Baby Boomers and Home Equity Borrowing

Yoon G. Lee [1]

Using data from the 2001 American Housing Survey, this study examines how Baby Boomers utilize home equity loans and identifies the correlates of home equity usage among Baby Boomer homeowners. This study found that higher incomes, investment incomes, greater numbers of mortgages, higher amount of mortgages borrowed, more expensive homes, and longer years lived in the unit were positively associated with home equity borrowing. Moreover, Baby Boomers that were more highly educated, Caucasian, and resided in the Midwest or West were more likely to borrow against their homes than other individuals. Implications for borrowing against the value of their home among the Baby Boomer population are presented.

Keywords: *Baby Boomers, Borrowing, Home Equity Loans, Mortgage Loans*

Introduction

Over the last century, life expectancy has dramatically increased. Life expectancy in 1900 was only 49.5, whereas by the year 2003 it had increased to 77.6 (National Center for Health Statistics, 2004). The increased life expectancy requires adequate retirement saving to finance a long period of consumption and health care needs in later life. With the aging of the Baby Boom generation—those people born between 1946 and 1964, the number of older persons aged 65 and above is projected to rise to 54.6 million in 2020 and to grow up to 86.7 million by 2050 (U.S. Bureau of the Census, 2005).

As the Baby Boomers approach retirement, their financial security has been an issue in the policy arena (Administration on Aging, 2002). The main issues for Baby Boomers include the insecurity of our social security system, their longer life expectancy, and inadequate financial resources to generate or maintain their pre-retirement. There are contradictory views about Baby Boomers' retirement savings (AARP, 2004; Baek & DeVaney, 2004; Butrica, Iams, & Smith, 2003; DeVaney, 1995; and DeVaney & Chiremba, 2005). Pessimistic reports indicate that Baby Boomers are not saving adequately for retirement; certain Baby Boomer subgroups will not be well-off in retirement; and, therefore, they need to save in order to maintain their pre-retirement standard of living in retirement. On the other hand, optimistic reports say that Baby Boomers will be substantially better off in retirement than their parents and will have more wealth in retirement compared to previous retirees.

While trends in overall homeownership rates in the U.S. increased over the last decade from 64.2% in 1992 to 69.2% in 2004 (U.S. Bureau of the Census, 2005), a growing number of homeowners are borrowing against the value of their homes. It is reported that while home ownership increases, home equity stagnates (Gillis, 2000). Equity is the difference between one's home's appraised value and its outstanding mortgage balance. There are two forms of loans in the area of home equity credit: 1)a traditional home equity loan and 2) a home equity line of credit (Canner, Durkin, & Luckett, 1994).

A traditional form of home equity credit is called a closed-end loan since the borrower does not have the option of increasing debt without the lender's covenant (Delaney, 1994). On the other hand, in the revolving home equity line of credit, the debtor is usually given a book of checks. A home equity line of credit has a more flexible repayment schedule than a traditional home equity loan (Canner, Durkin, & Luckett, 1994). These two loan types as placed under the term "home equity loan" are often assumed to be synonymous.

Increasing numbers of home owners utilize home-equity lines as a source of easy cash (Hagerty & Simon, 2005). For borrowers, home equity lines seem especially attractive when compared with alternatives such as credit cards since, for example, rates on credit cards average 12.2% (McBride, 2005). However, borrowing against home equity could decrease the available resources during retirement as well as would lead homeowners into making mortgage payments for additional years while in retirement. Further, in the event of homeowner default on the loan, another risk of home equity borrowing is foreclosure.

In regard to the Baby Boomer generation, much research has been devoted to their retirement wealth, but there is no information about how Baby Boomers borrow against their homes. The purpose of this study is to profile Baby Boomers that use home equity loans and to investigate factors predicting the occurrence of

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taking out home equity loans. While understanding the extent of home equity borrowing and predictors of home equity borrowing among Baby Boomer homeowners, the findings of this current study would give an insight to policy makers as well as financial planners and consumer educators.

Related Literature

Economic Prospects of Baby Boomers in Retirement

Considering the size of the baby boom generation and the demands that would place on private and public retirement systems in coming decades, retirement saving of Baby Boomers is an important issue for policy makers as well as for professionals working in personal finance. DeVaney (1995) examined factors related to retirement preparation for both older Baby Boomers (born from 1946 to 1954) and younger Baby Boomers (born from 1955 to 1964). Boomers were considered prepared for retirement if they had more than 25 percent of their net worth in investment assets (e.g., stocks, bonds, pension plan assets, certificates of deposit, mutual funds, cash value life insurance, loans owed to the household, art work, tax deferred savings plans, real estate other than current home, and net business assets). DeVaney (1995) noted that older Baby Boomers who were in good health, male, and had pension coverage were more likely to have investment assets greater than 25% of net worth. DeVaney (1995) also reported that for both younger and older Baby Boomers, as their education level increased, they were more likely to be prepared for retirement.

Gist, Wu, and Ford (1999) investigated factors associated with the accumulation of wealth. In that study, twenty three percent of the Baby Boomers reported that the primary reason for saving was for retirement. Gist et al. (1999) found that 46% of the Baby Boomers saved regularly for retirement; however, 24% of them didn't save at all, and 30% of the Baby Boomers saved only occasionally. As the factors associated with the wealth accumulation of Baby Boomers, their marital status, race, education, income level, and having children were all significant predictors. For example, those Baby Boomers who were married, white, college educated, had higher income, and had children, tended to accumulate more wealth than those who were unmarried, non-married, had less education, had lower-income, and had no children.

