Elderly Interest in Home Equity Conversion

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Abstract

Few elderly homeowners liquidate their home equity to fund consumption. This article examines whether attitudes about housing, independence, and finances affect a homeowner's interest in home equity conversion. The results of a nationwide survey of elderly homeowners were analyzed by logistic regression to ascertain the relationship between interest in home equity conversion and economic, demographic, and attitudinal characteristics.

The results indicate that elderly homeowners most interested in home equity conversion own houses valued at $50,000 or less, are concerned about maintaining independence but not homeownership, and are not very concerned about future medical expenses. Thus, societal norms for maintaining single-family homeownership and medical assistance programs that exempt home equity from requirements that participants spend all their assets to be eligible may be inhibiting the growth of home equity conversion programs.

Introduction

As the U.S. population ages, policy makers and businesspeople are devoting more attention to the housing and financial needs of the elderly. Much discussion has focused on house-rich, cash-poor elderly homeowners whose major store of wealth is home equity. Researchers have found that many elderly homeowners are in disequilibrium, overconsuming housing (Reschovsky 1990). Critics suggest that elderly homeowners would prefer to transfer wealth from home equity to finance current consumption were it not for the high transaction costs associated with selling and moving, including the financial costs of broker's fees, transfer taxes, moving expenses, and the purchase price of a new home or deposit on a rental unit, as well as the psychic costs of leaving friends and a familiar house in a well-known neighborhood.

In an attempt to give the elderly access to their wealth while they remain in their homes, government agencies and private financial institutions have developed other methods by which elderly homeowners can convert their home equity into cash, including guaranteed first and second mortgages, home equity lines of credit, sale-leasebacks, reverse mortgages, reverse annuity mortgages (RAMs), and split equity arrangements. Elderly homeowners are expected to participate in these programs so that they can use home equity to supplement their retirement income to fund consumption, repair their homes, and finance long-term health care as they age (Jacobs 1986). The slow growth of these programs may be attributable to legal impediments, income tax uncertainties, low annuities, high upfront costs for the homeowner, interest rate risk, collateral risk, uncertain life expectancy, and lack of understanding and familiarity with the concepts. Other possible explanations for the lower-than-expected demand for home equity conversion programs are the ways cultural housing norms, the desire for independence, and attitudes about saving and spending affect the homeowner's economic decision to liquidate home equity. The purpose of this article is to elucidate the attitudes the elderly have about their homes, independent living, medical concerns, and liquidating home equity and to identify those homeowners most likely to consider liquidating home equity.

The following section of this article provides a review of previous research in several relevant areas: elderly wealth and decumulation of assets, including home equity; the nonfinancial benefits of a home; and elderly attitudes about saving and borrowing. The methodology is described in the third section, including an explanation of the sample, questionnaire, model, method of analysis, and findings. The final section provides an interpretation of the results and discusses the policy implications.

Prior research

Economics

Because of the prevalent American work pattern, adults are expected to save during high-income middle-age years to fund consumption during retirement years through pensions, income from investments, and eventual liquidation of equities. In this way, consumers are able to smooth their spending over time despite a variable income pattern.

Because at least 80 percent of older heads of household own their homes free of debt (Kennickell and Shack-Marquez 1992), they have built up considerable equity. Home equity, on average, accounts for more than 70 percent of the total wealth of the elderly (Merrill 1984). Estimates of the average home equity of elderly homeowners range from $50,000 to $70,000 (Jacobs 1986; Kennickell and Shack-Marquez 1992). Even among elderly homeowners with income below the poverty line, one-fourth hold $50,000 or more in home equity, as do 30 percent of the near poor (U.S. Administration on Aging and U.S. Department of Housing and Urban Development [HUD] 1986). The prominence of home equity in the portfolios of the elderly has been shaped by many factors, including preferential income tax treatment of mortgage interest, availability of mortgage funds because of government guarantees and insurance, and the general increase in real estate values in recent decades. Homeownership gives elderly residents rent-free or low-rent shelter and an investment that is a source of emergency funds and has provided a substantial rate of return in recent decades.

Studies by economic researchers have shown that the elderly, as a group, fund most consumption out of current income (Danziger et al. 1982–83) and maintain their wealth in investments such as home equity. Venti and Wise's 1989 study of 1970s Retirement History Survey data indicated that most elderly are not liquidity constrained and so have no desire to reduce home equity. In fact, when moving, many elderly increased, rather than decreased, housing equity. Among homeowners who moved, those with low income and high equity tended to reduce housing equity the most, and those with high income and low housing equity tended to increase housing wealth the most. Even when they spend assets during retirement, many elderly homeowners apparently choose to maintain home equity wealth (Hurd 1990). The reasons for maintaining and increasing housing equity in retirement years may include expectation of a long life span, expectation of large medical expenses, intention to leave a bequest to heirs, and preference for a more conservative lifestyle during retirement (see Hurd 1990 for a review of economic studies in this area).

