debt Mix Changes

Total dollars outstanding for consumer debt, including all housing and nonhousing debt, has steadily increased since the early 1980s. By 1991, total consumer debt had exceeded \$3.6 trillion. Of this, outstanding nonhousing debt was \$728 billion in 1991 dollars, an increase of more than 47 percent since 1981. Figure 3 shows the dollars outstanding for common forms of this type of debt, including auto loans, revolving credit, and other debt,¹² for the period of 1981 through 1991. By 1991, the dollars outstanding for each of these types of nonhousing debt was more than \$200 billion.

Figure 3: Outstanding Dollars Owed by Type of Nonhousing Debt for 1981-1991



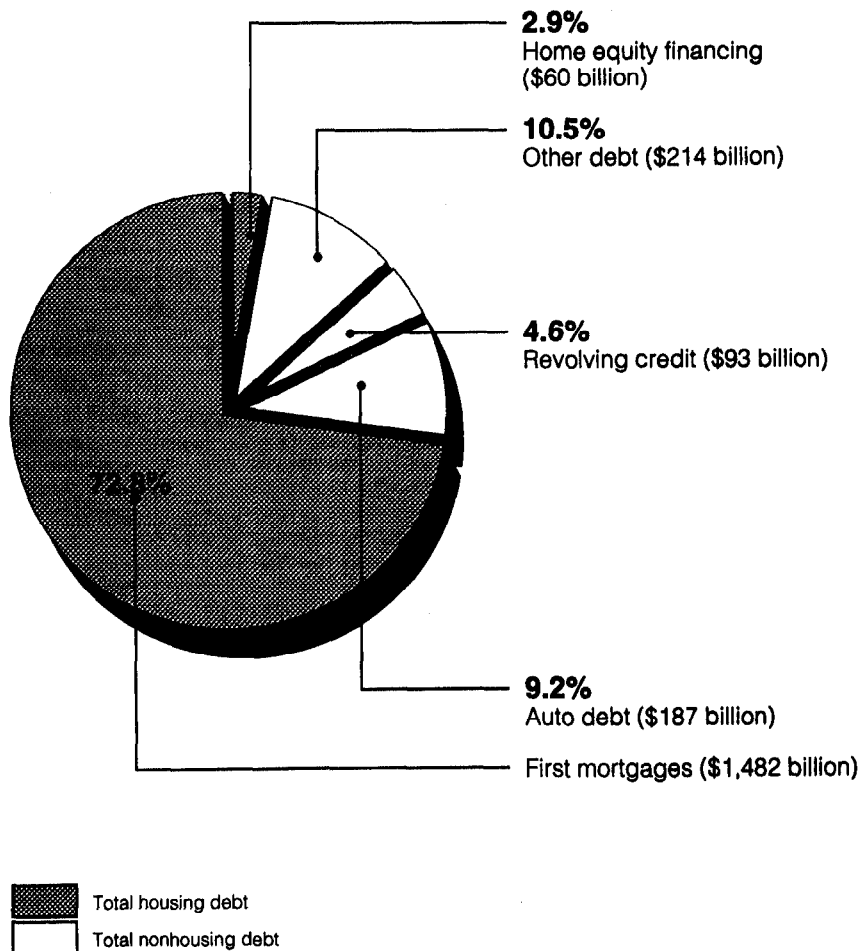
Note: Since January 1989, there has been more complete reporting of securitized loans (packages of consumer credit lenders sold to secondary markets). Thus, the 1989 through 1991 revolving credit data are more inclusive than the data from prior years.

Source: Data obtained from Federal Reserve Board publications.

¹²Other debt includes mobile home loans and other installment loans not included in automobile or revolving credit, such as loans for education, boats, and vacations. These loans may be secured or unsecured debt.

While total consumer debt outstanding (housing and nonhousing debt) increased, a more significant change was in the mix of debt held by consumers between 1981 and 1991. As shown in figures 4 through 6, the proportion of total consumer debt that was first mortgage debt fell from 72.8 percent in 1981 to 67.1 percent in 1986 and increased to 70.1 percent in 1991. On the other hand, the proportion of home equity financing to all debt steadily increased during this period, increasing from 2.9 percent in 1981 to 9.8 percent in 1991. The impact of these differing trends over the 11-year period, however, was an overall increase in the proportion of total housing debt (first mortgages and home equity financing), which increased from more than 75 percent in 1981 and 1986 to 80 percent in 1991. The decline in first mortgage debt and increase in home equity financing occurred during the period of high growth for home equity financing, prior to the Tax Reform Act of 1986. Since then, both forms of housing debt have increased.

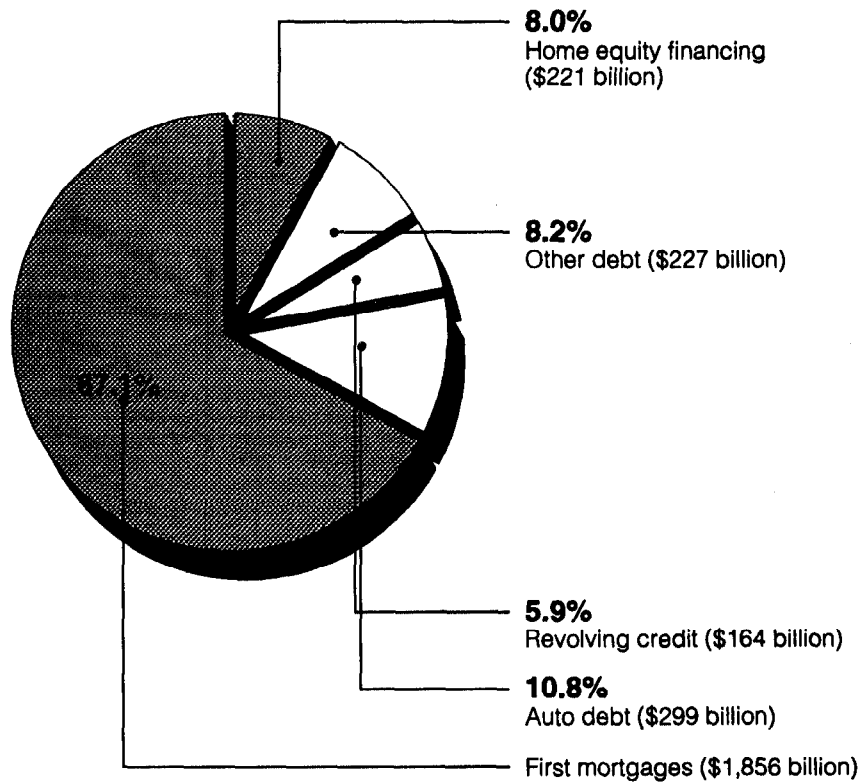
Figure 4: Outstanding Housing and Nonhousing Debt as a Percent of Total Consumer Debt for 1981





Note: The first mortgage percentage is based on a GAO calculation, using the difference between the dollars outstanding for all mortgage debt and home equity financing.

Source: GAO calculations based on data from the Statistical Abstract of the United States (1990 Edition), David Olson Research Co., and ABA's 1982 Retail Credit Report.

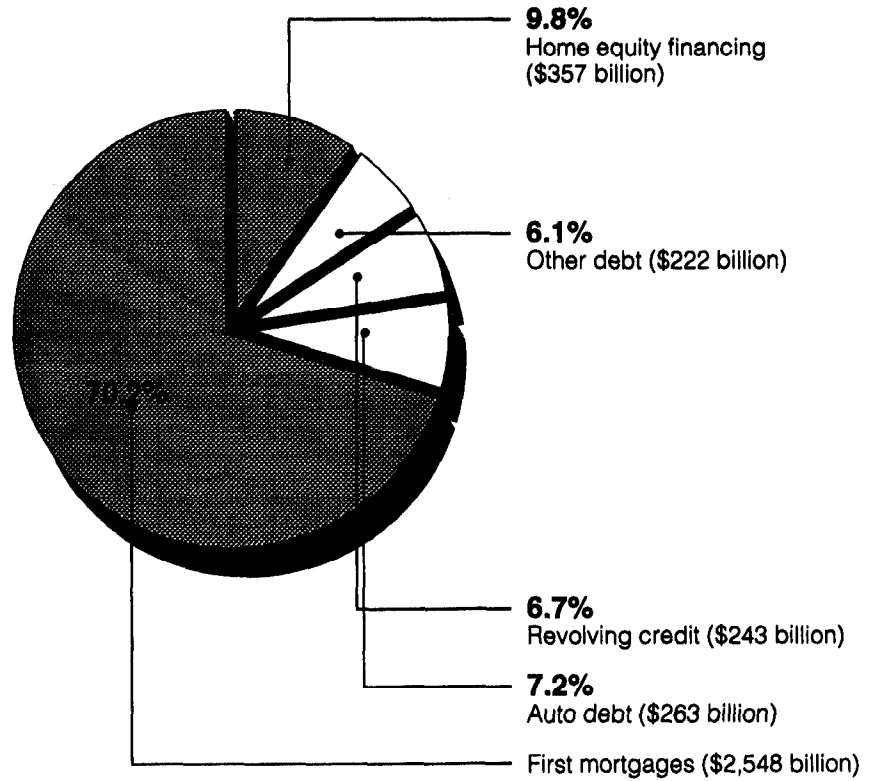
Figure 5: Outstanding Housing and Nonhousing Debt as a Percent of Total Consumer Debt for 1986





 Total housing debt
 Total nonhousing debt

Source: GAO calculations based on data from Federal Reserve Board publications and David Olson Research Co.

Figure 6: Outstanding Housing and Nonhousing Debt as a Percent of Total Consumer Debt for 1991



 Total housing debt
 Total nonhousing debt

Note: The percentages on this chart for first mortgages and home equity financing are estimates for 1991.

Source: GAO calculations based on data from Federal Reserve Board publications and David Olson Research Co.

Borrower Characteristics Varied Little

Although home equity loans and lines of credit have different features, the characteristics of the borrowers using each type of financing varied little. CBA's 1992 Home Equity Loan Study showed that the only difference was in income levels.

According to the CBA study, the average homeowner with an outstanding home equity loan or home equity line of credit in 1991 had owned the home for about 9 years. In addition, more than half of the borrowers of each type of financing were between the ages of 35 and 49 years old. The only difference they found between the homeowners using home equity loans versus the lines of credit was in their income levels. This study showed that while the average line of credit borrower earned \$51,398 in 1991, the average borrower with a home equity loan earned \$43,339, about 16 percent less.

Home Equity Financing Most Popular in the Northeast

Of households with any mortgage debt, those in the Northeastern region of the country were more likely to have home equity financing than were households in other regions. One study found that in 1989 homeowners in the Northeast who had mortgage debt were almost twice as likely as the national average to also have home equity financing.

Researchers point to two reasons for the popularity of home equity financing in the Northeast. First, this area experienced rapid growth in income levels and real estate values in the late 1980s. Average prices for existing homes increased by 43 percent in the Northeast, substantially more than in other regions. Secondly, this region is the home of many financial institutions that have aggressively marketed home equity products.

Most Home Equity Financing Used for Purchase of Home And/or Improvements

Funds obtained through home equity financing can be used for a wide variety of purposes. Some uses of the funds, such as home improvements, home purchase, investments, and debt consolidation, maintain or could increase the borrowers' net worth. Other uses, such as vacations, reduce net worth. Table 2 shows the results of our analysis of the data from the 1989 Survey of Consumer Finances of how these funds were used. Almost 48 percent of borrowers using home equity loans and almost 32 percent using home equity lines of credit said they used the funds for making home improvements or purchasing a home.

Table 2: Home Equity Financing Purposes in 1989

Purposes	Percentage of borrowers	
	Home equity loans	Home equity lines of credit
Home improvements or purchase	47.9%	31.8%
Investments	16.4	21.8
Debt consolidation	7.6	13.0
Auto purchases and/or expenses	5.8	13.0
Education	5.8	8.7
Medical needs	3.5	0.0
Taxes	2.9	5.1
Other	9.9	6.5

Source: GAO analysis of Federal Reserve data from the 1989 Survey of Consumer Finances.

This table also shows differences in the percentage of borrowers who used their home equity loans and lines of credit for debt consolidation, auto purchases and/or expenses, and educational needs. A higher percentage of borrowers used their home equity lines of credit for these purposes than those with home equity loans.

Almost half of the dollars outstanding on home equity loans in 1989 were used for purchasing a home. An additional 12.3 percent of the dollars outstanding were used for making home improvements. On the other hand, only 1.7 percent of the dollars outstanding were used for consolidating debts.

While these studies provide information on how consumers used home equity financing, they do not indicate whether consumer behavior changed with the use of home equity financing. For example, even though someone who took out a home equity loan may have made home improvements, we do not know if these improvements would have been made in the absence of home equity borrowing. If the improvements would not have been made without the home equity borrowing, then home equity borrowing could be said to have financed the home improvements. On the other hand, if the home improvements would have been made even without the home equity loan, then home equity financing may in fact have allowed the borrower to free up resources for other uses, such as going on a vacation or purchasing a car.

One economics study¹³ looked at how home equity financing was used by consumers and tried to assess the influence of home equity financing on consumer behavior. It found that for some households funds appeared to be used to finance consumption. It further stated that an increase in home equity borrowing was associated with a net reduction in household saving. However, because the study was based on very aggregative data, we believe its results are more indicative than conclusive.

Although Home Equity Financing Has Its Risks and Costs, It Is Popular With Borrowers

According to studies done by banking associations, homeowners like to use home equity financing for several reasons. These included (1) interest rates that are often lower than for other financing; (2) flexibility to use the funds borrowed for housing or nonhousing purposes; and (3) for a line of credit, the option to use the line as needed.

Several factors encouraged borrowers to use their home equity as a basis for financing, either directly through home equity financing or drawing down their equity through refinancing existing mortgage debt. For example, the value of many homes across the United States increased during the 1980s. The resulting increase in equity often led homeowners to use home equity financing as a convenient way of using this increased housing wealth.

Even though home equity financing is tax preferred over other types of consumer borrowing, it may not be the best choice for a particular borrower or use. If homeowners are increasing their level of debt, they are exposing themselves to increasing risk of insolvency. However, even if homeowners are not increasing the level of debt but are comparing home equity financing to alternative types of financing, they should take into account the interest rates and relative risks of each type. Because home equity financing is secured by a home, there is less risk to the lender and, as a result, a lower interest rate for the borrower. However, using the home as security also increases the borrower's risk. If the borrower defaults on the payments, he could lose his home.¹⁴ In addition, in a weak housing market, if a home's value declines substantially, the debt secured against the property may be greater than the value of the property. Another source of risk for borrowers is that some home equity financing

¹³J. M. Manchester and J. M. Poterba, "Second Mortgages and Household Saving," Regional Science and Urban Economics (1989), pp. 325-346.