The financial well-being of Baby Boomers is discussed by Butrica, Iams, & Smith (2003). In this study, Butrica et al. (2003) compared Baby Boomer retirees with previous generations on the adequacy of family income in maintaining their economic well-being in retirement. They suggested that in absolute terms, Baby Boomers, compared to current retirees, would expect to have higher incomes and lower poverty rates during retirement. On the other hand, Butrica, et al. commented that in relative terms, when the retirement income as a portion of pre-retirement income is considered, replacement rates for Baby Boomers are projected lower than for current retirees. Specifically, among Baby Boomers, higher earners will have more gains in real per capita income, whereas low earners will have little gain. They added that some groups of Baby Boomer such as divorced women, never married men, Hispanics, and those who never graduated from high school, those with weak labor force attachments, and those with the lowest lifetime earnings would not be well-off in retirement.

While using some financial ratios to measure financial strength or progress over time, Baek & DeVaney (2004) examined financial wellness of Baby Boomers. In this study, the financial ratio guidelines included debt-to-asset ratio less than 0.5, asset-to-income ratio greater than or equal to 2.5, and investment assets-to-net worth ratio greater than 0.25. If Baby Boomers met at least one of these criteria, they were considered financially well (Baek & Devaney, 2004). They reported that more than half of the Baby Boomers were financially well-off. It was also noted that financially well-off Baby Boomers were more likely to be married, have a higher level of education and income, and have homeownership than their less financially well-off counterparts.

Using the 2005 Survey of Consumer Finance (SCF), DeVaney and Chiremba (2005) examined the savings behavior of Baby Boomers and compared it to other age cohorts (Swing cohort–those born from 1928 to 1945; Generation X and Y–those born from 1965 to 1987). DeVaney and Chiremba (2005) found that older Baby Boomers (born from 1946 to 1954) were somewhat more likely than the other cohorts to hold a retirement account, while the swing cohort were more likely to hold the largest amount of retirement savings than other cohorts. It was also revealed that education, self-employment, homeownership, marital status, race, income, and risk tolerance were significant determinants of holding a retirement account among Baby Boomers. DeVaney and Chiremba reported that compared to other cohorts, older Baby Boomers had more in retirement savings than the generation X cohort, Y cohort, and younger Baby Boomers; however, older Baby Boomers had less in retirement savings than the Swing cohort.

In a recent report regarding how Baby Boomers fare at retirement (AARP, 2004), it was shown that Baby Boomers will amass more wealth in real terms at retirement than will the two previous generations. According to this report, it was considered that

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although real incomes of Baby Boomers at retirement would be higher than earlier generations, Baby Boomers might not achieve the higher economic replacement rates they will need, compared to current retirees. Similarly, it was speculated that some sub-groups of Baby Boomers would not achieve higher replacement rates than current retirees and younger Baby Boomers might be less likely than current retirees to maintain their pre-retirement standard of living.

This study seeks to understand the extent of home equity borrowing among Baby Boomers and the characteristics of those borrowers. Understanding the use of home equity loans among Baby Boomers provides insight into the financial behavior of these middle-aged households and their economic prospects in retirement.

Home Equity Loans

Due to the Tax Reform Act of 1986, households are not allowed to claim interest paid to finance most non-mortgage consumer debt; thus home equity loans are the only type of tax deductible interest loan (Stango, 1999). However, if borrowers take out more than $100,000 for purposes other than home improvement, it would be taxable (Internal Revenue Service, 2004). Coupled with the tax advantages of the mortgage interest deduction, low interest rates have encouraged many homeowners to borrow against the equity they have amassed (Marjamaa, 2002). It was revealed that the two main reasons for borrowing from home equity are to reduce debt and to pay for home improvements (DeMong & Lindgren, 1990; Canner, Durkin, & Luckett, 1994). Other than for debt consolidation and home improvement, a home equity loan has been used to pay for education; to buy big ticket items such as a car, a boat, a vacation; to start a business or to invest in other property or the stock market; to fund living expenses; and to pay for medical treatment and emergencies or helping out of family members (Home Equity Loan Information, 2005). Hong and Yu (1995) also indicated that the main reasons or associated factor for homeowner use of lines of credit in middle-aged and elderly households were home improvement, while those of younger stage in the life cycle were for education and sometimes furniture.

The traditional form of home equity credit is usually referred to as a second mortgage or a refinance. The basic premise behind this particular tool is the provision of current income secured by a lien on the debtor's home. A revolving home equity line of credit is similar to that of the traditional home equity loans, however, the differences lie in the disbursement of the secured funds. Instead of fixed payments, the balance due each month is determined by how much credit the household has effectively used or drawn from the pool of funds originally determined by the lender ("Fixed-rate loan," 2002). Depending on the goals of the borrower, these two types of loans each have advantages and disadvantages. For example, if a loan for a specified purpose that has a set date for payoff is desired, a second mortgage may be the loan of choice for the borrowing consumer. However, if more flexibility is desired, a borrower may consider the home equity line of credit a feasible borrowing option.

Currently the home equity line of credit is the most marketed and popular home-secured lending tool. Home equity lines could be one useful source of credit when households need to borrow money. However, home equity credit lines require borrowers to use their homes as collateral for the loan. Thus, if the borrowers default on their loans, they might lose their home which they used as collateral for the loan. One disadvantage to both the traditional home-equity loan and the home equity line of credit is a possible risk of foreclosure, while another possible risk is an unpaid mortgage when person reaches retirement.

