

**DETERMINANTS AND CONSEQUENCES OF MOVING DECISIONS FOR
OLDER AMERICANS**

Esteban Calvo, Kelly Haverstick, and Natalia A. Zhivan

CRR WP 2009-16
Released: August 2009
Draft Submitted: July 2009

Center for Retirement Research at Boston College
Hovey House
140 Commonwealth Avenue
Chestnut Hill, MA 02467
Tel: 617-552-1762 Fax: 617-552-0191

Prepared for the 11th Annual Joint Conference of the Retirement Research Consortium
August 10-11, 2009
Washington, D.C.

* Esteban Calvo is a graduate research assistant at The Center for Retirement Research at Boston College (CRR). Kelly Haverstick is a research economist at the CRR. Natalia A. Zhivan is a consultant for the CRR. The research reported herein was pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Retirement Research Consortium (RRC). The findings and conclusions expressed are solely those of the authors and do not represent the views of SSA, any agency of the Federal Government, the RRC, or Boston College. The authors would like to thank Alicia H. Munnell, Andrew Eschtruth, and Norma B. Coe for helpful comments and suggestions.

© 2009, by Esteban Calvo, Kelly Haverstick, and Natalia A. Zhivan. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

About the Center for Retirement Research

The *Center for Retirement Research at Boston College*, part of a consortium that includes parallel centers at the University of Michigan and the National Bureau of Economic Research, was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and forge a strong link between the academic community and decision makers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources.

Center for Retirement Research at Boston College

Hovey House
140 Commonwealth Avenue
Chestnut Hill, MA 02467
phone: 617-552-1762 fax: 617-552-0191
e-mail: crr@bc.edu
www.bc.edu/crr

Affiliated Institutions:
The Brookings Institution
Massachusetts Institute of Technology
Syracuse University
Urban Institute

Abstract

The lore on whether older Americans move is mixed. While the familiar stereotype is that retirees flock to Florida or Arizona, prior studies have found that their home equity rises modestly over time, suggesting that they tend to stay put. This paper examines moving trends, determinants, and consequences using the original cohort of the *Health and Retirement Study* (HRS). We find that a full 30 percent of homeowners in the HRS cohort move over the 1992-2004 period, but most moves occur close to home. Overall, two types of movers emerge from the analysis – those who affirmatively plan to move and those who react to changing circumstances. As proxies for these two types, this study uses the presence or absence of a negative shock, such as death of a spouse or entry into a nursing home. Our results show that the factors that help determine a move are similar for both groups, while the consequences of a move vary. Homeowners with shocks are more likely to discontinue homeownership and reduce net equity, supporting the hypothesis that households may view housing wealth as insurance against catastrophic events. Finally, while movers in both groups of homeowners experience improvements in psychological well-being, movers with shocks are impacted most by the shocks themselves.

Introduction

The lore on whether older Americans move is mixed. On the one hand, the familiar stereotype of retirement is that people flock to a warm climate such as Florida or Arizona. On the other hand, researchers have found that the home equity of older Americans rises modestly over time, suggesting that they tend to stay put.¹ Moving is an important decision for any homeowner, requiring one to weigh the familiar comforts of a home and neighborhood against the uncertain potential of a new location. A move decision may be even more challenging for an older person. Older people often have a decades-long attachment to their current residence, making them less likely to move. But they may also face new opportunities (ample leisure time) or challenges (the loss of a spouse) that affect their desire or ability to stay where they are. However, to date, researchers have seldom directly addressed the migration patterns of older Americans using nationally representative data. Understanding such patterns can be useful in assessing the social and economic circumstances of the elderly. This paper examines moving trends (how often older households move, where they move, and why they move), models a moving decision, and summarizes economic and psychological consequences of their move decisions using the *Health and Retirement Study* (HRS).

Previous literature suggests that older households may have different motivations for selling their homes and changing their residences (Walters, 2002). Some researchers consider a move decision as a well-planned action, such as a move to warm climate areas (Hays and Longino, 2002) or a move in response to fiscal policies, such as local spending on education or property tax rates (Shan, 2008; Farnham and Sevak, 2006). Others consider a move as a response to some negative shock; for example, a move closer to relatives to be taken care of or to help take care of somebody else, such as parents or grandchildren (Walters, 2002); or a move in response to a spouse's entry into a nursing home or a spouse's death (Venti and Wise, 2002, 2004). Overall, previous literature and initial analysis of self-reported reasons for moving lead to a hypothesis that movers fall into two broad types: those who affirmatively plan to move ("Planners") and those who react to changing circumstances ("Reactors"). Given the different stated motivations of

¹ See Venti and Wise (2002, 2004); Anderson, French, and Lam (2004); and Fisher et al. (2007).

these movers, the determinants and consequences of their move decisions may vary. Thus, we split the sample of movers and non-movers into Planners and Reactors using the absence or presence of a negative shock as a proxy for being a Planner or a Reactor. We then analyze and contrast the determinants and consequences of their move decisions by the type of move.

Our findings generally support the hypothesis of two types of movers. While we can explain very little of the homeowners' decisions to move, we do a better job predicting behavior of the Reactors than of the Planners. This is not surprising given that Reactors' decisions to move are driven by observed negative shocks rather than unobserved preferences or other unobserved characteristics – such as the local housing market – that tend to drive the decision for Planners. As we would expect, the outcomes for the two types of movers are different. A third of the moving homeowners experiencing negative shocks discontinue homeownership compared to 18 percent of households without shocks. We also observe a reduction in home equity for households that experience a negative shock and move. These two observations support the hypothesis that households perceive housing wealth as insurance against catastrophic events. Finally, while movers in both groups of homeowners experience improvements in psychological well-being, movers with shocks are impacted most by the shocks themselves. These results suggest that the adage “there's no place like home” does not necessarily hold for older households.

The paper is organized as follows. The first section covers trends in migration, such as the prevalence of moving, the geographic locations of the moves, and the self-reported reasons for moving. The second section explores whether these reasons for moving suggest different types of movers and introduces the samples of households used in the analysis. The third section analyzes what characteristics influence a decision to move. The fourth section looks at the extent to which movers discontinue homeownership, and the impact of moving on home equity and on psychological well-being. The final section concludes.

I. Trends in Migration

The current knowledge of migration trends of older people is mainly based on data collected by the U.S. Census Bureau, which provides very limited information in this area.² This study uses the original cohort (individuals born 1931-1941) in the *Health and Retirement Study* (HRS), a nationally representative database of individuals 51 and older, over a span of 12 years. The HRS contains rich information about demographic, financial, psychological, and health characteristics that describe the circumstances around the moving decision.³ The trends considered are the frequency, location, and self-reported reasons for moves by households in this cohort. Thus, the migration estimates calculated here are for households with members ages 51-61 in 1992 to ages 63-73 in 2004.⁴

For any given wave, the sample consists of households that were in that wave and the previous wave. The move indicator variable is based on the distance moved variable from the Cross-Wave Region and Mobility File with some modifications.⁵ A move was recorded if the distance moved was greater than zero or if the distance was zero but the year a respondent moved to his current home was consistent with a move since the previous wave. As a final consistency check, households were recorded as moving only if the respondent also reported that the household no longer lived at least part of the year in the same residence as the last wave. Thus, for the numbers reported in this paper, a move is defined by either the distance or year moved variable and whether the residence changed.⁶ Because of the coding of the distance variable plus our consistency check requirement of a recorded change in the residence, our migration rates are likely underestimates.

² To the authors' knowledge, Banks et al (2007) is the only other study to date that provides trends in migration of older Americans using large panel data, the *Panel Study of Income Dynamics*.

³ More information about the Health and Retirement study can be found at: <http://hrsonline.isr.umich.edu>.

⁴ At the time of the analysis, the data from the Cross-Wave Region and Mobility File were available through 2004. Since these data are vital for determining a move, the analysis incorporated observations through 2004.

⁵ This distance variable is constructed based on latitude and longitude. Prior to 1998, any move within a ZIP Code was coded as zero miles moved since latitude and longitude were based on ZIP Code centroids. Distances of moves after 1998 were calculated using miles between two street addresses. Additionally, all moves under a mile were coded as a distance of zero for all waves.

⁶ The definition of a move is different for wave 2 (1994) because whether the respondent still lives in the residence recorded in the last wave is not available.

How Often Do Older Americans Move?

Figure 1 shows the percentage of households who move between each wave from 1992 to 2004. The average two-year moving rate is about 7 percent for initial homeowners and 23 percent for initial renters.⁷ The total moving rate of 10 percent is heavily influenced by the homeowners, who make up the vast majority of households.⁸ While the two-year move rate for homeowners is relatively modest, results from the full time period (1992-2004) show that a substantial 30 percent of homeowners moved at least once.⁹ These numbers are consistent with the findings of the study by Banks et al. (2007) using the *Panel Study of Income Dynamics* to analyze downsizing later in life.