Home equity conversion

Selling the home was once an elderly homeowner's only method of liquidating home equity. Only a minority of the elderly want to or do move. For example, of the homeowners in the 1969 Retirement History Survey, only 27 percent had moved by 1979 (Venti and Wise 1989), an average annual turnover rate of about

3 percent. Among the 70- to 74-year-old retired homeowners in the American Housing Survey, the 1976–77 turnover rate was 5.1 percent (Stahl 1989). Only one in seven older homeowners in a Wisconsin survey had a clear intention of selling the family home sometime in the future. Two-thirds had no plans whatsoever to sell their homes (Nelson 1980). Among respondents to a 1986 American Association of Retired Persons (AARP) national survey, 70 percent wanted to stay in their own homes for the rest of their lives, especially women over age 80. Those most willing to move had relatively high incomes, were under age 70, lived alone, or had serious health limitations.

Selling the family home is no longer the only way to liquidate home equity. A variety of innovative home equity conversion programs have been developed in recent decades. One option now available in some locations is a line of credit with a government agency, such as the Virginia Housing Development Authority's Virginia Senior Home Equity Account, or with a private lender, such as Suncoast Schools Federal Credit Union in Tampa (Scholen 1990). A second option is a sale-leaseback, with an intermediary matching up sellers and investors, such as the Fouratt Senior Equity Plan and the Grannie Mae plan (National Center for Home Equity Conversion [NCHEC] 1986). Public reverse mortgage plans are generally available only to low- to moderate-income elderly homeowners, with the funds earmarked for specific purposes, whereas private plans are available in many states to any financially qualified borrower. The San Francisco Development Fund developed an uninsured fixed RAM for homeowners age 62 and older in 1980 (Weinrobe 1987). In 1983, American Homestead Mortgage Corporation developed the Century Plan, a tenure RAM with a shared appreciation component (Garnett and Guttentag 1984). Capital Holding Corporation has since developed an adjustable-rate tenure RAM (HUD 1989).

The availability of reverse mortgages has increased in recent years because of the removal of legal hurdles by the Alternative Mortgage Transaction Parity Act within the Garn-St. Germain Depository Institutions Act and the creation of a secondary market in which reverse mortgages insured by the Federal Housing Administration (FHA) are purchased by Fannie Mae. An initial demonstration project authorized HUD to insure 2,500 reverse mortgages originated by private lenders, but the HUD/home equity conversion mortgage (HECM) program has since been expanded to authorize insurance for 25,000 mortgages (Szymanoski 1990).

A few surveys have been conducted to assess elderly homeowner interest in equity conversion programs. As awareness has grown, attitudes and interest may be changing. A Wisconsin survey of homeowners age 65 and older in the late 1970s showed that 45 percent were interested in a reverse mortgage, RAM, sale-leaseback, or property tax postponement. Those interested were more likely to be married, to be male, to be less than 75 years old, to have at least eight years of education, to have income over $5,000, to have postponed home repairs because of cost, and to have trouble paying for large emergency expenses (Nelson 1980). A national Federal Home Loan Bank Board (FHLBB) survey found that more than a fourth of homeowners age 50 and older would be interested in a RAM if it were offered (Colton et al. 1977). Similarly, one-fourth of the respondents to the AARP (1986) study expressed interest in home equity conversion that allows the resident to remain in the home with repayment deferred. Those age 60 to 64, African Americans, those employed full time, and those with mortgages were more likely to consider home equity conversion. These surveys indicate that interest in home equity conversion in the 1970s and early 1980s centered in a financially needy segment of the youngest elderly.

The two main impediments to acceptance of RAMs among the FHLBB survey respondents were the desire to own a home free and clear of any liens and a concern about ability to make mortgage payments (even though the RAM does not require monthly payments) (Colton et al. 1977). Studies in Wisconsin (Nelson 1980), Ithaca (Daniels 1974), and Los Angeles (Chen 1973) indicated that the desire to leave a bequest to heirs was an impediment to dissaving home equity.

