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Chestnut Hill, Mass.: Center for Retirement Research at Boston College, February 2020

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# ARE HOMEOWNERSHIP PATTERNS STABLE ENOUGH TO TAP HOME EQUITY?

BY ALICIA H. MUNNELL, ABIGAIL N. WALTERS, ANEK BELBASE, AND WENLIANG HOU\*

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## Introduction

As retirees live longer, spend more on health care, and get less income replaced by Social Security, many may need to tap their home equity to be comfortable. They could access equity most directly by selling the house where they raised their children and buying a smaller, less expensive house. Such a shift would not only produce a bundle of cash but would also reduce the expenses associated with homeownership. The problem is that most retirees are attached to their homes and want to age in place. The alternative, then, is to tap equity through a reverse mortgage or a state property tax deferral program, both of which allow people to borrow against their house and pay back the loan with interest when they move or die. However, few households choose either of these options.

The question is why homeowners – who need the money, have the equity, and want to stay put – avoid borrowing against their home. In part, they may be put off by the complexity of the product or want to avoid liens on an asset that they plan to leave as a bequest. But a more fundamental concern may be the

fear that, if they do decide to move, they will have to pay back the loan with interest and could be left with inadequate resources late in life. This *brief*, which is based on a recent paper, assesses how likely people are to move as they age to see if borrowing against one's home is a viable financial strategy.<sup>1</sup>

The discussion proceeds as follows. The first section introduces the ways to tap home equity while remaining in place. The second section describes the data used for the analysis, the methodology for creating a “synthetic cohort” that can be observed from age 50 until death, and the sequence analysis technique for identifying common housing trajectories. The third section reports the results of applying sequence analysis to the synthetic cohort. Once groups with stable and unstable housing patterns have been identified, the fourth section reports on the characteristics of the homeowners who fit each pattern. The final section concludes that most homeowners experience enough residential stability to tap home equity.

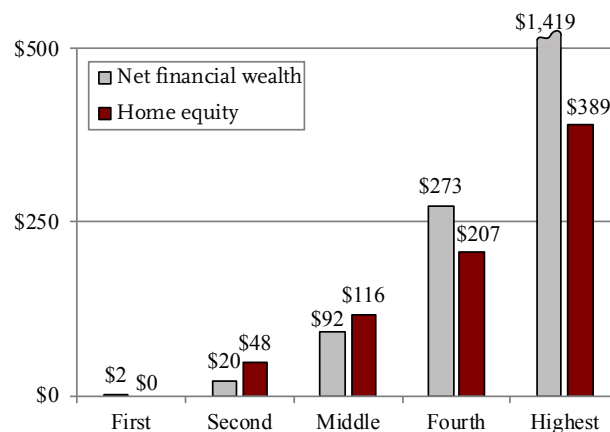
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## Background

For many households, particularly those with less wealth, their home equity is larger than their financial assets (see Figure 1). Tapping home equity in retirement could provide millions of retirees with a way to make ends meet or to maintain their standard of living. Given the value that people place on remaining in their current home, borrowing against home equity through either a reverse mortgage or a property tax deferral program could be attractive.

FIGURE 1. MEDIAN NET FINANCIAL WEALTH AND HOME EQUITY OF HOUSEHOLDS AGES 65-69 IN 2016, BY NET WORTH QUINTILE, THOUSANDS OF 2019 DOLLARS



Source: Authors' calculations from U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (2016).