Commercial Banks, Savings and Loan institutions, and Credit Unions are the most popular lenders and these three institutions are actively engaged in home-secured lending (Garman & Forgue, 2003). Home equity lines of credit are more commonly offered by larger banks due to the complex nature of the loan (Canner, Durkin, & Luckett, 1998). In 1997, 53 percent of commercial banks offered home equity lines of credit, while 81 percent of them carried traditional home equity loans (Canner et al., 1998). Canner et al. (1994) also reported that users of traditional loans have higher balances than users of home equity lines of credit.

Since a home mortgage carries a much lower interest rate than most credit cards and unsecured personal loans, it is viewed as the least risky type of loan. Sub-prime lenders have developed their marketing strategies to attract more customers with lower credit scores while making second mortgages and home equity lines of credit accessible to a wider range of borrowers. Lending from secondary or sub-prime markets expanded from $885 million in 1995 to $1.3 billion in 2000, a 47% increase over five years (Hogarth & Hilgert, 2001). As the number of home-equity loans has increased, the amount of borrowing has increased as well. The statistics showed that the average traditional home equity loan balance was $38,746 in 1994 (Canner et al.,1994). However, recent statistics indicate that the average size of a new home equity line climbed from roughly $57,000 in 2001 to nearly $78,000 in 2004 (Simmon, 2005). It can be seen that over the past 10 year period of time, there has been a great increase in the amount of borrowing among the homeowners.

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As a housing boom has boosted home values an average of 50%, many American homeowners view their homes as a cash machine that can be used to rapidly build wealth. It is reported that a growing number of homeowners are borrowing against their homes to invest in more real estate (Hagerty & Simon, 2005). Taking advantage of rising property values, an increasing number of home equity borrowing could reflect a shift in consumer borrowing habits. For example, rising housing prices and home equity borrowing have resulted in a decline in household net worth and have shored up consumer spending. For many households, a large percentage of accumulated household assets reside in equity in their homes. However, although home values increased since housing price rose, if homeowners borrowed against the equity in their homes to fund current consumption, the net worth would be less available during retirement.

Factors Affecting Home Equity Borrowing
There are several studies that have explored the relationships between life-cycle stage of households and home equity borrowing. Chen and Jensen (1985) found that as household heads were in their middle years, they were more likely to use home equity. Schmidt, DeMong, & Lindgren (1988) indicated that the typical home equity borrower was between the ages of 35 and 49 years. On the other hand, DeMong and Lindgren (1990) found that six percent of the borrowers were over 64 years of age and stated that borrowers of home equity were getting older. Hong and Yu (1995) also reported that elderly households had line-of-credit balances that were significantly higher than their middle-aged and younger household counterparts. In their study, the reason for the higher balances was speculated, due mostly to the higher equity in the homes of the older households compared to middle-aged and younger households (Hong & Yu, 1995). From these previous studies, it can be summarized that the effects of life cycle stage on home equity borrowing are mixed.

Individuals who use home equity loans had longer life expectancy, larger family size, longer ownership tenure, fewer assets, and lower net worth (Salandro & Harrison, 1997). Canner et al., (1994) found that home equity lines of credit attract borrowers with more expensive homes, higher incomes, higher educational levels, and more equity in their homes. Canner et al. (1998) also noted that homeowners who take out a home-equity line usually have expensive homes, higher incomes, and more equity in their homes than other homeowners. The findings of Canner et al. (1998) are similar to that of Canner et al., (1994), again reporting that having a more expensive home, a higher income, a higher education level, and more equity in their homes were positively associated with home equity borrowing.

Salandro and Harrison (1997) found that non-Black individuals were more likely to use home equity loans than their Black counterparts; individuals with a high school degree or more were significantly more likely to use home equity loans than those with less than a high school education; employed individuals were more likely to use home equity loans than unemployed individuals; individuals with higher permanent incomes were significantly more likely to use home equity loans than those with lower permanent incomes; and those with willingness to take any financial risks were significantly more likely to use home equity loans than the rest of the population.

To summarize, previous literature indicated that factors such as age of homeowners (a proxy of life-cycle stage of household), life expectancy, family size, years lived in the units, assets, income, race, and risk-taking attitude influenced home equity borrowing in the U.S. However, home equity borrowing of Baby Boomers has simply not been explored in the previous literature. No studies have focused on to what extent or degree Baby Boomers in middle years are different from those in other stages of the life cycle in regard to home equity borrowing. The findings of this study would provide additional knowledge of Baby Boomers' financial behavior to the field of family and personal finance.

Conceptual Framework and Hypotheses

As a theoretical background, this study integrates the life cycle income hypothesis. According to the life cycle income hypothesis, individuals seek to maintain their consumption levels over their lifetimes (Ando & Modigliani, 1963). The basic idea of the life cycle income hypothesis is that individuals or households base their consumption on total life resources not on current resources. The typical life-cycle model posits three stages of the life-cycle; young, middle-age, and retired of elderly households. At each stage, the household income is expected to differ while consumption is expected to remain constant over time. While borrowing and saving at different stages of the life cycle, households attempt to maintain a constant level of consumption activity (Ando & Modigliani, 1963; Hanna, Fan, & Chang, 1995).

Young households expect lower incomes because they may still be in school or they may expect their wages to be smaller due to a lack of job experience. If this is the case, the young households would borrow from future earnings to supplement current consumption. The household expects income to rise as the breadwinners get older and gain more experience. During the middle phase of the life cycle, the household is expected to

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save current income and resources for future consumption purposes. Finally, the retirement years consist of spending behavior consistent with the other two stages of the life cycle. The household also expects income to level off and decline at retirement, thus initiating consumption of previously accrued resources and savings (Bryant, 1990).