In determining migration patterns and analyzing the determinants and consequences of moving, it is useful to look at homeowners separately for three reasons. First, homeowners and renters clearly differ in their propensity to move. Homeowners generally have more ties to a particular area and have high moving costs associated with selling a home, which makes them more likely to stay put. Second, in considering the financial consequences of moving in a later section of this paper, homeowners are more relevant given that housing equity is the largest asset for elderly households outside of Social Security.¹⁰ What they do with this equity – enhance it, maintain it, draw it down, or liquidate it – can have significant consequences for their retirement security. A third reason why it is useful to look at homeowners separately is that the psychological consequences of moving for this group may be stronger than for renters. Since homeowners are likely to be more attached to their living environment, changing

⁷ The homeowner move rates are consistent with other studies. For example, Shan (2008) estimates a 9 percent two-year mobility rate for homeowners over the age of 50 using all cohorts except the Early Baby Boomers in the HRS. Venti and Wise (2004) find a 7 percent moving rate for households who are homeowners in both waves.

⁸ These average two-year move rates include moves between 1992 and 2004. However, later analysis excludes wave 2 (moves that occur between 1992 and 1994) because there is no consistent question about whether the household is still living at the address from the previous wave in 1994. For the 1994-2004 period, the average two-year move rates are 8 percent, 24 percent, and 11 percent for homeowners, renters, and all, respectively. These move rates are weighted calculations using the weight from the previous wave. The overall move rate is closer to that of initial homeowners because about 80 percent of this cohort is homeowners.

⁹ This figure includes any move recorded between 1992 and 2004. Households are weighted using the 2004 household weights.

¹⁰ Using the 2007 *Survey of Consumer Finances*, Munnell, Golub-Sass, and Muldoon (2009) report that housing equity for the typical household aged 55-64 is about \$140,000.

residences may have a more significant impact on their psychological well-being. For these reasons, previous research has tended to focus solely on homeowners, a practice we will follow in the rest of this paper.

Where Do Older Homeowners Move?

After determining how often homeowners move, the next step is to examine where they move. Again using the distance moved variable from the Cross-Wave Region and Mobility File, Figure 2 shows the percent moving between each wave, decomposed by the distance moved. One striking finding is that the large majority of moves in each wave – nearly 60 percent on average – are short-distance moves of less than 20 miles. Only about 21 percent are more than 200 miles, undermining the notion of a vast migration from the Frost Belt to the Sun Belt.

Beyond simple distances, the data allow us to estimate more precise geographic patterns in the moves. For households who move, where do they move from or to? Figure 3 displays the distribution of areas from which and to which older households are moving.¹¹ While the overwhelming majority of moves are within division (about 83 percent), comparing the inflows and outflows of regions provides some information on the locations of out-of-division movers. A larger percentage of movers out of an area than into an area occur in the northern divisions (such as New England, Mid-Atlantic, and North Central) and the Pacific division. Net inflows occur in the southern regions, most notably in the South Atlantic (which includes Florida) and the Mountain (which includes Arizona and New Mexico) divisions. So movers do show some preference for the Sun Belt over the Frost Belt although, again, no large scale migration is evident.

Why Are Older Homeowners Moving?

Moves may occur for a variety of reasons. Some researchers consider a move decision as a well-planned action, such as a move to warm climate areas (Hays and Longino, 2002) or a move in response to fiscal policies, such as local spending on education or property tax rates (Shan, 2008; Farnham and Sevak, 2006). Others consider

¹¹ These are the U.S. Census Bureau's regional divisions. See Appendix Table A4 for the states included in each of the regions and divisions.

a move as a response to some negative shock, for example, a move closer to relatives to be taken care of or to help take care of somebody else, such as parents or grandchildren (Walters, 2002) or a move in response to a spouse's move to a nursing home or a spouse's death (Venti and Wise, 2002, 2004). However, none of these studies report the prevalence of different motives. We use the self-reported reasons for moving that are available in the HRS for respondents who moved since the previous wave to determine the prevalence of these reasons.¹² Classifying these reasons into six categories, Figure 4 shows the most popular reasons for moving. Surprisingly, migration for traditional retirement reasons (e.g. "climate" or "leisure") is only fourth on the list. The most frequently cited type of reason – mentioned by over 25 percent of households – was family-related (e.g. "a change in marital status," which would include death of a spouse). About one-fifth of households mentioned financial factors (e.g. "smaller or less expensive home"), while a comparable percentage cited a preference to upgrade (e.g. "larger home" or "nicer location"). Less than five percent of respondents listed a health problem as a reason for moving. This finding may be due to the relative youth of this cohort during the observed time period – the maximum possible age of a cohort member is 73 in 2004, the last wave of available data to measure moves.

II. Two Types of Movers

Previous literature on the migration of older people suggests that movers fall into two categories: those who affirmatively plan to move and those who react to changing circumstances. This section considers the characteristics of movers compared to non-movers, uses self-reported reasons for moving to further explore the hypothesis that movers are of two main types, and describes the sample.

¹²The reason for moving is asked only beginning in the 1996 wave. Respondents may select more than one reason, but this analysis classifies households according to the first reason mentioned. For a full list of reasons, see Appendix Table A5.

Characteristics of “Planners” vs. “Reactors”

A first step in analyzing moves is to compare the characteristics of non-movers and movers. Surprisingly, with some exceptions, movers and non-movers look very similar in their demographic and financial characteristics as shown in Table 1. Moving homeowners are only slightly more educated, less likely to be married, and more likely to have a member enter into a nursing home.¹³ Movers are more likely to be widowed or divorced. For further insight into movers, Table 1 also summarizes characteristics by self-reported reasons for moving. In assessing the self-reported reasons for moving, two main types of movers seemed to emerge: “Planners” and “Reactors.” We define Planners as those who report moving for a better location or home, for retirement, or financial reasons and Reactors as those who cite family or health issues. Splitting the movers into Planners and Reactors clearly shows that the reason for the similarities between movers and non-movers is the fact that we mix two types of movers. Those moving for retirement reasons are more educated, better off financially, more likely to be married, and less likely to be in poor/fair health compared to the other groups. On the other hand, those moving for health or family reasons have the lowest educational attainment level, the highest incidence of poor/fair health, and the lowest level of income and wealth, as measured by Social Security, housing and non-housing wealth. Incidence of being divorced, widowed, or hospitalized is higher among Reactors compared to Planners.

Homeownership discontinuation by self-reported reasons also points to two types of movers. With the exception of the group citing financial reasons, very few among the Planners discontinue homeownership. High homeownership discontinuation among those moving for financial reasons, almost 30 percent, suggests that these people may have received a good offer for their house and may decide to rent while waiting for a good moment to buy another house. However, 40 percent of Reactors decide to rent or choose another arrangement, such as living with relatives. Since initial house values are low for this group, it seems unlikely that these households will continue homeownership, as it would be difficult for them to find more affordable housing.

Thus, the initial analysis of characteristics of movers by reasons for move supports the hypothesis of two types of movers and finds that those reporting family and

¹³ Individual characteristics such as education or race/ethnicity are measured for the respondent.

health as primary reasons for moving *are more likely* to be in poor health, have lower standards of living, and, most importantly, experience negative shocks compared to those reporting retirement, better location/house, or financial reasons. These characteristics suggest that Planners are better positioned to make an affirmative choice when they move, perhaps as part of a well-considered retirement strategy. In contrast, the Reactors' characteristics suggest that they *are more likely* to be forced to move out of necessity, such as the death of a spouse or their own ill health. Furthermore, these negative shocks may make it more difficult for them to maintain their current home. Since we do not observe propensity to move for different reasons for non-movers, we split the sample of movers and non-movers into "Planners" and "Reactors" using the absence or presence of a negative shock as a proxy for the two types. Using this framework, we analyze and contrast the determinants and consequences of their move decisions by the type of move in the next two sections.

Study Sample

To conduct the analysis of the determinants and consequences of moving, we use the absence or presence of a negative shock as a proxy, under the expectation that those movers with no shock are similar to the Planners and those with a shock are more like the Reactors. A shock is defined as any of the following recent events:¹⁴

- death of a spouse;
- divorce;
- entry into a nursing home;
- hospitalization or much worsened health; or
- loss of a job.

The results will be reported for homeowners with and without shocks. In the discussion of the consequences of moving, these two groups will also be broken down into movers and non-movers for a total of four distinct subgroups.

¹⁴ These variables, when applicable, also include these events for a spouse. All variables are measured based on these events occurring since the last wave. Households may experience multiple shocks.

III. Determinants of Homeowners' Move Decisions

Numerous factors may influence a move, including age, gender, marital status, race, and education. To test their impact, these factors were included in a regression analysis conducted for the full sample and separately on the two groups in the split sample – households with a shock and those without. We estimated the following probit model:

$$y_i^* = \beta X_i + \varepsilon_i, \quad i = 1 \dots N$$
$$y_i = 1 \text{ if } y_i^* > 0 \text{ and } 0 \text{ otherwise}$$

where N is the number of households, y_i^* is a latent variable that determines propensity to move, X_i is a set of a household i characteristics, and ε_i is an unobserved characteristic that has a normal distribution. In the pooled regression, we implicitly impose a restriction of equal effects of households' characteristics on moving for homeowners in both groups.