A few studies have examined the characteristics of participants in home equity conversion programs. The average participant in the Buffalo split equity program was a 75-year-old woman with an average income of less than $10,000 and property value of $20,000 (NCHEC 1986; U.S. Administration on Aging and HUD 1986). Weinrobe (1987) found that the older and poorer a homeowner and the greater the amount of home equity, the higher was the probability of entering the California RAM program. The typical participant in the California program was an 80-year-old widow. The average Century Plan borrower was a single 75-year-old with a property valued at $85,000. Grannie Mae participants were usually couples age 70 to 75 with a property valued at $100,000 (NCHEC 1986). As of mid-August 1992, most borrowers whose loans were insured under the HUD/home equity conversion mortgage program were between the ages of 71 and 82 with properties valued from $75,000 to $146,000 and relatively low incomes. More than half are women living alone (Case and Schnare 1993). Most of these programs appear to be serving homeowners in their 70s with substantial home equity. However, a substantial number of single women with less equity are also participating, indicating two possible market segments.

Home as both emotional and psychological resource

Although housing equity is the largest store of wealth for most elderly homeowners, the home also serves as an emotional resource. The home is an important component of self-image and identity in American society (Sadalla, Vershure, and Burroughs 1987). Rakoff (1977) found that the owner-occupied single-family detached house symbolizes personal control as well as the power and opportunity to achieve self-fulfillment. Strong social norms encourage the elderly to remain in owner-occupied homes and discourage sale of the home to liquidate home equity. Single-family homeownership is a major goal and status symbol in American culture. This norm has been sanctioned through income tax laws, government insurance of mortgages, and lending institutions that extend credit more readily to owners than to renters. The elderly want to conform to these norms as much as younger citizens. Merrill (1984) determined that those changing from owner to renter status during later years were more likely to have lower incomes, greater decreases in income after retirement, and less in liquid assets, indicating that financial necessity was the driving force behind change in tenure.

The elderly become emotionally attached to their homes. The home provides continuity, familiarity, comfort, and security. The extensions of the home provide familiar neighborhoods where the elderly can function easily and social networks of friends and family to supply emotional and other support. Older homeowners have an even stronger attachment to home than renters (O'Bryant and Wolf 1983).

Gerontologists have found that the ability to function in a normal independent environment is important for positive self-concept among older people (O'Bryant 1982). Home equity conversion programs that require selling the home and moving out take the elderly resident out of a familiar environment that allows independent functioning at a low level of competence (Lawton 1985) and may hurt self-esteem. When asked what they liked best about owning a home, 60 percent of older Wisconsin homeowners said independence or pride of ownership (Kummerow 1980). When AARP (1986) questioned older

Americans about their concerns, the most important issues to the respondents were physical deterioration of their homes, failing health, and loss of independence as they grow older.

Attitudes about borrowing and saving

Knowledge of elderly homeowners' attitudes about financial decisions, including borrowing against their home equity, may help explain their home equity decisions. Limited research has been conducted in this area, especially in recent years, making generalizations about the current elderly population difficult. Huck (1987) ascertained that older consumers do not generally like buying on credit. Mason and Bearden (1980) found that one-third of older respondents believed that using credit to buy something is a bad practice. Among Wisconsin homeowners age 65 and older, three-fourths of those surveyed would prefer getting by on less income to taking out a loan (Nelson 1980). When asked what reasons were acceptable for taking out loans, only 40 percent of the Wisconsin respondents said funding living expenses, while 80 percent approved of paying medical expenses (Neubig 1980).

Saving patterns during retirement years appear to be an extension of saving and spending patterns developed during working years. Participants in the Retirement History Survey who were relatively high savers in early years continued to save as they aged (Short 1984).

Methodology

Sample

This study used a mail questionnaire sent to a random national sample of persons age 65 and older from a mailing list compiled by R. L. Polk & Co. from vehicle registrations, voter registrations, driver's licenses, telephone directories, responses to direct mailings, warranty card registrations, and door-to-door interviews. As of August 1988, the list contained 87,223,000 households—approximately 96 percent of the households in the United States (Gina Williams, R.L. Polk & Co., personal communication, November 17, 1989).

Because of the difficulties often encountered in surveying elderly populations (lack of education, failing health and eyesight, and wariness of requests for personal financial information), a large sample of 3,712 names was selected. After removing names of the deceased from the list, forwarding letters to those who had moved, sending out follow-up reminders, and mailing second questionnaires, 601 responses were received. Of those, 321 questionnaires fully completed by one individual homeowner aged 65 to 91 were used in this analysis. Summary statistics for the sample used are provided in table 1.