Mortgage payments act as a form of forced saving for the households and this accumulation is consistent with the life cycle model of saving behavior for those in the middle stage of their life cycle. According to life cycle income hypothesis, middle-age households such as Baby Boomers would save to use the accumulated equity for future consumption purposes. Empirical evidence supports that the loan balances on installment loans, credit card balances, and balances on other lines of credit declined at the empty nest stage of the life-cycle are congruent with the life cycle hypothesis assertion that demands for consumption decline as households get older (Baek, Zhou, & Hong, 2000).

Hypotheses

The study focuses on a profile of Baby Boomers that take out home equity loans and also investigates the relationship between life cycle stages, economic and demographic characteristics, and the occurrence of taking out home equity loans. Based on the theoretical and empirical findings (Ando & Modigliani, 1963; Baek et al., 2000; Bryant, 1990; Chen & Jensen, 1985; DeMong & Lindgren, 1990; Hanna, Fan, & Chang, 1995; and Hong & Yu, 1995), this study examines how middle-aged household Baby Boomers utilize the accumulated equity in their homes. In particular, this study hypothesizes that holding other economic and socio-demographic factors constant, middle-age household Baby Boomers are more likely to borrow from home equity than those in the younger, near-retiree, and elderly or retired stages in the life cycle.

As economic factors that could influence home equity borrowing, income, presence of investment income, number of mortgages, amount of the 1st mortgage, annual housing costs, housing market value, and homeownership tenure are considered in this study. The findings of previous studies would lead to specific hypotheses regarding how selected economic and socioeconomic variables influence home equity borrowing (Canner et al., 1994; Chen & Jensen, 1985; Hong & Yu, 1995; and Salandro & Harrison, 1997).

The ability to borrow against home equity is expected to increase with household income. Real estate ownership is positively associated with income (Ioannides, 1989; Aizcorbe, Kennickell, and Moore, 2003). It is speculated that household with higher income might be more willing to invest in real estate, while using their home as collateral for the loan. Thus, it is hypothesized that homeowners with higher income is more likely to use home equity than those with lower income. Those having income from financial investments are more likely to use home equity because they are more likely to have better knowledge of financial management and may consider home equity a viable option because of the cushion their other financial investments offer.

It is hypothesized that those with a greater number of mortgages, those with higher loan amount of the 1st mortgage, and those with higher housing costs (e.g., general homeowner costs such as home owner's insurance or garbage/water/sewage costs) are more likely to take out home equity loans than their counterparts. Factors such as a greater number of mortgages, higher housing costs, and more housing debt in general, could lead to resource constraints for these homeowners; therefore, they are more likely to use home equity loans. Moreover, individuals with longer homeownership tenure are more likely to borrow against their home equity (Chen & Jensen, 1985); therefore, it is hypothesized that those with more years lived in the housing unit are more likely to use home equity loans. It is further hypothesized that those who own expensive homes are more likely to use home equity because they have high priced homes; therefore they are less likely to have leftover or spare financial resource (Chen & Jensen, 1985).

The socio-demographic variables such as education level, marital status, race, and region are considered to be factors that could also influence home equity borrowing. Those with a higher educational level are less likely or more likely to use home equity as collateral (Canner et al., 1994; Salandro & Harrison, 1997). The ability to understand financial information in various lending institutions can increase the use of home equity loans. Thus, it is hypothesized that households with a higher level of education are expected to be more likely to be willing to borrow than those with a high school degree or more.

Married households are expected to be more likely to have a home equity loan than non-married households. Married households may have more dependents than their non-married counterparts and consequently more household expenses, warranting a need for inexpensive, convenient borrowing mechanisms such as a home-equity loan (Salandro & Harrison, 1997). Thus, it is hypothesized that non-married homeowners are less likely to use the housing asset as collateral than their married counterparts. Similarly, based on the previous literature, it is hypothesized that White households are more likely to be willing to borrow than their non-White counterparts (Salandro & Harrison, 1997). Existing literature has not considered the impact of region on home equity borrowing.

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Methods

Data

Data for the study were drawn from the 2001 National American Housing Survey (AHS) that was conducted between July and November of 2001. The U.S. Census Bureau conducts the surveys in person and by telephone for the U.S. Department of Housing and Urban Development. Since 1973, data have been collected every other year from a fixed sample of about 50,000 households as well as from additional numbers of households for new construction.

The data set contains in-depth information about the geography, housing unit, housing quality, housing cost, housing composition, income, neighborhood, utilities, and recent movers. The American Housing Survey (AHS) is ideal for understanding home equity borrowing of the baby boom cohort since the data sources contain detailed information on income, finances, number of mortgages, and home equality loan balances.

Sample

Total households in the 2001 AHS were 56,157. Among the total households, there were 4 age groups: younger-ages 21-35 (n=11,954); Baby Boomer-ages 36-55 (n=16,141); near retiree-ages 56-64 (n=4,490); and elderly-ages 65 and over (n=6,666). These four categorical variables are used as a proxy of life cycle stage of the households. Since the main research question of this study is to understand whether Baby Boomers are more likely to take out home equity loans than those in the younger, near-retiree, and retired stages of their life cycles, the total sample of 56,167 was used for examining the effect of the life cycle stage on home equity borrowing. On the other hand, the Baby Boomer sub-sample of 16,141 was used to compare differences in economic and socio-demographic characteristics between home equity users and non-users and to further investigate the predictors of home equity borrowing among the Baby Boomer homeowners.