The results, as shown in Table 2, indicate that most of the demographic factors may have similar effects on both types of households, with the exception of age and marital status.¹⁵ However, the hypothesis that demographic characteristics jointly have the same effect for both groups is rejected.¹⁶ Explanatory power for all three models is very low, suggesting that there are many unobserved characteristics driving the migration decision. Interestingly, the explanatory power for the homeowners with shocks is 35 percent more than the explanatory power for the pooled sample, while the explanatory power drops by 40 percent when the sample is limited to homeowners without a shock. This finding suggests that observed shocks, such as the death of a spouse or their own ill health, determine migration decision for Reactors. However, the move decision for Planners is driven by preferences or other characteristics, such as ability to sell their house or conditions of the local housing market, which are unobserved by researchers.

¹⁵ While the estimates of the effect of a change from the 25th percentile to the 75th percentile values of age are negative and of similar magnitudes for the two groups, they are statistically significantly different. The difference in magnitude of the estimates of the effect of being not married is large, but we cannot reject that the effects are the same at a 10 percent level of significance.

¹⁶ A Chow test of the pooled regression where variables were interacted with dummies being in shock or no-shock groups does reject the hypothesis that all demographic characteristics jointly have the same effect for both groups at a 10 percent level of significance.

The results accorded well with our basic intuition. Households are *less likely to move* if they are older or have a female respondent. As people get older, they have a harder time breaking ties with the community and changing their daily routine. And households headed by women *are less likely to move* since women may have stronger emotional and social attachments to the neighborhood or may be more capable of caring for themselves than men.¹⁷

While the effect is small, households with higher levels of Social Security wealth and income *are more likely to move*, suggesting that these resources may make the move decision more financially feasible. Conditional on house value, households with higher levels of home equity *are less likely to move*, suggesting that these people may have lived there longer and have stronger emotional and social attachments to the neighborhood. At the same time, conditional on home equity, a higher value of the house increases chances of moving, suggesting that these homeowners owe more to the bank and cannot afford to live there compared to those with lower house values.

Households are *more likely to move* if they are not married, white, or headed by a college graduate.¹⁸ Being unmarried means more flexibility when making a decision to move as there is no need to accommodate the preferences of two people. The intuition for the impact of race is that white households may be less likely to have large extended families and thus weaker ties to the community than non-white households. Regarding education, college graduates are a mobile group of the population in general – often leaving their homes in early adulthood to go to college and frequently following available jobs across the country.

As noted above, both age and marital status have different impacts on the two types of homeowners, although age is the only effect that is statistically different between the two groups. Homeowners without shocks *are slightly less likely to move* as they get older relative to homeowners with shocks. This is consistent with the notion that those without shocks would tend to plan a move at younger ages, while homeowners with shocks may have less control over the timing of a move. For single homeowners,

¹⁷ Households headed by women are, in most cases, single.

¹⁸ This race/ethnicity group includes those households whose respondent listed his race as something other than black and did not indicate a Hispanic ethnicity. The non-white group consists of black and/or Hispanic individuals.

experiencing a shock – a health shock for example – may make them more likely to move in order to receive care compared to single homeowners without shocks.

Households with Shocks

For households with shocks, the type of negative shock is expected to have different effects on the probability of moving and thus was included in the regression. As shown in Table 2, those recently widowed or divorced and those diagnosed with a new health condition have an increased probability of moving. Surprisingly, the other shocks – being hospitalized or reporting worsened health, entering into a nursing home, and losing a job – do not significantly impact the probability of moving in these households with at least one shock. Thus, again, it seems that family structure is a very important factor in these households' decisions to move.

Households without Shocks

Different factors may affect the move decision of households with no observable shock. For households without shocks, an exit from the labor force may be driven by an unobserved shock, particularly by a health shock. Thus we include work status variables only in the model for homeowners with no observable shock. As we would expect, working households *are less likely* to move, while retiring households *are more likely* to move. For some of these households with no observable shocks, the moving and retirement decisions have the same meaning.

While no other additional explanatory variables were included in the probability of moving specification for the homeowners without shocks, it is also interesting to compare the self-reported reasons for moving given by these households with those given by households experiencing a shock. As shown in Figure 5, 26 percent of households moving without a shock cited a better location/house reason – generally consistent with a planned move – as compared to just 15 percent of those with a shock. In contrast, households with a shock were more likely than non-shock households to cite a family or health reason, which tend to suggest an unplanned move. Of course, the interpretation of the self-reported results may be ambiguous in some cases. For example, 2 percent of households without a shock responded that they moved for health reasons. It is possible

that a member of these households had a shock prior to the last wave and the move resulted, at least in part, from the cumulative effects of health problems.

IV. The Consequences of Homeowners' Move Decisions

Along with determining how factors affect homeowners' decisions to move, it is also important to consider what happens to older homeowners that move. Again separating households by shock status, this section explores the effect of moving on the decision to downsize in terms of homeownership discontinuation and change in home equity and on psychological well-being.

Decision to downsize: homeownership discontinuation and change in home equity

When a household decides to move, it also has to decide whether to continue being a homeowner, become a renter, or enter into some other form of living arrangement. Some households experiencing a bad health shock may decide to sell their house to cover immediate health care costs or a stay in a nursing home. Indeed, 33 percent of moving homeowners with shocks became renters or entered into some other form of living arrangements, such as living with relatives (see appendix Table A1).¹⁹ Only 18 percent of moving homeowners without shocks discontinued homeownership. While some of the renters may choose this state temporarily while searching for a good house to buy, the prevalence of becoming a renter among the group of homeowners moving with shocks suggests that some homeowners may be unable to afford a house any longer. Table 3 presents the marginal effects on the probability of discontinuing homeownership for those who move – for all movers, movers with shocks, and movers without shocks. As expected, single people and households experiencing negative shocks *are more likely to* discontinue homeownership. Newly divorced homeowners have the highest probability of discontinuing homeownership. While being hospitalized or reporting worsened health does not have a significant effect on moving, this type of shock increases the chance of becoming a renter in the pooled sample of movers. A

¹⁹ While most households are either homeowners or renters, a few are classified as having some other type of living arrangement. For succinctness, we use the term “renters” to include any households that live in a residence that they do not own.

higher level of Social Security wealth is associated with a lower probability of becoming a renter for people with shocks since higher levels of income may cover additional expenses associated with shocks, such as medical costs.

A high incidence of homeownership discontinuation among households with shocks has two implications. First, these households experience a very large decline in their housing wealth without significant positive change in their financial wealth (see Table A2) suggesting that these households may be significantly undermining their retirement income security. Second, becoming a renter or choosing another form of living arrangement may have a negative impact on psychological well-being. Thus, some of the households may be forced to live with their children or other relatives, which may add to the stress associated with the move and shocks that initiated this move.

Households that discontinue homeownership will necessarily decrease their home equity. But for homeowners who move and buy another house, how much home equity to hold is another decision to make. Since the reasons for moving are different for the two types of movers, the change in home equity – the most relevant financial consequence of a move by a homeowner – is also likely to differ.²⁰ Figure 6 shows how those with and without shocks fared – both movers and non-movers. Those households that moved saw the greatest change in home equity and, interestingly, the type of change varied dramatically by shock status. Movers with a shock saw an average decline in home equity of about \$26,000. In contrast, movers without a shock experienced an average increase of nearly \$33,000. These findings suggest that the former group may choose to downsize or discontinue homeownership, possibly in response to ill health or the death of a spouse. The latter group, instead, was in a better position to make a planned move to a more expensive home – perhaps in a popular area with better recreational amenities.

These results are consistent with previous research findings that households experiencing the death of a spouse or entry into a nursing home tend to reduce their home equity, while other households increase their equity on average.²¹ Furthermore, this decomposition clarifies the relationship between trends in home equity and moving for

²⁰ Home equity is measured as the gross home value less the outstanding mortgage. Home equity values were converted into 2006 dollars using the CPI-U (U.S Bureau of Labor Statistics 2009).

²¹ Venti and Wise (2004).

older homeowners. Previous findings of rising home equity with age and little use of housing equity to support general consumption among older homeowners led some researchers to believe that older households do not move.²² However, closer examination reveals that older households actually do move, but the increases for some are offset by the reductions for others.