¹⁴However, the homeowner could declare bankruptcy under Chapter 13 of the Bankruptcy Code to forestall foreclosure. Chapter 13 allows debtors to propose a plan for repaying the arrearages plus interest plus the regular mortgage payments as they accrue.

has adjustable rates of interest, which could affect the payment size and expose the borrower to cash flow risks.

In addition to the risks, there are other disadvantages associated with obtaining home equity financing but not with other types of consumer debt. These include closing costs, similar to those paid with a first mortgage, such as title insurance, origination fees, and appraisal fees. Likewise, it generally takes from 14 to 18 days to obtain home equity financing.

The Tax Reform Act Made Mortgage Borrowing More Attractive Than Other Types of Financing

The Tax Reform Act of 1986 disallowed the deduction of personal interest while maintaining the mortgage interest deduction. As a result, mortgage-backed borrowing became more attractive compared to other nondeductible forms. However, the same act raised the level of the standard deduction and lowered tax rates, both of which should reduce the tax incentive to borrow. Taken from IRS Statistics of Income (SOI) data, table 3 shows that the number of itemizers and the amount of itemized deductions fell after the Tax Reform Act. Despite this fact, the table indicates that the mortgage interest deduction increased.

Table 3: Trends in Itemized Deductions and the Mortgage Interest Deduction for Tax Years 1984 Through 1989

Tax year	Number of itemizers (millions)	Amount of mortgage interest deductions ^a	Amount of itemized deductions ^a
1984	38.2	\$131.3	\$461.4
1985	39.8	142.6	502.0
1986	40.7	151.9	539.8
1987	35.6	160.1	458.7
1988	31.9	168.0	445.0
1989	32.0	182.9	465.2

^aBillions of 1991 dollars.

Source: GAO analysis of SOI data.

Whether the Tax Reform Act merely maintained or increased mortgage borrowing is unclear. In any case, we were not able to determine the extent to which this borrowing reflects home equity borrowing. Because interest on home equity financing is not reported separately from other mortgage interest on the tax return, it is not possible to track the interest deductions for the two types of debt.

SOI data also indicate that there may be some substitution of mortgage interest for personal interest. For example, while the amount of mortgage interest paid increased between 1986 and 1989, nonmortgage interest paid (as reported on tax returns) fell from \$85.5 billion in 1986 to \$59.2 billion in 1989. For the same period, the ratios of nonmortgage interest paid and mortgage interest paid as a percent of adjusted gross income (AGI) moved in opposite directions. The nonmortgage interest to AGI ratio fell from 4.10 percent to 2.78 percent, while the mortgage interest to AGI ratio rose from 7.29 percent to 8.60 percent.¹⁵

Events of 1980s Encourage Aggressive Pursuit of Home Equity Market by Lenders

For several reasons, lenders found offering home equity financing more attractive during the 1980s than in prior years. In addition to the sudden growth of home equity from increasing home values in the 1980s, changes in banking laws and the introduction of home equity lines of credit as a financial instrument encouraged lenders to expand this form of lending. Lenders responded to these opportunities by offering home equity products and marketing them more aggressively.

Two important banking law changes increased the attractiveness of home equity financing to lenders. These changes were in the Garn-St Germain Depository Institutions Act of 1982¹⁶ and modifications made to the Truth in Lending Act in 1980 and 1984.¹⁷ The Garn-St Germain Act of 1982 expanded the authority of national banks and federally chartered thrifts to extend home equity credit. It repealed certain restrictions on real estate loans allowing national banks to make such loans primarily on the basis of the creditworthiness and income prospects of borrowers. In addition, federally chartered thrifts were given expanded real estate authority allowing them to offer second mortgages.

Furthermore, the Truth in Lending Act was temporarily modified in 1980 to limit the rescission period¹⁸ borrowers had when they used a line of credit that was secured by real estate. The Truth in Lending Act originally required this period to be 3 business days after each draw down on the line of credit. This was a cost disadvantage to lenders for offering home equity lines of credit relative to other lines or credit or credit cards.

¹⁵For variable definition and more detailed analysis, see appendix III.

¹⁶P.L. 97-320 (1982).

¹⁷P.L. 96-221 (1980) and P. L. 98-479 (1984).

¹⁸This is the period after a consumer uses a line of credit secured by real estate, during which time the consumer could change his mind about using the line of credit.

However, the 1980 modifications to the act reduced lenders' costs by limiting the rescission period to the initial set-up of the line of credit. This made offering home equity lines of credit more attractive to lenders. As a result, the number of lenders offering these lines of credit has increased from less than 1 percent in 1980 to more than 80 percent of commercial banks and 65 percent of thrift banks in 1989. Congress made this exemption from the rescission period permanent in 1984.

According to lenders and other sources, while home equity loans had been available as second mortgages, lenders did not actively market them, and borrowers tended not to use this type of financing because of an associated social stigma. As part of their marketing programs, the lending industry replaced the term "second mortgages" with "home equity" to eliminate the stigma and encourage homeowners to borrow against their home equity. They believe this change is related to the increase in the popularity of home equity financing overall.

Current Delinquency Rates Appear Low but May Be Growing

The American Bankers Association (ABA) defines loan delinquency as "loans past due 30 days or more." As shown in table 4, ABA reported that delinquency rates for home equity financing have been low. There was a significant difference in the rates for home equity loans and home equity lines of credit. The rates for home equity lines of credit, thus far, have been much lower than those for home equity loans and other types of credit, which have been similar to one another.

Table 4: Delinquency Rates for 1987 Through 1991

Credit type	Delinquency rates by year				
	1987	1988	1989	1990	1991
Home equity loans	2.01%	1.86%	1.85%	1.45%	2.06%
Home equity lines of credit	.74	.68	.78	.85	.88
Auto loans (direct)	1.73	2.08	2.25	2.51	2.45
Revolving credit loans	2.39	2.82	2.91	3.15	2.91

Source: American Bankers Association.

We believe the difference between the delinquency rates for home equity lines of credit and home equity loans may be attributable to such factors as the relative newness and rapid growth rate of the home equity lines of credit, higher credit standards for the lines of credit, and borrowers' ability to defer delinquency by drawing down more credit on their lines of credit.

According to ABA and our review of bankruptcy literature, there is little evidence to suggest lender or homeowner hardship in the form of bankruptcy and foreclosure resulting from the use of home equity financing. The 1992 ABA Home Equity Lines of Credit Report indicates that lenders reported that while the number of home equity line of credit accounts associated with foreclosures had increased between 1990 and 1991, the actual numbers were still quite modest. The numbers ranged from an average of 1 foreclosed loan for small banks to 13 for bigger banks. The ABA report also showed that the median number of home equity lines of credit closed due to bankruptcies was unchanged from 1990.

Extent of Future Problems With Home Equity Financing Difficult to Predict

Not only are current problems with home equity financing difficult to determine, but future problems are also difficult to predict due to a lack of data. For example, until late 1987, all data on outstanding mortgage debt were combined by lenders in the Federal Reserve's call report information, with no breakouts by mortgage type. The Federal Reserve changed the reporting requirements in 1987 to include a breakdown of information on home equity lines of credit and in 1991 to include information on home equity loans.

Because home equity lines of credit are relatively new financial instruments, analysts are not sure how the delinquency rates will be affected as the economy improves. ABA reported that it takes about 3 years for the effects of a recession to show up in the delinquency rate. ABA further noted that because the current recovery is slow, the lag period between the end of the recession and the effect on the delinquency rates might take longer than in the past.

Bank Regulatory Agencies and Lenders Taking Action to Minimize Risks With Home Equity Financing

Bank regulatory agencies and lenders have identified potential problems for lenders with home equity lending and implemented new approaches to avoid future problems. Examples of these problems include declining real estate values, legislatively imposed interest rate ceilings, and promotional techniques that did not always enable lenders to recoup their initial investment.

While home values increased greatly during the 1980s, recently they have stabilized or declined in most parts of the country. Where home values declined, so did household equity. If household equity becomes negative, property abandonment and borrower defaults may increase. Lenders could suffer substantial losses if they find themselves with outstanding home

equity loans and lines of credit secured against homes with little or no equity.

Although interest rate ceilings on home equity financing may be beneficial to borrowers, they add another element of potential risk for lenders. Under the terms of the Competitive Equality Banking Act of 1987, all adjustable rate mortgages, including home equity loans and lines of credit, are to carry a life-of-plan interest rate ceiling. However, the actual ceiling rate was left for lenders to establish. If lenders underestimate future interest rates, their risks increase should they have to borrow funds at a rate higher than the rate at which they have committed to lend funds. Lenders could reduce this risk by establishing conservative (high) ceilings.

In addition, lenders promoting home equity financing may have used promotional techniques, such as the use of low interest rates and discounted or waived initial fees, which did not in the long run provide them with the anticipated benefits. Customers attracted to home equity financing by these marketing techniques may not be using these accounts or keeping them open long enough for lenders to recoup their investments. Similarly, borrowers attracted to home equity financing because of a low interest rate may have used it to retire other debt at a higher interest rate from the same lender. This also would have reduced the lender's earnings.

With these problems in mind, officials from two banking regulatory agencies recommended that lenders establish procedures to monitor the financial condition of borrowers by periodically reviewing all outstanding consumer loans, including home equity financing. Having such a monitoring system in place would help lenders quickly identify financially troubled borrowers. These officials believe that a stronger emphasis on monitoring will improve lenders' abilities to foresee problems and take early action. In addition, on their own initiative, lenders are strengthening their credit standards and tightening approval processes to further reduce their exposure to risk.

Proposals to Limit Tax Expenditures From Home Equity Loans Would Be Difficult to Enforce

By eliminating the deductibility of personal interest expense and raising the standard deduction and lowering tax rates through the Tax Reform Act of 1986, Congress, in effect, reduced the incentive to borrow. On the other hand, by maintaining the deductibility of mortgage interest, including interest on home equity financing, Congress made mortgage financing of housing and nonhousing assets, as well as consumption purchases, relatively more attractive.

The increased use of mortgage debt may be consistent with congressional intentions and expectations. However, increased use of this borrowing, especially to finance nonhousing assets or for consumption purchases, could potentially expose some housing wealth to increased risk. This clearly would be true if households increase borrowing relative to assets, but it would also be true if home equity borrowing replaces other forms of debt. In either case, there may be increased risk of foreclosure. In addition, the change in tax incentives may raise potential equity concerns, because only those middle and upper income taxpayers who itemize are able to take advantage of this tax preference.

After 6 years of experience with the Tax Reform Act, Congress could decide to reconsider the tax treatment of home equity borrowing. While we are not convinced that change is necessary, we have identified various options relating to changes to the mortgage interest deduction and the deductibility of interest on home equity financing. We asked the Joint Committee on Taxation to estimate the revenue effect of each option. The following sections present those estimates and our views on the feasibility of implementing these options.

Disallowing Interest Deductibility for Home Equity Borrowing Is the Most Drastic Option and May Not Be Effective

If Congress believes that the use of home equity borrowing is undercutting congressional intent to reduce borrowing for consumption purchases, the most basic change would be to disallow the deductibility of interest on home equity loans and home equity lines of credit. However, this would mean that even the interest on loans taken out for home improvement purposes would not be deductible. The staff of the Joint Committee on Taxation estimates that such a limitation could raise over \$45 billion between 1993 and 1997.

From the perspective of borrowing to finance consumption, this might appear to restore equity, because no one would be allowed to deduct interest except on a first mortgage. To ease enforcement of these restrictions, it may be necessary to alter Internal Revenue Code requirements for information return reporting. Congress would need to require separate reporting to determine which interest would and would not be deductible. Currently, there are no requirements to report interest on first mortgages and home equity financing separately.

However, homeowners can, and many do, draw down on their equity when they obtain a mortgage on a newly purchased house or refinance existing mortgage debt. A 1990 Federal Reserve study indicated that many

refinanced mortgages included a reduction in equity and that this type of financing was used for purposes that paralleled uses of standard home equity loans. While restrictions can be placed on refinancing transactions so that interest on reductions in equity is not deductible, such restrictions may involve enforcement difficulties. Similar to the requirement needed for reporting first mortgage and home equity interest separately, it would also be necessary to establish such a requirement for information returns on refinanced mortgages. These returns would need to report separately the interest on preexisting debt and the interest on debt which reduces equity. Under this option, only interest on the debt existing prior to refinancing would be deductible.

Tighter Caps on Home Equity Interest Deductibility Suffer From Similar Problems

Rather than eliminate the deductibility of interest on home equity financing, Congress could impose tighter caps on the amount of indebtedness that would qualify for a deduction. The Joint Committee on Taxation estimates that lowering the cap from \$100,000 to \$75,000 could raise \$1.2 billion between 1993 and 1997, and lowering it to \$50,000 could raise \$4 billion during the same period.

One problem with the existing cap as well as any proposed tighter limits on deductible interest is that current information returns report the amount of interest and not the underlying value of the mortgage or the home equity indebtedness. Therefore, to enforce such a cap, it may be necessary for Congress to change the information reporting requirements to include the value of the debt, as well as the amount of interest paid.

An additional problem is that a household could accumulate mortgage and home equity indebtedness from different financial institutions. Any particular financial institution may not be aware of the total amount of home equity indebtedness certain households have accumulated. As a result, the financial institution would not be able to separate deductible from nondeductible interest on an information document. For each taxpayer, IRS would have to sum up the information from reporting institutions to determine the total amount of home equity indebtedness and ascertain whether any limit has been exceeded. Also, equity reductions from refinancing would be a substitute for home equity financing and would have to be subject to the cap.

Difficulty in Connecting Sources of Funds to Particular Uses Makes the Effectiveness of Limits on Purposes Doubtful

While the Tax Reform Act of 1986 gave special treatment to taxpayers using mortgage financing for educational and medical expenses, this provision was rescinded the following year because of concerns about enforceability. Both then and now it is difficult to track the use of home equity financing once the funds are transferred from the lender to the borrower. In addition, because money is fungible, all that can be verified is that funds were spent for the desired purpose. There is no way to determine if the desired purpose was achieved as a result of the home equity borrowing or if such borrowing allowed some other expenditure.

Interest Caps May Be Superior to Indebtedness Caps

As one of its 1992 revenue options, the Congressional Budget Office (CBO) included a cap on the annual amount of deductible mortgage interest of \$12,000 for a single individual and \$20,000 for a married couple. CBO estimated that such a cap could raise \$23.5 billion between 1993 and 1997. If the existing system of deductibility is seen by Congress to undermine tax equity, this cap would improve equity by limiting the ability of high-income taxpayers to benefit from the deduction. However, it could reduce horizontal equity because taxpayers living in areas with high housing prices would be disadvantaged compared with taxpayers with similar incomes living in areas with low housing prices. It could also disadvantage those who borrowed during periods of high interest rates.