## Reverse Mortgages

Essentially all reverse mortgages are government-insured Home Equity Conversion Mortgages (HECMs), available to homeowners ages 62 and older. HECM loans are typically set up as a line of credit.<sup>2</sup> The government guarantee assures borrowers that they will get the contracted funds and assures lenders that they will be repaid even if the balance exceeds the proceeds from the sale of the house. A HECM loan on a \$300,000 house costs about \$13,500 up front and 5.0 percent on amounts borrowed in January 2020, with the rate adjusted annually.<sup>3</sup> The high up-front costs make the product costly for short-term borrowers.<sup>4</sup> In addition, reverse mortgages are complex products that few understand, and if retirees end up moving they need to repay the loan.<sup>5</sup>

## Property Tax Deferrals

An alternative, and seemingly less complex and cheaper, way to borrow against home equity is a property tax deferral program. In many states, qualified – generally low-income – senior homeowners can defer their property taxes for as long as they stay in their home. By reducing taxes upfront, such programs free up money that can be used for other purposes, providing a stream of income for life that is very similar to having an annuity. The deferred amounts are repaid with interest when the person dies or sells the home, so the programs have no long-run cost for states or localities. Despite the advantages, eligibility is limited and take-up is low. A proposed redesign to the tax deferral program in Massachusetts would: 1) open up the program by removing income limits; 2) simplify sign-up; and 3) have the state – rather than the localities – handle program finances.<sup>6</sup> But even this new proposal has run into resistance from potential participants who do not want to have a lien on their property in case they want to leave their home as a bequest or need to move.

The question of interest here is how likely people are to move as they age, which can help determine if borrowing against one's home is a viable financial strategy.

## Data and Methodology

The three inputs into the analysis are: 1) the data; 2) the creation of the synthetic cohort; and 3) the use of sequence analysis to identify common housing trajectories.

### Data

This project uses data from the 1992-2016 waves of the *Health and Retirement Study* (HRS), a longitudinal survey of households ages 50 and over that includes several different cohorts added over time. The focus is on the housing trajectories of two of these cohorts: homeowners ages 50-54 in 1992 (the HRS cohort) and homeowners ages 70-74 in 1993 (the AHEAD cohort). The sample is restricted to those who remain in the study, have no missing observations, and consistently report their homeownership status. With these restrictions, the HRS sample consists of 1,142 households and the AHEAD sample consists of 931 households. The restricted samples for both cohorts continue to look like homeowners in the original surveys.

The analysis tracks the households over time, using the following rules. For single-person households, follow the individual. For singles who marry and for existing couples, follow the household. If couples divorce, continue the analysis with the financial respondent and drop the non-respondent spouse from the sample. If a spouse dies or enters a long-term services and supports (LTSS) facility, the analysis continues with the spouse who remains in the community. The focus here is not usage of care facilities, but whether people stay in their home long enough to make borrowing against the home an economically viable strategy.

While the HRS has 24 years of longitudinal data, that period is insufficient to observe a full cohort from ages 50-54 until death. To describe the typical housing trajectories of people in their 50s until death requires the creation of a synthetic cohort.

### *Synthetic Cohort*

The synthetic cohort is created by “splicing” together the HRS and AHEAD cohorts to create a complete picture of late-life housing trajectories until death (see Table 1). The synthetic cohort starts by following the housing trajectories of the 1,142 homeowners in the HRS cohort as the core sample, who are ages 50-54 in 1992, until 2016 when they are ages 74-78. Of this core sample, the 823 surviving households in 2016 are paired with similar households from the donor pool of the AHEAD cohort who are ages 74-78 in 1998.<sup>7</sup> By following the AHEAD cohort until 2016, when surviving households turn ages 92-96, the synthetic cohort can cover housing transitions from retirement age to death.<sup>8</sup>

### *Sequence Analysis*

This project uses sequence analysis to describe and group together common residential patterns among homeowners *who move* in each of the cohorts described earlier. Unlike methods that use a respondent’s housing situation at one point in time as the unit of analysis, sequence analysis uses the homeowner’s entire housing trajectory. Relying on a series of observations as the unit of analysis makes it possible to group together households with similar housing status at similar times and in a similar order. Visualizing trajectories allows the detection of patterns that might not be obvious using statistics.<sup>9</sup>

## Results of the Sequence Analysis

The sequence analysis was applied to the movers in three cohorts: the original HRS cohort (50-54 in 1992), the AHEAD cohort (70-74 in 1993), and the synthetic cohort described above. The following reports the results for the synthetic cohort only, which are fully consistent with the results for the HRS and AHEAD cohorts.