Impact of Moving on Psychological Well-Being

A final question relating to the moves of older homeowners is how does a move influence psychological well-being? Most studies on migration and psychological well-being focus on residential satisfaction (Amerigo and Aragonés, 1997; and Rojo Perez et al., 2001). In this paper, we focus on general psychological well-being rather than on residential satisfaction because people can be satisfied (or unsatisfied) with their home, but overall unhappy (or happy) with the decision to move (or not to move). Just as with home ownership, home equity, and other objective life conditions, psychological well-being is a useful indicator to assess the consequences of the move. Psychological well-being is a widely accepted measure of the enduring and global aspects of subjective well-being and is frequently used to assess the degree to which people favorably evaluate the overall quality of their present lives (George, 2006). The main advantage of measurements of psychological well-being is that they are indicators of “realized” quality of life, whereas measures of home ownership and home equity are indicators of “potential” quality of life (Calvo, Haverstick, and Sass, 2009; Frey and Stutzer, 2002; and Veenhoven, 2009).

Previous research addressing psychosocial aspects of moving theorizes that aging at home, without changing residence, maximizes the psychological well-being of older adults (Angus et al., 2005; Bookman, 2008; Gilleard, Hyde, and Higgs, 2007; and Kawachi and Berkman, 2003). This literature highlights a number of advantages of aging *in place* over aging *out of place*. Older adults that continue to live in the same home during older adulthood enjoy familiarity with the house, community, and neighborhood. They feel more independent, are more socially connected, and experience less stress than

²² Venti and Wise (2004, 2002); Anderson, French, and Lam (2004); and Fisher et al. (2007) find that average home equity increases by age until the early to mid-70s.

older adults that change to a new residence. In contrast, moving is characterized as a stressful experience that may result in relocation trauma and symptoms of depression, anxiety, distrust, and insecurity.

We argue that the controversy on aging in/out of place should be addressed by differentiating between the two types of movers we identified at the beginning of this paper: planners (households with shocks) and reactors (households without a shock). Shocks introduce major life changes simultaneously with the move and are known to have a detrimental influence on psychological well-being (Crosnoe and Elder, 2002; Diener, Suh, Lucas, and Smith, 1999; Gallo et al., 2006; and Yang, 2008). Because households moving without a shock are better positioned to plan the move, we hypothesize that they experience better psychological well-being outcomes compared to those not moving. In contrast, movers that react to a shock such as the death of a spouse have added disruptions in their routines and probably have worse psychological well-being outcomes than non-movers.

To test our hypothesis, we created a measure of psychological well-being comprised of positive feelings (happiness and enjoyment of life) and negative feelings (loneliness, depression, and sadness) that has a range from 0 to 5 with larger values indicating greater well-being.²³ Since this measure is for individuals, we then created a household-level measure which is simply the respondent's value for single-person households and the average of a couple's values for two-person households. Finally, we calculated the change in this composite variable (ranging from -5 to 5) for each household from the previous wave.

Figure 7 shows the average change in psychological well-being from wave to wave over the 1994-2004 period. As expected, the average change is positive for households without a shock and negative for households with a shock. Within each group, the movers had a more positive (or less negative) change than the non-movers. This result suggests that moving helps improve psychological well-being – even for those households that experience a shock.

²³ This measure is based on five yes-or-no questions in the health section of the HRS questionnaire. Respondents are asked whether “much of the time this past week” they were 1) happy; 2) enjoyed life; 3) felt lonely; 4) felt depressed; or 5) felt sad.

These findings seem contradictory to the common sociological notion of aging in place – that older adults maximize their psychological well-being when they remain in their homes (Angus et al., 2005; Bookman, 2008; and Gilleard, Hyde, and Higgs, 2007). However, simply comparing the mean changes for these groups of homeowners may not tell the whole story – it is necessary to control for other factors that may influence the changes in these households’ well-being.²⁴ Therefore, we analyzed how a variety of social, economic, and demographic variables – in addition to moving – influence well-being, using an ordered logit regression. Furthermore, since negative events may decrease well-being by differing magnitudes in the short-term, indicators for the types of shocks were also included for the group with shocks.²⁵

Specifically, we modeled the following equation separately for the shock and non-shock groups:

$$y_i^* = \beta X_i + \varepsilon_i, i = 1, \dots, N$$

which describes the underlying distribution of the observed y_i ,

$$\begin{aligned} y_i &= -5 && \text{if } y_i^* \leq 0, \\ &= -4.5 && \text{if } 0 < y_i^* \leq \mu_1, \\ &= -4 && \text{if } \mu_1 < y_i^* \leq \mu_2, \\ &\vdots \\ &= 5 && \text{if } \mu_{19} \leq y_i^*, \end{aligned}$$

where N is the number of households, y_i^* is a latent variable that measures the change in psychological well-being, X_i is a set of a household i characteristics, and ε_i is an unobserved characteristic that has a logistic distribution. Using an ordered logit specification accounts for the ordinal nature of the dependent variable (where the lowest value indicates the greatest deterioration while the largest value indicates the greatest

²⁴ For a review of factors influencing psychological well-being, see Diener, Suh, Lucas, and Smith (1999); and Gallo et al. (2006).

²⁵ For example, at the time of the event and for the two-year period following the event, Diener, Lucas, and Scollon (2006) find that widowhood has a greater impact on life satisfaction than divorce does while Calvo, Haverstick, and Sass (2007) estimate that the death of a spouse has a larger impact on psychological well-being than does a health change.

improvement in well-being) and allows for a non-linear relationship between the change in psychological well-being and the set of characteristics.

The results indicate that moving is still associated with improved well-being for both groups (see Table 4) and that the effects are of similar magnitudes.²⁶ Few other variables have significant impacts on the change in psychological well-being for homeowners without shocks.²⁷ But for homeowners with shocks, the effect of moving is relatively modest compared to losing a spouse, entering a nursing home, or even becoming divorced. This result that family shocks have the greatest impact on psychological well-being is consistent with other research findings.²⁸

Overall, our results suggest that the adage “there’s no place like home” does not necessarily hold for older households.²⁹ Since the majority of moves are short distances, these results suggest that individuals can change their residence but still enjoy the benefits of aging in place if they remain in a community that provides meaningful connections and a sense of belonging.

V. Conclusion

A significant share of older homeowners move. While, according to the HRS, the two-year move rate is only a modest 7 percent, a full 30 percent move over the 12-year period studied. Most moves are of a relatively short distance, with only a modest indication of Frost Belt to Sun Belt migration.

Previous literature and self-reported reasons for moving lead to a hypothesis that movers fall into two broad types: those who affirmatively plan to move and those who react to changing circumstances. The Planners tend to have higher social and economic

²⁶ The results are also shown for the pooled sample in which the estimates of the effects on the common factors are implicitly restricted to be equal. Running a pooled regression relaxing the restriction of having equal effects for the two groups allows us to test and conclude that they are jointly statistically different at the 10 percent level of significance.

²⁷ In fact, only being not married in the previous wave for both groups and having a college education for the group without shocks have significant effects in the set of socio-economic variables. However, in these cases, the negative effects are most likely driven by the upper truncation of the scale for the dependent variable and the substantial number of married or college-educated households starting at the highest value.

²⁸ Appendix Table A3 reports descriptive statistics for the psychological well-being regression.

²⁹ The idea that there is no place like home is recurrent. For example, see Fisher et al. (2007) and Sabia (2008).

status and better health than the Reactors, suggesting greater time and flexibility to select a move destination. The Reactors may be more pressed into a move decision by unexpected circumstances.

This paper finds that several factors influence a decision to move – households that are older or have a female head *are less likely* to move, while those that are unmarried, white, or have a college degree *are more likely* to move. Households that receive a negative shock, such as divorce or death of a spouse, *are more likely* to move compared to non-shock households or households with other types of shocks. The findings generally support the notion that older movers can be broadly categorized as either Planners or Reactors, based on whether they experience a negative shock.

The financial and psychological outcomes are different for the two types of movers. In terms of financial outcomes, movers who experience negative shocks *are more likely* to reduce their housing equity, which indicates that households may use their equity as insurance against catastrophic events (Venti and Wise 2002, 2004). Indeed, about a third of the initial homeowners with shocks discontinued homeownership compared to 18 percent among households without shocks, again suggesting that households with shocks are forced to sell their homes and use some of the home equity to cover costs associated with shocks. Similarly, conditional on demographic and financial characteristics, households with shocks *are more likely* to become renters or choose another form of living arrangement, such as living with relatives, than households without shocks.

Regarding psychological outcomes, as expected, households with shocks tend to experience worsened psychological well-being outcomes compared to those without shocks. However, moving modestly improves psychological well-being in each group but, for homeowners experiencing shocks, these effects are often overshadowed by major shocks such as the death of a spouse.