In addition to its equity benefits, such a cap has the advantage of being readily enforceable. As long as all mortgage interest was subject to a cap, IRS could administer such an option with the current information return system. However, if a cap were placed only on home equity interest, more information would have to be provided to IRS to ensure proper enforcement.

Agency Comments

In commenting on our draft report, Department of the Treasury officials thought it informative. However, they also stated that the effects of the Tax Reform Act were not conclusively demonstrated. We agree that at this time the evidence on the effects of that act are not conclusive. As such, we presented suggestive summary evidence in the letter and referred to appendix III for more detailed information. The Treasury response included more specific comments, which were incorporated where appropriate.

Objectives, Scope, and Methodology

The objectives of this review were to (1) analyze trends in home equity as well as mortgage-backed financing and other types of consumer credit used between 1981 and 1991, (2) determine who is using home equity financing and for what purposes, (3) determine what factors caused the growth in home equity financing, (4) determine if any problems are arising from this type of borrowing, and (5) analyze the implications of various tax policy options that might be instituted to constrain home equity borrowing.

We interviewed officials from bank regulatory agencies, IRS, consumer organizations, banking and mortgage associations, consumer financing associations, lenders, consulting companies, and academia. We gathered data on numbers of loans and lines of credit and dollar amounts outstanding for 1981 through 1991 on home equity financing and other types of consumer financing. We obtained estimates of revenue foregone with the use of home equity products and the interest deduction currently allowed from the Joint Committee on Taxation. We reviewed literature on home equity financing, bankruptcy, and economic analyses of consumer debt.

Our work was done during the period of August 1991 to August 1992 in accordance with generally accepted government audit standards. A more detailed explanation of our methodology is in appendix VI.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of issuance. At that time, we will send copies of this report to interested parties. We will also make copies available to others upon request.

The major contributors to this report are listed in appendix VII. Please contact me on (202) 512-5407 if you or your staff have any questions concerning this report.

Sincerely yours,



Jennie S. Stathis
Director, Tax Policy and
Administration Issues

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Abbreviations

ABA	American Bankers Association
AGI	Adjusted Gross Income
CBA	Consumer Bankers Association
CBO	Congressional Budget Office
FDIC	Federal Deposit Insurance Corporation
IRS	Internal Revenue Service
OCC	Office of Comptroller of the Currency
SOI	Statistics of Income

Home Equity Financing Grew Faster Than First Mortgages and Other Forms of Consumer Borrowing

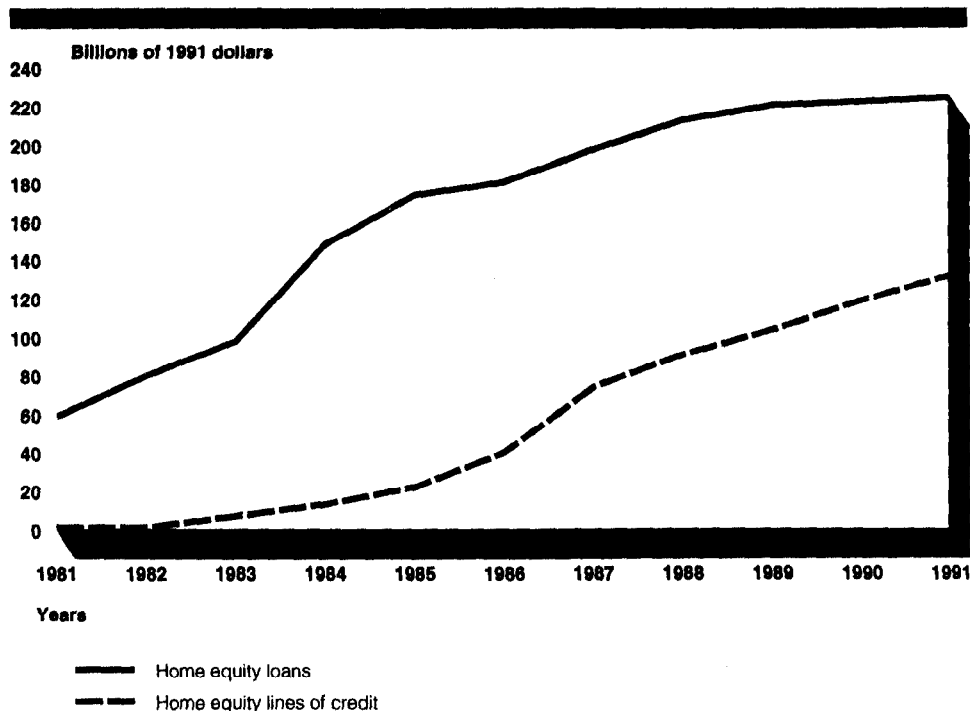
The amount outstanding and number of home equity loans and lines of credit increased dramatically during the 1980s. While the dollars outstanding for first mortgage debt and other forms of consumer debt also increased, the increases were at lower rates than for home equity financing. The proportion of debt held by households that was housing debt (including both first mortgages and home equity financing) increased between 1981 and 1991. While there still is much untapped home equity available for homeowners to use, the use of home equity financing may continue to grow but at a slower rate than in the past.

Use of Home Equity Financing Increased Substantially in 1980s

The amount of home equity financing outstanding increased significantly during the 1980s, as did the number of home equity loans and lines of credit. Historically, the total dollars outstanding have been higher for home equity loans than for home equity lines of credit, as shown in figure I.1.

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**Figure I.1: Outstanding Dollars Owed
on Home Equity Financing for
1981-1991**



Note 1: Dollars outstanding on home equity lines of credit represent amounts actually borrowed.

Note 2: The 1991 data on this chart were estimated.

Source: Data obtained from David Olson Research Co.

In 1981, the majority of the home equity financing was made up of home equity loans. Of the \$60 billion outstanding for home equity financing in 1981, \$59 billion was in home equity loans. The remaining \$1 billion, or 1.7 percent of the total dollars, was in home equity lines of credit. However, by 1991, the dollars outstanding for home equity lines of credit were estimated to account for almost 37 percent (\$132 billion) of the total dollars outstanding for home equity financing (\$357 billion).¹

The annual growth rate for dollars outstanding for home equity lines of credit far outpaced that of home equity loans during the 1980s. Between 1981 and 1991, the annual growth rates for home equity lines of credit ranged from 10.9 to 600.0 percent, with a mean of 98.4 percent. The annual growth rates for home equity loans ranged from .9 to 35.6 percent, with a

¹The figures in this report were adjusted for inflation and reflect 1991 dollars.

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mean of 15.3 percent. However, it should be noted that the annual growth rates in dollars outstanding were greater for both the home equity loans and lines of credit in the first half of the decade than in the second half (see table I.1).

Table I.1: Dollars Outstanding and Growth Rates for Home Equity Financing

Year	Annual percentage growth rates for home equity financing between 1981 and 1991			
	Home equity loans		Home equity lines of credit	
	Dollars ^a	Annual growth rate	Dollars ^a	Annual growth rate
1981	\$59	•	\$1	•
1982	80	35.6%	1	0.0%
1983	98	22.5	7	600.0
1984	148	51.0	13	85.7
1985	174	17.6	22	69.2
1986	181	4.0	40	81.8
1987	198	9.4	74	85.0
1988	213	7.6	91	23.0
1989	221	3.8	104	14.3
1990	223	0.9	119	14.4
1991	225	0.9	132	10.9

^aBillions of 1991 dollars.

Source: GAO analysis of data from David Olson Research Co.

Similarly, the average annual growth rates for home equity lines of credit and home equity loans differed during the first and second parts of the decade. Between 1981 and 1987, the average annual growth rate for the lines of credit was about 154 percent.² After 1987, this declined to about 16 percent. The average annual growth rate change for home equity loans was not as great as for the home equity lines of credit and its decline started earlier, declining from about 36 percent between 1981 and 1984 to about 6 percent thereafter.

Although the annual and average annual growth rates were much higher prior to the tax code changes in 1986 and 1987 than after, by 1988 the home equity financing market had begun to mature. In 1990, a Federal

²One reason the average annual growth rate is so high is due to the growth between 1982 and 1983 at 600 percent. The growth rate in each of the years following this period was lower. However, when the period of 1982 through 1983 is not included in the calculation, the average annual growth rate (between 1983 and 1987) is still high at 80.4 percent.

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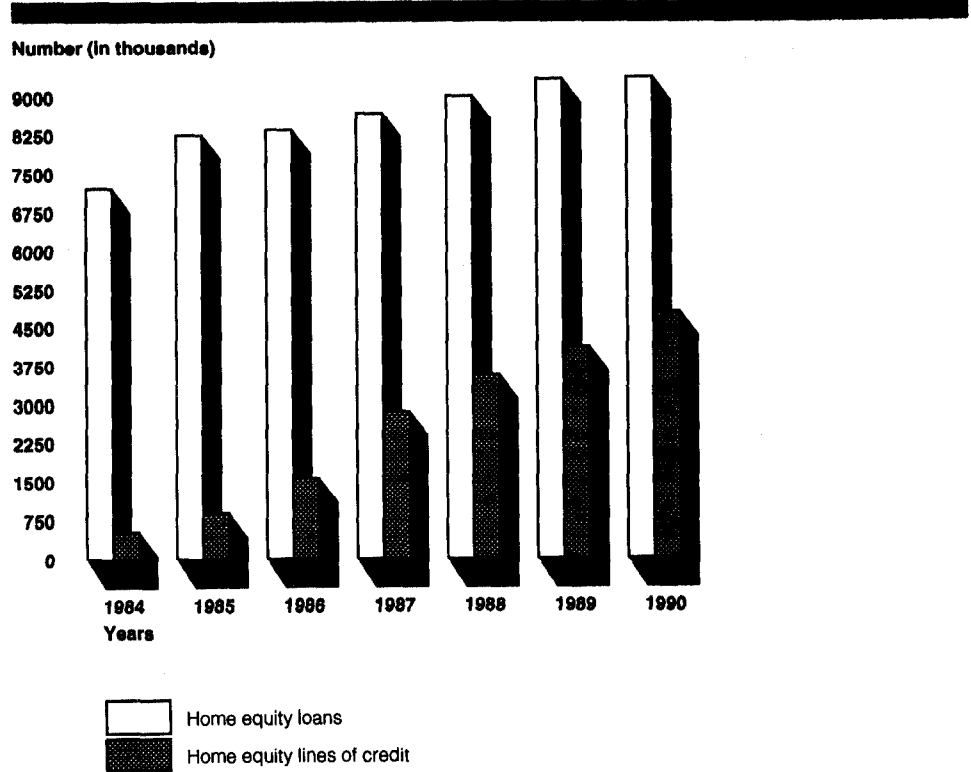
Reserve study³ reported that several factors slowed the growth in dollars outstanding for home equity financing. Among these factors were the decrease in the number of households establishing new home equity lines of credit and a reduction in the share of households without home equity lines of credit, who make up the potential market for new lines of credit. In addition, lenders may have contributed to the slowdown by not offering special promotional interest rates on home equity financing, which in the past made it particularly attractive to customers. As a result, we believe the tax code changes still may have increased the use of such financing because if the tax code had not been changed, the growth rate probably would have been even lower.

As with the trends in the dollars outstanding for home equity loans and lines of credit, the number of home equity lines of credit outstanding increased at a greater rate than the home equity loans between 1984 and 1990 (see fig. I.2). Even so, by 1990, the number of outstanding home equity loans was still almost 50 percent greater than the number of lines of credit.

³Developments Affecting the Profitability of Commercial Banks, Federal Reserve Bulletin, July 1990.

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Figure I.2: Number of Home Equity Loans and Lines of Credit With Outstanding Balances From 1984-1990



Note: The number of home equity lines of credit reflects those lines of credit for which the borrower had an outstanding balance at the time the data were collected.

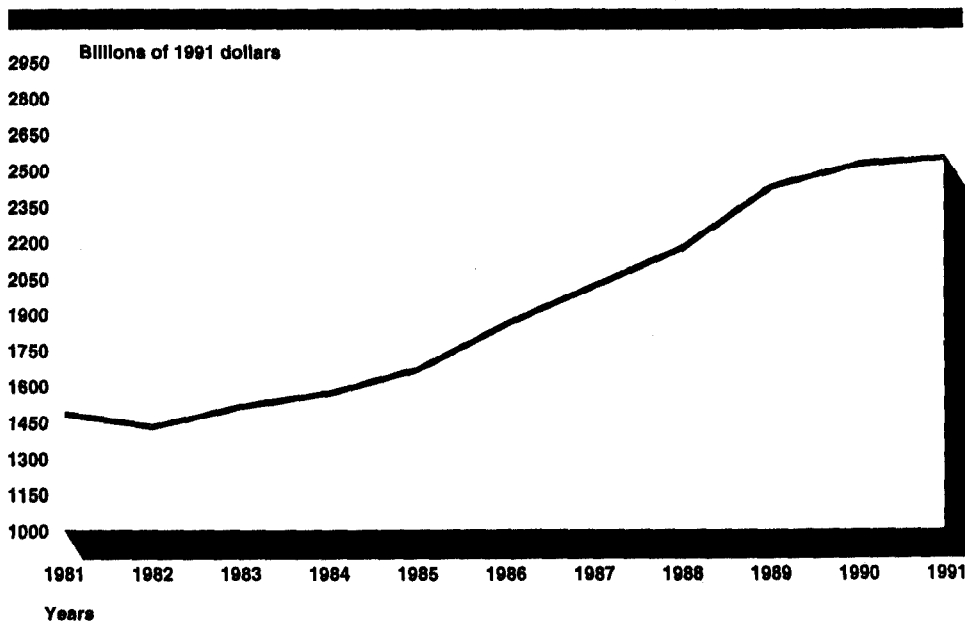
Source: Data obtained from David Olson Research Co.

Outstanding First Mortgages Also Increased at a Fast Pace

Figure I.3 shows that by 1991, the dollars outstanding for first mortgage debt were \$2.5 trillion, representing almost 88 percent of total mortgage debt. With an average annual growth rate of 5.7 percent, the dollars outstanding increased by about 72 percent between 1981 and 1991.

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**Figure I.3: Outstanding First Mortgage
Debt From 1981-1991**



Note: Outstanding first mortgage debt was derived from the difference between outstanding total mortgage debt and home equity financing for each of the years.

Source: GAO calculations based on data from Federal Reserve Board publications, David Olson Research Co., and the Statistical Abstract of the United States (1990 Edition).

While first mortgage debt outstanding has increased significantly, prices for existing and new homes did not increase as much. During this period, prices for existing and new homes grew at average annual rates of 1.0 percent and 1.9 percent, respectively.⁴

Increasing home prices had the effect of increasing the amount of accumulated equity in the homes. This increase in home equity gave homeowners several options. First, they could leave the equity untouched for the present, saving it for future needs. Second, they could take out the equity through home equity financing to finance home improvements or the purchase of goods and services or to repay other outstanding debts. Third, they could sell the property and use the equity to finance the

⁴According to the article Housing and Savings in the United States (Jonathan Skinner, National Bureau of Economic Research Working Paper Series, No. 3874, Cambridge, MA, October 1991), the mortgage/housing value ratio declined between 1965 and about 1981, from about 47 percent to about 37 percent. Since then the trend has reversed itself and reached an all-time high. In 1990, this ratio increased to about 58 percent.

