

# Determinants of Housing Down Payment Sources Among Baby Boomer Households in the U.S.

Yoon G. Lee\*, Bonny Lewellyn Steele<sup>1</sup>

Associate Professor, Dept. of Family, Consumer & Human Development, Utah State University, USA

<sup>1</sup>Graduate Student, Dept. of Family, Consumer & Human Development, Utah State University, USA

**Abstract :** Using data from the 2001 American Housing Survey, the purpose of this study is to profile the economic and socio-demographic characteristics of baby boomers according to housing down payment sources and to identify determinants of housing down payment sources among baby boomers. Results of the multinomial logistic regression analysis indicated that household income, housing value, age, education, gender, marital status, race, and geographic region were all significant determinants of housing down payment sources among baby boomers. Identification of factors affecting the occurrence of borrowing for housing down payment would aid in the development of financial education programs for baby boomer households.

**Key Words :** baby boomer, financial education, housing down payments, saving behavior

## I. Introduction

A growing number of households today own homes. Trends in overall homeownership rates in the U.S. increased over the last decade from 64.2% in 1992 to 67.4% in 2005 (U.S. Bureau of the Census, 2006). Along with the low interest rates and low unemployment during the 1990s, innovations in mortgage lending have contributed to the rise in homeownership of lower income families and consequently higher national mortgage default rates (The State of the Nation's Housing, 2002). Housing affordability has long been a subject of concern in the U.S. as many homeowners are in financial trouble because they cannot afford the homes that they have based on the housing affordability guidelines. The Department of Housing and Urban Development's generally accepted definition of affordability is for a household to pay no more than 20% of its annual

income on housing. Families are considered cost-burdened and may have difficulty affording other necessities when they pay more than 30% of their income for housing (Department of Housing and Urban Development, 2004).

Some people are more likely to borrow for down payments than others. When homebuyers borrow a down payment, they have a higher burden for their housing payment. The higher ratio of monthly housing payment to monthly income could result in insufficient financial resources for living which in turn could cause the households to incur more debts, consequently leading to home foreclosure and other financial consequences of defaulting on their loans. If we know who the people are that borrow for housing down payment, we can teach them about the negative implications of borrowing a down payment.

Baby boomers have affordability needs just like the rest of the population. As the baby boom generation -

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\*Corresponding Author: Yoon G. Lee, Dept. of Family, Consumer & Human Development, Utah University, 2905 Old Main Hill, Logan, Utah 84322-2905, USA. Tel: +1-435-797-1555 Fax: +1-435-797-3845 E-mail: yoonlee@cc.usu.edu

those people born between 1946 and 1964 - ages, the number of older persons aged 65 and above is projected to rise to 80 million by 2040 (U.S. Census Bureau, 2005). Borrowing money or having no down payment in the purchase of their home could increase the financial burden for boomers. Understanding of who borrows or puts no money down for housing down payments among baby boomers may prove essential because, again, such families might be at risk in their old age as high monthly mortgage payments would not allow them to prepare enough for their future retirement funds.

There are several studies that examine the savings behavior and financial wellness of baby boomer households. However, little has been done to understand how households, especially baby boomer households, fund the down payment on the purchase of a home. Using data from the 2001 American Housing Survey, the purpose of this study is to profile the economic and socio-demographic characteristics of baby boomer households by isolating their housing down payment sources and to identify the determinants of their housing down payment sources. Financial planners and counselors would benefit from these profiles because understanding the likelihood of baby boomers to fund down payments would offer more information for how financial professionals can financially advise their clients regarding purchasing a home.

## **II. Related Literature and Conceptual Framework**

### **1. Population aging and financial wellness of baby boomers**

As baby boomers grow old and reach retirement ages, the elderly population will rapidly increase. It is noted that by 2025 nearly one in five Americans will be 65 years old or older compared to one in eight today (Munnell, 2004a). Older Americans' economic status has improved dramatically in the last forty years, but

poverty still exists among older individuals. Additional concerns with the aging population are reflected in long term care. As the baby boom generation ages there will be an increased demand for long term care services that may present challenges for federal and state budgets (Walker, 2002). It is clear that the aging of the baby boom population is an important issue. Baby boomers that are not prepared for retirement and have not established adequate savings to fund their health care will be financially distressed in their old age.