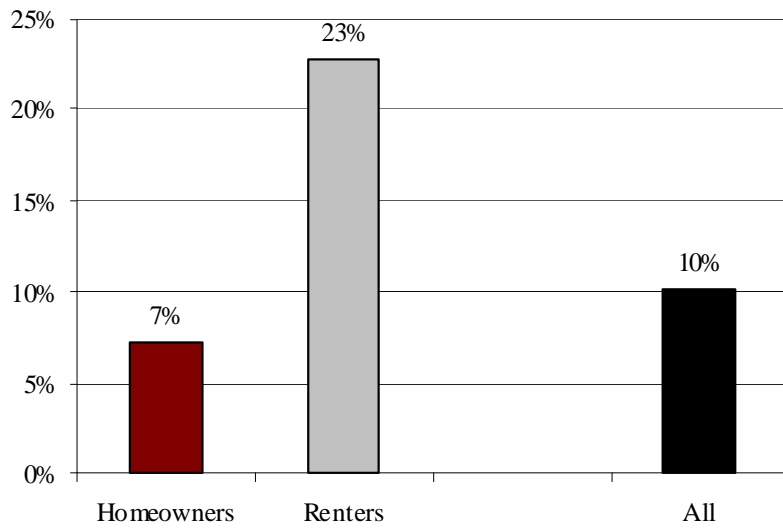
References

- Amerigo, Maria and Juan Ignacio Aragones. 1997. "A Theoretical and Methodological Approach to the Study of Residential Satisfaction." *Journal of Environmental Psychology* 17:47-57.
- Angus, Jan, Pia Kontos, Isabel Dyck, Patricia McKeever, and Blake Poland. 2005. "The Personal Significance of Home: Habitus and the Experience of Receiving Long-term Care." *Sociology of Health & Illness*, 27:2, 161-87.
- Anderson, Kate, Eric French, and Tina Lam. 2004. "You can't take it with you: Asset run-down at the end of the life cycle." *Economic Perspectives*, 3, 40-54.
- Banks, James, Richard Blundell, Zoë Oldfield, and James P. Smith. 2007. "Housing Price Volatility and Downsizing in Later Life" NBER Working Paper 13496.
- Bookman, Ann. 2008. "Innovative Models of Aging in Place: Transforming our Communities for an Aging Population." *Community, Work & Family*, 11:4, 419-38.
- Bourdieu, Pierre and Loïc J. D. Wacquant (eds). 1992. *An Invitation to Reflexive Sociology*. Chicago: University of Chicago Press.
- Calvo, Esteban, Kelly Haverstick, and Steven A. Sass. 2009. "Gradual Retirement, Sense of Control, and Retirees' Happiness." *Research on Aging* 31:112-35.
- Crosnoe, Robert and Glen H. Elder Jr. 2002. "Successful Adaptation in the Later Years: A Life Course Approach to Aging." *Social Psychology Quarterly* 65:309-28.
- Diener, Ed, Richard E. Lucas, and Christie Napa Scollon. 2006. "Beyond the Hedonic Treadmill: Revising the Adaptation Theory of Well-Being." *American Psychologist*, 61:4, 305-314.
- Diener, Ed, Eunkook M. Suh, Richard E. Lucas, and Heidi L. Smith. 1999. "Subjective Well-being: Three Decades of Progress." *Psychological Bulletin*, 125:2, 276-302.
- Duncombe, William, Mark Robbins, and Douglas A. Wolf. 2003. "Place Characteristics and Residential Location Choice Among Retirement-age Population." *Journal of Gerontology: Social Sciences* 50B(4): S244-S252.
- Farnham, Martin and Purvi Sevak. 2006. "State Fiscal Institutions and Empty-Nest Migration: Are Tiebout Voters Hobbled?" *Journal of Public Economics* 90(3): 407-427.
- Federal Reserve Bank of San Francisco. 2005. "More Life vs. More Goods: Explaining Rising Health Expenditures." *FRBSF Economic Letter* 2005-10. San Francisco, CA.

- Fisher, Jonathan D., Johnson, David S., Marchand, Joseph T., Smeeding, Timothy M., and Barbara Boyle Torrey. 2007. "No Place Like Home: Older Adults and Their Housing." *Journal of Gerontology*, 62(B):2, S120-8.
- Frey, Bruno S. and Alois Stutzer. 2002. "What can Economists Learn from Happiness Research?" *Journal of Economic Literature* 40:402-35.
- Gallin, Joshua Hojvat. 2004. "Net Migration and State Local Market Dynamics." *Journal of Labor Economics* (22)1: 1-22.
- Gallo, William T., Elizabeth H. Bradley, Joel A. Dubin, Richard N. Jones, Tracy Falba, Hsun-Min Teng, and Stanislav V. Kasl. 2006. "The Persistence of Depressive Symptoms in Older Workers Who Experience Involuntary Job Loss: Results From the Health and Retirement Survey." *Journals of Gerontology: Social Sciences* 61:4, 221-28.
- George, Linda K. 2006. "Perceived Quality of Life." Pp. 320-36 in *Handbook of Aging and the Social Sciences*, 6th ed., edited by R. H. Binstock and L. K. George. San Diego, CA: Elsevier.
- Gilleard, Chris, Hyde, Martin, and Paul Higgs. 2007. "The Impact of Age, Place, Aging in Place, and Attachment to Place on the Well-being of the Over 50s in England." *Research on Aging*, 29:6, 590-605.
- Hays, Judith C. and Charles F. Longino, Jr. 2002. "Florida Migration in the AHEAD Study, 1993-1995: A Note on the Flight of the Oldest Retirees." *Research on Aging* 24(4): 473-483.
- Kawachi, Ichiro and Lisa Berkman (eds.) 2003. *Neighborhoods and Health*. New York: Oxford University Press.
- Longino, Jr., Charles F. and Don E. Bradley. 2006. "Internal and International Migration." In *Handbook of Aging and the Social Sciences*, eds. Robert H. Binstock and Linda K. George, 76-93. San Diego, CA: Academic Press.
- Munnell, Alicia H., and Steven A. Sass. 2008. *Working Longer: The Solution to the Retirement Income Challenge*. Washington, DC: Brookings Institution Press.
- Munnell, Alicia H., Golub-Sass, Francesca, and Dan Muldoon. 2009. "An Update on 401(k) Plans: Insights From the 2007 SCF." Issue in Brief 9-5. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Rojo Perez, Fermina, Gloria Fernandez-Mayoralas, Fernandez Enrique Pozo Rivera, and Jose Manuel Rojo Abuin. 2001. "Ageing in Place: Predictors of the Residential Satisfaction of Elderly." *Social Indicators Research* 54:173-208.

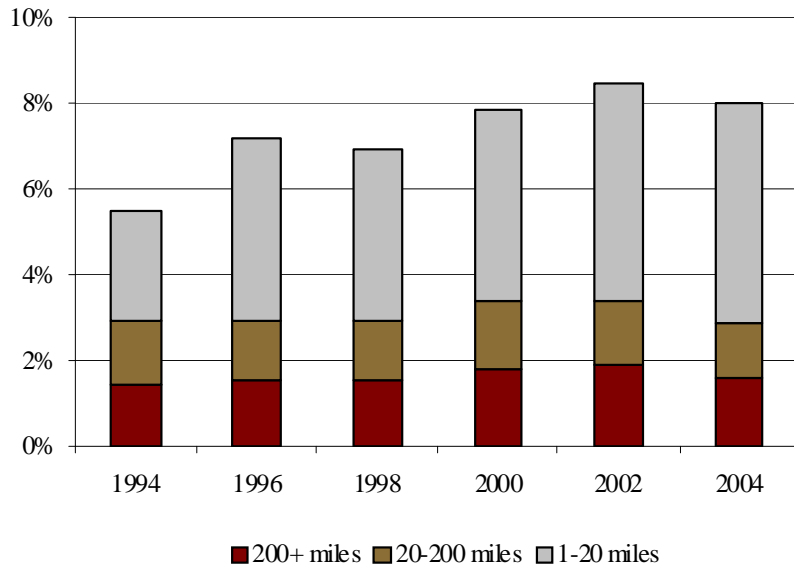
- Sabia, Joseph J. 2008. "There's No Place Like Home: A Hazard Model Analysis of Aging in Place Among Homeowners in the PSID." *Research on Aging*, 30:1, 3-35.
- Shan, Hui. 2008. "Property Taxes and Elderly Mobility." Finance and Economics Discussion Series, Divisions of Research & Statistics and Monetary Affairs, 2008-50. Washington, DC: Federal Reserve Board.
- University of Michigan. *Health and Retirement Study*, 1992-2004. Ann Arbor, MI.
- U.S. Census Bureau. 2004. "Census Bureau Region and Division Codes, State and County Federal Information Processing System (FIPS) Codes, and Minor Civil Divisions (MCD) and Places with Census and FIPS Codes." Washington, DC. Available at <http://www.census.gov/popest/geographic/codes02.html>.
- Veenhoven, Ruut. 2009. "Happiness in Nations, Introductory Text." Rotterdam, Netherlands: World Database of Happiness, Erasmus University Rotterdam, Available at <http://www2.eur.nl/>.
- Venti, Steven F. and David A. Wise. 2004. "Aging and Housing Equity: Another Look." In *Perspectives on the Economics of Aging*, ed. David A. Wise, 127-75. Chicago: University of Chicago Press.
- Venti, Steven F. and David A. Wise. 2002. "Aging and housing equity." In *Innovations in Retirement Financing*, eds. Olivia S. Mitchell, Zvi Bodie, P. Brett Hammond, and Stephen Zeldes, 254-281. Philadelphia: University of Pennsylvania Press.
- Walters, William H. 2002. "Later-Life Migration in the United States: A Review of Recent Research." *Journal of Planning Literature* 17(1): 37-66.
- Yang, Yang. 2008. "Social Inequalities in Happiness in the United States, 1972 to 2004: An Age-Period-Cohort Analysis." *American Sociological Review* 73:204-26.