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purchase of another house. Fourth, they could refinance their existing debt and draw down on the equity. The latter two options both involve obtaining new first mortgages rather than home equity financing. The last option appears to have been very popular during the second half of the 1980s as interest rates declined. As a result, much of the increase in first mortgage debt may have been due to homeowners drawing down on this equity through refinancing.⁵

In August 1990, the Federal Reserve reported that about 23 percent of outstanding first mortgage debt was refinanced debt.⁶ The results of its 1989 Survey of Consumer Attitudes⁷ showed that about 20 percent of homeowners reported refinancing their first mortgages. More than half of these homeowners also indicated that when they refinanced their mortgages, they also liquidated some of their equity. The average amount of the equity liquidated was about \$25,000.

**Other Forms of
Consumer Debt
Increased During
1980s but at Slower
Pace**

Besides housing debt, other common forms of consumer or nonhousing debt include auto loans, revolving credit,⁸ and other debt.⁹ In 1991, the total dollars outstanding for nonhousing debt were \$728 billion. The amount of nonhousing debt increased each year between 1981 and 1989, when it reached its high of \$774 billion. Since the end of 1989, however, the trend reversed itself, as shown in figure I.4.

⁵If homeowners refinanced their homes and did not liquidate any of their equity, there would have been no change in the dollars outstanding for first mortgage debt.

⁶Since we estimated there was about \$2.5 trillion in outstanding first mortgage debt in 1990, about 23 percent, or \$580 billion, of this would be refinanced debt.

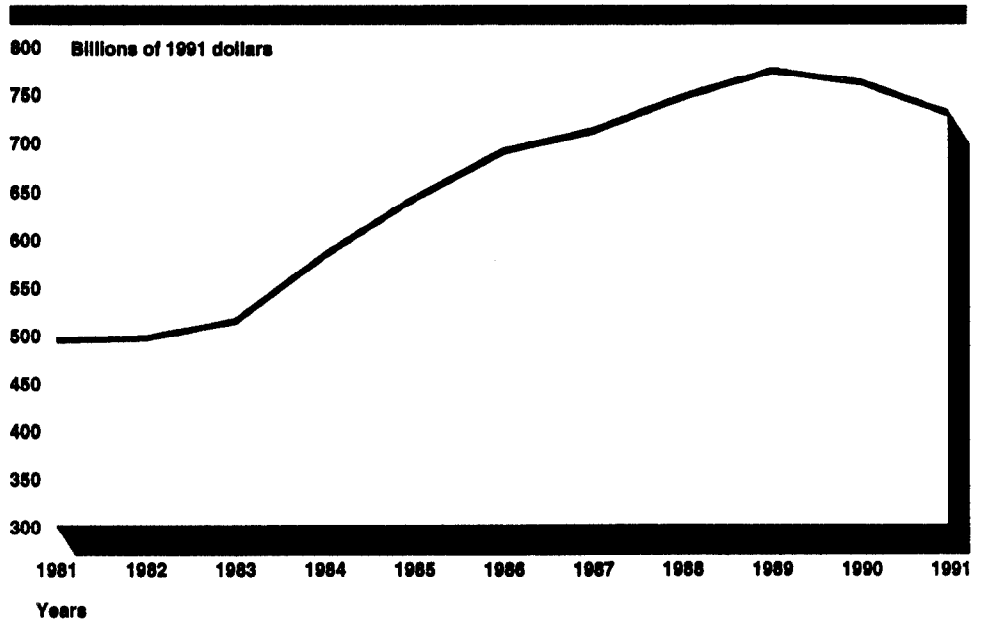
⁷This survey is conducted for the Federal Reserve by the Survey Research Center at the University of Michigan. It is conducted four times a year using questions sponsored by the Federal Reserve, other agencies, and private industry.

⁸Revolving credit does not include travel and entertainment cards.

⁹Other debt includes mobile home loans and other installment loans not included in automobile or revolving credit, such as loans for education, boats, and vacations. These loans may be secured or unsecured debt.

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**Figure I.4: Outstanding Total
Nonhousing Debt From 1981-1991**



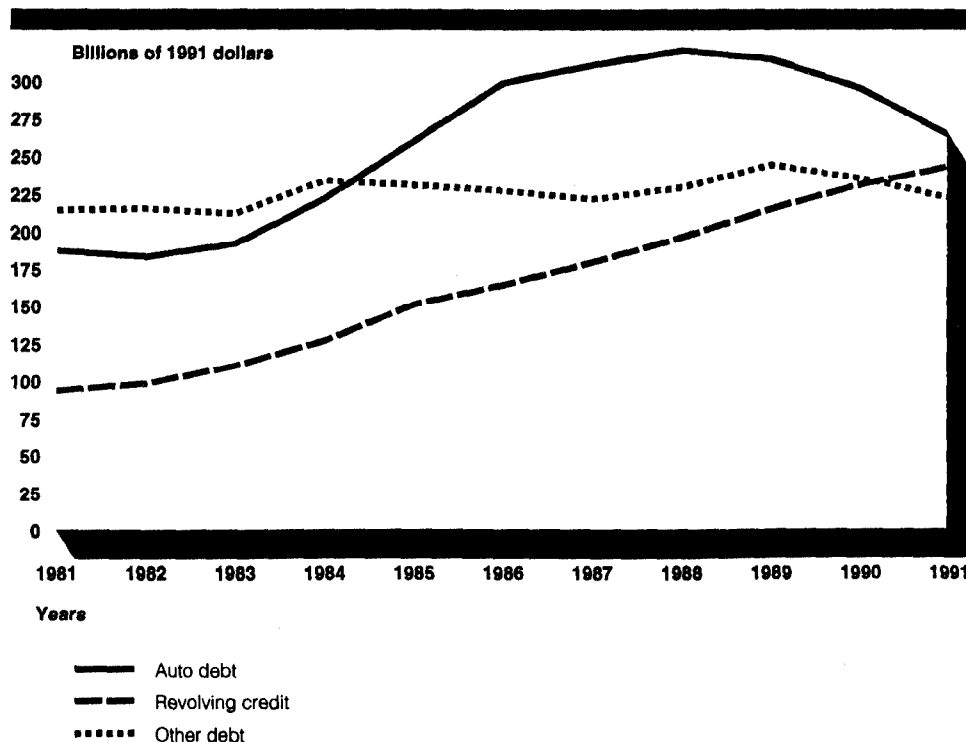
Note: This figure excludes all mortgage debt.

Source: GAO calculations based on data from Federal Reserve Board and ABA publications.

In 1991, the nonhousing dollars outstanding were almost evenly distributed between auto debt (\$263 billion), revolving credit (\$243 billion), and other debt (\$222 billion). Figure I.5 shows the dollars outstanding for each of these types of debt for 1981 through 1991.

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**Figure I.5: Outstanding Dollars Owed
by Type of Nonhousing Debt for
1981-1991**



Note: Since January 1989, there has been more complete reporting of securitized loans (packages of consumer credit lenders sold to secondary markets). Thus, the 1989 through 1991 revolving credit data are more inclusive than the data from prior years.

Source: Data obtained from Federal Reserve Board publications.

Auto Loans

Much of the decline in the total dollars outstanding for consumer debt is related to the change in outstanding auto debt. Between 1981 and 1986, outstanding auto debt grew annually by about 10 percent, with its growth rate peaking at more than 17 percent between 1984 and 1985. Since 1986, however, the amount of outstanding auto debt declined by an annual average rate of 2.4 percent.

Auto producers reported in the American Bankers' Association (ABA) quarterly report on consumer credit delinquencies that 1991 car sales volumes were the worst since 1983. They found that auto loan balances had decreased throughout 1991, which they believed reflected consumers' desires to reduce their indebtedness and their reluctance to take on more debt.

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In addition, some auto industry specialists believe that the reduction in the use of auto debt is due in large part to the growing popularity of auto leasing. An official from the Toyota Motor Credit Corporation indicated that the marketability of its retail lease product was enhanced by the elimination of the personal interest deduction for auto and other expenses following the passage of the 1986 Tax Reform Act.

Revolving Credit

Despite high interest rates on credit cards and the changes in the deductibility of personal interest charges on individual income taxes since 1987, consumers continued to borrow money using revolving credit. In contrast to the trend in auto debt, the dollars outstanding for revolving credit debt steadily increased between 1981 and 1991, with an increase of 161 percent and average annual growth rate of 10.2 percent during this period.

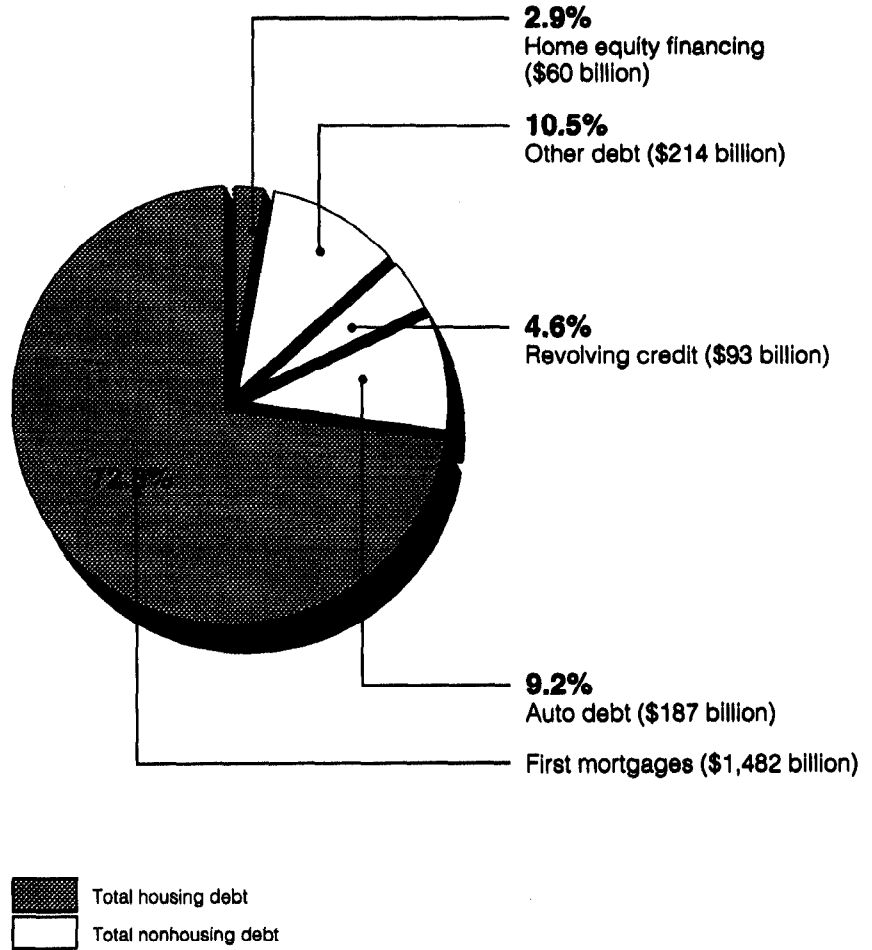
However, as with auto debt, the annual growth rate for revolving credit debt declined from a high of 19 percent between 1984 and 1985 to just over 5 percent between 1990 and 1991. Officials in the credit card industry believed the decline in their growth rate was related to the recession.

**Debt Mix Shifts
Toward Housing Debt**

Total dollars outstanding for a combination of housing and nonhousing debt have steadily increased since the early 1980s. By 1991, total outstanding debt was more than \$3.6 trillion. However, during this period the composition of debt held by consumers changed. An increasing portion of consumer debt became housing debt, a combination of both first mortgages and home equity financing, increasing from more than 75 percent in 1981 and 1986 to 80 percent in 1991. Figures I.6 through I.8 show the composition of total consumer debt in 1981, 1986, and 1991.

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Figure I.6: Outstanding Housing and Nonhousing Debt as a Percent of Total Consumer Debt for 1981

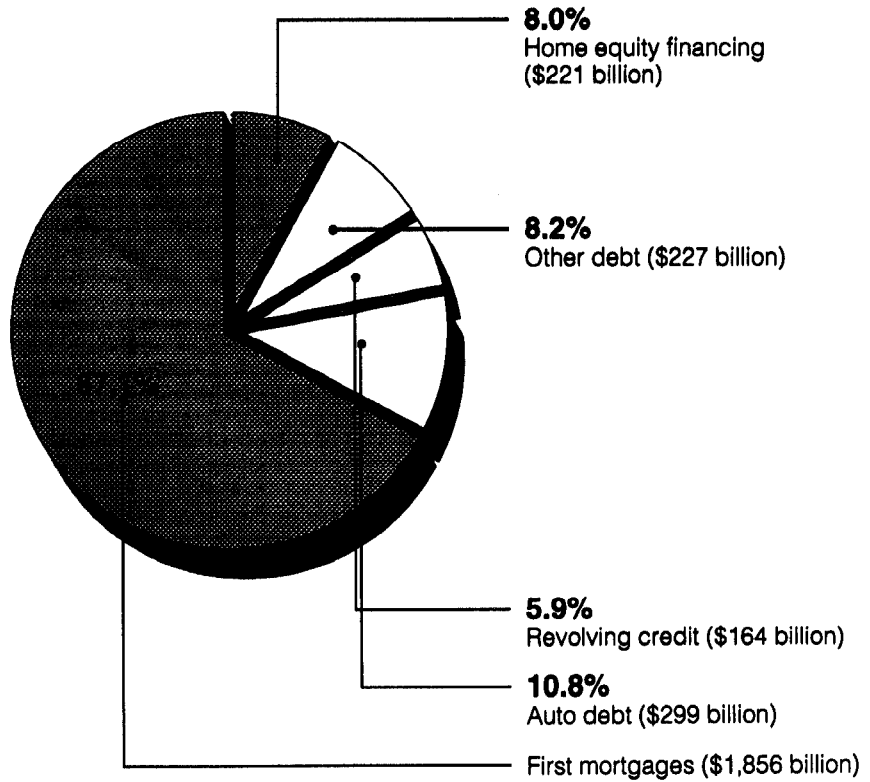




Note: The first mortgage percentage is based on a GAO calculation, using the difference between the dollars outstanding for all mortgage debt and home equity financing.

Source: GAO calculations based on data from the Statistical Abstract of the United States (1990 Edition), David Olson Research Co., and ABA's 1982 Retail Credit Report.