Baek and DeVaney (2004) examined financial wellness of baby boomers using financial ratios. Financial ratios are indexes that can measure financial strength or progress over time. For example, the debt-to-asset ratio is calculated by dividing the total amount of debt by the value of all assets. 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. Boomers who met at least one of these criteria were considered financially well. More than half of the baby boomers were financially well. Financially-well baby boomer households were more likely to be married, have a higher level of education, income, and homeownership than their less financially well-off counterparts. Financially-well baby-boomer households also had more favorable attitudes toward taking risk in making saving and investment decisions, using credit cards for convenience, saving, and spending less than their income.

Gist, Wu, and Ford (1999) indicated that the primary reason for savings among baby boomers was precautionary saving (29%). Twenty-three percent of the baby boomers reported the primary reason for saving as retirement, and 22% of them reported investment saving. Furthermore, 46% of the baby boomers saved regularly for retirement, 24% of them didn't save at all, and the rest of them saved only occasionally. In terms of risk, 46% of the total population reported being unwilling to take any investment risk at all. Boomers who were married, white, college educated, had higher incomes, and had children accumulated more wealth

than unmarried, minority, lower-income boomers with less education and no children.

Retirement is an important reason for saving among baby boomers. DeVaney (1995) examined factors related to retirement preparation of older and younger baby boomers. Having investment assets greater than 25% of net worth was the guideline used to determine if an individual was prepared for retirement. Results indicated that being White and expecting a large inheritance were positively related to meeting the guideline of retirement preparation for younger boomers. DeVaney (1995) indicated that when boomer heads were in good health, male, and had pension coverage, they had an increased likelihood of having investment assets greater than 25% of their net worth. It was noted that male-headed households were more likely to be prepared for retirement than female-headed households. In addition, as age and education increased for both older and younger baby boomers it became more likely that they would meet the guideline (having investment assets greater than 25% of net worth) for retirement preparation.

## **2. Household saving and housing down payments**

Policy makers are concerned about declines in personal savings rates because Americans may not be saving enough for retirement or financial emergencies. The national savings rate of disposable personal income dropped from 3.4% in 2001 to 1% in 2004 (U.S. Bureau of Economic Analysis, 2006). Savings motives discussed by Browning and Lusardi (1996) include: the precautionary motive; life-cycle motive; the intertemporal substitution motive (to enjoy interest and appreciation); the improvement motive (to enjoy a gradually increasing expenditure); the independence motive (to enjoy a sense of independence); enterprise motive (business projects); bequest motive, avarice motive (to satisfy pure miserliness); and the down payment motive. It is understood that households are motivated to save for a down payment on a home purchase in addition to many other

savings motives. Because there are several reasons for households to be motivated to save, households may have to allocate their savings to limited areas. One savings motive may take precedence over another depending on the financial goals of the household.

Chang (1994) suggested that a household's saving represents a decision to either increase asset accumulation or to consume less of current income in order to meet household financial goals. In Chang's (1994) research on household saving behavior and factors related to it, saving was defined as the net increase in the amount of wealth between two survey dates. Results indicated that income was positively related to non-housing asset accumulation. Because initial non-housing assets were negatively related to non-housing asset accumulation, the author suggested that households with higher non-housing assets may have less incentive to save. Those who expected to receive inheritances accumulated more than those who did not. Those with a high level of risk tolerance accumulated more non-housing wealth than those with low risk tolerance.

Engelhardt (1994) examined renters' decisions to save for home purchase in response to house prices. When house prices were high, renters were less likely to allocate savings for a down payment. This indicates that down payments may create barriers to homeownership because the higher the house price, the greater the amount of the down payment. Consumers respond to these barriers by changing the length of time and rate of savings before purchase and/or the size of house to be purchased. High cost housing and large down payments may discourage households from saving for a home (Engelhardt, 1994).

