Residential Mobility and Housing Adjustment of Elderly in Europe*

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Abstract

This paper investigates the determinants of residential mobility for the elderly (above 50 years old) and the adjustment of housing for those who move employing individual data from the European Community Household Panel, for a number of countries. Although owners are less likely to move compared to renters, we observe an increase in mobility rates for older owners after controlling for observed and unobserved individual characteristics. Estimating a competing risk hazard model we find that older households make transitions from ownership to renting more than younger ones, indicating some downsizing later in life. This seems to be the case mostly for countries in the North, in which also those who move and remain owners tend to reduce the size of their new owned house.

Keywords: Residential Mobility; Ageing, Housing Tenure Choice
JEL Classification: J14; R21; R23

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1 Introduction

One of the issues frequently discussed in the recent years is the demographic change that takes place in the developed countries. The proportion of elderly households is expected to increase due to higher life expectancy and lower fertility rates, which will have considerable economic and social effects. The most common concern is related to social security and the pressure that the increased fraction of the population that reaches retirement will put on the system. The increase of the average age in the population combined with the need for social security reforms raises issues regarding the well-being of the elderly, which are also related to their consumption and saving behaviour. Inadequate savings from the elderly while they are young may lead to poverty in later years, as well as, the inability to adjust current to desired consumption when they get older. Understanding the determinants of the decisions of the elderly regarding consumption and saving is of considerable policy interest.

In this paper, we are focusing on the decisions of elderly households which are related to their housing situation. Housing is one of the most important components of wealth for a large part of the elderly which serves not only as an asset but also provides consumption services. Therefore, appropriate housing in terms of financial and physical needs determines to a great extent the well-being of the elderly. Changes in family structure, financial situation, and physical needs, create a gap between the desired and the current housing consumption of the elderly. While housing adjustment might require a move, mobility constraints or individual preferences might prevent elderly households from moving, which means that they will be occupying inappropriate housing. This raises the question whether government intervention is required, and if so, whether policies should be targeted towards reducing

the mobility constraints, or towards programs that permit elderly to remain at their homes but at the same time allow them to adjust their housing consumption. Programs, such as reverse mortgages, allow the elderly to borrow money against the value of their owned homes so that they can adjust their housing consumption without being forced to move (Mitchell and Piggott, 2004).

The main contribution of this paper is that it offers a comparison across European countries on the determinants of mobility and the adjustment of housing consumption of the elderly. This is achieved by employing data from the eight waves of the European Community Household Panel covering the years from 1994 to 2001. We provide evidence for Belgium, Denmark, Finland, France, Germany, Greece, Italy, Netherlands, Portugal, Spain, and the UK. These countries vary in terms of the distribution across types of housing, which is mainly the outcome of different housing policies implemented over the years. These policies have favoured owner-occupation in countries such as Greece, Italy, Spain, UK, while other countries such as, the Netherlands and Germany, have adopted policies which created a balance between the social and the private rental market, and owner occupation.

The analysis is based on all households, single or couples, with members above 50 years old. Residential mobility is less common in the South compared to the North of Europe. As far as the determinants of mobility is concerned, we find that retirement and the death of the spouse induce mobility, with retirement being associated with a move mostly in countries in the North. We also find that after controlling for unobserved heterogeneity owners are less likely to move compared to renters, which is related to the high transaction costs involved with the selling and buying of a house. However, our results show that the mobility of owners is increased later in life and in particular after 70 years old.

The positive effect of age on mobility for homeowners is in line with the prediction of the Life Cycle Hypothesis according to which there is a decline of the desired housing consumption with age, which results in a move. Analysing the transitions from the current tenure choice after a move takes place, we find that while the owners tend to remain owners when they move, older owners relative to younger ones are more likely to become renters. This effect is statistically significant in Belgium, Finland, Germany, and the UK. This increased transition from ownership to renting for the older elderly in these countries provides some indication of downsizing later in life.

Transition from ownership to renting is not the only way for households to achieve an adjustment of housing. An alternative is to reduce the housing equity while remaining owners after a move. Since we are not observing the housing equity in our data, we look at the changes in the home size for the movers who remain owners. We find some evidence that in Belgium, Denmark, Finland, Germany, and the UK, there is a tendency for the owners to decrease the size of the their new own-occupied house when they move.

From these results there appears to exist a difference between the "North" and the "South" in terms of the extent and the determinants of residential mobility, and the tenure transitions of the elderly, especially the older ones. This North-South divide can be associated to differences in the family ties, in the bequest motives, and the moving costs, which affect the housing decisions of elderly.

Previous research has mainly analysed US data finding little evidence for downsizing of home equity. In particular, Venti and Wise (1989,1990), based on data from the Retirement History Survey (RHS) suggest that the households do not reduce housing equity as they age. Reductions in home equity are usually associated with precipitating shocks (e.g. spouse's

death, health shocks). Merill (1984), based also on the RHS shows that the transitions from renter to owner are more likely for the retired households than from owner to renter. Feinstein and McFadden (1989), using the Panel Survey of Income and Dynamics (PSID) also concluded that the elderly do not move unless there are changes in the household structure. Sheiner and Weil (1992), provide evidence that homeownership rates decline with age emphasising the importance of the widowhood and health shocks.

Evidence for Europe is rare due to the lack of appropriate data. Ermisch and Jenkins (1999), study the determinants of residential mobility and the adjustment of housing consumption of the elderly in the UK using the British Household Panel Survey (BHPS). Similarly with the findings in our study, they find that the residential mobility of the elderly is rare, with some downsizing for those households who do move. Borch-Supan (1994), provides a detailed description of the housing situation for Germany finding that the German households do not decrease their housing consumption as they age and that the mobility rates are low. These findings are based on data from the GSOEP from the 80's, while we employ data from the ECHP for the 90's.

The remaining of the paper is organised as follows. In Section 2, we describe the distribution of housing tenure across countries and across age groups, while in Section 3, we analyse the determinants of residential mobility. In Section 4, we look at housing adjustment focusing on housing tenure transitions, and we finally provide some concluding remarks.

2 Housing Tenure

Figure 1 shows the homeownership rate by country for 1994 and 2001 for households above 50 years old.[1] Owner-occupation is the highest in Greece, Italy, Spain, and Finland, exceeding 80 per cent, followed by Denmark, France, Portugal and the UK, around 70 per cent, while ownership rates are much lower, around 50 per cent in Germany and the Netherlands. The distribution of tenure for the elderly follows the pattern of tenure for the total population with the Netherlands and Germany having the lowest proportion of tenure in owner-occupation (ECB, 2003). Ownership rates increase towards the end of the 90's, which for most countries is related to the housing market boom of that period associated with the very low interest rates after the introduction of the Euro currency.

The differences in the homeownership rates across countries are influenced by government intervention and market forces which affect both the demand and the supply of housing. The most common forms of government intervention include housing allowances, mortgage interest tax relief, and exemptions from capital gains tax. However, the extent and the direction of government intervention is related to the sociopolitical system in operation in each country (Balchin, 1996). Depending on the political ideology, there are countries such as the Netherlands, Germany, and to a lesser extent France, in which social policy intervention creates a balance between private and social rented housing. Social rented housing competes with the private rental sector dampening rents and providing good quality housing on secure tenancy terms. In other countries, in which a typical example is the

[1] In what follows, the sample consists of all households which remain in the sample for at least two consecutive years. We consider all households (couples or singles) above 50 years old at the first observed wave. For couples this choice ensures that in case one of the spouse dies, the individual who remains in the sample is above 50 years old.

UK, social housing is seen as a safety net for the relatively poor which is segregated from the private rental market and therefore is formed as a stigmatised and often means-tested sector. Private rented housing is usually expensive providing little security. As a result, owner-occupation is fostered. Finally, there are countries like Greece, Italy and Spain which encourage homeownership. The rental market has been reduced considerably as the result of legislations which reduced the attractiveness of renting as an investment, leaving as the only option for housing owner-occupation.

How does the ownership rate relates with age? Do the elderly hold on their housing as they get older? To see this, we look at the homeownership rate across different age groups. Figure 2 presents tenure rates by age groups and by country. For each country, every column represents the share between owners and renters of a particular age group. For Belgium, Denmark, Netherlands, and the UK, homeownership rates seem to decline with age, while for Finland, France, Greece, and Italy, we observe a hump shape with increasing ownership rates up to 70 years old and a decline for the older elderly. For Germany, Portugal, and Spain homeownersip remains relatively constant with some decline in Germany and Spain at older ages.

Cohort effects might affect the tenure rates for the older age groups in Figure 2. That is, if older cohorts had lower lifetime income, this would result in lower homeownership rates which would appear as a decline of ownership with age. In Figure 3, we present ownership rates across time by cohort and by country. We define cohorts by their age at the first wave. That is, "Cohort 50" refers to those who are 50 years old in 1994. For each cohort we plot the home ownership rate across time. We do so for four different cohorts, that is, Cohort 50, Cohort 58, Cohort 66, and Cohort 74. Jumps in the ownership rates across cohorts indicate

the presence of cohort effects. The general pattern shows increase in ownership between 50-57 years old, constant rates before and after retirement age at 65 years old, and some decline in older ages. This decline is evident for Germany, Denmark, Netherlands, and the UK.

The evidence provided so far suggests that there is some decline in homeownership as people age, especially for the older elderly and more pronounced in some countries. Adjustment of housing typically requires turnover which is reflected on residential mobility rates. In the next section, we look at mobility rates of the elderly across countries by age and by housing tenure.