Analytical Procedure

Percentages, means, and medians were obtained to describe sample characteristics of Baby Boomer homeowners (Table 1). The differences in economic and socio-demographic characteristics between users and nonusers of home equity loans among Baby Boomers were examined by t-tests and χ^2-tests (Table 2). The F-tests and Chi-square tests were conducted to present economic profiles for homeowners by their life cycle stages: younger (ages 21-35); Baby Boomer (ages 36-55); near-retiree (ages 56-64); and elderly households (ages 65 and over) (Table 3). Further, to investigate factors that are associated with the occurrence of taking out home equity loans, logistic regression analyses were conducted (Table 4).

Empirical Models and Variables

In the multivariate analyses, the dependent variable is the occurrence of outstanding balance in the first home equity loan. A binary variable (1 if borrowed against their homes; 0 otherwise) was created for use in the multivariate logistic regression analyses. The empirical models include life cycle stage of homeowners, and economic and socio-demographic factors that could affect the likelihood of borrowing against the home.

Life cycle stage measures age (younger ages 21-35; Baby Boomer ages 36-55; near-retiree ages 56-64; and elderly ages 65 and over) of homeowners. Economic factors include total household income, presence of investment income, the number of mortgages including home equity loans, amount of first mortgage when the home was acquired, annual housing costs, current market value of housing, and length lived in the unit. Investment income includes income received from rental income, interest from savings or CDs, dividends from stock, and income from business/farms. Annual housing costs represented include homeowner's insurance, utilities or general homeowner costs (garbage, water and sewage).

Socio-demographic factors include the level of education (less than high school, high school graduate, some college education, college graduate, and advanced education); marital status (married, non-married); race (White, Non-white including Black, Indian, African-American, and Hispanic, other); and region of country (the Northeast, Midwest, South, and West). The effects of these factors on the likelihood of borrowing against the home are investigated for both total and Baby Boomer samples.

Results

Sample Characteristics of Baby Boomer Homeowners

Table 1 presents sample characteristics of Baby Boomer homeowners (n=16,141). About 5% of the Baby Boomer sample borrowed against the equity in their homes. The average household income was \$91,354, while the median income was \$62,000. Only 0.9% of the Baby Boomer homeowners reported investment income such as income received from rental income, interest from savings or CDs, dividends from stock, and income from business/farms. Typical Baby Boomer homeowners had 1.3 mortgages and the average amount of mortgage, when the home was acquired, was \$115,026. The annual average housing costs including homeowners insurance, garbage, water and sewage was \$1,077, whereas the average home value was \$229,773. The typical Baby Boomer homeowners lived in their current home for 10 years.

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Table 1
Sample Characteristics of Baby Boomer Homeowners
N=16,141

Variables	Percent	Mean	Median
Dependent Variable			
Home Equity Loan User	5.0		
Independent Variables			
Economic Characteristics			
Income in 2001		91,354	62,000
Receipt of investment income	0.9		
Number of mortgages		1.3	1.0
Amount of 1st mortgage		115,026	97,000
Annual housing costs		1,077	928
Market value of housing		229,773	160,000
No. of years lived in the unit		10	6
Socio-demographic Characteristics			
Education level			
Less than high school	13.9		
High school graduate	23.5		
Some college education	27.9		
College graduate	21.3		
Advanced degree	13.4		
Marital status			
Non-Married	37.6		
Married	62.4		
Race			
White	73.9		
Non-White	26.1		
Region			
Northeast	26.1		
Midwest	21.0		
West	25.9		
South	27.1		

The average level of education of Baby Boomer homeowners was 40.9, which reflects a high school education. Table 1 shows that 23.5% of Baby Boomer homeowners had a high school education. About 62.6% of Baby Boomer homeowners generally showed more than high school education (e.g., some college education, 27.9%; college graduate, 21.3%; and advanced degree, 13.4%). Among the Baby Boomer homeowners, the married households were 62.4% and a large percentage (73.9%) of them were Whites. Roughly equal proportions of the Baby Boomer homeowners reported they resided in the Northeast (26.1%), the Midwest (21.0%), the West (25.9%), and the South (27.1%).

A Profile of Home Equity Loan Users and Non-Users among Baby Boomer Homeowners

Table 2 compares the differences in economic and socio-demographic characteristics of Baby Boomer homeowners according to whether or not they borrowed against the equity in their homes. T-test results indicated that, except presence of investment income, home equity users and non-users were significantly different in all variables. Specifically, the Baby Boomers with home equity loans reported a significantly higher amount ($131,875) of household income than did those with no home equity loans ($89,152). Boomer homeowners with high incomes might be tapping into their home equity for stock or real estate investments. Boomer homeowners with home-equity loans also had greater mean numbers of mortgages (1.9) than did those with no home equity loans (1.2).

The results of the t-test also indicate that Baby Boomers with home equity loans reported a relatively higher average mortgage amount ($128,628) than those with no home equity loans ($113,954). Boomers with home equity loans owned a relatively expensive home ($264,038) than those with no home equity loans ($227, 244). The Baby Boomer with home equity loans lived a longer time period in their housing units (12 years) than those with no home equity loans (9 years); this result might reflect that Baby Boomers with home equity loans have more equity in their homes than those without home equity loans.

Table 2 also shows that there were significant differences in education, marital status, race, and residence between home equity users and non-users among the Baby Boomer homeowners. Baby Boomer homeowners with home equity loans tended to have a higher level of education than those with no home equity loans. A larger proportion of homeowners with home equity loans were married (77.7%) and about 88% of those with home-equity loans were White.

