



Residential Mobility of the European Elderly

Viola Angelini
Anne Laferrère

CESIFO WORKING PAPER NO. 3280
CATEGORY 2: PUBLIC CHOICE
DECEMBER 2010

An electronic version of the paper may be downloaded

- *from the SSRN website:* www.SSRN.com
- *from the RePEc website:* www.RePEc.org
- *from the CESifo website:* www.CESifo-group.org/wp

Residential Mobility of the European Elderly

Abstract

With the ageing of the European population, the housing choices of the elderly will have consequences on the whole housing market. In this paper we use data from the first two waves of the Survey of Health, Ageing and Retirement in Europe (SHARE) to analyse the residential mobility decisions of the elderly and the factors influencing them in eleven European countries.

JEL-Code: D10, R21, R28.

Keywords: housing, ageing, residential mobility, housing policy.

Viola Angelini
University of Groningen
Groningen / The Netherlands
v.angelini@rug.nl

Anne Laferrère
INSEE and CREST
France
anne.laferrere@insee.fr

November 2010

This paper uses data from SHARE release 2.3.0, as of November 13th 2009. SHARE data collection in 2004-2007 was primarily funded by the European Commission through its 5th and 6th framework programmes (project numbers QLK6-CT-2001- 00360; RII-CT- 2006-062193; CIT5-CT-2005-028857). Additional funding by the US National Institute on Aging (grant numbers U01 AG09740-13S2; P01 AG005842; P01 AG08291; P30 AG12815; Y1-AG-4553-01; OGHA 04-064; R21 AG025169) as well as by various national sources is gratefully acknowledged (see <http://www.share-project.org> for a full list of funding institutions).

1. Introduction

Housing is the most widely held asset and, therefore, an important component of household wealth in many European countries. The role of housing is made more complicated by the fact that it serves a double purpose: it is both an investment vehicle that allows investors to hold home equity and a durable consumption good from which the owner derives utility.

The life cycle model of saving under borrowing constraints predicts a hump shaped homeownership age profile (Artle and Varayia, 1978). The ownership rate increases with age as people save and become home-owners, and declines in old age as people draw on their housing equity. If individuals want to keep a good standard of living after retirement, they should release home equity by either taking up a mortgage, or by downsizing, or both.

The model is actually complicated by large mobility costs and housing illiquidity: moving house involves high transaction costs and this makes the trading infrequent. For this reason it is not surprising to find that very high proportions of elderly households own their home all over Europe (homeownership rate is above 70 percent for those aged 50-79 in most countries). The elderly may see their house as a secure asset in case of need and perceive it as a substitute for the purchase of long-term care insurance. Bequest motives can also explain the high home-ownership rates in old age: the house is a family asset that can be transmitted to the next generation.

Empirical studies, mostly based on US data, find that the elderly are not likely to decumulate housing wealth (Venti and Wise, 2004), contrary to the predictions of the life-cycle model of consumption and saving. Rather, the evidence suggests that the elderly prefer not to move, unless they are forced to by outside shocks – such as the death of a spouse or health problems. The evidence for other countries is far more limited. Chiuri and Jappelli (2010) use repeated cross section data from the Luxembourg Income Study to show that few households

cease to be home-owners late in life. Tatsiramos (2006) is the only systematic attempt to study residential mobility in different EU countries, using ECHP data on six countries from 1994 to 2001. He estimates residential mobility among the elderly to be 1.5 percent per year in Southern Europe (Italy and Spain) and 3 percent in Central Europe (France, Germany and the Netherlands) and the UK.

This paper uses data from the first two waves of the Survey of Health, Ageing and Retirement in Europe (SHARE) to investigate elderly households' residential mobility choices and the factors influencing them in eleven European countries. The longitudinal nature of the data will allow us to study both the decision to move and the changes in housing consumption of those who move. This topic is very relevant because the decisions of large “baby-boom” cohorts turning into a “papy-boom” will have consequences on the housing market, not only for those cohorts and for the future generations of elderly, but also for the younger cohorts.

The plan of the paper is as follows. In section 2 we present the data and we assess the importance of residential mobility. In section 3 we study its determinants, distinguishing the mobility between private ordinary dwellings from that to nursing homes and analysing separately tenants and home-owners. In section 4 we study the housing adjustments made by those individuals who move and in section 5 we conclude.

2. Residential mobility in old age

To study residential mobility of the elderly we draw data from the 2004 and 2006 waves of the Survey of Health, Ageing and Retirement in Europe (SHARE). This survey collects extensive information on health, socioeconomic status and family interactions of individuals aged 50 and over in eleven European countries, ranging from Scandinavia to the

Mediterranean: Austria (AT), Belgium (BE), Denmark (DK), France (FR), Germany (DE), Greece (GR), Italy (IT), Netherlands (NL), Spain (ES), Sweden (SE) and Switzerland (CH).