Figure 1. *Average Two-Year Move Rate, 1992-2004*



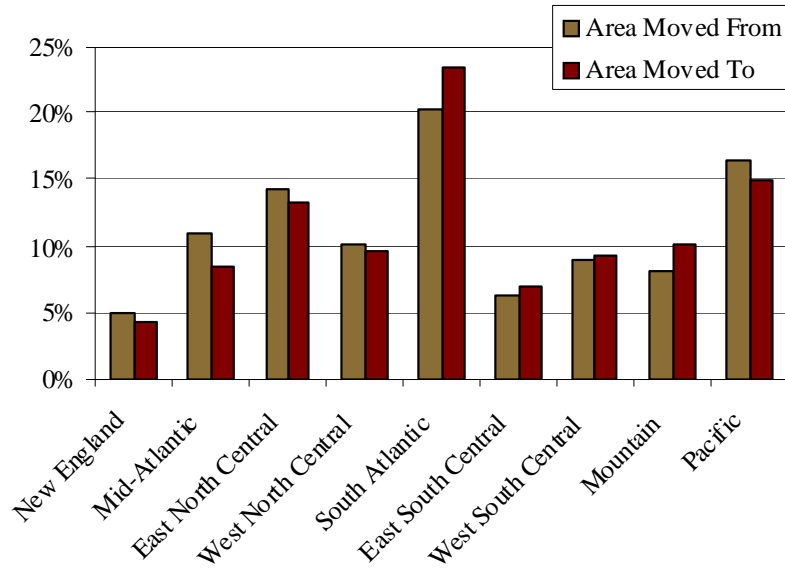
Source: Authors' calculations from the University of Michigan, *Health and Retirement Study* (HRS), 1992-2004.

Figure 2. *Percentage of Homeowners Moving by Distance Moved, 1992-2004*



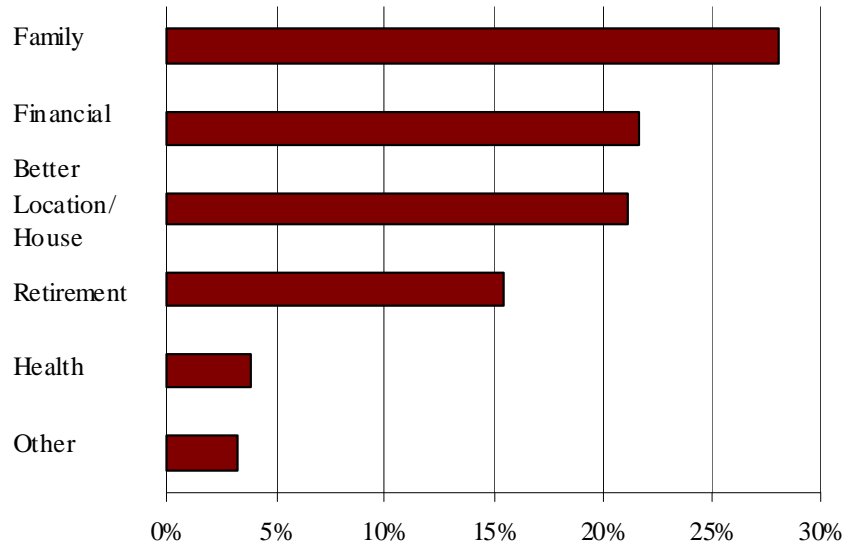
Source: Authors' calculations from 1992-2004 HRS.

Figure 3. *Distributions of Origin and Destination Divisions for Homeowners Who Move, 1992-2004*



Source: Authors' calculations from 1992-2004 HRS.

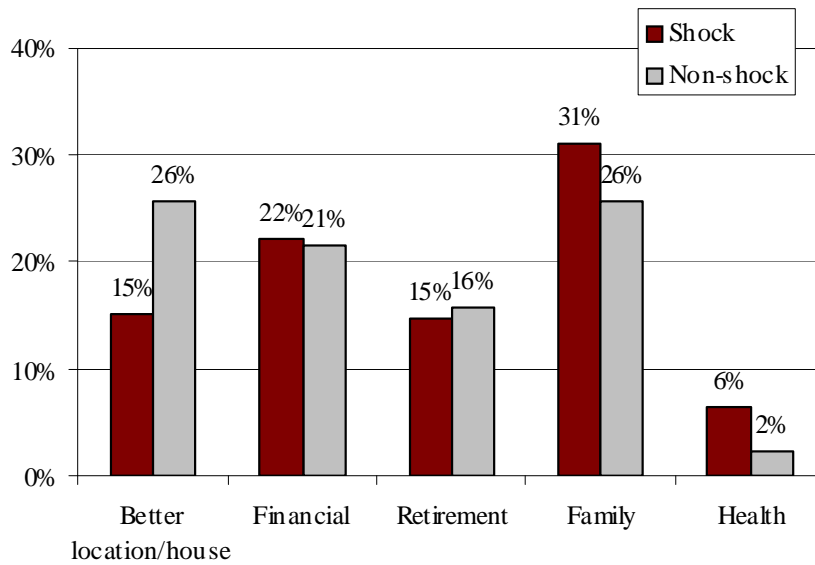
Figure 4. *Distribution of Reasons for Migration, 1994-2004*



Note: Households are classified according to the first reason they mention. Numbers do not add to 100 percent because non-respondents are not included.

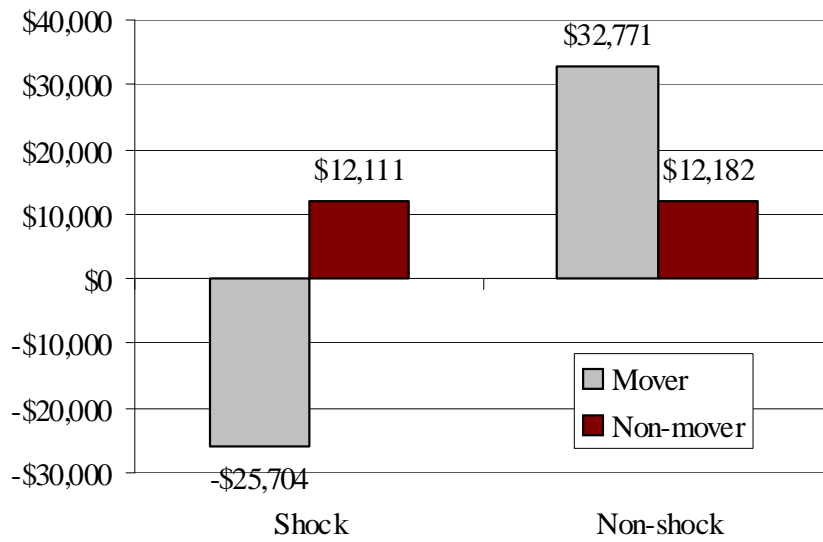
Source: Authors' calculations from 1994-2004 HRS.

Figure 5. *Reasons Provided for Moving by Older Homeowners, by Shock Status, 1994-2004*



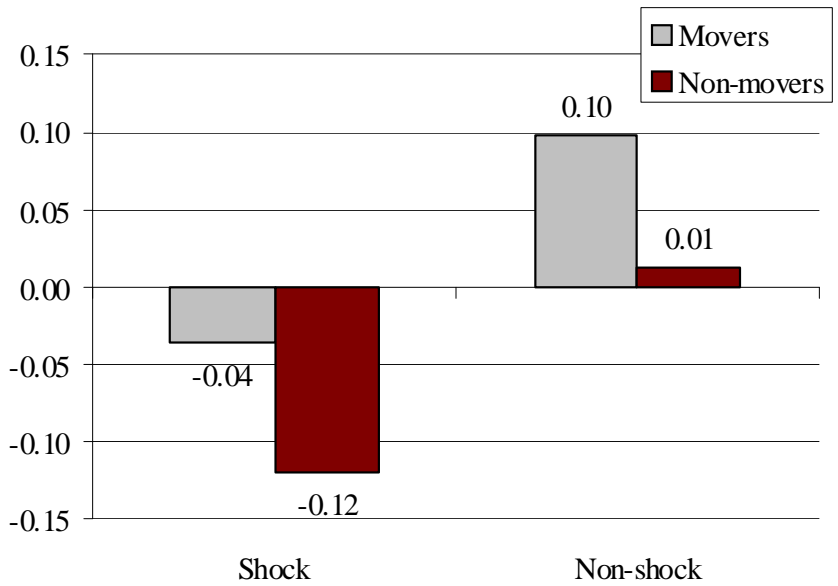
Note: The categories within each group do not add to 100 percent due to movers who provided no reason.
 Source: Authors' calculations from 1994-2004 HRS.