Economic Profiles for Homeowners by Life Cycle Stages

Table 3 profiles the economic characteristics of homeowners by their life cycle stages. It can be seen that 2.4% and 3.7% of those in younger and elderly life cycle stages, respectively, used home equity loans. A relatively higher portion of the Baby Boomers (5.0%) and near-retirees (5.7%) used home equity loans compared to younger and elderly homeowners. The results of F-tests indicated that the differences in the mean levels of household income were statistically significant across the four groups: younger (ages 21-35); Baby Boomer (ages 36-55); near-retiree (ages 56-64); and elderly (65 and over). While the Baby Boomer homeowners indicated the highest income level ($91,354), the elderly homeowners had the lowest income level ($49,528). The near-retiree homeowners reported a little lower level of income ($85,386) than the Baby Boomer homeowners. As for the mean levels of the housing value, the near-retirees indicated the highest housing value ($240,074) among the four groups, while the Baby Boomer category owned the next highest housing value ($229,773). It seems that middle-aged households such as Baby Boomers and near-retirees own relatively expensive homes compared

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Table 2
Profiles of Home Equity Loan Users and Non-Users among Baby Boomer Homeowners

Variables	Users (n=813)	Non-Users (n=15,328)	T-test	Chi-square
Economic characteristics				
Household income in $s	132,875	89,152	10.72***	
Presence of investment income				
% Yes	1.5	.9		3.03
% No	98.5	99.1		
Number of mortgages	1.9	1.2	-36.10***	
Amount of 1st mortgages in $s	128,628	113,954	-4.48***	
Annual housing costs in $s	1,316	1,062	-8.80***	
Housing market value in $s	264,038	227,244	-5.12***	
Time lived in unit in years	12	9	10.81***	
Socio-demographic characteristics				
Education level				
Less than high school	2.8	14.4		
High school graduate	17.5	23.9		
Some college education	32.2	27.7		130.53***
College graduate	31.0	20.8		
Advanced degree	16.5	13.2		
Marital Status				
Married	77.7	61.6		85.76***
Non-Married	22.3	38.4		
Race				
White	88.3	73.1		92.70***
Non-White	11.7	26.9		
Region				
Northeast	23.5	26.2		
Midwest	29.5	20.5		56.35***
West	28.3	25.8		
South	18.7	27.5		

* $p < .05$ ** $p < .01$ *** $p < .001$

to younger and elderly homeowners. Also, the near-retirees had more income such as income from rental unit and interest income from savings account than other three groups. However, the amount of the 1st mortgage loan was the highest for the Baby Boomer group ($115,026). From these findings, it can be summarized that Baby Boomer homeowners had higher incomes and higher mortgage loan amount borrowed than younger, near-retiree, and elderly homeowners.

On the other hand, the χ^2-test results indicated that the higher proportion of the near-retiree group reported income from rental units and income from business, farm, or ranch, whereas a higher proportion of the elderly group reported income from such income sources as interest from saving accounts and dividends from stocks. Table 3 also shows that while 24.5% of the Baby Boomer homeowners and 26.0% of the near-retiree homeowners had more than two mortgage loans, 19.7% of the younger homeowners and 14.3% of the elderly homeowners reported more than two mortgage loans. It can be said that the middle-aged Baby Boomer and near-retiree homeowners had more number of mortgages compared to younger and elderly stages of life cycle. Moreover, compared to the younger and elderly homeowners, both the Baby Boomer and near-retiree homeowners owned more expensive homes and reported higher annual housing costs.

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Table 3
Economic Profiles for Homeowners by Life Cycle Stages

Variables	Younger age 21~35 (n=11,954)	Baby Boomer age 36~55 (n=16,141)	Near-retiree age 56~64 (n=4,490)	Elderly age 65 and over+ (n=6,666)	Test Statistic
Home equity loan:					
User	2.4%	5.0%	5.7%	2.3%	χ^2=215.54***
Non-User	97.6%	95.0%	94.3%	9.7%	
Household income in $s	$70,335	$91,354	$85,386	$49,528	F=352.53***
Income sources:					
Rent income					
Yes	4.8%	6.5%	9.7%	8.6%	
No	95.2%	93.5%	90.3%	91.4%	χ^2=174.49***
Interest from savings, CD, etc.					
Yes	23.0%	31.8%	41.7%	54.8%	
No	77.0%	68.2%	57.3%	45.2%	χ^2=2114.98***
Dividends from stock					
Yes	12.4%	19.1%	28.2%	31.0%	
No	87.6%	80.9%	71.8%	69.0%	χ^2=1120.96***
Income from business/farm					
Yes	6.8%	10.6%	11.7%	6.1%	
No	93.2%	89.4%	88.3%	93.9%	χ^2=232.95***
Housing market value in $s	$196,631	$229,773	$240,074	$198,912	F=75.53***
Annual housing costs	$887	$1,078	$1,080	$962	F=135.76***
Original amount of 1st mortgage	$110,637	$115,026	$104,000	$88,991	F=75.84***
Mean number of mortgages	1.2	1.3	1.4	1.2	F=33.17***
Number of mortgages—percentage distribution					
One	77.5%	72.5%	69.5%	82.6%	
Two	19.7%	24.5%	26.0%	14.3%	
Three	2.7%	2.7%	4.2%	2.7%	χ^2=156.33***
Four	0.1%	0.3%	0.1%	0.2%	
Five	0.0%	0.0%	0.1%	0.2%	

*p<.05 **p<.01 ***p<.001

Logistic Results

The dependent variables in the logistic regression models measure the occurrence of taking out home equity loans. Table 4 shows the results from the Model 1 and Model 2. Since understanding the relationship between the life cycle stages and home equity borrowing was one of the objectives of this study, the effect of life cycle stages of homeowners on the likelihood of home equity usage was estimated by using the total sample (Model 1). In addition, Table 4 shows the factors that explain the occurrence of taking out home equity loans among Baby Boomer homeowners (Model 2). As for the significant predictors of home equity borrowing, the results of the logistic regression from both Model 1 and Model 2 indicated that income, presence of investment income, number of mortgages, years lived in the housing unit, education, race, and region were all statistically significant in predicting home equity borrowing.