Table 1 presents the sample of individuals who were interviewed in both waves.

Table 1. Description of the longitudinal sample 50 +

	Immobile	To private dwelling	To nursing home	total
Sweden	1 702	163	14	1 879
Denmark	1 041	88	23	1 152
Germany	1 407	47	7	1 461
The Netherlands	1 509	57	10	1 576
Belgium	2 592	40	21	2 653
France	1 796	46	9	1 851
Switzerland	619	27	6	652
Austria	1 160	14	7	1 181
Spain	1 169	42	4	1 215
Italy	1 627	52	0	1 679
Greece	2 153	17	0	2 170
All	16 775	593	101	17 469
In percent	96,0	3.4	0.6	100,0

N.B. The longitudinal sample comprises 17 469 individuals aged 50 or more. Among them 593 moved home (ordinary/private dwelling) and 101 entered a nursing home between wave 1 and wave 2. Those who lived in nursing home in wave 1 are excluded

The longitudinal nature of the survey allows estimating the annual residential mobility rate of the 50 + and understanding what motivates their choices. Mobility rates can be estimated mainly in two ways. First, without using the longitudinal aspect of the survey, we can measure mobility from the information on the number of years respondents have been living in their home: the results show that the percentage of individuals who have been living in their current accommodation for less than two years is 2.6 in 2004 and 2.6 in the 2006. Second, the annual mobility rate can be estimated by using the information on residential mobility between the two survey waves, as declared by respondents¹. The proportion of mobile individuals is 4 percent. To estimate the annual mobility rate, one should take into account that the time span between the two survey waves, which is on average 28 months, varies substantially both within and across countries, from a minimum of 11 months to a

¹ We use the question ‘Did you move since <date of previous interview>?’

maximum of 40 months. Once we apply this correction, we obtain a mean annual rate equal to 1.7 percent (Figure 1). However, attrition can be particularly serious here since respondents who moved between the two waves might have been particularly difficult to retrieve and, therefore, dropped out of the sample. To overcome this problem, we use data from the sample management system to try to identify those households who were not retrieved in 2006 but presumably moved². When these households are included in the computation, the estimated mobility rate is 2 percent at the household level (figure 2, unweighted). Hence, all measures converge to a low residential mobility rate of around 2 percent per year. The country rates go from 4.4 percent in Denmark and Sweden to 1 percent in Austria and 0.3 percent in Greece.³ In most countries, mobility is found to decrease with age, with an important rebound after age 80, as people move to nursing homes (figure 1) and the mean annual mobility rate increases to 3 percent. In the Netherlands and in Belgium, the mobility rate is higher among the 60-69 than the 50-59, which might be due to retirement mobility.

² Interviewers have to code the reason why they could not contact the household. We consider those households that could not be retrieved because they moved (often to an unknown address).

³ These rates are not far from those of Tatsiramos (2006) from ECHP 1994-2001, except for some countries. Germany is at the same level as Denmark according to the ECHP, which does not follow individual in nursing homes.