3 Residential Mobility

Residential mobility is less common in the South compared to the North of Europe. As Figure 4 shows, mobility rates in Greece, Italy, Portugal, and Spain, is about 1.5 per cent, while it is much higher in Denmark, Finland, and Germany, around 4 per cent, and somewhat in between these rates for Belgium, France, Netherlands and the UK. Mobility rates also differ between owners and renters with households who own their house moving less than renters. Renters move between 3 to 5 times more than owners, while the difference in mobility between owners and renters is lower in Denmark, the Netherlands, and the UK. One of the reasons for the low mobility rates of the owners is the cost associated with the selling and buying of housing. There seems to be a negative relation between the homeownership rates of Figure 1 and the mobility rates of Figure 5. In countries with higher ownership rates mobility is lower.

Mobility rates across age groups are depicted in Figure 6a. Starting from high rates at 50-54 years old, mobility rates decline in subsequent age groups up to around 70 years old, and remain constant or appear to increase slightly for those above 70. This seems to be the case mostly in North European countries, while in countries like Greece, Portugal, and Spain we observe a decline of mobility as people age. Figure 6b presents the mobility rates across age only for the homeowners showing a similar pattern as for the whole sample in Figure 6a. That is, homeowners seem to experience increased mobility above 70 years old which drives the slowdown or the slight increase of mobility rates for all the households in Figure 6a.

Decreasing homeownership rates for the older elderly and increasing mobility rates provide some indication for the validity of the Life Cycle Hypothesis (LCH). As pointed out by Hurd (1990, pp.624), "if the desired housing consumption falls with age as specified by the LCH, the difference between actual and desired consumption will eventually become large to overcome transaction costs and a move will occur." In the following, we estimate a discrete choice model in order to identify the effect of age and ownership on mobility, taking into account other determinants such as retirement, changes in the family structure, income, wealth, type of housing etc.

3.1 The Determinants of Residential Mobility

Table 1 contains the estimates from a logit model with the dependent variable being equal to one if a residential move occurs within the period between two consecutive years and zero otherwise. All regressors refer to the first of the two years within which a move can take place. As mentioned above, the sample consists of all households which remain in the sample

for at least two consecutive years. We restrict the sample to those above 50 years old at the first observed wave. For couples, both members have to be above 50, while the observation of the male is considered in the sample.

The specification includes a dummy for age above 65 years old, a dummy for being an owner, and an interaction of ownership with the age dummy. We allow for this interaction in order to capture any differential effect of ownership across age. We also control for cohort effect by including a dummy for those being 50-59 and 60-69 years old at the first wave. Other regressors include dummies for whether the head of the household has retired during the previous year, whether the structure of the household has changed by the death of a spouse for couples, whether health had deteriorated within the last year, whether the household was living in an appartment in the last year, whether housing costs are a burden for the household, and the last year's household income and wealth. Wealth information is not very rich in the ECHP so we use as a proxy for wealth property and capital income, which are deducted from household's income. Each regression includes also year and regional dummies.

The results from Table 1 show that older individuals (above 65 years old) and homeowners are less likely to move compared to those below 65 years old and renters. The extent to which older owners differ from younger ones is depicted from the interaction of ownership with age dummies. We find that in Belgium, Finland, France, and Spain the coefficient is positive and significant indicating that older owners are more likely to move compared to younger ones. For Denmark, Germany, and UK the coefficient is also positive but not significant, while for Greece, Italy, Netherlands and Portugal the effect is either zero or even negative, but again not significant.

To account for unobserved heterogeneity, which might be correlated both with the choice to move and the housing tenure choice, we also estimate a fixed effect logit model and we report the results in Table 2. In this estimation, only households which experience a move contribute to the likelihood, which is the reason for the drop in the sample size. Moreover, characteristics which do not vary across time are not identified, such as the cohort dummies and whether the household was single or couple at the begining of the observation period.

The results from Table 2 confirm that homeowners are less likely to move compared to renters. The effect is not significant for Greece, Netherlands and Portugal, while it is positive and not significant in Denmark and UK. While owners are less likely to move relative to renters, owners above 65 years old experience increased mobility relative to younger owners, as the coefficient of the interaction of ownership and age above 65 reveals. This effect is significant for Belgium, Finland, France, Germany, Netherlands, and only at the 10% significance level for Spain.

Two events during the lifetime which can induce a residential move are retirement and the death of the spouse. The results from Table 1 for the logit estimates and Table 2 for the fixed effects estimates indicate that retiring increases the likelihood to move. This effect of retirement seems to be mostly relevant for North European countries. The death of a spouse has a strong effect and seems to be present in most countries.[2]

Finally, households with higher household income are more likely to move in France, Germany, and Greece, although the fixed effect estimates are not significant. For Spain and the UK, we find a negative effect of household income on mobility. The result that poorer

[2]Both the logit and the fixed effect logit models were estimated without the interaction of age with the home ownership dummy giving similar results for all the countries (estimates not reported).

households in the UK tend to be more likely to move is consistent with evidence in Ermisch and Jenkins (1999).

3.1.1 Attrition Bias

These results are based on the unbalanced sample which means that some households are observed only up to a certain year. There are many reasons to suspect that this attrition might not be random. For instance, movers are more likely to be lost relative to stayers. Moreover, given the lack of information for moves to an old age house, this might be more relevant for the older elderly with certain type of health and family characteristics. In addition, differential mortality rates correlated with income and wealth might also bias the results. To test for attrition bias, we estimate the model both with the balanced and the unbalanced sample and we perform a Hausman test. The estimates with the balanced sample are consistent both under the null of no bias and the alternative, while the estimates with the unbalanced sample are consistent only under the null hypothesis. The p-values in the last row of Table 2 show that we cannot reject the null hypothesis of no attrition bias, except for Portugal and Spain.

The positive effect of age on mobility for homeowners is in line with the prediction of the Life Cycle Hypothesis according to which there is a decline of the desired housing consumption with age, which results in a move. In the next section we investigate the housing adjustment decisions of the households who move. This will shed more light on the driving forces behind this increased mobility of the elderly.

4 Housing Adjustment

4.1 Tenure Transitions

Adjustment of actual to desired housing can be achieved with transitions from ownership to tenancy, or by reducing the size and/or the value of the house for those remaining owners. Because in our data set we do not have information on the house values before and after the move, we will focus on the housing tenure transitions and on the changes in the home size as a way to analyse housing adjustment.

Figure 7 presents the housing transition rates within two consecutive years for the owners who move by country and by age groups. For each country, the first column shows the share of owners who move and remain owners, while the second column shows the share of owners who move and become renters.[3] For the age group 50-59, we observe in all countries that owners are more likely to remain owners once they move. Starting from the age group 65-74 there is an increase on the share of movers who make a transition from ownership to renting. For the age group 75 and above most owners become renters after moving, except in Finland, Italy, Portugal, and Spain.

4.2 Competing Risk Hazard Model

We investigate the transitions out of the current tenure choice in a multivariate setting controlling for household characteristics. We do so by estimating a competing risk hazard model of housing tenure distinguishing between transitions from the current tenure choice to ownership (o) and transitions to renting (r), allowing for different effect of the household

[3]The sum of the two columns equals to 100 per cent.

characteristics on each choice.

The analysis is based on the first observed housing tenure spell observed in our data set. The housing tenure duration is measured in years and is the difference between the year in which the household experiences a move from the current residence and the year in which it has moved at the current residence. Households that do not move are treated as right censored. All households at their first interview are already in the initial state, that is, they are either owners or renters. Therefore, we have stock sampling which might lead to sample selection bias since we only observe households who have survived in the current state up to the observed point in time. This is referred as left truncation in the literature. To take into account this source of bias we modify the likelihood function conditioning on the fact that the household has survived in the current state up to the initially observed time.

Each destination specific hazard $j = o, r$, is the product of the baseline hazard, which captures the time dependence in the hazard rate, a function of observed characteristics X_i, and unobserved characteristics, v_j

$$\theta_j(t|X_i, v_j) = \lambda_j(t) \cdot \exp(X^{'}(t)\beta_j + v_j) \tag{1}$$

where $\lambda_j(t)$ is the baseline hazard and $\exp(X^{'}(t)\beta_j + v_j)$ is the systematic part of the hazard. The baseline hazard is specified flexibly as both $\lambda_o(t)$ and $\lambda_r(t)$ have a piecewise constant specification, such that they are constant within duration intervals. The conditional density function of the completed tenure duration τ_h is given by

$$f_j(\tau_h|X_i, v_j) = \theta_j(\tau_h|.) \cdot \exp(-\int_0^{\tau_h} \theta_j(s|.)ds) \tag{2}$$

Letting c_j be the destination indicator variables for the tenure duration, which also take into account right-censoring, the individual contribution to the likelihood function is

$$L = \int_{v_o} \int_{v_r} \left([f_j(\tau_j|.)]^{c_j} \cdot [1 - F_j(\tau_j|.)]^{1-c_j} \right) \cdot [1 - F_j(b-a|.)]^{-1} \, dG(v_o, v_r) \tag{3}$$

where $G(v_o, v_r)$ is the joint cdf of the unobservables. We use a flexible and widely applied specification based on Heckman and Singer (1984) in which we assume that v_o and v_r follow a discrete distribution with two point of support.