Mayer and Engelhardt (1996) explored the role of gifts in helping first-time buyers purchase homes. They found that when first-time home buyers were financially constrained, there was an increased reliance on gifts for funding the home purchase. First-time homebuyers with higher incomes and greater wealth were less likely to receive a financial gift. It was also found that first homebuyers with higher incomes tended to have a higher

percentage of the down payment from their own savings.

Engelhardt (1996) examined the sources of down payments and found that the major source was from a household's own savings. He found that on average, 4 percent of first-time homebuyers financed their down payments entirely from funds from relatives; however, 20% of first-time homebuyers received some type of help from relatives. When help was received from relatives, the help is substantial—an average 50% of the down payment. While many households have access to gifts or loans to overcome down payment constraints, the vast majority are potentially truly constrained by down payments. Engelhardt (1996) also discussed that savings for down payment has an impact on consumption. The results of this study indicated that households experienced 10% higher growth in real consumption across periods of home purchase than across periods without purchases.

Research on down payments is somewhat limited as it applies to baby boomers. Understanding down payment funding sources and borrowing behavior is important especially for baby boomers that are purchasing homes. Baby boomers who borrow money for down payments may be considered risk takers and their borrowing behavior may reflect a lack of financial preparedness for retirement. Financial stability of baby boomers in retirement is important because there will be increased demand to provide services. There is limited literature on savings and borrowing behavior of baby boomers. While understanding the determinants of housing down payment sources among baby boomers, this study contributes to the literature on saving behaviors of baby boomers and their financial preparation for retirement.

### **3. Conceptual framework**

The lifecycle saving model provides a guideline for understanding baby boomers' saving or borrowing behavior for their housing down payment. The lifecycle saving model has been widely used to explain household inter-temporal use of resources, stating that since

households take a lifetime perspective on their consumption, the household borrows during the early years, saves during the middle high earning years, and uses accumulated assets during retirement years. While allocating available resources in this way, households attempt to maintain a constant level of consumption activity throughout their life cycle (Ando & Modigliani, 1963).

The life-cycle saving model posits three stages of the life-cycle in which households attempt to maximize satisfaction: young, middle-aged and retired. At each stage the household income is expected to differ while consumption is expected to remain constant over time. In the early years of the cycle the household borrows money in order to reach the desired spending level. The middle high earning years create opportunities to save excess income. Finally, the retirement years consist of spending behavior consistent with the other two stages of the life cycle (Chen & Jensen 1985). In this conceptual framework, younger households will borrow money in hopes of paying it back in the future; middle-aged households such as baby boomer households will save more due to their higher earnings and future retirement plans; and older households will consume the assets, such as savings and investments, which they have accumulated over time.

Based on life cycle income hypotheses, it is expected that baby boomer households are less likely to borrow for housing down payments, but are more likely to save. Based on findings in existing saving and borrowing literature, it is hypothesized that high income, educated, male, married, and White/Caucasian boomers are less likely to borrow for housing down payment than their counterparts.

## **III. Methods**

### **1. Data and sample**

Data for the study are drawn from the 2001 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 three years 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 geography, housing unit, housing quality, housing cost, housing composition, neighborhood, utilities, and recent movers. The American Housing Survey (AHS) also contains detailed information on demographics, income, finances, number of mortgages, and home equity loan balances. Since the purpose of this paper is to profile the economic and socio-demographic characteristics of baby boomers for down payment sources, those people born between 1946 and 1964 whose ages were between 36 and 55 years old in 2001 and those who are home owners were selected as the sample of this study.

Among these 10,835 baby boomer home-owners, there were four groups based on how they funded a down payment when they purchased their homes. They are: 1) those who used the sale of home or investment ( $n = 3,636$ ); 2) those who used their savings or cash-on-hand ( $n = 6,121$ ); 3) those who used the inheritance of gifts ( $n = 289$ ); and 4) those who borrowed or put zero down ( $n = 789$ ).