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**Figure I.7: Outstanding Housing and
Nonhousing Debt as a Percent of Total
Consumer Debt for 1986**

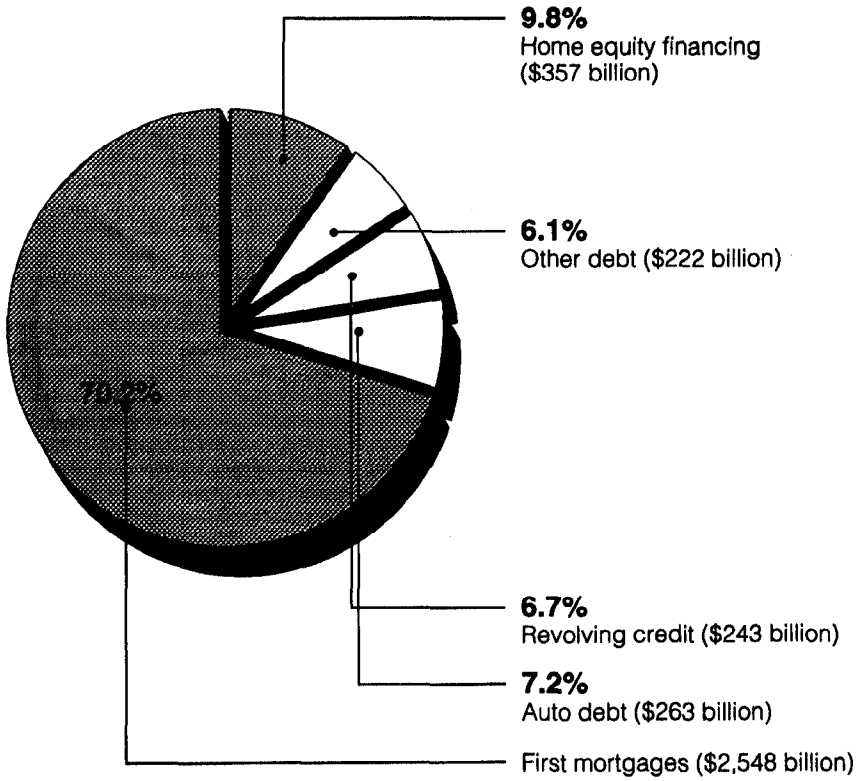




 Total housing debt
 Total nonhousing debt

Source: GAO calculations based on data from Federal Reserve Board publications and David Olson Research Co.

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**Figure I.8: Outstanding Housing and
Nonhousing Debt as a Percent of Total
Consumer Debt for 1991**



 Total housing debt
 Total nonhousing debt

Note: The percentages on this chart for first mortgages and home equity financing are estimates for 1991.

Source: GAO calculations based on data from Federal Reserve Board publications and David Olson Research Co.

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The proportions of consumer debt represented by first mortgage debt and home equity financing changed over this 11-year period. Between 1981 and 1986, first mortgage debt declined from 73 to 67 percent of total debt. While the proportion of consumer debt that was first mortgage debt declined during this period, home equity financing increased from 2.9 to 8 percent. The decline in the proportion of first mortgage debt and the increase in home equity financing occurred during the period of high growth for home equity financing and strong competition among lenders for customers, prior to the implementation of the Tax Reform Act of 1986.

Between 1986 and 1991, the downward trend in the proportion of debt represented by first mortgage debt was reversed. It increased in 1991 to about 70 percent of total consumer debt. At the same time, home equity financing continued its upward trend, increasing to almost 10 percent. While the proportion of total consumer debt devoted to home equity financing increased by more than 200 percent (from 2.9 percent to 9.8 percent) since 1981, it still represented a small proportion of all consumer debt.

Over this 11-year period, there were also changes in the proportions of consumer debt in the other debt categories. For example, between 1981 and 1991, the proportion of debt that was revolving credit increased from 4.6 percent to 6.7 percent, while other debt decreased from 10.5 percent to 6.1 percent.

**Although Much
Untapped Home
Equity Remains, Rate
of Future Growth May
Be Slower Than in
Past**

There is much untapped equity in homes across the country, particularly in areas of the country where home prices have maintained their value. In addition, about 42 percent of all homeowners have no mortgage debt and as long as home equity financing continues to receive favorable tax treatment, industry experts believe that the growth in home equity financing will continue, particularly with home equity lines of credit. However, they do not feel the growth will be as great as in the past, and economic factors may slow it down even further.

ABA estimated in 1990 that there was still about \$2.2 trillion dollars available in untapped home equity. It believed most of this untapped equity was in the coastal states and states like Texas,¹⁰ Illinois, Ohio, and Michigan. In most of these states, homes have retained their real estate values.

¹⁰There is much untapped home equity in Texas because of the restrictions on its use. See appendix II for additional details.

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There is a significant amount of potentially untapped equity in those homes where the homeowners do not have any mortgages on their homes or they have only a first mortgage. The 1989 American Housing Survey indicated that about 42 percent of homeowners in 1989 had no outstanding mortgage debt on their homes. The remaining 58 percent had one or more mortgages outstanding. Of this last group, only about 12 percent had two or more mortgages on their homes.

Between 1985 and 1989, the number of homeowners with multiple mortgages outstanding increased much more than those with only one mortgage. Homeowners with multiple mortgages increased by 27.5 percent, while households with only one mortgage increased by only 3 percent.

A 1988 Federal Reserve article¹¹ reported that future growth is expected in home equity financing, particularly with the home equity lines of credit. It stated growth will continue for several reasons, in addition to the tax incentives resulting from the tax reforms in 1986 and 1987. For example, there are many homeowners who still could substitute home equity lines of credit for other consumer installment credit and home equity loans. According to this article, the results of the Federal Reserve's 1986 Survey of Consumer Finances showed that only about 4 percent of homeowners already had a home equity line of credit, while about 62 percent had consumer installment credit outstanding. In addition, many of those homeowners with outstanding installment credit had about \$25,000 in home equity that could be substituted for other forms of credit. This article also reported that much of the baby boom population had reached a point in their lives where more of them owned homes, had growing home equity, growing needs for credit, and high income levels. It concluded that all of these factors could potentially increase the use of home equity financing in the future.

Estimates of future growth in dollars outstanding for home equity financing show trends similar to the past, with dollars outstanding expected to grow faster for home equity lines of credit than for home equity loans. The David Olson Research Co. projected that the dollars outstanding for the lines of credit will increase by an annual rate of 15 percent, while the home equity loans will increase at 5 percent. It seems reasonable to expect that much of the growth will occur in regions of the United States where there has been and continues to be growth in real estate values.

¹¹Home Equity Lines of Credit, Federal Reserve Bulletin, June 1988.

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It is uncertain, however, how economic conditions will affect the use of home equity financing in the near future. The recession and slow economic growth rates could have a positive or negative impact on such use. For example, home equity financing could be positively affected if home equity line of credit borrowers use their lines more when they have temporary financial setbacks. On the other hand, home equity financing usage, like other types of consumer debt, could be negatively affected by a weak economy.

During the recession in 1991, ABA reported that auto sales volumes were the lowest since 1983 and loan balances had decreased throughout the year, reflecting consumers' determination to reduce their indebtedness and reluctance to take on more debt. Homeowners may be just as unwilling to incur additional debt, particularly debt that is secured against their homes, during a weak economy.

Changing mortgage interest rates may also affect the use of home equity financing. For example, if rates decline, homeowners could lower their monthly mortgage payments by refinancing their existing mortgages at lower rates. At the same time, refinancing permits homeowners to draw down their equity without resorting to using traditional home equity financing.

When mortgage interest rates reached a low in 1991, there was a surge in the number of households refinancing their mortgages. As a result, according to the David Olson Research Co., the estimates it developed for the dollars outstanding for home equity financing in 1991 and beyond may be high. These estimates do not take into account the refinancing surge and how it might affect home equity financing.

Who Uses Home Equity Financing and How It Is Used

The features of the two forms of home equity financing are different, with lines of credit exhibiting greater flexibility in financing terms than the loans. Despite the product differences, there appear to be few differences between the types of people using home equity loans and those using lines of credit.

Studies on how home equity financing is used indicate these funds are used for a variety of purposes. Some of these purposes, such as debt consolidation and investments, enhance the borrowers' net worth. What the studies do not indicate is whether the availability and increased use of home equity financing had any effect on consumer behavior.

Home Equity Financing Is Differentiated by Degree of Flexibility in Financing Terms

Home equity loans and lines of credit have several features that differentiate them from each other as financial tools. One of the major differences is flexibility of the financing terms. The terms of home equity loans tend to be less flexible for borrowers than the terms of home equity lines of credit.

Home equity loans, also known as second mortgages, are typically a structured form of financing with fixed financing terms. They are closed-end loans, which means most are usually made for a specific amount of money at a fixed interest rate. In addition, the borrower makes monthly payments over a fixed period of time for a fixed amount.

In contrast, home equity lines of credit provide borrowers with a more flexible financial tool. Borrowers who obtain a line of credit are usually given a credit limit against which they can borrow. This line of credit can be used as frequently as the borrower wants. Repayment terms for home equity lines of credit can vary from 10 years to an indefinite period. An increasing number of lenders are permitting borrowers to repay each month as little as only the interest portion of the outstanding balance. Lenders most frequently offer the lines of credit with variable interest rates. Funds from the lines of credit may be accessed by the borrowers through a variety of approaches, such as using checks or making withdrawals through automatic teller machines. Home equity lines of credit can be opened by the borrower and not used immediately. Unlike the borrowers of home equity loans, these borrowers do not always have a specific need in mind for the funds at the time they apply for the line of credit. In fact, one 1988 study reported that about 41 percent of borrowers with lines of credit had no outstanding balance, and almost 85 percent of those never used the line of credit at all. This study said that many people

with unused open home equity lines of credit opened them as standby lines of credit.

The relationship between the lender and borrower tends to be longer for those with a home equity line of credit than with a home equity loan. Since the terms of a home equity loan require the loan to be repaid by the borrower by a specific time, the length of the lender and borrower relationship is defined by the terms of the loan. In contrast, the terms of home equity lines of credit enable the borrower to use the line of credit when they need to, often without a fixed maturity date. As a result, they may draw down on their line of credit, repay the debt, and repeat the process at a later time on the same line of credit. The whole time the line of credit is open, whether the borrower is using it or not, the lender and borrower continue their relationship.

Borrower Characteristics Vary Little by Type of Home Equity Financing

Although home equity loans and lines of credit have different characteristics, the characteristics of the borrowers using each type of financing are quite similar.

According to the Consumer Bankers Association's (CBA) 1992 Home Equity Loan Study, the average homeowner using either a home equity loan or borrowing against a home equity line of credit in 1991 had owned a home for about 9 years. In addition, about 53 percent of the borrowers were between the ages of 35 and 49 years old. The second largest group of borrowers (about 25 percent) for both types of financing was between the ages of 50 and 64 years old.

The only difference the CBA study found between the homeowners using home equity loans versus the home equity lines of credit was in their income levels. This study showed that while the average line of credit borrower earned \$51,398 in 1991, the average borrower with a home equity loan earned \$43,339, about 16 percent less. In both cases, the borrowers' income levels had increased between 1990 and 1991. The earnings for the home equity line of credit borrower increased by 2.5 percent and for the loan borrower by 1.9 percent.

Federal Reserve data indicated that the average outstanding balance was higher for a borrower with a home equity loan than for a borrower with a home equity line of credit. The data showed that in 1988 home equity loan borrowers owed an average of \$19,000, while home equity line of credit borrowers owed an average of \$13,000.

The results of the 1989 Surveys of Consumer Attitudes¹ indicated that homeowners typically liquidated similar amounts of their home equity when they used home equity loans and when they liquidated equity through refinancing mortgage debt. The mean amount of equity liquidated for borrowers using home equity loans was \$22,534, as compared with \$25,145 for those who refinanced. The median amounts liquidated were almost \$16,000 for those using home equity loans or mortgage refinancing.

Home Equity Financing Most Popular in the Northeast

Home equity loans appear to be particularly popular in the Northeast. According to the results of the 1988 Surveys of Consumer Attitudes,² the percentage of mortgage debt holders who also held a home equity loan in the Northeast was almost twice the national average.

According to the 1992 ABA Home Equity Lines of Credit Report, the home equity lines of credit were also more popular in certain regions of the country than in others in 1991.³ The regions with the highest volume of dollars outstanding were the Northeast and the West.⁴ In contrast, the volume was the lowest in the Midwest and the Southwest.

Various studies offered insights to explain the regional volume differences. For example, a Federal Reserve study reports two possible explanations for the higher use of home equity financing in the Northeast than in other parts of the country. First, the Northeast was a part of the country that experienced rapid growth in income levels and real estate values during the late 1980s. Between 1985 and 1989, average prices for existing homes increased by 43 percent in the Northeast. While prices also rose in the other regions, they did not increase nearly as much as in the Northeast. Second, the Northeast is the home of many financial institutions that have aggressively marketed home equity financing products to their customers.

On the other hand, the 1992 ABA study on home equity lines of credit discussed the reasons for low volume in certain regions. The reasons cited in the ABA study included lower real estate appreciation in the Midwest

¹Mortgage Refinancing, Federal Reserve Bulletin, August 1990.

²See footnote 1.

³No data were available on the geographic distribution of dollars outstanding for home equity loans.

⁴Another Federal Reserve study showed that these regions are also popular for equity liquidation through the use of refinanced first mortgage loans. About 70 percent of those who refinanced their loans in each of these regions also liquidized some of their equity at the same time.

and less advertising of home equity lines of credit in these regions in comparison with other regions.

Another source discussed the legal limitations in Texas regarding home equity financing. According to *As We Forgive Our Debtors*,⁶ Texas laws limit when mortgage liens can be placed against a home. Mortgage liens can be placed against a home in Texas only if the homeowner is using liquidated equity to make home improvements or to make tax payments. No other state has similar restrictions on home equity financing. As a result, Texas lenders offer little home equity financing.

Surveys Indicate Most Home Equity Financing Used for Home Improvements

Our analysis of the data from the 1989 Survey of Consumer Finances⁶ shows that most borrowers of both home equity loans and lines of credit use the funds primarily for making home improvements. Table II.1, however, shows that home equity financing is also used for many other purposes. The percentage of borrowers using home equity financing for several of the other purposes differed greatly according to the type of financing used. The data from the Survey show what borrowers report as the use of home equity financing. Because money is fungible, the reported use may not have actually been financed by home equity borrowing.

⁶Teresa A. Sullivan, et al., *As We Forgive Our Debtors* (New York: Oxford University Press, 1989).

⁶This survey is conducted on a triennial basis by the Survey Research Center at the University of Michigan for the Federal Reserve, in cooperation with the Federal Reserve, other federal agencies, and private industry. This most recent survey, conducted between August 1989 and March 1990, was designed to "gather family-level information" on consumer finances.