Table 1. **Sample and Homeowner Population Characteristics**

Characteristic	Sample (%)	Population (%)
Age		
65–74	62.6	61.2
75 and older	37.4	38.8
Gender		
Male	74.8	62.0
Female	25.2	38.0
Marital status		
Married	72.0	51.0
Not married	28.0	49.9
Geographic location		
Northeast	17.4	25.0
Midwest	29.0	25.0
South	33.0	33.0
West	20.6	20.0
Annual household income ($)		
Less than 10,000	13.7	35.4*
10,000–19,999	31.2	28.3
20,000–29,999	21.8	18.1
30,000–49,999	20.6	11.6
50,000 or more	12.8	6.6
Principal home value ($)		
Less than 50,000	21.5	36.0
50,000–74,999	23.4	21.5
75,000–99,999	20.9	14.1
100,000–199,999	21.2	18.9
200,000 or more	13.1	9.6
Principal home mortgage ($)		
0	81.0	85.0
1 or more	5.0	15.0

Source: Population data from U.S. Bureau of the Census (1989; 1992a, 16–17; 1992b, 74) and Kennickell and Shack-Marquez (1992).
* Population income data include renters.

A comparison of the demographic and economic composition of the respondents with that of the entire U.S. population of elderly homeowners revealed that the sample was overrepresentative of midwestern married men with higher home values and incomes. The underrepresentation of women may be a function of shortcomings of the mailing list. Because only one person's name was listed for each household and more men than women are listed as heads of household, the list contains a disproportionate number of men. Also, because of the way data are collected for the list, it would tend to be underrepresentative of the relatively poor, uneducated, and unhealthy, who do not appear on many public lists. Nevertheless, people of all ages, incomes, and net worths were well represented in the sample. Because the purpose of this study was to identify differences in the elderly population, not to estimate a level of demand for equity conversion for the entire population, this imbalance did not require weighting of the responses.

The possibility of nonresponse bias in the variables of interest was checked by comparing the responses of the first 25 percent of those returning questionnaires with the responses of the last 25 percent, assuming that nonrespondents are similar to those who return their questionnaires last. Using univariate t tests of the equality of group means for each variable, no significant differences were found between early and late respondents on attitudinal questions, indicating no need for adjustments for nonresponse.

Survey instrument

The data were collected with a four-page questionnaire. A cover letter, questionnaire, and postage-paid reply envelope were mailed to each member of the sample, and a prompting postcard was mailed to each nonrespondent after two weeks. Respondents were asked to indicate their degree of agreement on a scale of 1 to 5 (with 1 representing "strongly disagree" and 5 representing "strongly agree") with two pages of statements about housing, saving, and spending. The questionnaire explained five methods of home equity conversion (sale, traditional mortgage or home equity line of credit, reverse mortgage, sale-leaseback, and split equity) and then asked whether the homeowner had used any of these options since retiring or reaching age 65 and whether the homeowner would be interested in using each option in the future. Demographic and economic data were determined from multiple-choice questions with wide ranges to allow subjects to respond without giving specific answers to financial questions.

The questionnaire was pretested on a convenience sample of 65 Atlanta-area senior citizens, revised, and then pretested again on a national random sample of 200 persons selected from the same sampling frame used in the final study using mail delivery and response. Thirty-two usable questionnaires were returned during this pretest. The results were used to develop the questionnaire used in this analysis.

Model and variables

Older residents differ in economic, social, emotional, and physical resources. Those with greater resources have a wider range of options in making economic and housing decisions. In addition, life experiences and expectations affect a person's attitudes about saving, spending, and housing. The attitudes of the elderly, especially their attitudes toward housing and the independence it affords, as well as their economic and demographic characteristics, may affect the decision to liquidate home equity.

The model used in this study was based on an expanded economic life-cycle model that includes attitudes and values to help explain elderly interest in home equity dissaving. The model used economic, demographic, and attitudinal independent variables to estimate the probability that a homeowner would be interested in home equity conversion. A logistic regression model was chosen because of the binary dependent variable and the combination of categorical and continuous independent variables. The model is defined as

$$P_i = 1/[1 + \exp(-\alpha - \mathbf{X_i}\beta)],$$

where P_i is the probability that a homeowner i would consider liquidating home equity sometime in the future; α is the intercept parameter, $\mathbf{X_i}$ is a vector of independent variables, and β is the vector of parameters to be estimated by the maximum-likelihood method. The model is specified as