## 2. Analysis procedures

Percentages and means were calculated to obtain the descriptive information that portrays income, housing prices, housing loan amounts, age, gender, education, marital status, race, and region of the baby boomer households in the study. The differences among four groups in regard to their housing down payment sources were examined by F-tests and Chi-square tests. To investigate factors that are associated with the probability of the housing down payment sources, multinomial logit regression analysis was employed.

The multinomial logit approach was appropriate for

the analysis because the dependent variable – housing down payment sources includes four dummy categorical variables: 1) used sale of home or investment; 2) used saving or cash-on-hand; 3) used inheritance or gifts; and 4) borrowed or put zero down. To understand the determinants of the probability of the housing down payment sources, the probability of use of sale of home or investment was employed as the omitted category. SAS software, version 9.1, was used for statistical analyses.

## 3. Variables

The dependent variable in the multivariate analysis represents baby boomers' housing down-payment sources. The independent variables of interest include economic and financial characteristics (household income, housing current market price, amount of loans when acquired) and socio-demographic characteristics (age, education, gender, marital status, race, and region). Table 1 shows how these independent variables were measured in the multivariate analysis.

To identify interaction effects of variables, this study also includes interaction terms of income and regions in the empirical model. Income can vary by region of the country; therefore, while including interaction terms between income and region, the differences in income by region can be accounted for. Thus, the explanatory variables in the multinomial logit analysis were household income, housing price, mortgage amount, age, education (low education, high education), marital status (non-married, married), race (Whites, Blacks, other race), region of country (Northeast, Midwest, South, and West), and interaction variables (income and Northeast, income and Midwest, and income and West). The effect of these independent variables on the likelihood of utilizing savings, utilizing gifts, and borrowing or putting zero housing down payment over that of selling home or using an investment was investigated among baby boomer households.

&lt;Table 1&gt; Measurement of variable and profile of sample

(N = 10,835)		
Variables	Measurement	% / Mean (Median)
<b>Dependent variable</b>		
Sources of down payment		
(Sale)	1 if sell home or investment, 0 if otherwise	33.5%
Savings	1 if savings or cash on hand, 0 if otherwise	56.5%
Gifts	1 if inheritance or gifts, 0 if otherwise	2.7%
Borrow or no down	1 if borrow or zero down, 0 if otherwise	7.3%
<b>Independent variables</b>		
<i>Continuous Variables</i>		
Income	Total household income in 2001 (\$)	109,367 (75,230)
House price	Current market value of unit (\$)	233,567 (165,000)
Amount of loans	Amount of loans when acquired (\$)	116,421 (99,000)
Age	Age of householder (# of years)	47.3 (46.0)
<i>Categorical Variables</i>		
Education:		
(Low education)	1 if less than high school or high school education, 0 if otherwise	9.9%
High education	1 if some college, college graduates, advanced degree, 0 if otherwise	90.1%
Gender:		
(Male)	1 if male, 0 if otherwise	66.3%
Female	1 if female, 0 if otherwise	33.7%
Marital status:		
(Married)	1 if married, 0 if otherwise	71.1%
Non-married	1 if non-married, 0 if otherwise	28.9%
Race:		
White	1 if white, 0 if otherwise	80.1%
Black	1 if black, 0 if otherwise	11.2%
(Other race)	1 if Hispanics and others, 0 if otherwise	8.7%
Region:		
Northeast	1 if living in Northeast, 0 if otherwise	25.4%
Midwest	1 if living in Midwest, 0 if otherwise	23.2%
West	1 if living in West, 0 if otherwise	24.4%
(South)	1 if living in South, 0 if otherwise	27.1%

Note: ( ) indicates the reference group.

## IV. Findings

### 1. Demographic profile of baby boomer homeowners

<Table 1> presents information on financial and socio-demographic characteristics for total baby boomers (N = 10835) in the study. While about 57% of the baby boomers used savings or cash-on-hand for housing down payments, 33.5% of boomers reported

sale of home or investment as housing down payment sources. It is also noted that 7.3% of boomers reported borrowing or putting zero down as their housing down payment category, whereas 2.7% of boomers reported inheritance or gifts as their housing down payment sources. The average household income of baby boomer households was \$109,367, while their median income was \$75,230. The average loan amount of the baby boomers when these were acquired was \$116,421, while the average value of their housing was \$233,567.