Figure 1. Annual mobility rate by age group

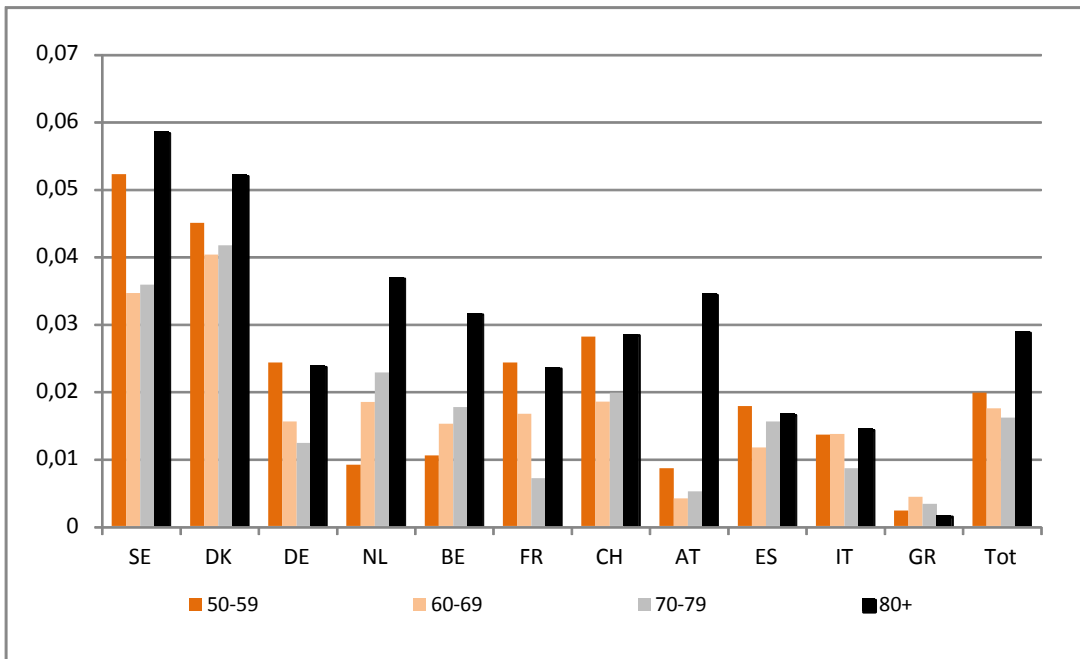
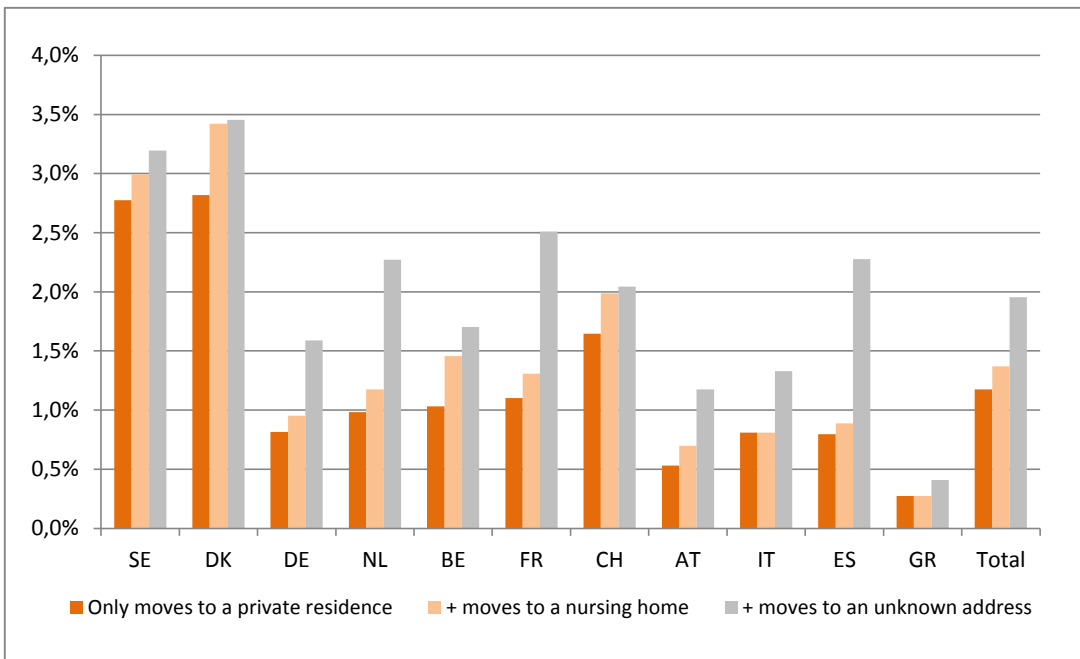


Figure 2. . Annual mobility rate by country (household level, unweighted)



3. The determinants of residential mobility

The longitudinal nature of SHARE and the unique feature that individuals were followed into nursing homes provide precious information on what determines residential mobility and on the choices made by those who move, despite the small sample size of movers. Our intuition is that moving from one private accommodation to another is very different from moving to a nursing home. The first type of mobility is largely a free choice, while the second is often a forced choice. We identify the difference by testing if, taking into account mobility costs, more resources make mobility between homes easier, while it has less influence, or even a reversed effect on moving to an institution.

3.1 Habit formation

We first present a series of Probit models analysing the probability to have moved from a private dwelling to another one between the two survey waves (Table 2). Our data allow us to control for a large number of variables, including demographic characteristics (age, marital status, household size, presence of children), socio-economic status (income, wealth, economic activity), health housing quality (whether the individual lives in a house or a flat, in a rural area or in a city, in a crime-ridden neighbourhood) and the country of residence.

A well-known general result is that residential mobility declines with age as housing consumption is progressively adjusted along the life-cycle; this can be seen in column 1 of Table 2. Among the 50+, those aged 50-59 are the most mobile. What is less studied, for lack of longitudinal data, is the way mobility also depends on the time one has spent in the same home (Boehm and Schlottmann, 2006). For this reason, in our model we also control for the number of years spent in the same accommodation⁴. Among the 50+, the more time spent in the home, the less likely one is to leave it, at a given age. This negative effect

⁴ In all models we introduce as explanatory the number of months between the two survey waves and country dummies.

appears in columns 2 to 5 of Table 2: ten more years spent in the same accommodation reduce the probability of moving by 0.5 point. Once the length of tenure is introduced, age has an effect on mobility only after age 80, when some decide to move (column 2). And even this old age effect loses its significance when other control variables are introduced, such as income and homeownership (column 3), or marital status (columns 4 and 5)⁵. These results show that it is not age *per se* that matters but length of tenure.