$$\begin{aligned}\text{INTEREST} = {} & \beta_0 + \beta_1(\text{ASSETS1}) + \beta_2(\text{ASSETS2}) + \\ & \beta_3(\text{ASSETS3}) + \beta_4(\text{VALUE1}) + \beta_5(\text{VALUE2}) + \beta_6(\text{VALUE3}) \\ & + \beta_7(\text{VALUE4}) + \beta_8(\text{INCOME1}) + \beta_9(\text{INCOME2}) + \\ & \beta_{10}(\text{INCOME3}) + \beta_{11}(\text{INCOME4}) + \beta_{12}(\text{MORTGAGE1}) + \\ & \beta_{13}(\text{MORTGAGE2}) + \beta_{14}(\text{MORTGAGE3}) + \\ & \beta_{15}(\text{MORTGAGE4}) + \beta_{16}(\text{DEBT1}) + \beta_{17}(\text{DEBT2}) + \\ & \beta_{18}(\text{DEBT3}) + \beta_{19}(\text{AGE}) + \beta_{20}(\text{MARITAL}) + \beta_{21}(\text{GENDER}) + \\ & \beta_{22}(\text{NORTHEAST}) + \beta_{23}(\text{MIDWEST}) + \beta_{24}(\text{SOUTH}) + \\ & \beta_{25}(\text{NORMS}) + \beta_{26}(\text{INDEP}) + \beta_{27}(\text{BEQUEST}) + \beta_{28}(\text{SAVE}) + \\ & \beta_{29}(\text{CREDIT}) + \beta_{30}(\text{MEDICAL}),\end{aligned}$$

where INTEREST represents the likelihood of considering using home equity sometime in the future. It was measured by whether the homeowner would consider selling the home and buying a less expensive home, renting, or moving into the home of a relative; refinancing; taking out a junior mortgage, a home equity line of credit, or a reverse mortgage; or entering into a sale-leaseback arrangement sometime in the future.

The independent variables were divided into three subsets: economic variables, demographic variables, and attitudinal variables (table 2). The economic variables are derived from previous economic life-cycle studies: sources of support in retirement (non-home-equity assets, home value, and income) and financial obligations (home mortgage and other debts). The economic variables were measured by self-reported household figures. Assets other than home equity were measured as the total reported value of cash, certificates of deposit, savings accounts, stocks, bonds, and other real estate held by household residents; the reported categories were converted into three dummy variables. The owner was asked to estimate current market value of the home within categories that were then converted into four dummy variables. Current income was measured as the respondent's and spouse's total self-reported after-tax income during 1989 in categories that are represented by four dummy variables. The amount of household debt was measured in two separate variables. One was the resident's estimate of the outstanding balance on the mortgage on the principal residence within categories that were then converted into four dummy variables; the other was the respondent's estimate of any other debts owed by the respondent or spouse, if present in the household, in categories that are represented by three dummy variables. People with other sources of income and fewer financial obligations have less financial need to convert home equity into spendable cash.

The demographic characteristics included are age (and, conversely, remaining life span), marital status, gender, and U.S. Bureau of the Census geographic region. Marital status affects living arrangements and reflects both economic and emotional resources available to the elderly. A married person has a spouse to provide live-in emotional, physical, and financial support, making living in the family home without tapping home equity more feasible. Those widowed, divorced, separated, and never married were grouped into one "unmarried" category. Females tend to live longer and have fewer means of financial support than males, making them more likely to experience financial need. Availability of home equity conversion programs and

Table 2. **Variables Used in the Analysis**

Variable	Definition	Measure
Dependent variable		
INTEREST	Interest in using home equity	1 = interest in any form of home equity conversion 0 = no interest
Independent economic variables		
ASSETS	Respondent and spouse's total savings except home equity (series of dummy variables)	ASSETS1: 1 = less than $25,000 ASSETS2: 1 = $25,000 to $99,999 ASSETS3: 1 = $100,000 to $199,999
VALUE	Respondent's principal home value (series of dummy variables)	VALUE1: 1 = less than $50,000 VALUE2: 1 = $50,000 to $74,999 VALUE3: 1 = $75,000 to $99,999 VALUE4: 1 = $100,000 to $199,999
INCOME	Respondent and spouse's 1989 after-tax income (series of dummy variables)	INCOME1: 1 = less than $10,000 INCOME2: 1 = $10,000 to $19,999 INCOME3: 1 = $20,000 to $29,999 INCOME4: 1 = $30,000 to $49,999
MORTGAGE	Respondent's principal home mortgage amount (series of dummy variables)	MORTGAGE1: 1 = $0 MORTGAGE2: 1 = $1 to $9,999 MORTGAGE3: 1 = $10,000 to $29,999 MORTGAGE4: 1 = $30,000 to $49,999
DEBT	Respondent and spouse's nonhome mortgage debt amount (series of dummy variables)	DEBT1: 1 = $0 DEBT2: 1 = $1 to $999 DEBT3: 1 = $1,000 to $24,999