The third part of equation (3) accounts for the left censoring which occurs because we sample from households that are in the initial state at a given point in time b. Households enter the current state at time a but we observe them in the sample if and only if they are still at the initial state at time b. Therefore, the observed duration must be greater or at least equal to $b-a$. The correct conditioning likelihood function is obtained dividing by the probability of duration to be greater than $b-a$, i.e. $prob(\tau_h \geq b-a|.) = 1 - F_j(b-a|.)$. Equation (3) can be also written as

$$\begin{aligned} L \;=\; & \int_{v_o} \int_{v_r} \theta_o(\tau_h|.)^{c_o} \cdot \theta_r(\tau_h|.)^{c_r} \\ & \cdot \exp\left(- \int_0^{\tau_h} \theta_o(s|.)ds - \int_0^{\tau_h} \theta_r(s|.)ds - \int_b^a \theta_o(s|.)ds - \int_b^a \theta_r(s|.)ds\right) dG(v_o, v_r) \end{aligned} \tag{4}$$

The probability for the household to change residence and become either an owner or a tenant at a particular year, given that the household has not moved up to that year, is a function of the time spent in the current residence, the type of tenure, the family and household characteristics, and the changes in these characteristics. For the characteristics that vary with time the specification includes, similarly with the discrete choice models of

the previous section, a dummy for becoming retired, a dummy for the death of the spouse, and a dummy for the changes in the health status from good to bad.[4]

4.2.1 Empirical Results on Housing Transitions

We focus the discussion on the results related to the effect of age and whether being owner or renter on housing transitions. Table 3 presents the estimates for each country including a dummy for age above 65 years old, a dummy for being currently an owner and an interaction of the ownership dummy with age above 65 years old. The results indicate that owners are more likely to remain owners once they exit from their current residence and are less likely to become renters. From the interaction effect of ownership with age we also observe that owners above 65 years old are more likely to exit to renting compared to owners less than 65 years old. This effect is significant in Belgium, Finland, Germany, and the UK. Although this does not mean that older owners are more likely to become renters when they move compared to renters, it indicates an increasing transition of elderly owners into renting. Allowing for different age groups is not always feasible due to small cell sizes. We have estimated the model for age above 70 and for different age groups (65-69, 70-74, and above 75 years old) interacting them with the ownership dummy. Table 4 shows the estimates for the age above 70. For Belgium, Finland, Germany, and the UK, the coefficient of the interaction term of ownership with age above 70 is now larger and significant at 5% or 1% significance level. We also observe for Italy a positive and significant coefficient at 10%. Estimation results when allowing for more age groups in Table 5 show that the positive effect of age on transitions

[4]For instance, for a stayer, the dummy for retirement will be equal to one if retirement occurs within the observation period, and zero otherwise. For movers, it will be one if retirement occurs before or at the same year with the move, and zero otherwise. The construction for the death of the spouse and the health status follows similarly.

from ownership to renting is driven by the older elderly (typically above 70 and above 75 years old). This is particulary the case for the Netherlands where the coefficient of the interaction of owenrship with age above 75 is signficiant.

These results are in line with the increasing transitions from ownership to renting as households become older which were observed in Figure 7. They indicate that although owners are less likely to become renters, this effect is not homogeneous across age groups. After controlling for the effect of other characteristics such as retirement, health deterioration, and changes in the family structure, there is a significant increase of the transitions from ownership to renting for the older owners relative to the younger ones. The magnitude of the positive effect at an older age offsets the negative effect at a younger age, which implies that the current owners at an older age are as likely to become renters as the current renters. This increased mobility towards tenancy provides an indication of downsizing for the elderly. These results are based on the estimations taking into account unobserved heterogeneity. In particular, unobserved heterogeneity seems to be present for Belgium, Germany, Greece, and the UK. For the rest of the countries we could not identify a second mass point in the distribution of unobservables.

Finally, for the owners who move and remain owners, we also look at the change in the size of their house. Table 6 reports the change in the number of rooms excluding the kitchen. For Belgium, Denmark, Germany, and the UK, the majority of home owners reduce the size of their house once they move, while for Italy, Portugal, and Spain the majority of households move to a house with the same or more rooms relative to their previous house.

5 Conclusions

In this paper, we studied the extent and the determinants of the residential mobility and the housing adjustment decisions of the elderly in a number of European countries. Housing is one of the most important components of wealth for a large part of the elderly. The distribution of housing tenure varies across these countries as a result of different housing policies which have been adopted in the past. Countries such as Italy, Spain, the UK, and to a lesser extent France, have encouraged homeownership, while Germany and the Netherlands, have established a balance between social and private rented housing, and homeownership, with social housing being most important in the Netherlands.

Changes in the family structure, the financial situation, and the physical needs, create a gap between the desired and the current housing consumption of the elderly. While the housing adjustment requires a move, residential mobility rates for the elderly are rather low. They vary from around 1.5 per cent in Italy and Spain, to about 3 per cent in Germany, the Netherlands, and UK. As far as the determinants of residential mobility is concerned, we have found that retirement and the death of the spouse induce mobility. Retirement is mostly associated with a move in countries in the North. We have also found that the owners are less likely to move compared to the renters, which is related to the high transaction costs involved with the selling and buying of a house. However, our results showed that the mobility of the owners is increased later in life and in particular after 70 years old.

We have also investigated the type of housing adjustment of the elderly by analysing the transitions from the current tenure choice after a move takes place. We have found that while the owners tend to remain owners when they move, the older owners relative to the

younger ones are more likely to become renters. This effect is significant in Beglium, Finland, Germany,and the UK. We also looked at the changes in the home size for the movers who remain owners finding that for these countries there is also a tendency for the owners to decrease the size of the their new own occupied house when they move.

These results provide some evidence of downsizing later in life and especially for the older elderly. Moreover, there seems to exist a difference between the North and the South both in terms of the extent and the determinants of residential mobility, and the housing tenure transitions. This North-South divide can be associated to differences in the family ties, in the bequest motives, and the moving costs, which affect the housing decisions of the elderly.

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Figure 1. Homeownership rates by country (Year 1994 and 2001)

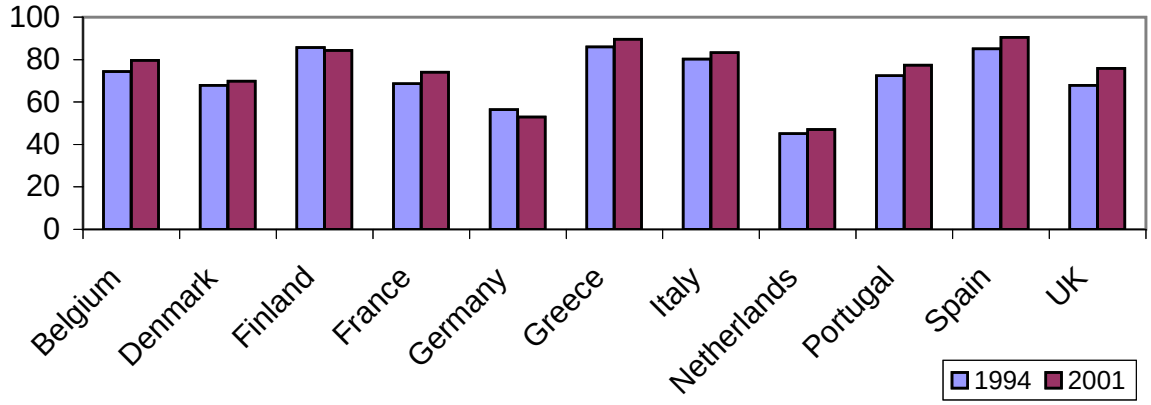


Figure 2a. Housing tenure rates by country and age groups (%)

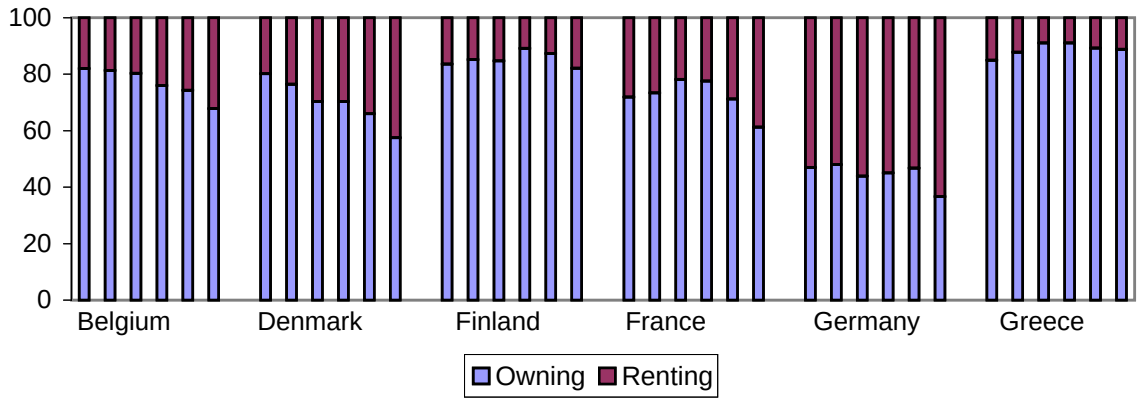
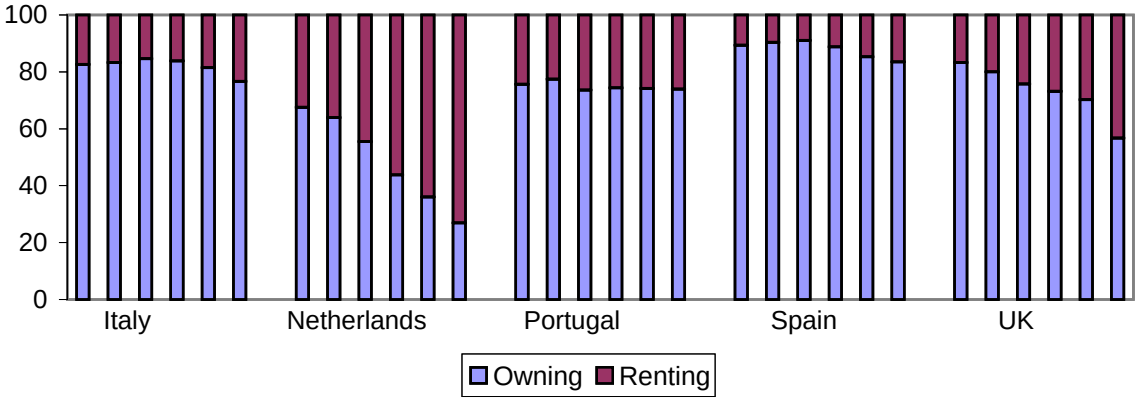