A homeowner is less likely to move than a tenant because her mobility costs are higher, as they include higher transaction costs, and because houses tend to be more adapted to owner-occupiers, who can arrange it to their taste, than to tenants. However, the tenure effect cannot be interpreted as casual because there is endogenous selection due to the fact that owner-occupation is not chosen by individuals or households who plan to move soon. Nevertheless, the high rates of home-ownership among the elderly Europeans can be proven to be an obstacle to mobility. We also find that, because of mobility costs, a higher income helps to move, and so do higher savings⁶.

⁵ For the list of all control variables, see footnotes of table 2.

⁶ Income is introduced via 4 dummies for each household income quartile, estimated at the national level. Wealth is PPP-adjusted net household wealth. All standard errors in estimations account for clustered observations in a household in case of couples.

Table 2. Residential mobility between private dwellings (marginal effects)

	(1)	(2)	(3)	(4)	(5)
Age 50-59	0.010**	0.003	0.005	0.001	0.003
Age 60-69	0.003	-0.000	0.001	0.000	0.000
Age 70-79	Ref.	Ref.	Ref.	Ref.	Ref.
Age 80 +	0.007	0.010*	0.006	0.003	0.003
Nb of years in home_w1 (x10)		-0.007***	-0.005***	-0.005***	-0.005***
Income					
1 st quartile_w1			Ref.	Ref.	Ref.
2 nd quartile_w1			0.001	0.005	0.005
3 rd quartile_w1			0.003	0.009*	0.009*
4 th quartile_w1			0.002	0.009*	0.010*
Net wealth_w1 (x10 ⁹)			2.31**	2.20**	2.23**
Owner-occupier_w1			-0.035***	-0.032***	-0.032***
Crime in neighbourhood_w1				0.007	0.007
Rural_w1				-0.010***	-0.009***
House_w1				0.008**	0.008**
Married_w1				-0.003	-0.003
Single_w1				Ref.	Ref.
Partner_w1				-0.004	-0.004
Widowed_w1				0.011	0.011
Divorced_w1				0.017*	0.017*
Recent widowed				0.016	0.015
Recent divorced				0.185***	0.192***
Child departure				0.024***	0.024***
Household size increases				0.032***	0.032***
Household size decreases				0.001	0.000
Motor limitation_w1				0.008*	0.007*
Motor limitation				-0.000	-0.001
Special equipment				-0.009**	-0.009**
Improved economic situation					0.022***
Deteriorated economic situation					0.005
Passage to inactivity					0.008
Inactive in w1 and w2					0.008**
Pseudo R ²	0,060	0,072	0,092	0.116	0.122
Number of observations	17 469	17 469	17 469	17 469	17 469

Note. Probit model. Dependent variable: “has moved between two private dwellings between the two waves of SHARE”. We also introduce other control variables (not shown to save space). Significant: number of months between the two waves, country dummies (col. 1 to 5); non-significant (col. 4 and 5): number of rooms in wave 1, gender, bad self-assessed health in w1, in w2, dummies for the number of children. Child departure = coresidence with a child in w1, no coresidence with a child in w2.

The estimated coefficients are marginal effects (for a dummy variable it is the effect of going from 0 to 1). * 10 percent significant, ** 5 percent significant; *** 1 percent significant.

3.2 Mobility and tenure

To understand more about the wealth effect we test a specification where we allow tenants and owner-occupiers to have different constraints and behaviours. In Table 3 we estimate the same model as in Table 2 but separately for owner-occupiers and tenants and we interact the tenure decision in 2006 with wealth⁷. The results show that the income effect is positive and significant only for tenants. Those who belong to the highest income quartile are more likely to have moved. Conversely, wealth has no effect on the residential mobility of a tenant, whereas it makes it more likely for an owner-occupier to move. This result can be explained by the fact that most of the wealth of the elderly Europeans is in their home (Christelis et al., 2008); higher wealth translates into higher housing value, which *ceteris paribus* induces to sell the home and move. Table 3 also shows that the effect of the number of years spent in the current home is stronger for tenants than for owner-occupiers. Even if overall tenants are more mobile, in most countries moving home often implies losing a rent discount, especially if rents are controlled or subsidized. Unfortunately in SHARE tenants are not asked whether they live in public or social housing and we cannot delve deeper into this question.