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Table II.1: Results of the Survey of Consumer Finances on Home Equity Financing Usage in 1989

Uses	Percentage of borrowers	
	Home equity loans	Home equity lines of credit
Home improvements	29.8	27.5
Purchase a home	18.1	4.3
Investments in business	8.8	10.9
Investments in real estate	7.6	5.1
Debt consolidation	7.6	13.0
Auto purchases and/or expenses	5.8	13.0
Education	5.8	8.7
Medical needs	3.5	0.0
Taxes	2.9	5.1
Appliances, furniture, etc.	0.0	0.7
Investments in stock	0.0	5.8
Other	9.9	5.8

Source: GAO analysis of data from the Federal Reserve's 1989 Survey of Consumer Finances

Although purchasing a home was the second most popular use of home equity loans as reported by the 1989 Survey of Consumer Finances, table II.2 shows that almost half of the outstanding dollars were used for this purpose.

Table II.2: Results of the 1989 Survey of Consumer Finances on Percentage of Dollars Outstanding on Home Equity Loans in 1989

Uses	Percentage of dollars outstanding
Purchase a home	45.3
Investments in business	17.7
Home improvements	12.3
Investments in real estate	10.4
Education	2.7
Auto purchases and/or expenses	2.5
Debt consolidation	1.7
Taxes	1.3
Medical needs	.3
Other	5.7
Total	100.0

Note: Similar data for uses were unavailable for home equity lines of credit from the 1989 Survey of Consumer Finances.

Source: GAO analysis of data from the Federal Reserve's 1989 Survey of Consumer Finances.

Similar to these results, the 1988 Survey of Consumer Attitudes reported borrowers using their home equity lines of credit for the same top three purposes reported in the Survey of Consumer Finances results: home improvements, debt consolidation, and auto purchases and/or expenses.

The results of the 1988 and 1989 Surveys of Consumer Attitudes also showed that home equity line of credit borrowers used funds differently following their initial and subsequent drawdowns on their home equity lines of credit. For example, in the 1989 survey, consumers reported initially drawing down on the line of credit for debt consolidation (40 percent) and home improvements (38 percent). Subsequent drawdowns were used more for home improvements (58 percent) and auto expenses (30 percent) than to consolidate debts (28 percent).

Another finding of these Surveys of Consumer Attitudes showed that homeowners used equity they liquidated when they refinanced mortgage debt similarly to how they used home equity loans. For example, about 46 percent of homeowners who obtained some of their equity when they refinanced and 45 percent of those who used a home equity loan said they used the funds for home improvements. Similarly, about 36 percent of homeowners who refinanced and 35 percent of those who used home equity loans said they used the funds for debt consolidation.

Similar to the results of the 1989 Survey of Consumer Finances, as shown earlier in tables II.1 and II.2, CBA studies on home equity financing in 1990 and 1991 showed that about 9 percent of the home equity lines of credit and about 7 percent of home equity loans were used for education purposes.

Using home equity financing for educational expenses provides borrowers with one of the few opportunities currently available for deducting the interest paid on educational indebtedness. Since the Tax Reform Act of 1986 eliminated the interest deduction on most personal interest expenses, including student loans, educational indebtedness is generally not deductible. The two exceptions are cases in which the expenses can qualify as trade or business expenses, or the interest could be deductible under the exclusion for qualified residence interest if home equity financing was used.⁷

⁷Since 1986, various bills have been proposed in Congress to foster higher education, including proposals to restore tax incentives that had previously been eliminated. For example, one bill (H.R. 592) proposed excluding the interest on a qualified educational loan from the definition of personal interest, which would also restore the educational tax incentive that was eliminated under the Tax Reform Act of 1986. At the time this report was prepared, no action had been taken on these bills.

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Using the exclusion for qualified residence interest, however, requires home ownership and sufficient equity in the home to obtain home equity financing. For this reason, parents are more likely than students to own homes with equity to draw upon and are more likely to use home equity financing than independent students. When home equity financing is not available to students or their parents, students must rely on other funding sources for their education expenses, such as federal and state guaranteed student loan programs, for which the interest expenses are not tax deductible.

Many of the uses shown in table II.1 provided borrowers with opportunities to improve the condition of their personal finances and their net worth. For example, the 1989 Survey of Consumer Finances data showed that about 9 percent of borrowers used their home equity loans and 11 percent of borrowers used their home equity lines of credit to invest in businesses. In addition, about 6 percent of borrowers used their home equity lines of credit for investing in stocks. (None of the loan borrowers used their loans this way.) Potential profits made from these investments could ultimately improve the borrower's net worth.

An article in the June 1988 Federal Reserve Bulletin⁸ reported that when consumers used home equity financing to reduce the balances on other consumer debt, they generally improved their current financial picture. At 1988 interest rates for home equity financing and most other consumer credit, using home equity financing would have reduced borrowing costs. In addition, consumers get greater tax savings from using home equity financing and, in many instances, have more flexibility in adjusting the monthly payments to match fluctuations in income, particularly when consumers have a home equity line of credit.

In addition, in the book *As We Forgive Our Debtors*,⁹ the authors showed that some consumers used home equity financing during financially difficult periods in an effort to avoid bankruptcy or forestall financial collapse. In looking at the characteristics of people who declared personal bankruptcy, the authors found that these people had higher levels of mortgage debt than other households. Their results showed that bankrupt consumers had a greater likelihood of having obtained a second, third, and even fourth mortgage on their property to help them recover from what they anticipated would be a temporary financial setback, such as job loss.

⁸Home Equity Lines of Credit, Federal Reserve Bulletin, June 1988.

⁹See footnote 5 in this appendix.

We found that few studies address the issue of whether the availability of home equity financing or the increased use of it in any way changed consumer behavior. In other words, the studies we reviewed do not really tell us if these homeowners financed (1) something they would not have otherwise done without this financial option or (2) something they would have done anyway. By using home equity financing, they were able to free resources for other purposes.

For example, one economic study¹⁰ done in 1989 found that homeowners who tap into housing wealth through home equity borrowing use the funds to reduce savings and increase consumption. According to this study, each dollar of a household's home equity borrowing is associated on average with a 60- to 75-cent reduction in the household's savings. It also found that households with larger home equity borrowing, on average, do not have commensurately higher common stock or bond holdings, or commensurately lower nonmortgage debts outstanding. Thus, the researchers found little evidence that households obtained home equity funds in order to invest in other assets or to pay down other outstanding debts. Instead, increased home equity debt appeared to be associated with increased consumption and decreased savings.

An article in the June 1988 Federal Reserve Bulletin on home equity lines of credit discussed an attempt by the authors to assess changes in consumer behavior with the use of home equity lines of credit by using life-cycle models. The article concluded that when consumers shifted their debt from consumer debt to a form of mortgage debt, their total borrowing did not change. This conclusion was based on survey results that showed that most respondents used their home equity lines of credit to pay off existing debt and to finance home improvements. In either case, the use of a home equity line of credit did not necessarily increase the borrower's total indebtedness. For example, by paying off existing debt, the borrower reduced consumer debt while increasing housing debt and the net effect was no change. Likewise, there was also no change to the total indebtedness if the homeowner, when financing home improvements, merely substituted a home equity line of credit for a home equity loan.

¹⁰J. M. Manchester and J. M. Poterba, Second Mortgages and Household Saving, Regional Science and Urban Economics (1989), pp. 325-346.

Even Though It Is Tax-Advantaged, Home Equity Financing May Not Be the Best Source for All Uses

In deciding how to finance their consumption or investment purchases, homeowners should take several factors into consideration when comparing all types of financing. These include the after-tax cost of funds, the costs of obtaining the financing, and the risks involved. Once these factors are considered, homeowners may find that while home equity financing is tax deductible, alternative forms of financing may be more attractive.

By gradually eliminating the deductibility of personal interest, the Tax Reform Act shifted incentives toward mortgage-backed borrowing. However, because tax rates were reduced and the standard deduction increased, the tax-based incentive to borrow was reduced even for mortgage-backed debt. The net effect appears to have been an increase in mortgage debt and the increase in the mortgage interest deduction, to the extent this can be measured from tax return data.

Home Equity Interest Rates Are Usually Lower Than Other Consumer Loans and Have Been Declining

Home equity loans and lines of credit usually carry lower interest rates than other consumer loans. As secured financing, home equity financing represents less of a risk to lenders, who then charge lower interest rates. Interest rates for home equity financing are usually based on the prime rate or other such index plus one or two points. Credit cards, on the other hand, as unsecured debt, have interest rates that are substantially higher, often charging from 14 to 19 percent.

When homeowners are financing a car purchase, if they have home equity to use, they have the option of choosing between auto financing and home equity financing. However, auto companies periodically may attempt to attract car purchasers by offering low-interest rates on auto financing rather than directly lowering prices.¹ If they do, the after tax interest rate they offer may be lower than the home equity rate.

Mortgage interest rates declined throughout most of the 1980s. According to the Federal Reserve in 1990, the rates declined from 14.47 percent in 1982 to 9.76 percent in 1989 for conventional mortgages on new homes.

As mortgage interest rates declined, there were opportunities for homeowners to benefit from using home equity financing or refinancing existing mortgages. At the same time, home prices were rising rapidly, creating additional home equity. With lower interest rates on mortgage

¹The seller may actually charge a lower price for cars bought with cash. Our discussion is limited to comparing alternative methods of financing.

debt and more home equity available, borrowers had an incentive to use home equity financing for both new borrowing and to repay debts carrying higher interest rates.

Home Equity Financing May Involve Substantial Risk

Home equity borrowing can be quite risky for the borrower, even if such borrowing does not increase total debt. In the first place, this type of borrowing is secured against the borrower's home, thus exposing the borrower to more financial risk than if unsecured financing had been used. Secondly, the amount of home equity a homeowner has available can fluctuate greatly as home values change. The combination of these two factors makes such borrowing quite risky. In the worst case, since home equity loans are sometimes really the first lien on a home, a family could lose² its home if the debt is not repaid as scheduled. These risks must be considered in addition to the lower after-tax cost that usually applies to home equity borrowing compared to other borrowing. It may be that home equity borrowing is not the best way to finance certain purchases when all the factors are carefully weighed.

In considering whether to substitute home equity financing for other types of financing, borrowers should be aware of the risks involved in using this type of debt. The risks include fluctuations in (1) the value of the home, which, in turn, has exaggerated effects on home equity; and (2) interest rates if the borrower has an adjustable rate contract.

While home values had an average annual growth rate of 1.0 percent for existing homes and 1.9 percent for new homes for the period from 1981 to 1991, the average annual growth rates were much higher during the middle of this period. Between 1984 and 1989, average annual prices increased for existing homes by 2.9 percent and for new homes by 5.0 percent. The increase in the value of homes had the effect of improving the housing equity position of many households and increasing net worth. Homeowners who desired to make use of this increased equity often turned to home equity financing as a convenient way of gaining access to their increased housing wealth.

However, since the late 1980s, the rise in housing prices has slowed in some areas and has flattened or declined in other areas. During such a period, little new home equity is being created. If the value of the home

²However, the homeowner could declare bankruptcy under Chapter 13 of the Bankruptcy Code to forestall foreclosure. Chapter 13 allows debtors to propose a plan for repaying the arrearages plus interest plus the regular mortgage payments as they accrue.

declines substantially, the borrower may find him or herself owing a debt greater than the value of the property.

Another feature of home equity financing that is a source of risk to borrowers is adjustable interest rates. For home equity loans and lines of credit with adjustable rates of interest, the variable payment size due to fluctuating interest rates exposes borrowers to cash flow risk. If a borrower is experiencing cash flow problems and has a large outstanding balance on a home equity line of credit with a variable rate during a period of increasing interest rates, the borrower's home may be at risk. Since home equity financing is secured against the borrower's home, in the event that the borrower is unable to make payments on the outstanding debt, the lender could foreclose on the home.

Home Equity Financing Has High Up-Front Costs and Takes Time to Arrange

Unlike other types of consumer financing, home equity financing usually includes additional up-front costs that should be considered when a borrower is deciding which type of financing to use. Overall, these costs could add up to several hundred dollars, which could be a sizable percentage of the entire loan amount. These costs include the typical costs lenders charge for loans secured by real estate, such as origination fees, title insurance, appraisal fees, and others. In addition, some lenders charge an up-front fee or points for home equity financing. Each point is usually equal to 1 percent of the loan amount. In the 1992 CBA Home Equity Loan Study, the number of points charged by lenders in 1991 averaged 2.1 for a home equity line of credit and 1.2 for a home equity loan.

The potential borrower also needs to consider the time it takes to obtain home equity financing versus other types of financing. It usually takes more time to process the application for home equity financing than other types of financing. For example, according to ABA, obtaining approval for a home equity line of credit in 1991 took from 14 to 18 days. ABA said that getting outside appraisals on the property may have been the factor that slowed the process. The time it takes to obtain approval for this type of financing may not be a problem if an individual knows ahead of time that he/she is going to use home equity financing for a specific purpose, such as to purchase a car. The financing could be arranged in advance of the purchase. Alternatively, the borrower could initially purchase the car with other financing and repay that loan with the home equity financing once approved. However, if lenders charge an early repayment penalty on the auto loan, this could increase the cost of borrowing.

While Tax Reform Act Tilted Toward Mortgage Debt, Extent of Effect Is Difficult to Measure Precisely

Because the Tax Reform Act of 1986 removed the deductibility of personal interest while maintaining the mortgage interest deduction, it—along with modifications in the subsequent year—tilted borrowing decisions toward housing-backed debt. The same act, however, substantially raised the level of the standard deduction and lowered tax rates across the board. These two changes act to reduce the tax incentive to borrow. Whether the net effect is an increase or decrease in borrowing is an empirical question with, so far, an ambiguous answer.

The Tax Reform Act of 1986 phased out the deductibility of most consumer interest expenses, with several exceptions, including mortgage and investment interest, between 1987 and 1990, and completely eliminated these deductions by 1991. Since the deductibility of interest paid on mortgage-based debt continued, taxpayers who continued to itemize had an incentive to reduce their nonmortgage-based debt for which interest was no longer deductible and increase their mortgage-based debt.

Initially, the act limited the deduction of this interest to interest paid on home equity financing used for certain purposes, including home improvements or educational or medical expenses. However, the Omnibus Budget Reconciliation Act of 1987 modified the rules once again. In this act, the amount of deductible mortgage interest was limited to the interest paid on up to \$1 million acquisition debt and \$100,000 home equity indebtedness. In addition, all restrictions on the use of funds were removed.

While some changes in the tax laws moved people in the direction of more mortgage-backed debt, other changes pushed in the opposite direction. The level of the standard deduction was increased significantly, and it was expected that this would reduce the number of itemizers. In fact, the number of itemizers did fall from almost 41 million in 1986 to just under 36 million in 1987, and then to about 32 million in 1988 and 1989. While increasing the standard deduction was an attempt to simplify filing for some lower middle income taxpayers, it also should have the effect of removing incentives for itemizers to choose borrowing or a particular type of borrowing on the basis of tax considerations.