Figure 2b. Housing tenure rates by country and age groups (%)



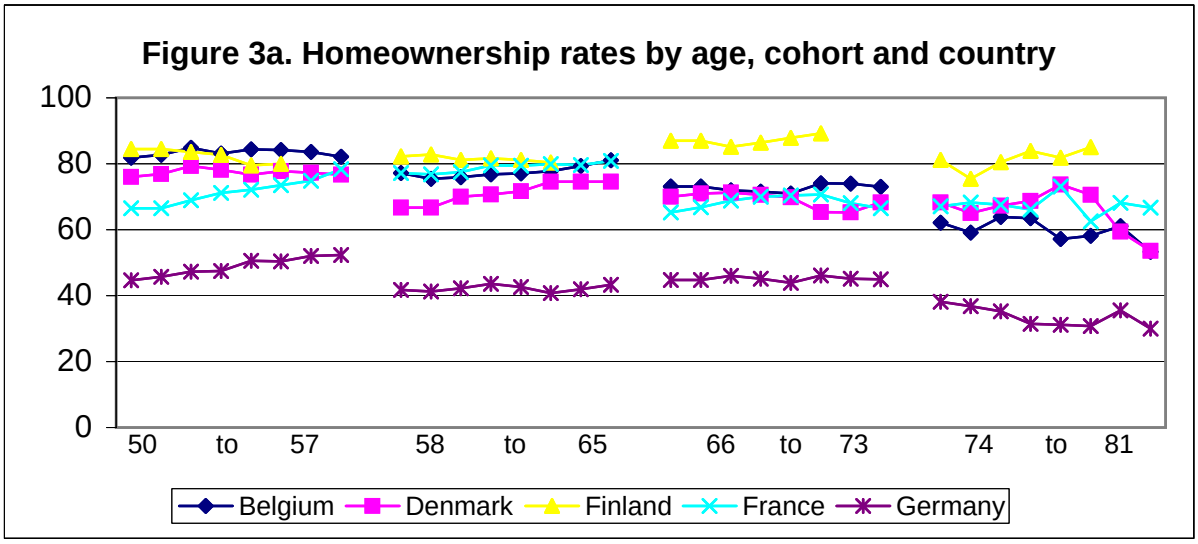


Figure 3a. Homeownership rates by age, cohort and country
100
80
60
40
20
0
50 to 57
58 to 65
66 to 73
74 to 81
Belgium
Denmark
Finland
France
Germany

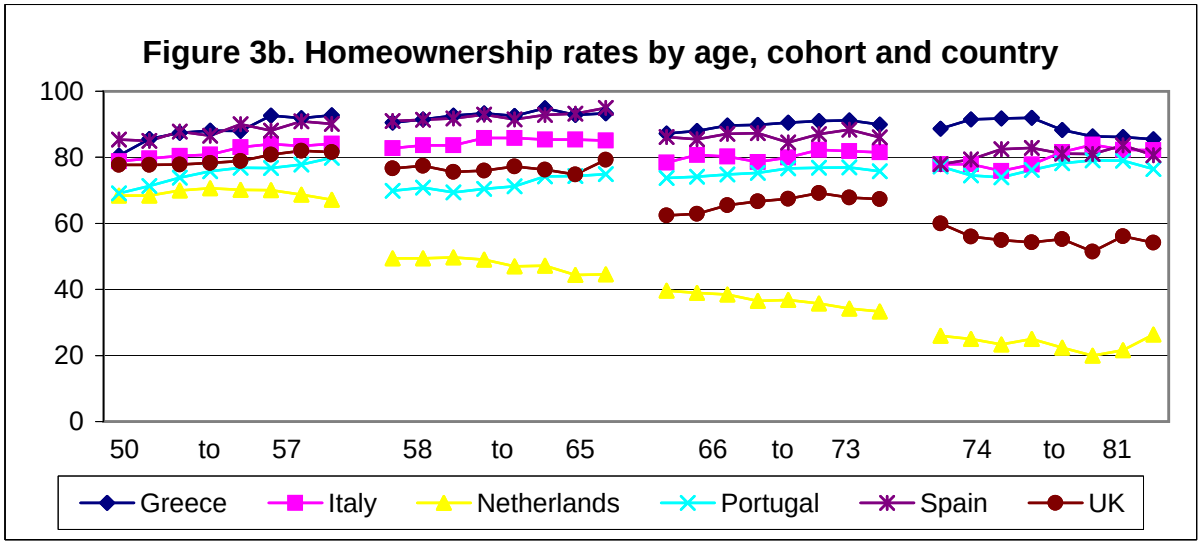


Figure 3b. Homeownership rates by age, cohort and country
100
80
60
40
20
0
50 to 57
58 to 65
66 to 73
74 to 81
Greece
Italy
Netherlands
Portugal
Spain
UK

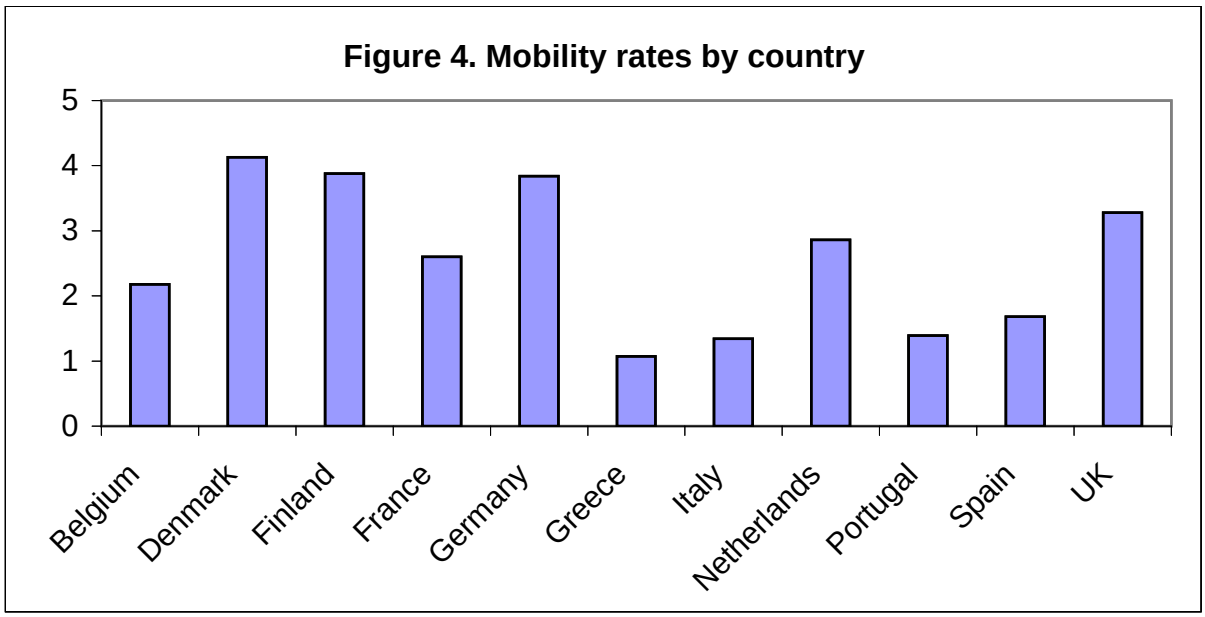


Figure 4. Mobility rates by country
5
4
3
2
1
0
Belgium
Denmark
Finland
France
Germany
Greece
Italy
Netherlands
Portugal
Spain
UK