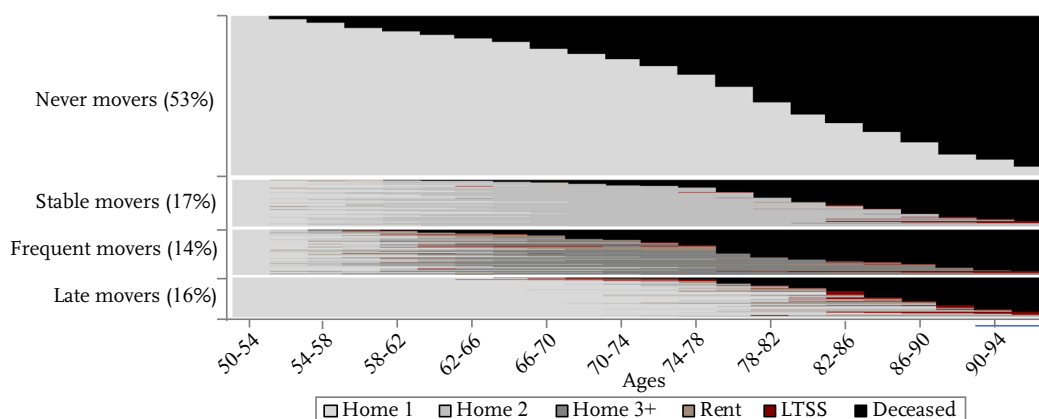
The analysis uncovers four groups of households (see Figure 2 on the next page). Those in Group 1 (53 percent) never move from the original home they lived in when they were in their early 50s. Group 2 households (17 percent) move around the time of retirement into a new owner-occupied home and then generally stay in that new home until death. Group 3 (14 percent) are frequent movers. And those in Group 4 (16 percent) stay in their original home until their 80s and then move into either a rental or an LTSS facility.

TABLE 1. SYNTHETIC COHORT METHODOLOGY, BY SURVEY YEARS AND AGE RANGES

Survey year	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012	2014	2016
Core sample	50-54	52-56	54-58	56-60	58-62	60-64	62-66	64-68	66-70	68-72	70-74	72-76	74-78
Donor pool				74-78	76-80	78-82	80-84	82-86	84-88	86-90	88-92	90-94	92-96

Source: Authors’ illustration.

FIGURE 2. SEQUENCE GROUPS FOR HOME-OWNING HOUSEHOLDS IN THE SYNTHETIC COHORT, 1992-2016



Source: Authors' calculations using University of Michigan, *Health and Retirement Study* (HRS) (1992-2016).

The results from the sequence analysis show that the vast majority of households rarely change residences even over several decades. The remaining question is: who moves and why?

## Characteristics of Movers

To better understand who moves in retirement, the next step is to compare the demographics of the various groups (see Table 2 on the next page). As noted above, the default appears to be the desire to settle in for the duration. Households accomplish this goal in one of two ways. In the first case, households decide to stay in the same home they were in during their 50s. These households look very much like the average in terms of race, income, and wealth. In the second case, households purchase a new home around the time of retirement and stay there through old age. The data suggest households that follow this second path are the most privileged of the four groups. They are more educated than the average older household; and they have higher income, substantially more financial wealth, and more housing wealth. Both the “never movers” and “stable movers” end up with substantially more housing wealth than the movers the last time that each one is observed.

As discussed, the movers consist of two distinct groups – “frequent movers” and “late movers.” The frequent movers look somewhat like the stable movers in that they are better educated and have higher income than the average. Along other dimensions, however, they differ noticeably. Most importantly, a much smaller share of the frequent movers are two-earner couples, and the frequent movers have more children, experience more unemployment, and have less financial wealth. The result of the frequent moves appears to be less combined housing and financial wealth than any other group at the end of the observation period.