Total sample. The life cycle income hypothesis posits that the middle-aged households are more likely to save enough to pay off debts as well as to save for their retirement. This study hypothesized that Baby Boomer homeowners are more likely to borrow against the equity in their homes than those in the younger, near-retiree, and elderly stages of the life cycle. The results of the Model 1 indicate that the effect of life cycle stage was significant and negative, indicating that Baby Boomer homeowners were more likely to use home equity loans than were those homeowners in the younger, near-retiree, and elderly life cycle stages. Thus, the hypothesis was supported. The odds ratios showed that compared to Baby Boomer homeowners, younger homeowners, near-retiree homeowners, and elderly homeowners were 77%, 70%, and 59%, respectively, less likely to borrow against their homes.

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Table 4
Logistic Regression Results for Home Equity Borrowing

Variables	Model 1: All Homeowners				Model 2: Baby Boomer Homeowners			
	Parameter Estimate	P-value		Odds Ratio	Parameter Estimate	P-value		Odds Ratio
Life Cycle Stages of Homeowners								
Boomer -- reference category								
Younger	-0.2674	0.0012	***	0.77				
Near-retiree	-0.3612	0.0006	***	0.70				
Elderly	-0.5262	0.0006	***	0.59				
Economic Characteristics								
Income	0.000004	0.0001	***	1.00	0.000008	0.0001	***	1.00
Income squared	0.000000	0.0001	***	1.00	0.000000	0.0001	***	1.00
Having investments	0.3873	0.0001	***	1.47	0.3576	0.0003	***	1.43
Number of mortgages	2.1165	0.0001	***	8.30	2.2520	0.0001	***	9.51
Amount of 1st mortgage	0.000001	0.3275		1.00	0.000002	0.0050	**	1.00
Annual housing cost	0.000095	0.0188	*	1.00	0.000105	0.1087		1.00
Housing market value	0.000000	0.1029		1.00	-0.000001	0.0041	**	1.00
Time lived in unit in years	0.0276	0.0001	***	0.97	0.0224	0.0001	***	0.98
Socio-Demographic Characteristics								
Education level:								
Less than high school-- reference category								
High school graduate	1.0306	0.0001	***	2.80	0.7593	0.0082	**	2.14
Some college education	1.1752	0.0001	***	3.24	0.8612	0.0018	**	2.37
College graduate	1.2753	0.0001	***	3.58	0.9151	0.0011	***	2.50
Advanced education	1.1738	0.0001	***	3.23	0.7031	0.0152	*	2.02
Marital status:								
Married-- reference category								
Non-Married	-0.0325	0.6642		0.97	0.0857	0.4704		1.09
Race:								
Non-White-- reference category								
White	0.8581	0.0001	***	2.36	0.8092	0.0001	***	2.25
Region:								
South -- reference category								
Northeast	-0.0989	0.2853		0.91	-0.1406	0.3316		0.87
Midwest	0.5293	0.0001	***	1.70	0.3403	0.0127	**	1.41
West	0.5628	0.0001	***	1.76	0.3976	0.0044	**	1.49
Intercept	46.3647	0.0001	***		35.8519	0.0023	**	
Log Likelihood		9768.746				3377.251		
χ^2		3705.345***				1348.500***		

*p<.05,**p<.01,***p<.001

As hypothesized, as the income level increased, the likelihood of borrowing against the equity in their homes increased. This study also found a curvilinear relationship between income and home equity borrowing. In this study, it was hypothesized that if a homeowner had investment income from stocks, bonds, mutual funds and other equities, the homeowner would be more likely to take out a home equity loan compared to those without investment income. The hypothesis was supported, indicating that the households with investments are more likely to use home equity compared to those without investment income. From this finding, it is speculated that since home equity loans typically offer lower interests than other financial products, the households with investment income are more likely to take advantage of this loan and therefore, are able to get some things they need. It is possible that households with investments may use home equity loans instead of selling stocks due to the likelihood of the stocks having reduced value from when they were purchased. That is, households with investments may have decided to hold their stocks long term in hopes that stock prices will increase.

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The number of mortgages a household is currently carrying was hypothesized to be positively related to the individual's decision to borrow from its home's equity. The hypothesis was supported, indicating that as the number of mortgages increased, the households were more likely to take out home equity loans. As expected, homeowners with high housing costs were more likely to use home equity loans. As the years of living in the unit increased, the likelihood of borrowing against the home increased. It is speculated that those Baby Boomers who have lived a relatively longer period in the unit could build more equity than those who have lived a shorter period, and are, therefore, more likely to take out that equity.

Education level of homeowners was also expected to have a positive relationship with home equity borrowing and the result supported the hypothesis. Thus, it can be said that those with higher levels of education were more likely to borrow against the equity in their homes than those with less than a high school education. It was revealed that White homeowners were more likely to use home equity than non-White homeowners. The finding supported the hypothesis and this result is consistent with that of a previous study (Salandro & Harrison, 1997). In the model, the homeowners living in the South was the reference group. Two variables (the Midwest and West) were significant and positive, indicating that homeowners living in the Midwest and in the West were more likely to use home equity loans than were those living in the South.