Table 2. **Variables Used in the Analysis** *(continued)*

Variable	Definition	Measure
Independent demographic variables		
AGE	Respondent's age in years	
MARITAL	Respondent's marital status	1 = married 0 = single, divorced, separated, or widowed
GENDER	Respondent's gender	1 = male 0 = female
REGION	Three dummy variables	NORTHEAST: 1 = Yes MIDWEST: 1 = Yes SOUTH: 1 = Yes
Independent attitudinal variables		
NORMS	Degree of agreement with housing ownership norm	Summated Likert scale
INDEP	Degree of importance of independent living	Summated Likert scale
BEQUEST	Degree of positive attitude toward bequest	Summated Likert scale
SAVE	Degree of positive attitude toward saving	Summated Likert scale
CREDIT	Degree of positive attitude toward credit	Summated Likert scale
MEDICAL	Degree of concern about medical expenses	Summated Likert scale

publicity about them, as well as average home value and variability, differ across the nation. Thus, differences in levels of interest in home equity conversion might exist among different regions.

Attitudes toward the home (agreement with homeownership norms and the importance of an independent living situation) and attitudes toward finances (leaving a bequest, saving, using credit, and concern over future medical expenses) are also included. The development of attitudinal scales was based on previous theory and research, such as the survey work of Wister (1984) and Nelson (1980), as well as the two pretests. Strength of agreement with the individual measures indicates the strength of agreement with the general attitude. The response to each item was given a score from 1 to 5: For favorable items, strong agreement was given a score of 5 and strong disagreement a 1; scoring was reversed for unfavorable items. The individual scores were added to obtain a score for each respondent that describes that person's overall attitude on each subject. Thus, the higher the score, the more a respondent agrees with the general attitude. The attitude statements are shown in table 3. The Cronbach's alpha (measure of reliability) for each scale is also shown in table 3. These items were used to measure the importance of living independently, concern about medical expenses, and attitudes about homeownership, saving, using credit, and leaving a bequest. Because of the value of homeownership to an elderly person's self-image, feelings of control, and independence, those elderly who value autonomy and homeownership more are less likely to be interested in liquidating home equity and risking loss of their home and, thereby, independence and control over their lives. From a financial planning viewpoint, those elderly who want to leave a bequest and want to save for potential medical expenses would be less likely to be interested in liquidating home equity unless the funds were used to pay medical bills. Similarly, those who value saving and dislike or disapprove of borrowing would be less likely to be interested in home equity liquidation programs because of the stigma of borrowing and owing money.

Analysis

Frequency distributions, cross tabulations, and correlation matrices were created for the variables to examine the distribution and characteristics of the responses. The mean values and standard deviations of the variables are presented in table 4.

Table 3. **Items Comprising Attitude Scales and Scale Reliability Coefficients**

Variable	Coefficient Alpha	Items
NORMS	.79	People look up to persons who own their home.
		Homeowners have much more influence in their community.
		Owning your own home gives you status in the community.
INDEP	.62	I'm my own boss in my home. I would never give that up.
		Older people should live on their own until they absolutely can't manage any longer.
		Moving in with relatives takes away an elderly person's independence.
		Losing your independence means losing your dignity.
		Living in my own home is proof I can still take care of myself.
BEQUEST	.62	A major advantage of owning a home is that it can remain in the family after one's death.
		I would like to leave a small estate for my loved ones.
		I would like my relatives to live in my home after me.
		I am willing to get by on less money now to leave something for my loved ones.
SAVE	.67	If I won a cash prize, I would save most of the money.
		If I were rich, I would still save as much as I could.
		I would use my savings before I would reduce my standard of living. (Reverse)
CREDIT	.62	Most people are too heavily in debt today. (Reverse)
		Borrowing money shows a lack of thrift. (Reverse)
		I would rather do without than take out a loan. (Reverse)
		People who use credit are living beyond their means. (Reverse)
		You should only use credit if you have to. (Reverse)
MEDICAL	.69	I have to save now for future medical expenses.
		I would have trouble paying for a long hospital stay.
		I expect my health to be a major problem in the years ahead.
		I am concerned about medical costs causing me financial problems.