&lt;Table 2&gt; A Comparison of Homeowners by Down Payment Sources

(N = 10,835)

Variables	Sale of home or investment (n=3,636)	Savings or Cash on hand (n=6,121)	Inheritance or Gifts (n=289)	Borrowers or No down payers (n=789)	Test statistics
Income	\$137,976 <sup>1</sup> (90,000) <sup>2</sup>	97,840 (70,000)	83,621 (66,000)	76,380 (60,000)	F = 128.31***
House price	296,875 (210,000)	206,905 (145,000)	195,752 (130,000)	162,515 (125,000)	F = 209.73***
Amount of loan	136,625 (118,400)	107,765 (90,000)	95,046 (82,000)	93,525 (81,972)	F = 111.55***
Age	48.7 (48.0)	46.8 (45.0)	46.7 (45.0)	45.7 (45.0)	F = 41.37***
Education:					
Low education	184 (17.2) <sup>23</sup>	757 (70.5)	20 (1.9)	112 (10.4)	$\chi^2 = 156.39^{***}$
High education	3452 (35.4)	5364 (54.9)	269(2.7)	677 (7.0)	
Gender:					
Male	2502 (34.9)	3987 (55.5)	153 (2.1)	537 (7.5)	$\chi^2 = 38.12^{***}$
Female	1134 (31.0)	2134 (58.4)	136 (3.7)	252 (6.9)	
Marital status:					
Married	2843 (36.9)	4167 (54.1)	178 (2.3)	514 (6.7)	$\chi^2 = 142.46^{***}$
Non-Married	793 (25.3)	1954 (62.4)	111 (3.5)	275 (8.8)	
Race:					
White	3270 (37.7)	4596 (52.9)	246 (2.8)	571 (6.5)	$\chi^2 = 386.97^{***}$
Black	149 (12.3)	891 (73.5)	27 (2.2)	145 (12.0)	
Other race	217 (23.1)	634 (67.5)	16 (1.7)	373 (7.8)	
Region:					
Northeast	782 (28.5)	1743 (63.4)	80 (2.9)	143 (5.2)	$\chi^2 = 158.58^{***}$
Midwest	952 (38.0)	1357 (54.1)	39 (1.6)	160 (6.3)	
West	936 (31.8)	1626 (55.3)	73 (2.5)	304 (10.3)	
South	966 (36.6)	1395 (52.8)	97 (3.7)	182 (6.9)	

Note: <sup>1</sup>Mean and <sup>2</sup>median values for continuous variables are presented. <sup>3</sup>Row percentages for categorical variables are presented.

<sup>+</sup> p < .1 \* p < .05 \*\* p < .01 \*\*\* p < .001

The average age of baby boomers was approximately 47. The majority of baby boomers (approximately 90%) had more than a high-school-graduate education. While 66% of the sample in this study were males, 34% of them were females. For the total baby boomer households, the percentage of married households were 71%, while non-married were approximately 29%. About 80% of the boomers in the study were Whites, 11% Blacks, and about 9% Hispanics/others. Roughly equivalent portions of the total baby boomer sample reported they were living in the West (24.4%); the South (27.1%); Northeast (25.4%); and the Midwest (23.2%).

## 2. Financial and socio-demographic profile

<Table 2> compares the differences in financial and socio-demographic characteristics by funding resources for down payments among baby boomers. F-test results indicate differences in down payment sources with respect to income, house value, mortgage loans, age, gender, marital status, race, and region. Those who borrowed or put no money down for a housing down payment reported the lowest amount (\$76,380) of household income among the four groups, whereas

those who sold their home or used an investment as a down payment reported the highest amount (\$137,976) of household income.