Borrowing incentives were also reduced for those taxpayers who still itemized. Before the Tax Reform Act, a taxpayer in the 50-percent bracket would effectively have the government paying half of his/her interest costs. After 1986, this was reduced, even for those types of interest that

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remained fully deductible, to 28 or 33 percent, depending on his or her income bracket. This means that the taxpayer's effective interest cost on a 10-percent debt rose from 5 percent to 6.7 or 7.2 percent. Obviously, the increase would be even greater if the interest was not fully deductible. This increase in effective after-tax interest rates should have the effect of somewhat reducing the overall incentive to borrow. The extent is more difficult to determine.

Because there is no separate line on the tax return for reporting deductible interest on home equity borrowing, there is no direct tax return data on the size or growth of home equity loans. Interest on home equity borrowing is included with other mortgage interest on tax returns and is included in the return data published in IRS' Statistics of Income Division's Publication 1304, under the category of home mortgage interest paid. We analyzed this data to compare the size and growth of mortgage interest with other deductions and other variables, although we realize that the data include first as well as second mortgages. However, because other data indicate that second mortgages are growing at a faster rate than first mortgages, our analysis probably understates the proportionate effect of home equity interest.

Prior to the Tax Reform Act of 1986, deductions for mortgage interest were rising somewhat faster than adjusted gross income. Table III.1 shows that by 1986, mortgage interest deductions had reached about \$152 billion (about 5.07 percent of AGI).³ As of 1989, mortgage interest deductions had risen to \$183 billion (about 5.20 percent of AGI), even though the number of itemizers and the ratio of itemized deductions to AGI had fallen substantially. Since 1987, it appears that the growth of the mortgage interest deduction is at least keeping pace with income growth.

³Between 1978 and 1983, the ratio of mortgage interest deduction to AGI increased from 3.01 percent to 4.57 percent.

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Table III.1: Trends in Itemized Deductions and the Mortgage Interest Deduction for 1984-1989

Tax year	Itemizers (millions)	Itemized deductions^a	Itemized deductions/AGI (percent)	Mortgage Interest deductions^a	Mortgage Interest/AGI
1984	38.2	\$461.4	16.77%	\$131.3	4.77%
1985	39.8	502.0	17.56	142.6	4.99
1986	40.7	539.8	18.01	151.9	5.07
1987	35.6	458.7	14.13	160.1	4.93
1988	31.9	445.0	12.82	168.0	4.84
1989	32.0	465.2	13.23	182.9	5.20

^aBillions of 1991 dollars.

Source: GAO analysis of SOI data.

As a result of the Tax Reform Act, itemized deductions fell off and have subsequently risen slightly in real terms. By 1989 they were about equivalent to what they had been in 1984. Itemized deductions had risen to 18.01 percent of adjusted gross income by 1986, but by 1989 they had fallen to 13.23 percent of adjusted gross income. Because the mortgage interest deduction has risen while total deductions have held steady, the mortgage interest deduction has increased in importance.

Some Evidence Taxpayers Are Replacing Personal Interest With Mortgage Interest

Direct measures of personal interest reported on tax returns have fallen beginning in 1987. In 1987, \$51.5 billion (in 1991 dollars) in personal interest paid was reported on tax returns. By 1989, this had fallen to \$42.5 billion. However, there is no comparable tax return data for the period prior to 1986, because there was no separate line item for personal interest until tax year 1987 returns.⁴ To analyze changes in the composition of interest deductions, we have therefore constructed a series called nonmortgage interest. This is the total interest deduction, corrected for the nondeductible portion after 1986, minus mortgage interest paid. As a result, it is not a pure measure of personal interest because it includes investment interest.

Table III.2 shows the overall trend of nonmortgage interest for the period. It also shows how nonmortgage and mortgage interest have changed over time in comparison to adjusted gross income. This comparison gives us an

⁴Until 1987, tax returns had a line item for credit card and charge account interest paid and other interest paid. There was no separate line item for investment interest. For tax years 1987 through 1990 (the period immediately following the implementation of the Tax Reform Act of 1986), the tax returns had line items for personal interest and investment interest.

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indication that there was some substitution of mortgage interest for nonmortgage interest.

Table III.2: Comparison of Mortgage and Nonmortgage Interest Paid for 1984-1989

Tax year	Nonmortgage interest ^a	Nonmortgage interest/AGI (itemizers)	Nonmortgage interest/AGI (all filers)	Mortgage interest/AGI (itemizers)	Mortgage interest/AGI (all filers)
1984	\$72.1	3.89%	2.62%	7.09%	4.77%
1985	80.6	4.11	2.82	7.27	4.99
1986	85.5	4.10	2.85	7.29	5.07
1987	67.8	3.22	2.09	7.61	4.93
1988	60.6	2.85	1.75	7.90	4.84
1989	59.2	2.78	1.68	8.60	5.20

^aBillions of 1991 dollars.

Source: GAO analysis of SOI data.

Nonmortgage interest rose until 1986, but declined in real terms afterwards. As a percent of adjusted gross income for itemizers, nonmortgage interest peaked at just over 4 percent in 1985 and 1986. Since then the percentage has fallen and was less than 3 percent in 1988 and 1989. The relationship between nonmortgage interest and adjusted gross income for all filers followed a similar trend.

In contrast, mortgage interest, which was 7.27 percent of adjusted gross income for itemizers before the Tax Reform Act of 1986, grew to 8.60 percent in 1989. Thus, as a percent of this measure of adjusted gross income, mortgage interest has risen by an amount similar to the reduction in nonmortgage interest. Some substitution appears to be taking place. When the ratios of mortgage interest to AGI for all filers is compared to a similar ratio for nonmortgage interest, the ratios moved in opposite directions between 1986 and 1989. The ratio for mortgage interest to AGI increased from 5.07 percent in 1986 to 5.20 percent in 1989. During the same period, the ratio of nonmortgage interest to AGI decreased from 2.85 percent to 1.68 percent. Using this measure, there is more evidence of reduced overall interest and slight evidence of substitution of mortgage for nonmortgage interest.

The Tax Reform Act of 1986 made housing-backed borrowing more attractive compared to other forms of borrowing. At the same time, reductions in marginal tax rates and increases in the standard deduction

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reduced the overall tax incentive to borrow. The net effect of these two incentives could have raised or lowered housing-backed borrowing and was likely different for different groups of taxpayers. Since the tax rate reduction from the Tax Reform Act was greater for high-income taxpayers, the resulting increase in the relative borrowing cost could have led to a greater reduction in tax-advantaged borrowing for these taxpayers. However, while the reduction in tax rates for low-income groups was smaller, an increase in the size of the standard deduction would also have reduced the advantage of itemizing for lower income households and lessened the tax incentive for this group to borrow.

One recent study indicated that the Tax Reform Act had changed the mortgage interest deduction from a predominantly middle-class deduction to an upper middle or upper income deduction.⁵ We analyzed this by looking at changes in the distribution of the mortgage interest deduction compared to changes in the distribution of adjusted gross income in the periods before and after the Tax Reform Act. Table III.3 shows the ratio of mortgage interest deductions to adjusted gross income for five income classes over two periods. To allow for changes in the standard deduction and the effect this has on the number of itemizers, we used two measures of adjusted gross income—one for itemizers and one for all filers.

Table III.3: Comparison of Mortgage Interest Deduction to Adjusted Gross Income for Different Income Classes

AGI class	Mortgage Interest/AGI (Itemizers) 1984-86	Mortgage Interest/AGI (Itemizers) 1987-89	Mortgage Interest/AGI (all filers) 1984-86	Mortgage Interest/AGI (all filers) 1987-89
< \$20,000	11.42%	18.54%	2.30%	1.90%
\$20,000 - \$50,000	7.83	10.41	5.62	5.24
\$50,000 - \$100,000	7.26	8.32	6.91	7.21
\$100,000 - \$500,000	4.71	5.83	4.62	5.57
> \$500,000	0.84	1.28	0.84	1.24
All classes	7.22	8.04	4.87	4.92

Source: GAO analysis of SOI data.

Using the AGI of itemizers in the denominator, the ratio of mortgage interest to AGI for all classes for the period prior to the implementation of the Tax Reform Act of 1986 to the period following it rose from 7.22 percent to 8.04 percent. However, if we compare mortgage interest deductions to the AGI of all filers, there is only a small increase from

⁵James M. Poterba, "Taxation and Housing: Old Questions, New Answers," *American Economic Review*, May 1992, pp. 237-242.

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4.87 percent to 4.92 percent. The different ratios reflect the differential effect of the standard deduction on lower income versus higher income taxpayers.

Mortgage interest deductions become less important for all low-income filers, because many have opted for the standard deduction. For low-income itemizers, the deduction became more important because this group was likely to have relatively large mortgage interest deductions. While those who opted for the higher standard deduction over itemizing were probably made better off by this choice, their implicit tax subsidy on housing has been reduced.

Because a very high percentage of the highest income taxpayers continued to itemize even after the Tax Reform Act, the increase in the ratio of mortgage interest to AGI for the two highest income groups is similar regardless of the measure of AGI used. While this ratio has increased significantly for both groups, it has increased disproportionately for the highest AGI bracket. The net effect of these changes in the tax law on the economic well-being of different groups is difficult to judge, but it does appear that the tax subsidy for housing-backed borrowing has been increasingly concentrated among high-income taxpayers.

Home Equity Financing Is Also Popular With Lenders

Home equity financing has several features that make it popular with lenders. As secured debt, it has lower lending costs, is less risky than other forms of financing, and presents opportunities to sell additional financial services to the same borrowers. The popularity of this type of financing increased with lenders during the 1980s in conjunction with regulatory reforms, rising house prices, the introduction of home equity lines of credit, and increased competition among lenders.

Home Equity Financing Has Several Features That Appeal to Lenders

Home equity financing has several features that make offering it to customers very popular with lenders. One of these features is that the use of home equity financing by borrowers reduces some of their lending costs. For example, if borrowers used a home equity line of credit for recurring expenses (drawing down on the line of credit as the funds are needed) instead of obtaining a series of loans, the lender does not incur the fixed expenses of establishing the other loans. While the expenses of establishing a home equity line of credit may be high for a lender, they are usually offset by initial fees charged the borrower.

The interest rates charged on home equity financing are often adjustable rates. This makes home equity financing popular because it enables lenders to adjust interest rates in accordance with market conditions. If rates are not adjustable, lenders may end up bearing losses should their costs of funds increase.

Home equity financing also is popular because, as secured debt, lenders are provided with more security than they have with other forms of consumer credit. If a borrower defaults on any mortgage-backed debt, the lender could foreclose on the house. In addition, applicants for this type of financing are subject to rigorous underwriting and application review processes. Also, home equity financing has had a lower delinquency rate than other types of financing.¹ According to an Office of Comptroller of the Currency (OCC) 1988 staff paper on home equity lending, home equity borrowers assign a high priority to servicing this debt on time. As a result, the risk for the lender has been low.

Another reason home equity financing is attractive to lenders is that the borrowers tend to have long-term relationships with lenders. For many borrowers, it takes from 10 to 15 years to repay outstanding home equity debts. Certain features of home equity financing help promote this long relationship. Fees associated with obtaining home equity financing or

¹See table V.1 in appendix V for delinquency rates by credit type.

closing accounts, as well as the complexities of the application process, are disincentives to borrowers to switch lenders frequently.

As a result of this long-term relationship, lenders have more opportunities to increase revenues by providing other services to the borrower. While lenders can sell checking accounts, debit cards, and credit insurance to any customers, home equity borrowers are particularly appealing because they tend to be better borrowing prospects. An article in the June 1988 Federal Reserve Bulletin on home equity lines of credit stated that these borrowers typically had higher incomes; were better educated; and more likely than other homeowners to hold certain financial instruments, such as money market accounts and certificates of deposit.

Regulatory Changes Make It Easier to Provide Home Equity Financing

Changes in banking laws in the 1980s made it easier and more attractive for lenders to provide customers with home equity financing. These changes include modifications to the Truth in Lending Act (P.L. 96-221 in 1980 and P.L. 98-479 in 1984) and the Garn-St Germain Depository Institutions Act of 1982 (P.L. 97-320).²

Temporary modifications to the Truth in Lending Act in 1980 removed a major impediment to providing home equity financing. Initially, as implemented by Federal Reserve Regulation Z, this act provided a 3-day period for consumers to change their minds following each drawdown on a line of credit secured by real estate. This "right of rescission" was considered very generous to borrowers. Since only borrowers using lines of credit secured by real estate had this right, it made offering home equity lines of credit more expensive in comparison with credit card and other credit lines. The Truth in Lending Act was modified in 1980 to limit this right to the initial setup of the account, rather than every time a transaction occurred. Congress made this exemption from the rescission period permanent in 1984.

Another change occurred with the Garn-St Germain Depository Institutions Act of 1982. This act expanded the authority of national banks and federally chartered thrifts to extend home equity credit. It repealed certain restrictions on real estate loans allowing national banks to make such loans on the basis of the creditworthiness and income prospects of borrowers. In addition, federally chartered thrifts were given expanded real estate authority, which allowed them to offer second mortgages.

²As discussed earlier, in addition to these laws, the Tax Reform Act of 1986 and the Omnibus Budget Reconciliation Act of 1987 also influenced the market for home equity lending.

While lenders had always offered the traditional closed-end second mortgages or home equity loans, in 1980, less than 1 percent of lenders offered the lines of credit to their customers. By 1989, after these regulatory changes had taken effect, 80 percent of commercial banks and 65 percent of thrifts offered these products.

Other Events Also Increase Appeal of Home Equity Financing

Either in addition to or in response to the bank regulatory changes, several other events occurred during the 1980s that increased the appeal of home equity financing to lenders. These included the revitalization of second mortgages as home equity loans, the introduction of home equity lines of credit by the lending industry, the increase in home values, and the competition among lenders for market share.

While home equity lines of credit are relatively new financial instruments, home equity loans have always been available to borrowers, but as second mortgages. In the past, lenders typically did not market these loans, and borrowers shied away from using their equity absent great financial need. Home equity loans became more popular in the early 1980s when the term "home equity" replaced "second mortgages." The lending industry coined the phrase home equity loan to eliminate the stigma and to encourage homeowners to use their built-up equity.

Although ABA traces the origin of the lines of credit back to the 1960s, its 1988 Home Equity Credit Report states that these financial instruments did not become significant until the mid-1980s. Two important sources of their increased popularity were the increase in home values in the 1980s and the Tax Reform Act of 1986. This same report indicated that while most small lenders did not introduce this product until 1986 or later, many of the larger lenders (with assets of more than \$5 billion) were offering these lines of credit even earlier.