Table 4. **Mean Values and Standard Deviations of Independent Variables**

Variable	Mean	Standard Deviation
ASSETS1	0.27	0.44
ASSETS2	0.33	0.47
ASSETS3	0.16	0.37
VALUE1	0.21	0.41
VALUE2	0.23	0.42
VALUE3	0.21	0.41
VALUE4	0.21	0.41
INCOME1	0.14	0.34
INCOME2	0.31	0.46
INCOME3	0.22	0.41
INCOME4	0.21	0.40
MORTGAGE1	0.81	0.39
MORTGAGE2	0.05	0.22
MORTGAGE3	0.05	0.21
MORTGAGE4	0.06	0.24
DEBT1	0.68	0.47
DEBT2	0.14	0.35
DEBT3	0.16	0.37
AGE	73.00	5.69
MARITAL	0.72	0.45
GENDER	0.75	0.44
NORTHEAST	10.17	0.38
MIDWEST	0.29	0.45
SOUTH	0.33	0.47
NORMS	11.43	2.46
INDEP	20.47	3.31
BEQUEST	13.19	3.14
SAVE	0.72	2.67
CREDIT	17.45	3.88
MEDICAL	14.23	3.54

The data were also examined for multicollinearity by observing the variance inflation factors (VIFs) and the condition indices. The significance of the model derived was tested with a likelihood ratio chi-square. A chi-square test was also used to test which variables were significant at the 5 percent level.

Findings

Only 31 of the 321 respondents used in this analysis reported having used their home equity since retiring or reaching age 65. Of these, 19 had sold the home and purchased a less expensive home or moved into a rental unit, 11 had taken out a traditional mortgage or home equity line of credit without moving, and 1 had a reverse mortgage. A total of 175 persons, or 54.5 percent of the sample, expressed interest in using at least one home equity conversion option sometime in the future.

The average scores on the attitudinal scales indicated that the respondents, as a group, valued independence (average score of 20.47, whereas a score of 15.0 would indicate that the respondents neither agree nor disagree that independence is important). To a lesser degree they agreed with cultural housing norms, desired to leave a bequest, were concerned about medical expenses, and had a positive attitude toward both saving and using credit.

A regression analysis modeling interest in home equity use as a categorical dependent variable with the entire set of independent variables as predictors produced only one VIF greater than the multicollinearity criterion of 10. The VIF for nonmortgage debt of $0 was 14.57. The condition indices ranged from 1.00 to 80.56, below the criterion of 100, indicating that there was only minor multicollinearity (Montgomery and Peck 1982).

The logistic regression model was statistically significant: $\chi^2(30, N = 321) = 62.54$, $p < .05$. The coefficients derived from this model are presented in table 5. Among the explanatory

Table 5. **Logistic Regression Coefficients**

Variable	Coefficient	X^2
INTERCEPT	–5.2039	
ASSETS1	–0.6615	1.53
ASSETS2	–0.7675	2.89
ASSETS3	–0.6560	2.12
VALUE1	1.4698	6.38*
VALUE2	0.9864	3.56
VALUE3	0.2844	0.29
VALUE4	0.9125	3.51
INCOME1	–0.3901	0.34
INCOME2	–0.8054	1.96
INCOME3	–0.8221	2.27
INCOME4	–0.4450	0.80
MORTGAGE1	0.9294	1.08
MORTGAGE2	0.2615	0.06
MORTGAGE3	0.4048	0.14
MORTGAGE4	1.5245	2.32
DEBT1	1.0562	0.99
DEBT2	1.3826	1.57
DEBT3	0.8238	0.58
AGE	0.0267	1.26
MARITAL	–0.2648	0.53
GENDER	0.4685	1.59
NORTHEAST	–0.1123	0.07
MIDWEST	0.3337	0.69

Table 5. **Logistic Regression Coefficients** *(continued)*

Variable	Coefficient	X^2
SOUTH	0.0230	0.00
NORMS	–0.1696	8.27*
INDEP	0.1595	10.96*
BEQUEST	0.0817	2.81
SAVE	0.0175	0.11
CREDIT	0.0211	0.29
MEDICAL	–0.1267	9.02*

*Significant at 5 percent level.

variables, agreement with cultural housing norms and concern about medical expenses had significant negative relationships with the likelihood of interest in home equity use. The importance of independence had a significant positive relationship. Homeowners' attitudes toward saving and using credit were not related to the likelihood of an owner expressing interest in using home equity. Current home value was the only significant variable among the economic and demographic variables, indicating a positive relationship between owning a home valued at less than $50,000 and interest in converting that equity into income. The coefficients on the nonsignificant variables indicate only slightly greater interest among homeowners with more assets, more income, and less debt. Thus, those older homeowners expressing interest in using home equity own lower value homes with little debt. They want to maintain their independence, but not necessarily homeownership. They are also less concerned about paying for future medical expenses.

Conclusions

The main purpose of this research was to examine how the elderly's attitudes about their homes, living situations, medical concerns, and finances affect their interest in liquidating home equity to fund consumption. By using an expanded economic life-cycle model based on research in economics, sociology, gerontology, real estate finance, marketing, and housing, the study attempted to identify which segments of the elderly population were interested in transforming their home equity into income, as well as how those people differ from homeowners who want to preserve their equity.