Borrowers for housing down payment indicated the lowest value (\$162,515) of their current housing among the four groups; however, sellers (of a home) for a housing down payment reported the highest value (\$296,875) of their current housing. As can be seen in <Table 2>, those who sold their homes or used investment money as a down payment demonstrated the highest loan amount (\$136,625) when they purchased their homes, while the mean mortgage amount (\$93,525) was the lowest for the down payment borrowers among the four groups.

In their socio-demographic profiles, those who sold their homes or utilized investment money for down payment were significantly older than the other three groups, and a larger proportion of the seller group had a higher education (95%) than the other three groups. Also, a larger proportion of the seller group was males (69%), married (78%), and non-Black (96%) when compared to the other groups. In contrast, those who borrowed money for down payment were significantly younger, Black and non-married, and a larger proportion of the down-payment borrowers had low education. For those who received gifts for housing down payment, receivers were relatively young, had a relatively high education, were more often female and White, compared to those who saved for a down payment and those who borrowed for a housing down payment.

A larger portion of non-married individuals used an inheritance or gifts for their down payment than any other source. In the correlates of housing down payment sources and geographic regions, there were a larger proportion of baby boomer sellers (of their homes) in the Midwest, a larger proportion of baby boomer savers in the Northeast, a greater proportion of baby boomer gift-receivers in the South, and a larger proportion of baby boomer borrowers in the West.

### **3. Multinomial logit estimates of housing down payment sources**

<Table 3> presents the estimates of a probability model with baby boomers that sold their homes or used an investment as the omitted category. Table 3 indicates the determinants of housing down payment sources among baby boomers. Variables such as household income, housing price, mortgage amounts, age, education, gender, marital status, race of baby boomers, and geographic location of their households as well as the interaction terms between household income and regions, were significant predictors of baby boomers' housing down payment sources when they purchased homes.

The household income and housing price negatively affected the probability of utilizing savings or cash-on-hand over that of selling a home or using an investment. As baby boomers' ages increased, the probability that boomers used savings or cash-on-hand decreased. It was also found that those with a high education and those who are White negatively influenced the probability of baby boomers utilizing savings or cash-on-hand over that of selling a home or utilizing an investment. However, being non-married positively influenced the probability of boomer utilizing savings or cash-on-hand for housing down payment over that of selling home or using an investment. As for the regions, the results indicated that compared to those living in the South, those baby boomer home owners living in the Northeast were more likely to use savings or cash-on-hand over that of selling home or using an investment. Table 3 also shows that the interaction term between income and Northeast was significant and positive. From this finding, it can be said that when household income interacted with the dummy variable for the Northeast, the probability of utilizing savings or cash-on-hand over that of selling a home or using an investment increased.

The mortgage amount negatively influenced the probability of baby boomers utilizing gifts from relatives over that of selling a home or using an investment. As



<Table 3> Multinomial Logit Estimates of Housing Down Payment Sources<sup>1</sup>

Variable	(N=10,835)		
	Savings or Cash on hand (n=6,121)	Inheritance or Gifts (n=289)	Borrowing or Zero Down (n=789)
	Estimate (S.E.)	Estimate (S.E.)	Estimate (S.E.)
<i>Continuous Variables<sup>2</sup></i>			
Income	-0.009 (0.003) **	-0.006 (0.016)	-0.047(0.013) ***
House price	-0.005 (0.001) ***	-0.005 (0.005)	-0.021 (0.004) ***
Mortgage loan amount	-0.004 (0.003)	-0.033 (0.014) **	0.003 (0.009)
Age	-0.014 (0.002) ***	-0.024 (0.009) **	-0.011 (0.006) *
<i>Categorical Variables</i>			
Education:			
(Low education)			
High education	-0.180 (0.048) ***	0.497 (0.279) +	-0.112 (0.131)
Gender:			
(Male)			
Female	-0.014 (0.032)	0.196 (0.1421)	-0.261 (0.095) ***
Marital Status:			
(Married)			
Non-married	0.106 (0.034) ***	0.314 (0.147) *	-0.006 (0.097)
Race:			
White	-0.208 (0.049) ***	0.648 (0.290) *	-0.230 (0.139) +
Black	0.055 (0.062)	0.344 (0.360)	0.245 (0.166)
(Other race)			
Region:			
Northeast	0.151 (0.056) **	0.551 (0.276) *	-0.315 (0.220)
Midwest	-0.025 (0.063)	0.654 (0.396) +	-0.309 (0.204)
West	-0.006 (0.059)	1.162 (0.273) ***	-0.396 (0.164) **
(South)			
<i>Interaction Variables:</i>			
Income*Northeast	0.008 (0.004) *	-0.018 (0.023)	-0.038 (0.026)
Income*Midwest	-0.003 (0.005)	-0.146 (0.058) **	-0.031 (0.026)
Income*West	0.008 (0.004)	-0.050 (0.026) *	0.042 (0.015) ***
Constant	0.517 (0.159) *	-3.456 (0.588) ***	-0.813(0.325) **
Log likelihood	-7454.23	-1022.82	-2055.35
Chi-square (df)	3792.49 (8586)	8409.29 (8586)	8227.53 (8586)