Moving can also be a response to *shocks* in income, household size, health and to changes in tastes and preferences that make current housing less adapted to new circumstances. Some factors are clearly linked to the life cycle. Retirement, or the fact of being retired induces some owner-occupiers to move, but it has no significant effect on tenants. One possible explanation is that the decision to retire is also financially constrained and easier for those who own a house that can be traded for another one, rather than for tenants. To estimate the effect of a change in income, we use the information from a subjective question that asks

⁷ We have tested that the differences we comment are significant on a single model with interaction of all variables with an ownership dummy.

respondents how their economic situation evolved since the last survey⁸. For owner-occupiers a deterioration in their financial situation does not induce a move: on the contrary, moving seems to be linked to better economic conditions. The mobility rate of owner-occupiers between the two waves⁹, which is 2.1 percent when there is no improvement or a deterioration in the household economic conditions, rises to 5.7 percent when the economic conditions get better. The case of tenants is more complex. Both those whose situation improved and those whose situation got worse moved more¹⁰. This difference could be linked to the fact that some tenants were forced to move. This interesting result would have to be confirmed in future waves of the survey.

For owner-occupiers, being widowed increases the probability of residential mobility. Bonnet et al. (2010) attribute the residential mobility of widows to the necessity for a surviving spouse to adjust her housing consumption to her new resources, new needs or to the anticipation of future care needs in the absence of a spouse. They show that French widows tend to move closer to cities and to their children. It could also be the case that inheritance laws force a surviving parent to share the estate with her children, hence sell the home. To test this hypothesis, we interact the widowhood dummy with a dummy for childlessness. Indeed owner-occupier widows without children are less mobile than those who have children, which is compatible with inheritance sharing, but also with the will to move closer to the children. The sample size is too small to distinguish between these two motives. Being divorced or having recently divorced since has also a positive effect on residential mobility.

⁸ The question is ‘Since we last interviewed you in <month and year previous interview>, would you say your household’s financial situation today has... 1. Greatly improved 2. Somewhat improved 3. Remained the same 4. Somewhat deteriorated 5. Greatly deteriorated’. We group together categories 1 and 2 (improvement) and categories 4 and 5 (deterioration).

⁹ Non-corrected for the length of time between the two survey waves.

¹⁰ Omitting the variable does not change qualitatively the income coefficients both for home-owners and tenants.

On the pooled sample the number of children has no significant effect on the probability to move. However, this result changes when we distinguish between tenants and owner-occupiers (Table 3). Among the owner-occupiers, those who have no children are the most mobile (3.5 percent versus 2.4 percent on average), while the reverse is true for tenants. Tenants with four or more children move more than average (9.7 percent versus 6.9 percent). The departure of the last child from the parental home induces to adjust housing consumption, both for owner-occupiers and for tenants. This result is the reverse of what is found by Debrand and Taffin (2005) in France. Indeed if we estimate the model by group of countries we find that the variable is only significant in Northern and Southern Europe. Again the sample sizes are too small to document more the origin of country differences.

A low self-reported health status has no influence on residential mobility, but having at least three limitations with mobility, arm function and fine motor function in 2004 induces owner-occupiers to move.

Once all the control variables have been introduced, Sweden and Denmark remain the countries where the elderly are the most mobile, Greece that one where they are the less.

Table 3. Mobility of owner-occupiers and of tenants (marginal effects)

	(1)	(2)
	owner-occupiers w1	tenants w1
Age 50-59	0.002	0.015
Age 60-69	-0.000	0.005
Age 70-79	ref	ref
Age 80 +	0.002	0.010
Nb of years in home_w1 (x10)	-0.002**	-0.016***
Income		
1 st quartile_w1	ref	ref
2 nd quartile_w1	0.002	0.015
3 rd quartile_w1	0.005	0.018
4 th quartile_w1	0.004	0.046**
Net wealth_w1 x10 ⁹	8.77***	2,08
Owner-occupier_v2*Net wealth_w1	-8.24***	4.15
Crime in neighbourhood_w1	0.005	0.018
Very large city_w1	-0.008**	0.012
Suburbs of a large city_w1	ref	ref
Large city_w1	-0.006*	0.025*
Small city_w1	-0.002	0.012
Rural_w1	-0.010***	0.009
House_w1	0.004	0.011
Married_w1	-0.002	-0.008
Single_w1	ref	ref
Partners_w1	0.002	-0.024
Widowed_w1	0.020*	-0.001
(widowd_w1==1)* No child	-0.011***	0.004
Divorce_w1	0.029	0.002
Recently widowed	0.006	0.022
Recently divorced	0.201***	0.147**
Child departure		
Household size increases	0.014**	0.066**
Household size decreases	0.007	0.124***
No children		
1 child	0.012*	-0.006
2 children	0.001	-0.004
3 children	-0.002	0.014
4 children or more	ref	ref
Motor limitation_w1	0.008**	0.002
Motor limitation	-0.002	0.004
Special equipment	-0.005	-0.015
Improved economic situation		
Deteriorated economic situation	0.016***	0.036***
Passage to inactivity	-0.001	0.025***
Inactive in w1 and w2	0.010*	-0.001
	0.008***	0.005
Pseudo R ²	0.1510	0.1012
Number of observations	13 277	4 192