A majority of the respondents to this survey, as in previous research, were not liquidating their assets, including home equity, to fund retirement consumption. However, approximately half the elderly homeowners surveyed would consider using home equity to fund consumption in the future. None of the demographic variables were significant in distinguishing those interested in using home equity, although the signs on the coefficients indicated that those interested in home equity conversion tended to be single, older men. These relationships must be viewed with caution because the analysis did not reveal a significant relationship between these variables and interest in home equity liquidation. Most previous studies found interest in equity conversion concentrated among younger, married men (AARP 1986; Nelson 1980) but actual program participation concentrated among older, single women (Case and Schnare 1993; NCHEC 1986; U.S. Administration on Aging and HUD 1986; Weinrobe 1987), perhaps because men have historically made more of the family financial decisions and been more interested in financial options and programs. Older, single women, while more financially needy, may not want to consider home equity conversion and the risks it entails. Because of their more limited financial and emotional resources, they may fear the risk of losing their homes and will not consider liquidating home equity until absolutely necessary.

Among the economic variables, only home value of less than $50,000 was significant. Those interested in home equity conversion own lower value homes and therefore have limited home equity available even though they may hold low mortgage balances. This group does not represent the house-rich, cash-poor segment often targeted by home equity conversion programs. Lower value houses may be in greater disrepair and be located in less desirable neighborhoods. The owners of these homes may want to free up equity to finance repairs. They may also be less attached to a home in a declining neighborhood.

Homeowners interested in home equity conversion and those not interested had similar attitudes about saving and using credit. Thus, it does not appear that a fundamental difference in values about saving or borrowing in general is the major factor influencing attitudes about liquidating home equity.

Homeowners who less strongly value the cultural norm for homeownership were more likely to consider using their home equity. They would not perceive renting a home as loss of status. The cultural norm for homeownership and the success and status it connotes appear to be discouraging many elderly homeowners from tapping their equity. They still do not associate the new home equity conversion options with the ability to remain in the home.

Homeowners who value independent living were more likely to express interest in home equity conversion. Liquidating their home equity when they can no longer care for themselves or the family home alone may allow them to maintain control and autonomy by generating funds to pay for in-home assistance or movement to an assisted living facility. Single, older men might especially feel the need for assistance in household chores to remain independent.

Homeowners who are not concerned about financing future medical expenses were more likely to be interested in home equity conversion programs. They did not perceive a need to save for these expenses by building equity. Those concerned about medical bills are attempting to retain all the resources they can to provide for large future expenses.

Policy implications

The results of this research provide some policy direction for those wanting to provide elderly homeowners with additional liquidity. The responses to this survey continue to reflect the contradiction that the homeowners most likely to express interest in home equity conversion programs are not necessarily the homeowners who are the most liquidity constrained or who would realize the greatest percent income increase from equity liquidation. Some homeowners may see home equity conversion as part of an investment portfolio decision and express interest because they would consider all financial options. Other, less financially sophisticated homeowners would be less likely to express interest in a still rather unfamiliar and risky financial and housing decision. Thus, public agencies wanting to help the house-rich, cash-poor frail elderly widow still face a considerable education task to persuade such homeowners that home equity conversion is a positive financial option they should consider.

Another challenge to developers of reverse mortgages is the interest of owners with homes valued at $50,000 or less. Many of these houses are probably older and in need of repair. Potential appreciation may be very limited. Lenders would not be able to provide much cash in either a lump sum or an annuity arrangement. Substantial upfront costs would make a home equity conversion instrument impractical for this market segment.

Any promotion of home equity conversion programs should recognize the important attitudinal factors affecting elderly homeowners' decisions. Programs should be marketed as a means of maintaining independence either in one's current home or in some alternative housing. The potential of using home equity to finance in-home care and assistance with household chores should be emphasized.

In addition, the acceptability of home equity conversion programs will continue to be hampered by elderly homeowners' desire to maintain single-family homeownership. In attempting to maintain the housing tenure promoted by public policy and social norms, elderly homeowners are limiting their housing options. Home equity conversion programs should have greater success if promoters can allay owners' fears that they risk losing their houses when they enter into one of these programs.

The fear of catastrophic medical bills also reduces interest in home equity conversion. Elderly homeowners are maintaining a store of wealth, especially in the form of home equity, to provide for these potential bills. Under some programs that require elderly patients to use all their own resources before receiving public assistance with medical and long-term care expenses, home equity is a protected asset. Unless these rules are modified, they encourage elderly homeowners to maintain a large proportion of their portfolio in home equity if they expect or greatly fear a long-term nursing home stay.

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