During the 1980s, the number of lenders offering home equity loans and home equity lines of credit greatly increased and, with this, came increased competition among them for a share of this market. As mentioned above, not many lenders offered home equity lines of credit until after the Tax Reform Act of 1986. In addition, according to a CBA survey of lenders in 1987, only 58 percent of the lenders responding offered home equity loans. During the late 1980s, more lenders began offering both home equity loans and home equity lines of credit. For 1991, the CBA's 1992 survey of lenders showed that 89 percent of the lenders

Appendix IV
Home Equity Financing Is Also Popular With
Lenders

offered home equity loans and 96 percent offered home equity lines of credit.

In an effort to gain market share, lenders have gone to great lengths to induce customers to obtain home equity financing. For example, some offered low introductory interest rates and discounted or rebated closing costs.³ One study showed that in 1987, 8 percent of large lenders charged no fees and 68 percent promoted home equity lines of credit by waiving fees or crediting them against interest charges.

³Examples of closing costs are origination fees, appraisal fees, title insurance, and mortgage recording fees.

Problems With Home Equity Financing for Lenders

While thus far there has been little indication of lender or homeowner hardship from using home equity financing, the evidence available is sketchy and lender experience is limited. Studies show that delinquency rates and the number of foreclosures on this type of borrowing have been low. However, we do not know if this will continue to be true. In addition, lenders and bank regulatory agencies have raised some concerns about the risks associated with home equity financing. Both are working on approaches for guarding against future problems.

Low Delinquency Rates to Date for Home Equity Financing

The Federal Reserve's Surveys of Consumer Attitudes in 1990 and 1991 indicated that among the various types of consumer debt, "other mortgages," particularly home equity financing, had the best payment performance by borrowers.

Table V.1 shows delinquency rate data from ABA for 1987 through 1991. During this period, delinquency rates¹ for home equity financing were low, and the difference in the delinquency rates for home equity loans and home equity lines of credit was significant. The rates for home equity lines of credit, thus far, have been much lower than those for home equity loans and other types of credit, which have been similar to one another.

Table V.1: Delinquency Rates as a Percentage of the Number of Loans Outstanding for 1987-1991

Year	Delinquency rates by credit type				
	Home equity financing		Auto loans (direct)	Revolving credit loans	Bank card loans
	Loans	Lines of credit			
1987	2.01%	.74%	1.73%	2.39%	2.47%
1988	1.86	.68	2.08	2.82	2.34
1989	1.85	.78	2.25	2.91	2.35
1990	1.45	.85	2.51	3.15	3.02
1991	2.06	.88	2.45	2.91	3.36

Source: American Bankers Association

The rates for the lines of credit may be lower for several reasons, including the following.

- Most lines are not very old.

¹ABA defines delinquency as loans past due 30 days or more.

- Many have lenient financing terms that allow borrowers to make minimum monthly payments or pay only the interest portion of the outstanding balance.
- The growth rate for the lines was much faster during the 1980s than for the loans.
- A borrower with a line of credit can defer delinquency by drawing down more credit.
- Many lenders apply higher credit standards for obtaining a line of credit than for a loan.

In addition, the Federal Reserve's Surveys of Consumer Attitudes² showed that households that were delinquent with home mortgage or vehicle loans did not like to let such debts get more than 60 days in arrears. The surveys showed that consumers felt delinquencies of such duration were more likely to raise the possibility of foreclosure or repossession, actions most people like to avoid.

Similarly, other research done on bankruptcy and mortgage debt in the early 1980s showed that homeowners will go to great lengths to continue paying outstanding mortgage debt. This includes obtaining additional mortgages or using nonmortgage debt to finance consumption to free up cash for mortgage payments. In either case, the homeowner may end up declaring bankruptcy when the debts they acquired in an effort to stay current on their mortgage debt become unmanageable.

Delinquency rates vary not only by type of home equity borrowing but also by state. According to ABA, the states that were hit the hardest by the recession in 1991 had the highest delinquency rates. Several of these states are in the Northeast and include New Hampshire, New York, Massachusetts, and Maine. Delinquencies were high in this region because of the magnitude of home equity credit extended and the decline in real estate values. In regions where lower amounts of home equity credit were extended and real estate values did not decline as much, for example in Midwestern states, delinquency rates were lower.

Over the last few years, there has been a slight increase in home equity financing delinquencies and the number of foreclosures on homes with multiple mortgages. As shown earlier in table V.1, while still low, the delinquency rate for home equity lines of credit increased from 0.68 percent in 1988 to 0.88 percent in 1991. Likewise, the home equity

²These surveys were done in September and November 1990 and January 1991.

loan delinquency rate also increased from 1.45 percent in 1990 to 2.06 percent in 1991.

ABA reported³ the number of foreclosures in 1987 for borrowers with home equity lines of credit ranged on average from one in the smaller banks to seven in the larger banks. By 1991, the high end of this range increased to an average of 13 for the larger banks. In addition, the dollar value of the amount outstanding at time of foreclosure increased significantly between 1990 and 1991, as did the value of the real estate holdings received by banks from foreclosure actions.

Increases in both delinquencies and foreclosures have occurred at the same time as increases in lenders offering home equity lines of credit, aging of outstanding accounts, and slowing of economic growth. An official from the National Consumer Law Center said that in general, delinquencies increase the longer debt is outstanding. He believes the home equity financing delinquency rate is deceptively low in comparison to rates for other types of credit because they are newer financial instruments and delinquencies will increase as the lines mature.

In addition, recent weak economic growth affecting employment levels and home values likewise lessened borrowers' ability to repay outstanding home equity debt. Delinquency rates are already above the national norm for home equity lines of credit in certain areas of the country, such as in the Northeast, where home values have been depressed.

Extent of Problems With Home Equity Financing in Future Difficult to Predict

Limited experience with home equity financing makes it difficult to predict how it will fare following an economic recovery. In particular, economists are not sure how delinquency rates will be affected. For example, a July 6, 1992, article in Business Week said that the home equity loan delinquency rate took about 3 years to peak from the 1982 recession. If it takes as long to perceive the effects of the current recession, delinquency rates could rise in the future.

In addition to the uncertainties generated by the business cycle, there are long-term factors that may increase the risk level of home equity financing. Examples of these include declining real estate values and the existence of caps or ceilings on the interest rate lenders could charge borrowers for home equity financing.

³ABA Home Equity Credit Reports for 1988 and 1992.

Housing values in many parts of the country have recently declined. If this continues, lenders may find themselves with outstanding home equity loans and home equity lines of credit that are secured against homes worth less than when the funds were borrowed and, possibly, worth less than the accumulated debt. Declining home values could stimulate abandonment of property and increased defaults. As a result, lenders could find themselves selling properties that had been used as collateral and, in some cases, may not recoup their investment.

Additionally, as a result of the Competitive Equality Banking Act of 1987,⁴ lenders are required to put interest rate caps on all adjustable rate mortgages, including home equity loans and lines of credit. The act provided that the terms of all adjustable rate mortgages established after December 9, 1987, are to carry a life-of-plan interest rate ceiling. This act did not, however, specify a minimum or maximum for this ceiling or provide for any restrictions on annual changes in interest rates. This law had more impact on home equity financing because adjustable rate first mortgages already had such a ceiling.

While such ceilings limit interest rate risk for home equity financing borrowers, they increase lenders' risk. According to the Federal Reserve in 1989, lenders may be reluctant to lock themselves into long-term home equity lines of credit contracts with relatively low interest rate ceilings. Their reluctance stems from the risk such ceilings present during periods of increasing interest rates.

During the 1980s, lenders also increased their own risk levels with home equity financing in several ways. For example, in an effort to attract customers during the 1980s, they used popular promotional mechanisms, such as discounting or waiving initial fees and offering decreased interest rates. According to the June 1988 Federal Reserve Bulletin on Home Equity Lines of Credit, customers who were attracted by these marketing techniques may not actually use their accounts or keep them open very long. As a result, lenders may not be able to recoup their initial costs through interest earnings. In addition, the same consumers who were attracted to home equity financing because of a low interest rate may use it to retire other outstanding debt at higher interest rates. This could become a problem for the lenders if the retired debt is also with them. However, while the result is less interest earnings for the lenders, it may be offset by reduced bad debt expenses.

⁴P.L. 100-86 (1987).

Bank Regulators and Lenders Taking Action to Forestall Problems With Home Equity Financing

The April 1991 Federal Reserve Bulletin article on Payment of Household Debts indicated that home mortgage or consumer loans have not been the source of major problems for most lending institutions. However, higher delinquency and default rates could cause lenders to tighten credit standards, which could dampen consumption and housing activities. Two bank regulatory agencies, the Federal Deposit Insurance Corporation (FDIC) and OCC, have identified potential problems with home equity financing and other consumer credit and recommended actions to prevent such problems from developing.

For example, officials with these agencies recommended that their lenders establish procedures to periodically review outstanding consumer loans, which include home equity financing. This would help the lenders quickly identify borrowers in trouble. It is important for lenders to have a system in place that monitors the financial condition of borrowers. These officials also emphasized that monitoring would improve the lenders' capabilities to foresee problems and take early action.

In 1989, OCC did an extensive study of 11 large regional banks to assess the risks associated with retail lending, including home equity financing. While OCC began the study with the idea that this type of financing might be an increasing credit risk because consumers in the 1980s were leveraged at historic highs relative to their income levels, the study found that the banks were managing this risk satisfactorily. More recently, however, OCC increased the number of consumer-related loans to be examined during a bank review because it appeared that late payment rates were increasing with the unemployment rate. By doing this, OCC will be able to assess whether banks are adjusting their credit requirements to meet economic conditions.

In addition to the preventive measures instituted by regulatory agencies, lenders are also changing their policies and procedures to reduce their risks. For example, to control the risks with home equity lines of credit, one lender uses four advances in the same month as an early warning indicator of a potential weakening in a borrower's financial condition.

OCC also noted in 1990 a trend among lenders to assume that all existing credit lines for a customer were fully extended when they calculated the potential borrower's debt burden. This helps lenders better assess whether the borrower can afford to repay more debt. In addition, lenders are increasingly likely to consider not only the equity available but also the income of the borrower.

**Appendix V
Problems With Home Equity Financing for
Lenders**

The 1992 CBA's survey of lenders revealed that increasing numbers of lenders are periodically reviewing borrowers' accounts. Between 1989 and 1991, the percentage of lenders reporting this periodic review increased from 67 percent to about 85 percent. Sixty percent of these lenders reported reviewing the accounts on an annual basis. Such reviews give lenders the opportunity to detect changes in the borrower's financial condition and to initiate changes in the terms of the financing before the borrower defaults on the loan. In some cases, lenders may need to curtail the amount of credit available on the home equity lines of credit.

ABA's 1992 Home Equity Lines of Credit Report shows that many lenders had by 1991 strengthened their credit standards in response to market conditions, declining property values, or borrowers' declining ability to repay. Many lenders planned to tighten their standards in 1992 for similar reasons.

Objectives, Scope, and Methodology

In a letter from Representative Coyne, we were asked to review the use of home equity financing over a 10-year period. Specifically, the objectives of this review were to

- analyze trends in home equity as well as mortgage-backed financing and other types of consumer credit used over the last 10 years,
- determine who was using home equity financing and for what purposes,
- determine what factors caused the growth in home equity financing,
- determine what problems were arising from this type of borrowing, and
- analyze the implications of various tax policy options that might be instituted to constrain home equity borrowing.

Our review of home equity financing was limited to home equity loans and lines of credit outstanding during the period of 1981 through 1991.¹ Limiting our work to this time period enabled us to look at the period before and after the Tax Reform Act of 1986, which allowed us to assess the impact of this act on the use of home equity and other types of financing. In addition, prior to 1981, there was little information available that separated home equity loans from first mortgages and little activity in home equity lines of credit.

During this assignment, we interviewed many officials from public and private sector organizations. In the public sector, we interviewed officials from bank regulatory agencies and the Internal Revenue Service (IRS). The bank regulatory agencies included the Federal Reserve, Federal Deposit Insurance Corporation (FDIC), Office of Thrift Supervision, and the Office of the Comptroller of the Currency (OCC). At IRS, we interviewed officials in several divisions, including Research and Statistics of Income.

In addition, we obtained information from or interviewed individuals from many private sector organizations. These included

- consumer organizations, such as Consumers Union, American Association of Retired Persons, and the Bankcard Holders of America;
- banks, such as NationsBank (formerly known as Sovran), Maryland National Bank, and Connecticut National Bank;
- credit card companies, such as Visa and Mastercard International;
- auto financing companies, such as Ford Motor Credit Company and Toyota Motor Credit Corporation;
- finance companies, such as Beneficial Management Corporation and TRW;

¹While we were asked to review only 10 years of data, we actually reviewed 11 years since 1991 year-end data became available during this review.

- consulting companies, including David Olson Research Co.,² J. D. Power and Associates, and CNW Marketing Inc.;
- academia, such as Massachusetts Institute of Technology, University of Pennsylvania Law School, University of Michigan Survey Research Center, and Purdue University; and
- industry associations, such as the American Bankers Association (ABA), Consumer Bankers Association (CBA), American Financial Services Association, National Association of Realtors, National Second Mortgage Association, and National Auto Dealers Association.

We reviewed and analyzed data on the numbers of and dollar amounts outstanding for home equity loans and lines of credit for the period of review from a variety of sources. These sources included David Olson Research Co., CBA, ABA, and Federal Reserve Bulletins. In all cases, this report reflects the most current data available from these organizations at the time of this review. Also, in our time series analyses of dollars, except for the revenue estimates from the Joint Committee on Taxation and the Congressional Budget Office, we adjusted the numbers for inflation (to 1991 dollars).

We reviewed and analyzed data from the Federal Reserve's Survey of Consumer Finances for 1989 to assess consumers' use of different types of debt before and after the Tax Reform Act of 1986. This survey, conducted by the Survey Research Center at the University of Michigan for the Federal Reserve between August 1989 and March 1990, was designed to "gather family-level information" on consumer finances. A similar survey is conducted about every 3 years. More than 3,000 families were included in the 1989 survey sample. This report includes both analyses we did using the raw data from the survey and work done by the Federal Reserve, as reported in the January 1992 Federal Reserve Bulletin.

We obtained estimates of revenue foregone with the use of home equity financing and the tax deduction for the interest paid on this type of financing from the Joint Committee on Taxation. In addition, the Joint Committee also provided revenue estimates based on different scenarios we provided to them for changes to the tax laws.

²We purchased home equity financing data for the period of 1981 through 1995 from this source. At the beginning of our work on this study, Mr. Olson had been referred to us by several people as being the best, and for some kinds of information, the only, data source for home equity financing. We used his data because lenders did not begin to report to the Federal Reserve separate information on home equity lines of credit until 1987 and on home equity loans until 1991.

We reviewed literature on trends relating to home equity products, bankruptcy cases, and economic analyses of consumers' use of money and housing.

Our work was done during the period of August 1991 to August 1992 in accordance with generally accepted government audit standards.

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