Note: <sup>1</sup>Sale of own home or investment (n=3,636) is the omitted category in the multinomial logit regression analysis.

<sup>2</sup>Continuous variables such as income, house price, and mortgage loan amount are recoded in 10,000 dollars.

+ p < .1 \* p < .05 \*\* p < .01 \*\*\* p < .001

baby boomers' ages increased, the probability that boomers used gifts decreased. Those with a high education as well as being non-married, and being White positively affected the probability of baby boomer home-owners utilizing gifts from relatives over that of selling home or using an investment. It was also found

that compared to those living in the South, baby boomer home-owners living in the Northeast, Midwest, and West were more likely to use financial gifts from relatives over that of selling a home or using an investment. However, when each of the regional dummy variables interacted with the household income, two

were found to have coefficients that were statistically significant and negative - income and Midwest, income and West. Thus, it can be said that when household income interacts with the dummy variable for the Midwest or West, the probability of using gifts over that of selling a home or using an investment decreased.

As household income and the value of housing increased, the probability that boomers were borrowing or putting zero down decreased. The older boomers were less likely to utilize gifts from relatives over that of selling a home or using an investment. It was found that being female and being White meant less likelihood of borrowing a housing down payment over that of selling a home or using an investment. It was also noticed that compared to those living in the South, baby boomer home-owners living in the West were less likely to borrow for their housing down payment over that of selling a home or using an investment. However, it is interesting to note that when the dummy variable for West interacted with the household income, the probability of borrowing or putting zero down payment over that of selling a home or using an investment increased.

From the results of the multinomial logit estimates, household income negatively affected the probability of utilizing savings and borrowings over that of selling a home or utilizing an investment among baby boomers. In other words, it can be said that overall, when income increased, baby boomer households were more likely to sell a home or use an investment to provide their housing down payment when they purchased homes. The older baby boomers were more likely to sell their home or use an investment over that of using savings or cash-on-hand to provide their housing down payment fund when they purchased homes.

Having high education positively affected the probability of the baby boomer home owners utilizing gifts to provide their down payment compared to those with selling own home or using an investment. Being non-married and being White positively affected the probability of baby boomer home owners utilizing gifts

to provide their housing down payment over that of selling home or using an investment. This result suggested that baby boomers with these socio-demographic characteristics were more likely to receive gifts for a down payment over that of selling home or using an investment. In addition, while including the interaction variables between income and regions in the multinomial logit model, how the differences in income by Northeast, Midwest, and West affected the probability of baby boomers' housing down payment sources was explored in this study.

## V. Summary and Conclusions

This is an exploratory study in which the profile of baby boomers according to their housing down payment sources is examined. Based on this study, 7.3% of the sample borrowed money for housing down payment. Some people incur more debt by borrowing money for a housing down payment: if households have higher percentage of monthly payment out of their monthly income, they could have a housing burden; consequently leading to possibly losing their home. This study found that borrowers for down payments tended to be younger, be males, be less educated, non-whites, and those who were living in the South than the other three homeowner types. The profiles of down payment borrowers among baby boomers needs to receive an attention by financial counselors and educators since the lower level of down payments might result in not having enough resources to meet their financial needs in later life.