3.3 Moving to a nursing home

Moving between private homes is definitely very different from moving to a nursing home. Therefore, in Table 4 we estimate separately the decision to move to a nursing home. Note that no respondent in Italy or Greece moved to a nursing home: indeed in these countries there are few such institutions and the elderly tend to stay at home or with their children¹¹.

Table 4. Residential mobility towards a nursing home (marginal effects)

	(1)	(2)	(3)
	All countries	SE DK	Rest
Age 50-59	-0.002	0.003	-0.003**
Age 60-69	-0.001	-0.002	-0.001
Age 70-79			
Age 80 +	0.009***	0.012**	0.006***
Income			
1 st quartile_w1	0.002**	0.005	0.002**
No close family	0.004**	0.008	0.002*
Recently widowed	0.007**	0.024**	0.003*
Motor limitation_w1	0.004***	0.011**	0.002***
Motor limitation	0.002**	0.001	0.002**
Pseudo R ²	0.1694	0.1384	0.1950
Number of observations	14 491	3 217	11 274

Note. Probit model. Dependent variable: “has moved between to a nursing home between the two waves of SHARE”. Other control variables not shown: country dummies, number of months between the two surveys, numbers of years spent in the dwelling. The estimated coefficients are marginal effects. * 10 percent significant, ** 5 percent significant; *** 1 percent significant.

The results show that moving to a nursing home happens only after age 80 (see also Figure 1). Such a change is more likely, *ceteris paribus*, for those with mobility limitations, and those who have neither a spouse, nor any living child. Having lost a spouse since the previous survey wave is a strong determinant of a transition to a nursing home; such transition can follow the bereavement closely. The finding that moving to a nursing home is mostly triggered by age, bad health and the absence of close family is not new in the literature (Friedman, 1996, Gaymu et al. 2007). However, SHARE allows adding a third determinant, namely a low income. Indeed, moving to a nursing home is more frequent for those who are

¹¹ Even in the other countries, sample size is low and the results to be taken with caution.

in the first income quartile, a result in line with what found on US data by Börsch-Supan et al. (1990). More should be known on the supply of long-term care and its financing, and the SHARE sample is too small to reach clear cut conclusions. However, it is probable that both family and economic circumstances play a role in the housing choices of the elderly needing long-term care in most European countries.

To summarize, moving between private dwellings is motivated by housing quality and mobility costs, whereas moving to an institution is determined by age, health and family situation. Moreover, the effect of economic conditions plays in opposite directions.

4. Housing adjustments

Along the life cycle, adjustments are from small flats to larger houses at the time of marriage and the arrival of children. Then adjustments are very rare, but one would expect the choice of smaller dwellings as children leave the parental house or a spouse dies, especially if the home was a saving device, and if the need to use this saving is present. However, the issue of «downsizing», i.e. the decrease in housing consumption in old age, is still debated (Laferrère, 2006; Banks et al., 2007).

According to SHARE, even if the number of mobile individuals is not high, their demand is clearly for smaller homes, especially at older ages. Individuals aged 50-59 move to homes with 0.3 rooms less on average; those aged 60 to 69 lose 0.7 rooms; they lose 0.8 rooms when aged 70-79 and 1.4 rooms if they are 80 or older. Such reduction in the number of rooms often goes with moving to a flat and to the rental sector. Indeed, a majority of movers choose a flat rather than a house, which becomes more common with age: the proportion of movers choosing a flat goes from 47 percent in the age group 50-59 to 63 percent for the 80+.

In Table 5¹² we analyse the factors that lead movers to choose a smaller home (column 1) or a flat (column 2).