Figure 6. *Average Change in Home Equity, by Shock and Move Status, 1994-2004, 2006 Dollars*



Source: Authors' calculations from 1994-2004 HRS.

Figure 7. Average Change in Psychological Well-being, by Shock and Move Status, 1994-2004



Source: Authors' calculations from 1994-2004 HRS.

Table 1. *Characteristics of Movers by Reason Given for Moving, 1994-2004*

Characteristics:	Non-movers	Movers	“Planners”			“Reactors”	
			Better location/ house	Financial	Retirement	Family	Health
Age	64	63	62	64	63	63	65
Married	0.710	0.663	0.688	0.652	0.808	0.571	0.603
White	0.849	0.894	0.886	0.896	0.924	0.892	0.864
College degree, head	0.230	0.269	0.324	0.237	0.410	0.191	0.222
Poor/fair health, head	0.192	0.199	0.169	0.193	0.133	0.230	0.406
Poor/fair health, spouse	0.139	0.134	0.102	0.115	0.099	0.157	0.223
Social Security wealth, median (\$)	147,300	145,600	147,800	152,500	164,400	138,200	135,100
Gross house value, median (\$)	128,490	141,198	136,032	173,153	163,902	115,641	96,471
Net housing wealth, median (\$)	98,945	91,228	83,122	104,778	113,071	81,619	72,840
Financial wealth, median (\$)	23,415	22,263	32,775	16,324	50,428	12,923	2,721
Household income, median (\$)	41,787	45,020	56,000	40,460	62,840	37,060	25,320
Stopped working, head	0.105	0.162	0.091	0.147	0.322	0.156	0.134
Stopped working, spouse	0.060	0.097	0.083	0.092	0.204	0.064	0.050
Newly widowed	0.026	0.044	0.024	0.057	0.019	0.047	0.115
Newly divorced	0.006	0.059	0.016	0.015	0.005	0.165	0.024
Job loss	0.041	0.047	0.040	0.040	0.060	0.060	0.013
Hospitalize/worsened health	0.326	0.321	0.252	0.358	0.353	0.283	0.573
Nursing home, head or spouse	0.013	0.017	0.008	0.014	0.002	0.018	0.082
% discontinued homeownership, movers		0.247	0.154	0.278	0.116	0.376	0.399
Distance moved, (%): 0-20 miles	-	60	65.13	83.62	30.11	51.04	63.11
20-200 miles	-	19	17.83	11.25	24.67	22.29	17.15
200+ miles	-	21	17.04	5.13	45.23	26.67	19.74
N	21,987	1,759	383	368	258	497	75

Note: Characteristics are weighted using households weights. Variables except age and health are defined as of previous wave. Social Security wealth is calculated at the Normal Retirement Age and is available at the HRS website. Wealth characteristics are at the household level.

Source: Authors' calculations from 1994-2004 HRS.

Table 2. *Marginal Effects on the Probability of Moving, 1994-2004*

Variable	All	With Shock	Without Shock
Age	-0.002 (0.01)	0.016 (0.01)	-0.022*** (0.007)
Age squared	-0.000 (0.00)	-0.000 (0.00)	0.000** (0.000)
Not married, previous wave	0.037*** (0.01)	0.052*** (0.01)	0.029*** (0.007)
Female	-0.015*** (0.00)	-0.007 (0.01)	-0.018*** (0.005)
White	0.028*** (0.00)	0.024*** (0.01)	0.029*** (0.005)
College degree, head	0.015*** (0.01)	0.017* (0.01)	0.012* (0.006)
Social Security Wealth, \$10K	0.000* (0.00)	0.000 (0.00)	0.001* (0.000)
Ln(gross house value)	0.008** (0.00)	0.004 (0.01)	0.009** (0.005)
Net house value, \$10K	-0.001*** (0.00)	-0.001 (0.00)	-0.001** (0.000)
Household income, \$1K	0.000** (0.00)	0.000** (0.00)	0.000 (0.000)
Worked previous wave, head	-0.026*** (0.00)	- -	-0.020*** (0.006)
Worked previous wave, spouse	-0.009* (0.01)	- -	-0.010 (0.006)
Stopped working, head	0.055*** (0.01)	- -	0.060*** (0.011)
Stopped working, spouse	0.063*** (0.01)	- -	0.056*** (0.014)
Newly widowed	0.077*** (0.02)	0.081*** (0.02)	- -
Newly divorced	0.423*** (0.04)	0.424*** (0.05)	- -
Job loss	-0.004 (0.01)	-0.001 (0.01)	- -
Worsened health/hospitalization	0.002 (0.00)	0.001 (0.01)	- -
Nursing home	0.030 (0.02)	0.032 (0.02)	- -
Pseudo R ²	0.0476	0.0641	0.0287
Number of observations	23,267	9,052	14,246

Note: Omitted categories: male, non-white, less than college, single. Model includes year fixed effects. *denotes significance at the 10% level, **at the 5% level, and ***at the 1% level.

Source: Authors' calculations from 1994-2004 HRS.

Table 3. *Marginal Effects on the Probability of Discontinued Homeownership, Movers, 1994-2004*

Variable	All	With Shock	Without Shock
Age	-0.046 (0.03)	-0.028 (0.06)	-0.060** (0.03)
Age squared	0.000 (0.00)	0.000 (0.00)	0.000* (0.00)
Not married, previous wave	0.130*** (0.03)	0.238*** (0.06)	0.058* (0.03)
Female	0.014 (0.03)	0.072* (0.04)	-0.008 (0.03)
White	-0.130*** (0.04)	-0.028 (0.05)	-0.213*** (0.05)
College degree, head	-0.021 (0.03)	-0.046 (0.05)	-0.016 (0.03)
Social Security Wealth, \$10K	-0.001 (0.00)	-0.005** (0.00)	0.000 (0.00)
Ln(gross house value)	-0.035** (0.02)	-0.043 (0.03)	-0.027 (0.02)
Net house value, \$10K	-0.001 (0.00)	-0.002 (0.00)	-0.000 (0.00)
Household income, \$1K	-0.000 (0.00)	-0.000 (0.00)	-0.000 (0.00)
Worked previous wave, head	-0.044 (0.03)	- -	0.009 (0.03)
Worked previous wave, spouse	0.031 (0.03)	- -	-0.043 (0.03)
Stopped working, head	0.056 (0.04)	- -	0.045 (0.04)
Stopped working, spouse	-0.108*** (0.04)	- -	-0.037 (0.05)
Newly widowed	0.132** (0.07)	0.055 (0.10)	- -
Newly divorced	0.504*** (0.06)	0.497*** (0.08)	- -
Job loss	-0.040 (0.05)	-0.132* (0.07)	- -
Worsened health/hospitalization	0.075*** (0.03)	-0.075 (0.09)	- -
Nursing home	0.351*** (0.12)	0.327*** (0.13)	- -
Pseudo R ²	0.1374	0.1897	0.0808
Number of observations	1,707	744	972

Note: Omitted categories: male, non-white, less than college, single. Model includes year fixed effects. *denotes significance at the 10% level, **at the 5% level, and ***at the 1% level.

Source: Authors' calculations from 1994-2004 HRS.

Table 4. *Change in Psychological Well-being, Ordered Logit Estimates, 1994-2004*

Variable	All	With Shock	Without Shock
Move	0.141** (0.06)	0.147* (0.09)	0.132* (0.07)
Age	0.008 (0.06)	-0.033 (0.10)	0.053 (0.06)
Age squared	0.000 (0.00)	0.000 (0.00)	-0.000 (0.00)
Not married, previous wave	0.141*** (0.02)	0.180*** (0.05)	0.128*** (0.03)
Female	-0.016 (0.02)	-0.030 (0.04)	-0.005 (0.03)
White	-0.025 (0.02)	-0.043 (0.05)	-0.015 (0.04)
College degree	-0.023 (0.02)	0.047 (0.04)	-0.070** (0.03)
Net household wealth, previous wave	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)
Job loss	0.073 (0.07)	0.014 (0.10)	- -
Health shock	-0.089*** (0.03)	-0.148 (0.12)	- -
Newly widowed	-1.653*** (0.11)	-1.527*** (0.13)	- -
Newly divorced	-0.465** (0.23)	-0.440* (0.24)	- -
Nursing home	-1.361*** (0.38)	-1.238*** (0.35)	- -
Pseudo R ²	0.007	0.011	0.002
Number of observations	23,401	9,058	14,374

Notes: Omitted categories: male, non-white, less than college, single. Model includes year fixed effects. Net household wealth is the sum of net financial wealth and net housing wealth. *denotes significance at the 10% level, **at the 5% level, and ***at the 1% level.

Source: Authors' calculations from 1994-2004 HRS.