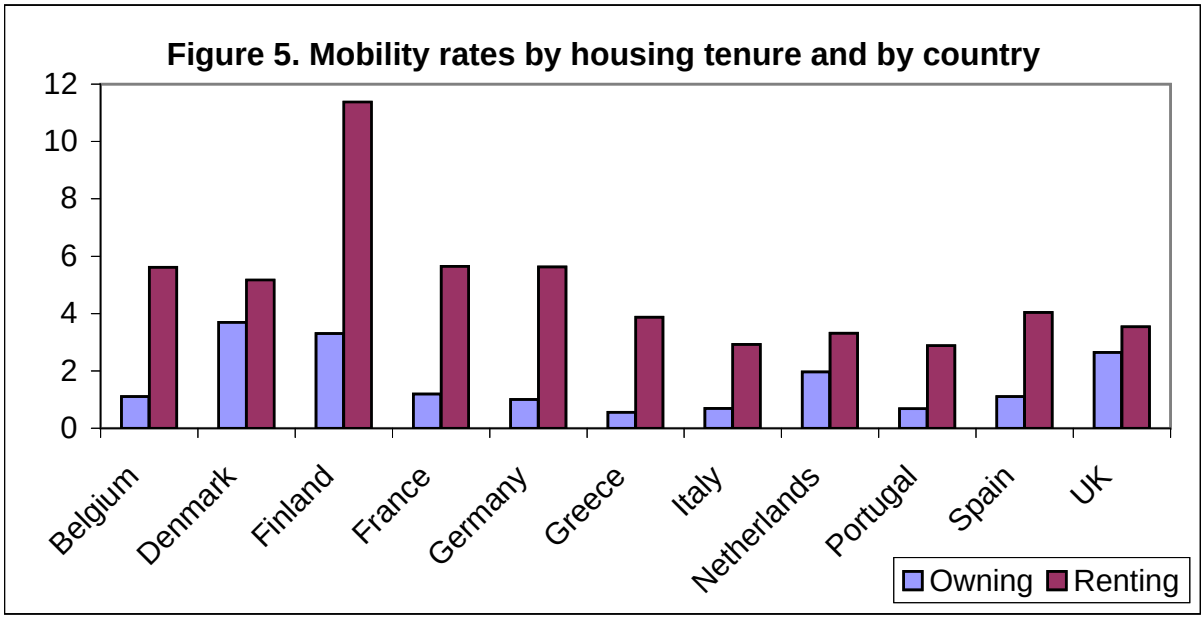
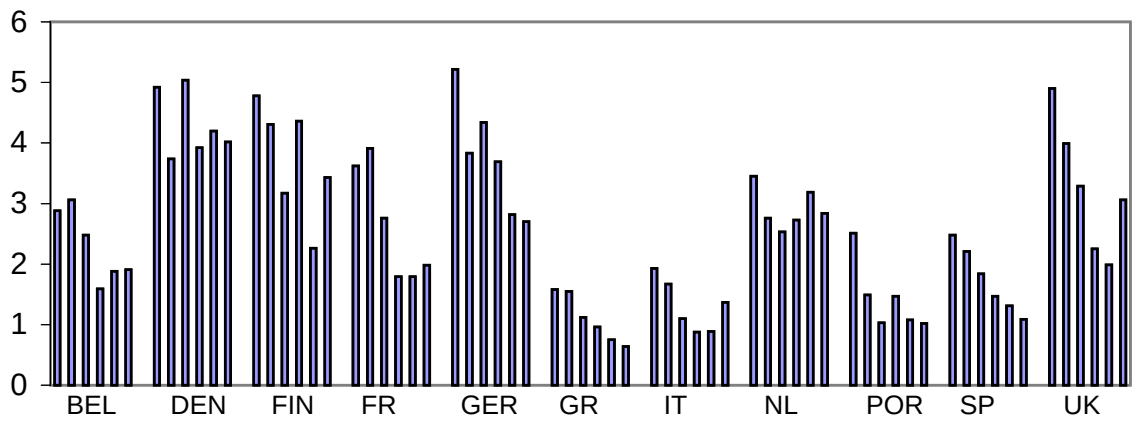


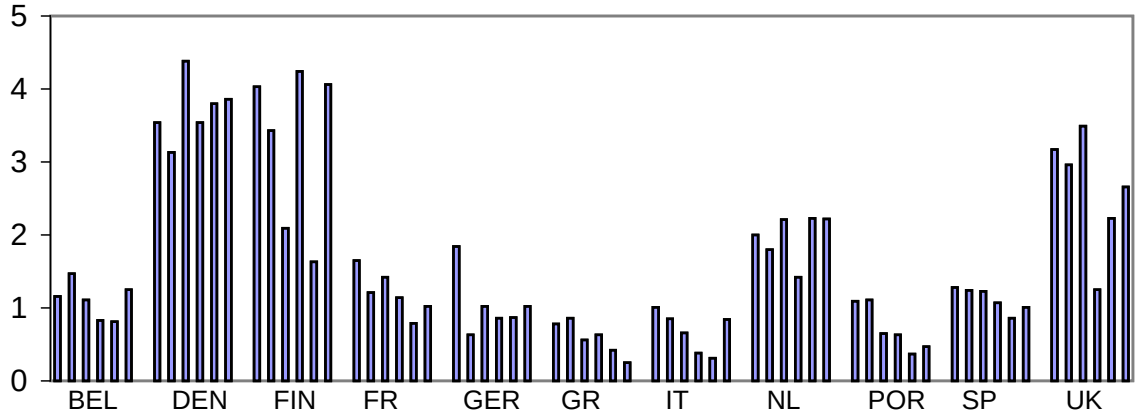
Figure 5. Mobility rates by housing tenure and by country
12
10
8
6
4
2
0
Belgium
Denmark
Finland
France
Germany
Greece
Italy
Netherlands
Portugal
Spain
UK
Owning
Renting

Figure 6a. Mobility rates by age groups and by country



Age Groups (50-54, 55-59, 60-64, 65-69, 70-74, 75+)

Figure 6b. Mobility rates by age groups and by country for homeowners



Age Groups (50-54, 55-59, 60-64, 65-69, 70-74, 75+)

Figure 7a. Transitions of homeowners who moved by country (Age 50-59)

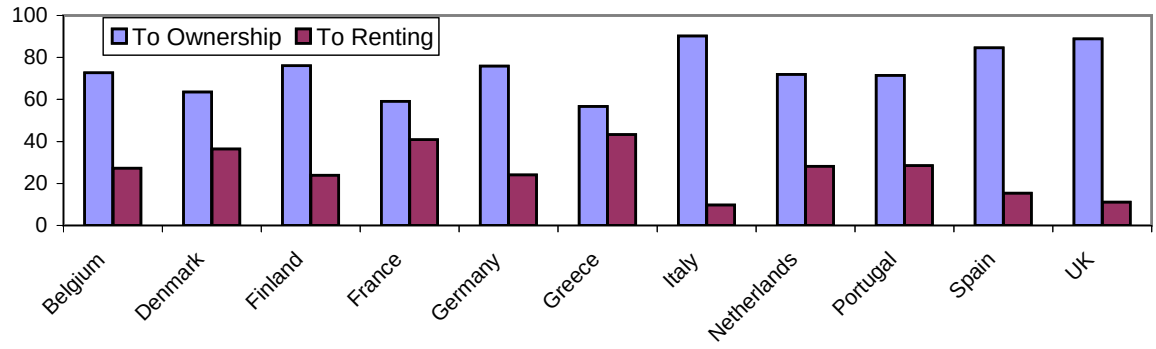


Figure 7b. Transitions of homeowners who moved by country (Age 60-64)

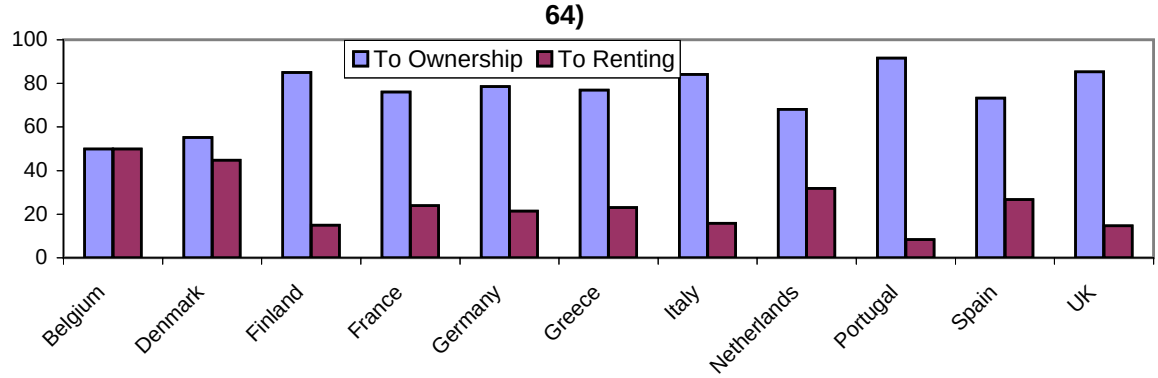


Figure 7c. Transitions of homeowners who moved by country (Age 65-74)

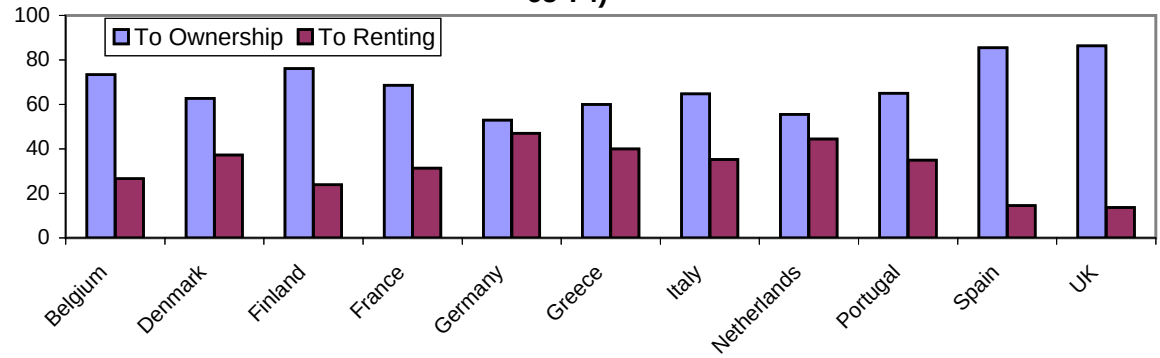


Figure 7d. Transitions of homeowners who moved by country (Age 75+)

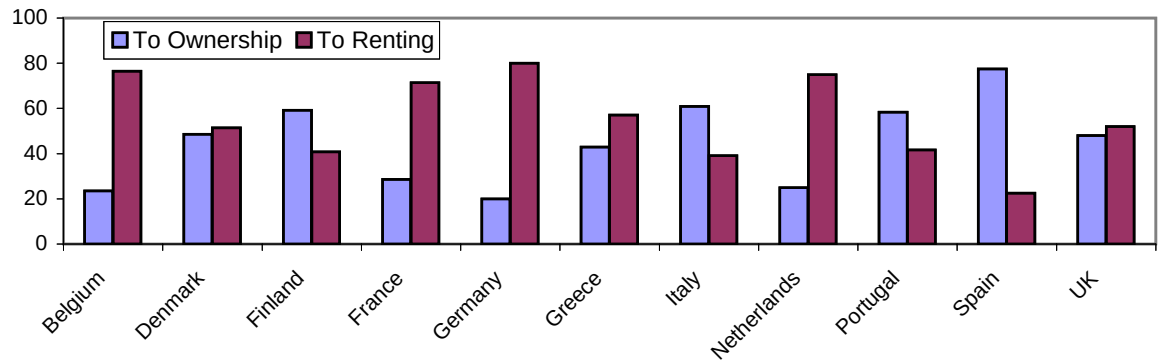


Table 1. Logit Estimates - Dependent Variable: Move between two waves.