Boomer sample. Table 4 presents that household income was positively associated with home equity borrowing among Baby Boomer homeowners. The curvilinear relationship between income and home equity borrowing was also found. The odds ratios showed that those having income from investments were 43% more likely to borrow against the equity in their homes than Baby Boomer homeowners who did not have investment income. As the number of mortgages increased, Baby Boomer homeowners were 851% more likely to borrow against the equity in their homes. As the amount borrowed on the 1st mortgage increased, Baby Boomer homeowners were more likely to borrow against the equity in their homes. As expected, Baby Boomer homeowners who had more expensive homes were more likely to borrow against the equity in their homes. Moreover, as the length lived in the unit increased, the likelihood of borrowing against the equity in their homes also increased. For example, Baby Boomer homeowners who had recently moved into the unit were 98% less likely to borrow against the equity in their homes.

The odds ratios showed that as the education level of Baby Boomer homeowners increased, the likelihood of borrowing against the equity in their homes increased. It was also found that compared with non-White, Whites were 125% more likely to borrow against the equity in their homes. This study found that compared with Baby Boomer homeowners who resided in the South, those who lived in the Midwest and in the West were 41% or 49%, respectively, more likely to borrow against the equity in their homes.

Conclusion and Implications

Using data from the 2001 American Housing Survey, this study examined how Baby Boomers utilized home equity loans and investigated the correlates of home equity usage among Baby Boomer homeowners. The descriptive statistics indicated that 5% of the Baby Boomer homeowners used home equity loans; therefore, it appeared that a small portion of the Baby Boomer homeowners utilized home equity loans. However, the results of the logistic regression analysis indicated that holding others constant, Baby Boomers (age 36-55) were more likely to use home equity loans than those in the younger (age 21-35), near-retirees (age 56-64), and elderly (age 65 and over) stages of the life cycle.

Home equity has been the largest component of the typical household's net worth. The trends–rising rates of homeownership, home equity growth in line with inflation-are likely to continue into the near future. As home equity grows over time as home values appreciate; therefore, homeowners could use a margin account (home equity or a line of credit back by securities) in order to buy stocks or to invest in more real estate. Two major advantages to borrowers that home equity loans have over other types of debt is a lower interest rate and tax deductions. However, the biggest drawback of a home equity loan is the fact that the home is on the line and homeowners could lose their homes if they default on their payments. Further, the borrowing against the equity could reduce the retirement funds available in later life. Thus, financial planners or counselors working with families or individuals need to educate potential borrowers in their middle age of life-cycle stage to understand how home equity loans work and how they can effectively use home equity as a tool that would help build wealth, and further to recognize predatory lending problems in the financial market rather than the opposite.

A variety of factors including age of homeowner, household income, presence of investment income, number of mortgages, amount of the 1st mortgage, market value of the unit, length lived in the unit, education, race, and region influenced home equity borrowing. Specifically, the determinants of the occurrence of taking out home equity loans can provide ideas for developing effective programs and financial

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counseling that are specifically targeted for demographic groups such as those homeowners in the middle-aged life cycle stage, the highly educated, the Whites, and the higher-income households.

This study emphasizes the Baby Boomers' home equity borrowing. Descriptive statistics indicated that, compared to those who did not use home equity loans, those who used home equity loans reported more number of mortgages, had higher income, had higher levels of education, and owned relatively expensive homes. Knowing the profile of home equity users among Baby Boomer homeowners can be useful for developing financial education programs for the Baby Boom generation, and the findings of this study further can be used by financial planners and counselors who would find this profile useful in a clinical setting.

Consumers are constantly bombarded with advertisements to use up their home equity. Thus, consumers might feel that a home equity loan is the best option for debt reduction or future planning. However, the combination of higher home equity value, tax advantages, economic volatility, and increased availability of home-secured loans from traditional and non-traditional lenders (e.g., commercial banks and sub-prime lenders) warrants a watchful eye on the financial well-being of American households. Regardless of whether they are in middle-aged or younger- or elderly-life cycle stages, it is important for financial planner and educators to continuously provide the educational basics of home equity loans. Teaching homeowners about how to manage their resources, such as home equity loans, could be an important subject for financial counselors and educators.

In educating homeowners or potential borrowers, the following suggestions could be recommended for financial professionals: 1) Financial planners and counselors might implement the wise use of home equity loans in estate planning and provide several examples that show effective usage of home equity by some homeowners; 2) Consumer credit counselors could utilize profiles of home equity borrowers to warn users and potential users about the dangers of home equity default; 3) Consumer educators should develop and conduct educational sessions regarding dissaving habits of well-to-do Americans who could have the potential of giving their offspring the wrong ideas about financial management; 4) Extension specialists might set up classes for the middle-aged individuals (such as the Baby Boom generation) and help them understand the possible economic impact of home equity usage for current consumption on the financial wellness in later life; and 5) Banks and Credit Unions who are community conscious could provide home equity borrowers with short instructional videos on the advantages and disadvantages of home equity loans.

These findings have also policy implications related to the increasing demand for home equity lending and borrowing. Policymakers need to provide consumer protection in mortgage finance markets and should be aware of the impacts of extensive home equity usage on household financial well-being as well as on the economy as a whole. Lenders use incentives to entice homeowners into borrowing. An increasing number of homeowners find themselves dependent on their available resources, that is, their home equity. However, home equity is viewed as the cornerstone of retirement wealth. Limitations on the use of home equity loans and encourages effective ways of utilizing this option should be created for future financial wellness.

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