Appendix A

Table A1. *Summary Statistics for Moving Regression, 1994-2004*

Variables	All		With Shock		Without Shock	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Move	0.076	0.265	0.086	0.280	0.070	0.255
Becoming a renter or other	0.242	0.429	0.327	0.469	0.180	0.384
Age	63.629	4.546	64	5	63	4
Not married, previous wave	0.291	0.454	0.204	0.403	0.346	0.476
Female	0.493	0.500	0.500	0.500	0.488	0.500
White	0.854	0.354	0.862	0.344	0.848	0.359
College degree, head	0.232	0.422	0.201	0.401	0.250	0.433
Social Security Wealth	155,534	90,974	156,954	91,916	154,601	9,0342
Ln(gross house value)	2.521	0.858	2.451	0.868	2.564	0.849
Net house value	137,120	291,006	126,864	206,300	143,472	332,485
Household income	62,164	105,263	57,522	73,539	64,995	120,642
Worked previous wave, head	0.555	0.497	-	-	0.579	0.494
Worked previous wave, spouse	0.367	0.482	-	-	0.368	0.482
Stopped working, head	0.109	0.312	-	-	0.090	0.286
Stopped working, spouse	0.063	0.244	-	-	0.057	0.232
Newly widowed	0.026	0.160	0.069	0.253	-	-
Newly divorced	0.009	0.096	0.024	0.154	-	-
Job loss	0.042	0.201	0.110	0.313	-	-
Worsened health/hospitalization	0.326	0.469	0.851	0.356	-	-
Nursing home	0.013	0.114	0.034	0.182	-	-

Source: Authors' calculations from 1994-2004 HRS. Observations are weighted using households' weights.

Table A2. *Summary Statistics for Homeownership Discontinuation Model, 1994-2004*

Variables	All		With Shock		Without Shock	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
% discontinued homeownership	0.250	0.433	0.337	0.473	0.185	0.389
Change in financial wealth, all	19,305	566,965	27,823	688,039	12,589	452,477
Change in financial wealth, renters	10,843	192,245	14,035	198,261	6,084	182,523
Age	63	5	63	5	63	5
Not married, previous wave	0.334	0.472	0.250	0.433	0.401	0.490
Female	0.475	0.500	0.512	0.500	0.447	0.497
White	0.896	0.305	0.887	0.316	0.903	0.296
College degree, head	0.270	0.444	0.237	0.426	0.293	0.456
Social Security Wealth	15.507	8.922	15.165	9.032	15.731	8.824
Ln(gross house value)	2.553	0.964	2.468	1.000	2.614	0.931
Net house value	13.024	14.852	12.139	15.051	13.644	14.639
Household income	67.272	81.142	64.384	78.923	69.452	82.707
Worked previous wave, head	0.546	0.498	0.499	0.500	0.582	0.493
Worked previous wave, spouse	0.360	0.480	0.374	0.484	0.352	0.478
Stopped working, head	0.162	0.368	0.181	0.385	0.146	0.353
Stopped working, spouse	0.097	0.295	0.100	0.301	0.093	0.290
Newly widowed	0.043	0.203	0.100	0.300	-	-
Newly divorced	0.057	0.232	0.132	0.339	-	-
Job loss	0.047	0.211	0.108	0.311	-	-
Worsened health/hospitalization	0.323	0.468	0.748	0.434	-	-
Nursing home	0.002	0.046	0.005	0.070	-	-

Source: Authors' calculations from 1994-2004 HRS. Social Security wealth and net housing wealth are measured in \$10,000. Income is measured in \$1000. Observations are weighted using households' weights.

Table A3. *Summary Statistics for Psychological Well-being Regression, 1994-2004*

Variables	All		With Shock		Without Shock	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Change in psychological well-being	-0.03	1.13	-0.11	1.25	0.02	1.04
Move	0.08	0.26	0.08	0.28	0.07	0.25
Age	63.68	4.63	63.92	4.83	63.52	4.52
Age squared	4076	589	4,108	612	4,055	574
Not married, previous wave	0.29	0.45	0.20	0.40	0.35	0.48
Female	0.49	0.50	0.50	0.50	0.49	0.50
White	0.85	0.35	0.86	0.34	0.85	0.36
College degree	0.23	0.42	0.20	0.40	0.25	0.43
Net household wealth, previous wave (in \$10,000 units, 2006 dollars)	26.63	69.54	23.73	44.96	28.38	80.91
Job loss	0.04	0.20	0.11	0.31	-	-
Health shock	0.32	0.47	0.85	0.35	-	-
Newly widowed	0.03	0.16	0.07	0.25	-	-
Newly divorced	0.01	0.09	0.02	0.15	-	-
Nursing home	0.00	0.05	0.01	0.08	-	-

Source: Authors' calculations from 1994-2004 HRS. Observations are weighted using households' weights.

Table A4. *Definition of U.S. Census Regional Divisions*

Region 1 (Northeast)	Division 1 (New England)	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut
	Division 2 (Mid-Atlantic)	New Jersey, New York, Pennsylvania
Region 2 (Midwest)	Division 3 (East North Central)	Illinois, Indiana, Michigan, Ohio, Wisconsin
	Division 4 (West North Central)	Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
Region 3 (South)	Division 5 (South Atlantic)	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia
	Division 6 (East South Central)	Alabama, Kentucky, Mississippi, Tennessee
	Division 7 (West South Central)	Arkansas, Louisiana, Oklahoma, Texas
Region 4 (West)	Division 8 (Mountain)	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
	Division 9 (Pacific)	Alaska, California, Hawaii, Oregon, Washington

Source: U.S. Census Bureau (2004).

Table A5. *Categories of Reasons for Moving*

Category	Includes reasons
Better Location/ House	Larger home
	New house/apartment has specific desirable features not size related
	New neighborhood; location better; better area; nicer location etc
	Bought own/new home; had new one built; wanted a house
	Positive change in economic status (e.g., received inheritance)
	Old neighborhood/location bad; run down area; crime; bad schools; earthquakes; other undesirable characteristics
	Not happy in last location
	Respondent or partner/spouse changed job
	Work or retirement related (not classified as retirement reason); business opportunities
	Closer to work
	Public transportation
	Shopping, other consumption services
	Moved into an area previously lived in
	Moved into previously owned property or vacation home
Financial	Dispossessed/forced to move (e.g. old house sold by owner; property condemned; house/property not well maintained, falling apart; conflict with owner)
	Natural disaster
	Desperation; nowhere else to go
	Sold old home; in order to sell home
	Smaller or less expensive home
	Simpler house to take care of; less upkeep; old property too much upkeep
	Cheaper area
	Negative change in economic status of respondent or spouse/partner (e.g., respondent or spouse/partner laid off or unemployed)
	Financial reasons
Retirement	Climate or weather
	Leisure activities
	Respondent retired
	Spouse retired
	Retirement or semi-retirement area; we're out in the country now; peaceful, quiet area
	Moved to retirement housing or complex
	Work or retirement related (if not working/say retired)
Family	Near or with children
	Near or with other relatives/friends
	To care for relative/family member
	To move in with non-family member (e.g. "Moved in with my girlfriend")
	To get away from family members (e.g. "My husband is abusive")
	To get away from non-family members
	Family problems
	Change in marital status

Health	Health problem or services
Other	In temporary housing/transition while home is fixed or remodeled
	Could not or did not want to live alone
	Wanted to live alone
	Personal reasons or no reason
	Other

Source: Authors' classification from the 1996-2004 HRS.

RECENT WORKING PAPERS FROM THE
CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

The Implications of Declining Retiree Health Insurance

Courtney Monk and Alicia H. Munnell, August 2009

Capital Income Taxes With Heterogeneous Discount Rates

Peter Diamond and Johannes Spinnewijn, June 2009

Are Age-62/63 Retired Worker Beneficiaries At Risk?

Eric R. Kingson and Maria T. Brown, June 2009

Taxes and Pensions

Peter Diamond, May 2009

How Much Do Households Really Lose By Claiming Social Security at Age 62?

Wei Sun and Anthony Webb, April 2009

Health Care, Health Insurance, and the Relative Income of the Elderly and Nonelderly

Gary Burtless and Pavel Svaton, March 2009

Do Health Problems Reduce Consumption at Older Ages?

Barbara A. Butrica, Richard W. Johnson, and Gordon B.T. Mermin, March 2009

Financial Hardship Before and After Social Security's Early Eligibility Age

Richard W. Johnson and Gordon B.T. Mermin, March 2009

Rising Tides and Retirement: The Aggregate and Distributional Effects of Differential Wage Growth on Social Security

Melissa M. Favreault, February 2009

Accounting for the Heterogeneity in Retirement Wealth

Fang Yang, January 2009

Labor Supply Elasticity and Social Security Reform

Selahattin Imrohorolu and Sagiri Kitao, January 2009

Evaluating Micro-Survey Estimates of Wealth and Saving

Barry P. Bosworth and Rosanna Smart, January 2009

All working papers are available on the Center for Retirement Research website (<http://www.bc.edu/crr>) and can be requested by e-mail (crr@bc.edu) or phone (617-552-1762).