	Belgium	Denmark	Finland	France	Germany	Greece
Age 65+	-0.966***	-0.541**	-0.490	-0.828***	-0.510***	-0.206
	(0.259)	(0.254)	(0.301)	(0.185)	(0.136)	(0.352)
Owner $_{t-1}$	-2.080***	-0.649***	-1.589***	-1.949***	-1.936***	-1.781***
	(0.261)	(0.221)	(0.188)	(0.175)	(0.178)	(0.257)
Owner*(Age 65+) $_{t-1}$	0.831**	0.455*	0.703**	0.554**	0.400	-0.009
	(0.349)	(0.271)	(0.302)	(0.235)	(0.269)	(0.382)
Retired $_{t-1}$	0.206	0.782***	0.544*	0.830***	0.429**	-0.368
	(0.362)	(0.282)	(0.288)	(0.224)	(0.175)	(0.464)
Loss of Spouse $_{t-1}$	2.225***	1.644***	2.003***	1.425***	1.291***	0.511
	(0.372)	(0.277)	(0.279)	(0.305)	(0.260)	(0.831)
Couple	-0.026	0.460*	0.244	0.193	-0.501***	0.144
	(0.227)	(0.243)	(0.209)	(0.167)	(0.145)	(0.517)
Bad Health $_{t-1}$	0.647	0.553	-0.135	-0.283	0.324	0.422
	(0.610)	(0.354)	(0.415)	(0.362)	(0.238)	(0.454)
Living in Appartment $_{t-1}$	0.369	-0.087	0.229	0.160	-0.168	0.600***
	(0.249)	(0.191)	(0.174)	(0.149)	(0.109)	(0.215)
Housing Cost a Burden $_{t-1}$	-0.140	0.366**	0.409***	0.195*	0.519***	0.459**
	(0.177)	(0.144)	(0.139)	(0.112)	(0.104)	(0.202)
HH Income $_{t-1}$	0.001	-0.006	0.007	0.005***	0.011***	0.019***
	(0.001)	(0.006)	(0.006)	(0.002)	(0.004)	(0.005)
HH Wealth $_{t-1}$	0.001	-0.006	0.018**	0.027*	0.010**	-0.073
	(0.003)	(0.016)	(0.008)	(0.014)	(0.005)	(0.052)
Male	0.182	-0.585***	-0.277	-0.041	0.097	0.700
	(0.223)	(0.205)	(0.207)	(0.176)	(0.140)	(0.517)
Cohort (50-59) at Year 1	-0.007	-0.166	0.080	0.064	-0.037	0.155
	(0.254)	(0.195)	(0.215)	(0.163)	(0.127)	(0.275)
Cohort (60-69) at Year 1	-0.311	-0.250	-0.026	0.031	0.108	0.140
	(0.225)	(0.176)	(0.178)	(0.157)	(0.133)	(0.264)
Constant	-1.257*	-0.178	-2.835***	-3.418***	-3.024***	-5.271***
	(0.682)	(1.126)	(0.393)	(0.315)	(0.255)	(0.612)
Observations	7397	6318	5964	14334	15361	14707

* significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in parenthesis are adjusted for repeated observations for each household. Estimations include year and regional dummies.

Table 1. Logit Estimates - Dependent Variable: Move between two waves. (cont.)

	Italy	Netherlands	Portugal	Spain	UK
Age 65+	-0.345	0.217	-0.079	-1.283***	-0.990***
	(0.283)	(0.217)	(0.258)	(0.261)	(0.248)
Owner $_{t-1}$	-1.551***	-0.584***	-1.141***	-1.815***	-0.486**
	(0.206)	(0.202)	(0.226)	(0.196)	(0.215)
Owner*(Age 65+) $_{t-1}$	0.002	-0.045	-0.419	1.007***	0.377
	(0.317)	(0.284)	(0.312)	(0.285)	(0.273)
Retired $_{t-1}$	0.420	0.014	0.303	0.282	0.480**
	(0.294)	(0.359)	(0.292)	(0.257)	(0.226)
Loss of Spouse $_{t-1}$	1.660***	0.415	1.557***	1.711***	1.491***
	(0.446)	(0.414)	(0.442)	(0.380)	(0.289)
Couple	-0.487**	0.392**	-0.274	0.656**	0.146
	(0.230)	(0.193)	(0.243)	(0.306)	(0.177)
Bad Health $_{t-1}$	-0.078	0.412	0.103	-0.483	0.571**
	(0.514)	(0.528)	(0.456)	(0.512)	(0.280)
Living in Appartment $_{t-1}$	0.068	-0.217	0.123	0.451***	0.034
	(0.177)	(0.155)	(0.234)	(0.149)	(0.192)
Housing Cost a Burden $_{t-1}$	0.328	0.182	-0.234	0.130	0.067
	(0.236)	(0.144)	(0.163)	(0.176)	(0.267)
HH Income $_{t-1}$	0.008	0.001	0.012	0.001	-0.009*
	(0.005)	(0.004)	(0.010)	(0.006)	(0.006)
HH Wealth $_{t-1}$	0.00002	-0.049	0.043***	0.012	-0.014
	(0.00001)	(0.039)	(0.013)	(0.010)	(0.017)
Male	-0.085	-0.286	0.821***	0.018	-0.028
	(0.240)	(0.194)	(0.266)	(0.307)	(0.162)
Cohort (50-59) at Year 1	0.323	0.266	-0.086	-0.162	-0.325*
	(0.223)	(0.215)	(0.257)	(0.197)	(0.177)
Cohort (60-69) at Year 1	-0.051	-0.095	-0.122	0.110	-0.417***
	(0.209)	(0.156)	(0.190)	(0.171)	(0.156)
Constant	-3.557***	-4.467***	-3.735***	-4.318***	-2.775***
	(0.426)	(0.278)	(0.388)	(0.433)	(0.328)
Observations	18830	11195	15061	16298	11061

* significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in parenthesis are adjusted for repeated observations for each household. Estimations include year and regional dummies.

Table 2. FE Logit Estimates - Dependent Variable: Move between two waves.

	Belgium	Denmark	Finland	France	Germany	Greece
Age 65+	-0.899	-0.254	-0.928	-1.206***	-0.168	-0.183
	(0.800)	(0.541)	(0.619)	(0.464)	(0.254)	(0.781)
Owner $_{t-1}$	-1.656***	0.370	-0.867**	-1.800***	-2.223***	-0.294
	(0.531)	(0.427)	(0.406)	(0.313)	(0.341)	(0.368)
Owner*(Age 65+) $_{t-1}$	1.712**	0.142	1.539***	1.371***	1.814***	-0.081
	(0.755)	(0.515)	(0.571)	(0.439)	(0.481)	(0.607)
Retired $_{t-1}$	0.738*	0.603**	0.443	0.858***	0.274	-0.632
	(0.421)	(0.306)	(0.344)	(0.266)	(0.191)	(0.508)
Loss of Spouse $_{t-1}$	1.963***	1.202***	1.292***	1.316***	1.232***	-0.203
	(0.454)	(0.305)	(0.354)	(0.386)	(0.306)	(0.870)
Bad Health $_{t-1}$	0.518	0.377	-1.139*	-0.569	0.194	0.846
	(0.635)	(0.474)	(0.614)	(0.426)	(0.277)	(0.629)
Housing Cost a Burden $_{t-1}$	-0.634**	0.062	0.497**	0.099	0.292**	-0.082
	(0.293)	(0.207)	(0.222)	(0.165)	(0.135)	(0.279)
HH Income $_{t-1}$	0.010	-0.002	0.011	0.003	0.010	0.035
	(0.008)	(0.010)	(0.012)	(0.004)	(0.007)	(0.024)
HH Wealth $_{t-1}$	0.020	-0.011	0.005	0.013	0.012	-0.027
	(0.015)	(0.021)	(0.020)	(0.025)	(0.015)	(0.077)
Observations	748	1271	907	1726	2923	657
Number of Groups	138	219	209	297	480	113
Hausman Test: $Chi^2(14)$	12.53	7.03	8.02	6.38	20.36	12.77
$Pr>Chi^2$	0.563	0.933	0.783	0.955	0.119	0.386

* significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in parenthesis. Estimations include year dummies.

Table 2. FE Logit Estimates - Dependent Variable: Move between two waves. (cont.)