The other group that moves – the late movers – look exactly like the never movers along many dimensions. The households are similar in racial makeup, education, percentage of dual-earners, and incomes at the first observation. The late movers are better off, however, than the never movers in terms of starting financial and housing wealth. The problem is that they are more likely to experience a health impairment that forces them to move in their 80s. As they sell their home, their housing wealth drops and their financial wealth increases. The challenge is that it is very difficult to tell early on which households will need to move in their old age.

TABLE 2. CHARACTERISTICS OF SEQUENCE GROUPS FOR HOME-OWNING HOUSEHOLDS AGES 50-54 IN 1992 (SYNTHETIC)

Characteristics	Sequence group				All
	Never movers	Stable movers	Frequent movers	Late movers	
Share of total sample	53%	17%	14%	16%	100%
Couple	80	78	76	78	79
White	81	87	90	83	84
College degree	20	34	27	22	23
Two-earner couple	65	69	59	69	66
<i>With any ADL impairment</i>					
First observation	5	6	5	2	5
Last observation	38	37	41	54	41
<i>Housing - last observation</i>					
Homeowner	100	83	52	30	47
Renter/other	0	5	31	23	21
LTSS	0	12	17	47	19
Share of observations unemployed	13	13	21	11	14
Number of children	3.1	3.0	3.6	3.1	3.1
<i>Household income</i>					
First observation	\$75,000	\$95,000	\$83,000	\$80,000	\$81,000
Last observation	33,000	34,000	30,000	27,000	31,000
<i>Financial wealth</i>					
First observation	13,000	27,000	15,000	27,000	18,000
Last observation	11,000	31,000	9,000	47,000	20,000
<i>Housing wealth</i>					
First observation	89,000	105,000	78,000	108,000	95,000
Last observation	119,000	112,000	31,000	0	94,000

Notes: Characteristics are for the head of household except for ADL limitations (for the last survivor). Due to data availability, the first ADL observation is in 1994. Wages and wealth are in 2018 dollars.

Source: Authors' calculations using HRS (1992-2016).

## Conclusion

This study examines whether older homeowners – many of whom need the money, have the equity, and want to stay put – might avoid using reverse mortgages or property tax deferral programs because they expect to move. The results paint a clear picture: most households do not change residences, even over several decades. This stability shows up in two ways.

Households either stay in the home they were in during their 50s, or they buy a new home around retirement, where they generally remain for the duration. The minority of households that do move fall into two groups. Frequent movers appear to face financial challenges: a much smaller share of them are two-earner couples; the head experiences more unemployment; and the household enters the survey with less financial wealth. Late movers look like a slightly

more affluent version of the never movers, but then face a health shock that forces them out of the home they owned in their 50s into a rental unit or an LTSS facility. These findings largely support the narrative from previous research: most people want to age in place and usually move only in response to a shock.

The overall conclusion is that most homeowners – the exception being the frequent movers – experience enough residential stability to make tapping home equity through reverse mortgages or property tax deferrals a financially viable strategy.

## Endnotes

1 Munnell et al. (2020).

2 Sass (2017).

3 The up-front costs include the lender's origination fee, a mortgage insurance premium, and appraisal, legal, and other service fees.

4 See Haurin and Moulton (2017) for a comparison of equity withdrawal through borrowing in the United States and other industrialized nations. Mudrazija and Butrica (2017) compare the evolution of housing wealth in the United States and Europe.

5 See Davidoff, Gerhard, and Post (2017) and Davidoff (2015).

6 Munnell et al. (2017).

7 To get a large enough sample for the donor pool, this analysis also includes households from other cohorts within the age range. And, because some of the core cohort no longer own a home, this donor pool is not restricted to homeowners.

8 After the pairing process, 8 percent of households in the synthetic cohort are still alive at ages 92-96. Since these households are at an advanced age, their housing trajectories are unlikely to have many more changes before death; therefore, the analysis does not perform additional pairing on this group.

9 For more on the theory of social sequence analysis, see Abbott (1990).

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