Table 5. Choice of the number of rooms or of type of dwelling among movers (marginal effects)

	(1)	(2)
	less rooms	To a flat
Age 50-59	ref	ref
Age 60-69	0.008	-0.003
Age 70-79	0.051	0.047
Age 80 +	0.204***	0.178***
Income		
1 st quartile_w1	ref	ref
2 nd quartile_w1	-0.017	-0.124**
3 rd quartile_w1	0.131**	-0.122*
4 th quartile_w1	0.069	-0.170**
Household size increases	-0.239***	-0.116
Household size decreases	0.214***	-0.163**
Widowed_w1	0.147**	0.116**
Recently widowed	-0.068	0.291***
Divorce_w1	-0.008	0.063
Recently divorced	0.114	-0.160
Bad health_w1	0.051	0.005
Bad health	-0.015	0.034
Motor limitation_w1	0.031	0.034
Motor limitation	0.010	0.062
To rent	0.244***	0.224***
Less rooms		0.184***
To a flat	0.189***	
Pseudo R ²	0.175	0.2016
Number of observations	788	788

Note. Probit model. Dependent variable: “has decreased the number of rooms/has chosen a flat between the two waves of SHARE (mobile individuals)”. Other control variables: country dummies, number of months between the two surveys. Age is age in wave 1. * 10 percent significant, ** 5 percent significant; *** 1 percent significant.

Moving to smaller accommodation is not linked to income or bad health, but to age, widowhood and in general a reduction in household size. Old age and widowhood are also

¹² Table 5 and 6 only have descriptive value and do not model simultaneous decisions of mobility and change in housing consumption.

associated with moving to a flat but in this case low income does play a role. This result can be explained by the fact that people leave houses for flats to reduce care and maintenance costs.

Table 6. Choice of the rental sector among movers (marginal effects)

	(1)	(2)	(3)
	owner-occupiers	tenants	All
50-59	ref	ref	ref
60-69	0.099	0.003	0.067
70-79	0.254***	0.065*	0.199***
80 +	0.449***	0.107***	0.313***
Income			
1 st quartile_w1	ref	ref	
2 nd quartile_w1	-0.111	-0.102*	-0.119*
3 rd quartile_w1	-0.218**	-0.111	-0.185**
4 th quartile_w1	-0.264***	-0.324***	-0.327***
Household size increases	0.173	-0.039	0.015
Household size decreases	0.216**	-0.033	0.046
Widowed_w1	-0.111	0.051	0.008
Divorce_w1	0.104	-0.038	0.040
Recently widowed	-0.080	0.067	0.141
Recently divorced	0.054		0.186
Bad health_w1	0.033	-0.020	0.014
Bad health	0.053	0.019	0.023
Motor limitation_w1	0.115*	0.045	0.094*
Motor limitation	-0.080	0.032	-0.035
Less rooms	0.131*	0.047	0.104*
To flat	0.500***	0.158***	0.381***
Owner-occupier in w1			-0.365***
Pseudo R ²	0.3618	0.3454	0.3708
Number of observations	444	354	798

Note. Probit model. Age is age in wave 1. Dependent variable: “chose to rent in w2 (mobile individuals)”. Other control variables: country dummies, number of months between the two surveys.

* 10 percent significant, ** 5 percent significant; *** 1 percent significant.

In Table 6 we analyse the factors associated with the choice of the rental sector among movers. Even if the overall rate of owner-occupiers does not decrease substantially between

the two waves, 32 percent of mobile owner-occupiers abandon ownership, while only 24 percent of mobile tenants become owner-occupiers. Renting increases with age after age 70 and diminishes when income is higher, both for those who were tenants and for previous owner-occupiers. Renting is correlated to the choice of a flat and to the decline in the number of rooms. Widowhood, divorce, and also the existence of mobility problems, increase the choice of renting over owning. Being a tenant implies less management and maintenance care for a person living alone, or anticipating the onset of age-related disabilities.

To understand residential mobility, it is interesting to analyse, even if only at a descriptive level, the characteristics of housing and the reasons for moving (Table 7).

Table 7. Reasons given for moving by age

	All	50-59	60-69	70-79	80 et +
Family reasons	17.5	21.7	9,0	9.1	35.6
Professional reasons	2.4	5.8	1,0	0,0	0,0
Wanted bigger/smaller/different dwelling	37.1	45.5	37.7	30.7	22.9
Wanted to change region	7.5	6.1	9.6	8.5	5.2
Other reason	35.3	21,0	42.7	50.3	36.3
Does not know	0.3	0,0	0,0	1.4	0,0
Total	100	100	100	100	100

The data show that residential mobility is accompanied by an improvement in housing special features that assist persons who have physical impairments or health problems. Among the non-movers, only 6 percent live in homes equipped for old age. Among movers, only 3 percent of them were living in a home with special features in 2004, but the percentage increases to 19 percent in 2006, which provides evidence in favour of the idea that adapting the home to the needs of old age is one of the main reasons to move. Indeed, when explicitly asked for the reason for moving¹³, 37.1 percent mention they wanted a different home (Table 7). This is the most common reason, followed by “other reasons” (35.3 percent), which probably includes health-related reasons and the desire to reduce housing costs, and “family

¹³ The question was only asked to those who did not move to a nursing home.

reasons” (17.5 percent). The desire to change region only comes in fourth position (7.4 percent) and, as expected in this age group, professional reasons come last (2.4 percent).