	Italy	Netherlands	Portugal	Spain	UK
Age 65+	-0.203	-0.539	1.228**	-1.133**	-1.368**
	(0.638)	(0.488)	(0.493)	(0.547)	(0.586)
Owner $_{t-1}$	-1.267***	-0.340	-0.441	-1.330***	0.689
	(0.417)	(0.371)	(0.398)	(0.375)	(0.496)
Owner*(Age 65+) $_{t-1}$	0.279	1.433***	-0.692	0.855*	0.293
	(0.572)	(0.548)	(0.495)	(0.495)	(0.581)
Retired $_{t-1}$	0.566*	0.086	0.032	0.335	0.494*
	(0.325)	(0.386)	(0.340)	(0.284)	(0.260)
Loss of Spouse $_{t-1}$	1.617***	0.474	1.708***	1.433***	1.499***
	(0.575)	(0.392)	(0.543)	(0.420)	(0.361)
Bad Health $_{t-1}$	-0.045	0.750	0.498	0.120	0.532
	(0.604)	(0.688)	(0.571)	(0.574)	(0.355)
Housing Cost a Burden $_{t-1}$	0.607*	0.219	-0.348	-0.189	0.314
	(0.352)	(0.200)	(0.234)	(0.233)	(0.399)
HH Income $_{t-1}$	-0.007	0.009	-0.001	-0.033**	-0.020*
	(0.014)	(0.007)	(0.022)	(0.015)	(0.011)
HH Wealth $_{t-1}$	0.00001	-0.040	0.036	0.027	-0.033
	(0.00001)	(0.056)	(0.047)	(0.038)	(0.020)
Observations	1061	1592	1049	1243	1631
Number of Groups	179	267	172	209	275
Hausman Test: $Chi^2(14)$	13.94	17.83	39.82	22.50	4.93
$Pr>Chi^2$	0.377	0.214	0.003	0.068	0.840

* significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in parenthesis. Estimations include year dummies.

Table 3. Competing risk hazard model estimates with Unobserved Heterogeneity

	Belgium		Denmark		Finland		France	
	Own	Rent	Own	Rent	Own	Rent	Own	Rent
Age 65+	-1.071	-0.663	-0.771	0.061	-0.826	-0.459	-0.383	0.797 ***
	(0.849)	(0.422)	(0.652)	(0.329)	(0.512)	(0.394)	(0.399)	(0.273)
Owner	0.288	-1.309 ***	0.530	-0.390	0.133	-2.133 ***	0.180	-0.704 ***
	(0.624)	(0.464)	(0.402)	(0.305)	(0.348)	(0.343)	(0.241)	(0.289)
Owner*(Age 65+)	0.932	1.010 *	0.701	-0.145	0.844	0.984 **	0.490	-0.139
	(0.875)	(0.569)	(0.674)	(0.388)	(0.521)	(0.480)	(0.439)	(0.370)
Retired	0.219	-0.158	-0.105	0.155	0.170	-0.140	0.231	-0.976 ***
	(0.476)	(0.446)	(0.309)	(0.272)	(0.267)	(0.366)	(0.254)	(0.335)
Loss of Spouse		1.768 ***	0.287	0.623 *	0.336	0.924 ***	-1.551 ***	0.640 **
		(0.406)	(0.319)	(0.315)	(0.292)	(0.308)	(0.604)	(0.283)
Couple	0.181	-0.617 *	0.754 **	-0.429 *	0.007	0.069	0.794 ***	-0.277
	(0.575)	(0.353)	(0.314)	(0.260)	(0.269)	(0.315)	(0.267)	(0.204)
Bad Health	-1.322 ***	-0.398	-0.501 **	-0.609 ***	-0.782 ***	0.144	-0.425 **	-0.343 *
	(0.481)	(0.299)	(0.225)	(0.206)	(0.210)	(0.245)	(0.205)	(0.178)
Living in Appartment	-0.121	-0.023 ***	-0.902 **	0.247	-0.135	-0.040	-0.004	-0.014
	(0.580)	(0.009)	(0.411)	(0.234)	(0.216)	(0.254)	(0.036)	(0.078)
Housing Costs a Burden	-0.097	0.970 ***	0.033	0.225	0.003	-0.008	0.012	0.648 ***
	(0.511)	(0.293)	(0.245)	(0.222)	(0.008)	(0.024)	(0.199)	(0.180)
HH Income	0.002	-0.013	-0.0002	-0.019 *	0.004	-0.017	0.004	-0.002
	(0.003)	(0.014)	(0.007)	(0.011)	(0.007)	(0.013)	(0.003)	(0.007)
HH Wealth	-0.011	-0.016	0.011	-0.010	-0.018	0.004	0.047 ***	-0.173 ***
	(0.008)	(0.022)	(0.019)	(0.038)	(0.014)	(0.011)	(0.017)	(0.061)
Cohort (50-59) at Year 1	1.250 **	0.627	-0.079	0.236	0.290	0.365	0.322	0.764 ***
	(0.543)	(0.402)	(0.294)	(0.307)	(0.277)	(0.359)	(0.267)	(0.255)
Cohort (60-69) at Year 1	1.281 **	-0.027	0.153	0.257	0.647 ***	-0.134	0.294	-0.139
	(0.621)	(0.357)	(0.298)	(0.238)	(0.266)	(0.313)	(0.288)	(0.214)
Mass Point 1	-9.318 ***	-7.302 ***	-7.048 ***	-5.768 ***	-6.818 ***	-4.920 ***	-8.568 ***	-6.558 ***
	(1.141)	(0.631)	(0.562)	(0.438)	(0.549)	(0.566)	(0.488)	(0.395)
Mass Point 2	- inf	-3.859 ***	4.E-06	-2.E-05	5E-05	-0.0001	0.010	-0.030
		(1.178)	(2.165)	(1.908)	(0.593)	(0.785)	(0.926)	(0.934)
Prob	0.987***							
Log-Likel.	-477.21		-1043.96		-1097.96		-1447.37	
N (Households)	1308		1378		1629		2891	

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in parenthesis. Estimations include regional and year dummies

Table 3. Competing risk hazard model estimates with Unobserved Heterogeneity (cont.)

	Germany		Greece		Italy		Netherlands	
	Own	Rent	Own	Rent	Own	Rent	Own	Rent
Age 65+	-1.004 **	-0.196	-0.525	0.724	-0.854	0.258	-1.231 ***	1.085 ***
	(0.448)	(0.184)	(0.674)	(0.641)	(0.584)	(0.388)	(0.424)	(0.251)
Owner	0.304	-1.893 ***	0.452	0.098	0.520 *	-2.073 ***	1.456 ***	-1.036 ***
	(0.322)	(0.331)	(0.437)	(0.506)	(0.301)	(0.502)	(0.309)	(0.300)
Owner*(Age 65+)	0.726	1.267 ***	0.810	-0.685	0.060	0.935		0.135
	(0.539)	(0.409)	(0.693)	(0.680)	(0.541)	(0.597)		(0.381)
Retired	-0.346	0.035	0.034	-1.164 **	-0.260	0.436	0.551	-0.579 *
	(0.269)	(0.157)	(0.403)	(0.565)	(0.250)	(0.333)	(0.524)	(0.330)
Loss of Spouse	-2.047 ***	-0.124	-1.083	0.507	0.345	0.263	0.268	-0.098
	(0.734)	(0.213)	(1.211)	(0.946)	(0.347)	(0.543)	(0.409)	(0.302)
Couple	0.744 **	-0.075	0.285	-0.371	0.295	-0.463	0.550	0.326 *
	(0.330)	(0.164)	(0.724)	(0.523)	(0.361)	(0.366)	(0.374)	(0.179)
Bad Health	-0.906 ***	-0.724 ***	-1.235 ***	-1.016 ***	-0.380	-1.139 ***	-0.571 **	-0.771 ***
	(0.246)	(0.141)	(0.373)	(0.382)	(0.248)	(0.276)	(0.278)	(0.169)
Living in Appartment	-0.112	-0.192	-0.120	-1.215 ***	0.089	0.059	0.004	0.001
	(0.269)	(0.157)	(0.375)	(0.453)	(0.218)	(0.278)	(0.003)	(0.002)
Housing Costs a Burden	0.006	0.015 ***	1.078 ***	1.099 ***	0.250	0.362	-0.244	0.263
	(0.009)	(0.004)	(0.381)	(0.463)	(0.300)	(0.420)	(0.309)	(0.169)
HH Income	0.001	-0.018 ***	-0.008	-0.009	-0.004	0.000	0.002	0.002
	(0.005)	(0.006)	(0.018)	(0.022)	(0.008)	(0.013)	(0.007)	(0.006)
HH Wealth	0.014 ***	-0.026	0.004	-0.174	4.E-06	-0.0001 **	0.005	-0.112
	(0.005)	(0.031)	(0.046)	(0.160)	0.000	0.000	(0.029)	(0.078)
Cohort (50-59) at Year 1	0.271	0.144	0.955 ***	0.453	0.038	-0.344	0.420	0.384
	(0.276)	(0.183)	(0.427)	(0.495)	(0.266)	(0.419)	(0.307)	(0.247)
Cohort (60-69) at Year 1	0.278	0.063	0.864 *	-0.038	0.651 *	0.184	0.858 **	0.023
	(0.366)	(0.185)	(0.447)	(0.467)	(0.376)	(0.283)	(0.420)	(0.185)
Mass Point 1	-8.752 ***	-7.567 ***	-8.322 ***	-8.159 ***	-7.782 ***	-6.463 ***	-8.559 ***	-6.951 ***
	(0.796)	(0.406)	(1.023)	(1.238)	(0.796)	(1.063)	(0.553)	(0.344)
Mass Point 2	1.224 *	2.189 ***	- inf	1.661 **			-0.479	0.138
	(0.646)	(0.259)		(0.821)			(1.129)	(0.792)
Prob	0.212***		0.798**					
Log-Likel.	-2164.27		-558.76				-1255.69	
N (Households)	2841		2814				2464	

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in parenthesis. Estimations include regional and year dummies

Table 3. Competing risk hazard model estimates with Unobserved Heterogeneity (cont.)