The results of this study indicated that the sellers or savers for housing down payment had a relatively higher income level compared to the gift receivers and borrowers; savers also owned a relatively higher priced housing than did the gift receivers and borrowers. A greater proportion of married boomers were found in the saver group than those in both gift receiving and borrowing groups. It was also found that gift receivers for housing down payment tended to have a relatively lower

level of household income than the saver groups. The gift receivers were older than the borrowers, but they were younger than both savers and home sellers. It was also noticed that baby boomers that used the housing down payment fund from selling a home or using an investment tended to be older and a higher proportion of this group indicated high education, males, married, and being White when compared to the other three groups.

Using data from the 2001 American Housing Survey, this study provides profiles of sellers, savers, borrowers, and gift receivers for housing down payment and investigates the determinants of the housing down payment sources among the baby boomer households. Since this study analyzes nationally representative data, the profile of these four groups can serve as a basis for developing education programs for households in near retirement stage of life cycle. For example, the profiles of borrowers could help financial educators and planners recognize who needs information—such as a clear figure of monthly payment according to the amount of down payment to be paid in the purchase of home.

The multinomial logit regression analysis indicate that, holding other factors constant, household income, mortgage loan amounts, home value, age, education, gender, marital status, race, geographic regions, and interaction terms between household income and regions were the significant determinants of housing down payment sources among baby boomers. The determinants of probability of borrowing for a housing down payment can provide some insights for developing programs that are specifically targeted for demographic groups such as the young, less educated, and poor groups. It is hoped that financial planners and counselors can find this information useful in a clinical setting; using this information, financial counselors educate such risk takers—those who borrowed down payments or put no down payment when they purchased home—with sound financial management advice.

When households use a down payment, their loan amount is lower; consequently, it makes their monthly payment lower. Perhaps saving for down payments

would allow more consumers to purchase homes within the affordable housing suggested limit of 30%. Thus, having a reasonable amount of down payment for the purchase of a home can be considered a wise use of savings. However, some lending institutions provide easy access to home equity loans even if home buyers have no housing down payments, which puts the borrower in a more precarious situation. Accordingly, it is vital for financial professionals to emphasize that households should try to have enough saving for a housing down payment when they purchase homes. Saving for a housing down payment should be included in a households' smart money management.

This study utilized data from the 2001 American Housing Survey. However, since 2001 there have been changes in the housing market in the U.S. During the 2001-2005 period, the U.S. experienced a housing bubble in which there were rapid increases in the value of housing especially in populous areas such as California, Florida, and New York. This housing bubble reached unsustainable levels of home prices and has been followed by decreases in home prices. In addition, during the rise in home prices, the subprime housing finance market rose until the recent crash of the market in 2007 (Bernake, 2007). The collapse of the housing bubble and the resultant decline in home values create additional problems for borrowers and enforces the notion of helping homebuyers avoid borrowing their down payment or putting no down payment in purchasing their homes. Using more recent data, future studies might capture the impact of these negative events on savings behavior of renters or prospective homebuyers. It is more critical than ever that people learn to save and not borrow for down payments.

With the uncertainty of Social Security, baby boomers could face special challenges in maintaining quality of life in their later years. As the baby boomers age, there will be an increased demand for services that may present challenges for federal and state budgets (Walker, 2002). Thus, special attention needs to be paid to those baby boomers who borrow for a down payment on a

house because they could be at a financial disadvantage which might create additional pressures on retirement savings. Putting population aging and baby boomer retirement preparation issues together, financial educators and professionals in the U.S. should continue to educate those boomers who borrowed or put zero down payment when they purchased homes. Because when these risky boomers will be older and retired, the society as a whole could have to share, to some extent, the burden or costs of potential negative outcomes.

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Received August 31, 2007

Revised December 9, 2007

Accepted December 10, 2007