4. Conclusions

In this paper we analyse residential mobility of the elderly, using data on eleven European countries from the first two waves of the Survey of Health, Ageing and Retirement in Europe. A unique feature of the dataset is that it allows distinguishing mobility between private dwellings from mobility to a nursing home. Our results show that moving to another private accommodation depends on housing quality and mobility costs, whereas moving to an institution is determined by age, bad health and the absence of close family. Moreover, the effect of economic conditions plays in opposite direction: while mobility between private dwellings is positively associated to wealth, moving to a nursing home is more frequent among those in the lowest income quartile.

We find some evidence that those who move tend to reduce housing consumption, as predicted by the life-cycle theory. Indeed, especially among the low income group, movers are more likely to choose smaller homes and to prefer flats to houses and renting than owning. The consequences on the housing market of the ageing of large baby-boomer cohorts, both in terms of supply and demand, might be important, if not anticipated.

Overall, the annual residential mobility rate of the European aged 50+ is very low, around 2 percent. One could ask whether residential mobility will grow or slow down, according to the preferences and constraints of the new generations of retirees. Up to now, there is some evidence that in France the residential mobility of the 65-75 has rather decreased (Laferrère, 2007) but the movement could be reversed. The public policy implications are many, as the markets will be impacted in many ways: supply of houses, demand of flats, of equipments and services for old age.

References

- Angelini, V. and A. Laferrère, 2008. Home, houses and residential mobility, SHARE First Result Book, wave2, in A. Börsch-Supan et al (ed.), Health, Ageing and Retirement in Europe (2004–2007). Starting the Longitudinal Dimension, 99-107.
- Artle, R. and P. Varaiya, 1978. Life Cycle Consumption and Ownership. *Journal of Economic Theory* 18:35-58.
- Banks, J., Blundell, R., Oldfield, Z. and J. P. Smith, 2007. Housing Price Volatility and Downsizing in later Life, mimeo.
- Boehm T.P., and A. Schlottmann, 2006. Comparison of household mobility for owned manufactured, traditional owned and rental units using the American Housing Survey. *Journal of Housing Economics*, 15:126-142.
- Bonnet, C., Gobillon, L. and A. Laferrère, 2010. The effect of widowhood on housing and location choices, *Journal of Housing Economics*, 19, 106-120.
- Börsch-Supan, A., Hajivassiliou, V., Kotlikoff, L. and Morris, J., 1990. Health, Children, and Elderly Living Arrangements: A Multiperiod-Multinomial Probit Model with Unobserved Heterogeneity and Autocorrelated Errors. NBER Working Paper W3343.
- Börsch-Supan A., 1990. Elderly Americans: A Dynamic Analysis of Household Dissolution and Living Arrangement Transitions, in D.A. Wise (ed.), Issues in the Economics of Aging, University of Chicago Press: Chicago.
- Chiuri M.C. and T. Jappelli 2010. Do the elderly reduce housing equity? An international comparison. *Journal of Population Economics*, 23, 643–663
- Christelis D., Jappelli T. and M. Padula, 2008. Real and Financial Assets in SHARE Wave2, in A. Börsch-Supan et al (ed.), Health, Ageing and Retirement in Europe (2004–2007). Starting the Longitudinal Dimension, 283-288.
- Debrand, T. and C. Taffin, 2005. Les facteurs structurels et conjoncturels de la mobilité résidentielle depuis 20 ans. *Économie et Statistique*, 381-382, 125-146.
- Freedman, V.A., 1996.. *Journals of Gerontology*, Series B: Psychological Sciences and Social Sciences, 51, S61-S69.
- Gaymu, J., Ekamper, P. and G. Beets, 2007. Qui prendra en charge les Européens âgés dépendants en 2030? *Population*, 62, 789-822.
- Laferrère A., 2006. Vieillesse et logement: désépargne, adaptation de la consommation et rôle des enfants. *Retraite et Société*, 47, 66-108.
- Laferrère A., 2007. Les seniors de moins en moins mobiles, les jeunes toujours plus mobiles: l'évolution de la mobilité résidentielle est-elle paradoxale?, *Economie Publique/Public Economics*, 20,37-87.

Laferrère, A. and V. Angelini, 2009. La mobilité résidentielle des seniors en Europe. *Retraite et Société*, 58, 87-107.

Tatsiramos K., 2006. Residential Mobility and Housing Adjustment of Older Households in Europe. IZA Discussion Paper 2435.

Venti, S. F. and D. A. Wise, 2004. Aging and housing equity: Another look. In D. A. Wise (Ed.), *Perspective on the Economics of Aging*, pp. 127-175. Chicago: The University of Chicago Press.