	Portugal		Spain		UK	
	Own	Rent	Own	Rent	Own	Rent
Age 65+	-0.314	0.090	-0.015	-1.150 *	-1.500	0.070
	(0.379)	(0.403)	(0.388)	(0.603)	(1.142)	(0.348)
Owner	-1.016 ***	-1.399 ***	0.612 **	-0.968 **	1.970 ***	-2.000 ***
	(0.321)	(0.427)	(0.281)	(0.407)	(0.530)	(0.382)
Owner*(Age 65+)	0.525	0.779	-0.236	0.527	1.314	0.836 *
	(0.449)	(0.560)	(0.382)	(0.631)	(1.141)	(0.455)
Retired	0.022	-0.800 **	-0.607 ***	-0.367	-0.267	-0.768 ***
	(0.287)	(0.346)	(0.197)	(0.422)	(0.221)	(0.316)
Loss of Spouse	-0.454	0.576	-1.126 ***	1.116 ***	-0.211	0.318
	(0.539)	(0.456)	(0.332)	(0.404)	(0.313)	(0.360)
Couple	0.792 **	-0.350	0.369	-0.287	0.742 ***	0.010
	(0.387)	(0.332)	(0.262)	(0.383)	(0.239)	(0.272)
Bad Health	-0.284	-0.171	-1.235 ***	-0.649 *	-0.968 ***	-1.601 ***
	(0.226)	(0.282)	(0.174)	(0.365)	(0.204)	(0.233)
Living in Appartment	0.317	-0.232	-0.017	-0.358	-0.002	-0.004
	(0.297)	(0.398)	(0.165)	(0.315)	(0.005)	(0.004)
Housing Costs a Burden	0.458 **	-0.080	0.688 ***	0.715 *	-0.004	0.006 **
	(0.226)	(0.266)	(0.197)	(0.402)	(0.005)	(0.003)
HH Income	0.025 *	-0.006	-0.022 ***	-0.009	-0.014 *	-0.065 ***
	(0.013)	(0.020)	(0.008)	(0.013)	(0.007)	(0.015)
HH Wealth	0.021	-0.136	0.023	0.019	0.016	-0.174 **
	(0.040)	(0.172)	(0.016)	(0.056)	(0.015)	(0.087)
Cohort (50-59) at Year 1	0.107	0.219	-0.053	-0.152	0.292	0.724 **
	(0.317)	(0.372)	(0.204)	(0.366)	(0.213)	(0.353)
Cohort (60-69) at Year 1	0.179	-0.210	0.418 *	0.410	0.467 *	-0.299
	(0.314)	(0.339)	(0.235)	(0.454)	(0.238)	(0.260)
Mass Point 1	-9.210 ***	-8.579 ***	-6.748 ***	-5.249 ***	-7.783 ***	-7.571 ***
	(0.698)	(0.874)	(0.599)	(1.081)	(0.750)	(0.770)
Mass Point 2	2.E-06	-1.E-06			-0.108	3.046 ***
	(1.974)	(2.990)			(0.536)	(0.547)
Prob					0.205***	
Log-Likel.	-810.15				-1408.21	
N (Households)	2796				2147	

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in parenthesis. Estimations include regional and year dummies

Table 4. Competing risk hazard model estimates (Age above 70)

	Belgium		Denmark		Finland		France	
	Own	Rent	Own	Rent	Own	Rent	Own	Rent
Age 70+	-0.92	-0.51	-0.52	-0.06	-0.90	-0.05	-0.57	0.39
	(0.808)	(0.368)	(0.593)	(0.304)	(0.778)	(0.382)	(0.397)	(0.259)
Owner	0.33	-1.408***	0.717*	-0.427*	0.44	-1.907***	0.33	-0.847***
	(0.652)	(0.415)	(0.423)	(0.253)	(0.345)	(0.327)	(0.201)	(0.255)
Owner*(Age 70+)	1.18	1.179**	0.30	0.02	0.74	1.112**	0.16	0.39
	(0.868)	(0.470)	(0.638)	(0.360)	(0.838)	(0.494)	(0.462)	(0.324)

	Germany		Greece		Italy		Netherlands	
	Own	Rent	Own	Rent	Own	Rent	Own	Rent
Age 70+	-1.894**	-0.09	-1.43	-0.08	-1.15	0.37	-0.24	0.718***
	(0.797)	(0.159)	(0.914)	(0.478)	(0.740)	(0.376)	(0.416)	(0.194)
Owner	0.562*	-1.311***	0.49	-0.09	0.37	-1.997***	1.121***	-1.033***
	(0.294)	(0.260)	(0.393)	(0.500)	(0.299)	(0.455)	(0.331)	(0.254)
Owner*(Age 70+)	1.641*	1.136***	1.36	-0.26	0.89	1.006*		0.59
	(0.883)	(0.361)	(1.045)	(0.542)	(0.783)	(0.564)		(0.393)

	Portugal		Spain		UK	
	Own	Rent	Own	Rent	Own	Rent
Age 70+	-0.30	0.39	0.40	-0.16	-0.63	-0.05
	(0.320)	(0.330)	(0.349)	(0.606)	(1.190)	(0.305)
Owner	-0.945***	-1.037**	0.690***	-0.930**	2.108***	-1.593***
	(0.281)	(0.458)	(0.260)	(0.419)	(0.565)	(0.327)
Owner*(Age 70+)	0.63	0.07	-0.729*	0.35	0.46	0.905**
	(0.474)	(0.592)	(0.406)	(0.668)	(1.203)	(0.432)

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in parenthesis. Estimations include all other regressors as in Table 3.

Table 5. Transitions to renting (Different age groups).

	Belgium	Denmark	Finland	France	Germany	Greece
	Rent	Rent	Rent	Rent	Rent	Rent
Age 65-69	0.221	0.435	-0.804	1.165***	0.129	1.683**
	(0.535)	(0.402)	(0.511)	(0.449)	(0.225)	(0.713)
Age 70-74	0.193	-0.022	-0.013	0.542	-0.140	0.340
	(0.324)	(0.480)	(0.489)	(0.364)	(0.246)	(0.597)
Age 75+	-0.581	-0.064	-0.575	0.610**	-0.113	1.041*
	(0.445)	(0.347)	(0.492)	(0.299)	(0.210)	(0.614)
Owner	-1.030**	-0.394	-2.028***	-0.709***	-1.538***	0.001
	(0.419)	(0.264)	(0.341)	(0.254)	(0.291)	(0.476)
Owner * Age 65-69	-13.175***	-0.647	0.311	-1.354**	0.564	-1.226
	(0.637)	(0.493)	(0.787)	(0.673)	(0.535)	(0.857)
Owner * Age 70-74	-0.116	0.129	0.064	-0.105	0.886*	-0.034
	(0.603)	(0.533)	(0.705)	(0.472)	(0.486)	(0.711)
Owner * Age 75+	1.285**	-0.196	1.697***	0.411	1.482***	-0.938
	(0.536)	(0.415)	(0.570)	(0.381)	(0.405)	(0.709)

	Italy	Netherlands	Portugal	Spain	UK
	Rent	Rent	Rent	Rent	Rent
Age 65-69	0.281	0.834***	0.025	-1.981*	0.022
	(0.472)	(0.314)	(0.523)	(1.013)	(0.468)
Age 70-74	0.901**	1.165***	0.861*	-0.337	-0.295
	(0.457)	(0.322)	(0.465)	(0.671)	(0.498)
Age 75+	0.524	1.066***	0.027	-1.925*	0.197
	(0.516)	(0.239)	(0.430)	(1.134)	(0.341)
Owner	-1.963***	-1.019***	-1.334***	-1.011**	-1.519***
	(0.502)	(0.277)	(0.460)	(0.408)	(0.320)
Owner * Age 65-69	0.024	-0.423	1.228	0.484	-0.378
	(0.941)	(0.504)	(0.750)	(1.133)	(0.878)
Owner * Age 70-74	0.405	0.023	-0.125	-0.384	-0.043
	(0.726)	(0.530)	(0.887)	(0.752)	(0.738)
Owner * Age 75+	1.125	0.820**	0.699	1.687	0.874**
	(0.696)	(0.375)	(0.692)	(1.163)	(0.417)

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in parenthesis. Estimations include all other regressors as in Table 3. Transitions to renting only presented.

Table 6a. Change in the number of rooms (owners who move and remain owners)

	Belgium	Denmark	Finland	France	Germany	Italy	Portugal	Spain	UK
Same	19.35	28.57	25.60	31.08	23.81	51.85	52.94	41.98	30.90
	(18)	(10)	(32)	(23)	(10)	(42)	(27)	(55)	(55)
More	21.51	17.14	17.60	29.73	28.57	28.40	23.53	29.01	24.72
	(20)	(6)	(22)	(22)	(12)	(23)	(12)	(38)	(44)
Less	59.14	54.29	56.80	39.19	47.62	19.75	23.53	29.01	44.38
	(55)	(19)	(71)	(29)	(20)	(16)	(12)	(38)	(79)

Table 6b. Change in the number of rooms per family size (owners who move and remain owners)

	Belgium	Denmark	Finland	France	Germany	Italy	Portugal	Spain	UK
Same	16.13	28.57	26.40	28.38	21.43	41.98	50.98	35.88	21.35
	(15)	(10)	(33)	(21)	(9)	(34)	(26)	(47)	(38)
More	27.96	22.86	28.80	33.78	38.10	44.44	31.37	32.06	29.78
	(26)	(8)	(36)	(25)	(16)	(36)	(16)	(42)	(53)
Less	55.91	48.57	44.80	37.84	40.48	13.58	17.65	32.06	48.88
	(52)	(17)	(56)	(28)	(17)	(11)	(9)	(42)	(87)

Notes: Number of cases in parenthesis. For Greece and Netherlands information on number of rooms is not available