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Moving Out of Home Ownership in Later Life: The Influence of the Family and Housing Careers

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ABSTRACT *Home ownership is often regarded as the preferred housing tenure; however, situations in parallel life-course careers might make moving to a rental home necessary or attractive to home owners. Retrospective data from the SHARELIFE survey were used to study the short- and long-term impact of situations and disruptions in the family and housing careers on leaving home ownership at middle (45–64) and older ages (65–80) in Denmark, Sweden and the Netherlands. We found that directly after separation and widowhood, the likelihood of leaving home ownership was the greatest. However, more than 10 years after separation and widowhood, individuals were still significantly more likely to leave ownership than those in their first marriage. Furthermore, late first childbirth and early first-time home ownership were associated with lower chances of leaving home ownership. We conclude that situations and changes in family and housing careers have both a short-term and a long-term impact on the likelihood of moving out of home ownership.*

KEY WORDS: Home ownership, residential relocation, life course, union dissolution, family career, older people

Introduction

For many people, residential moves are characterized by an upward trend in size and value of the home, with home ownership as the pinnacle of the housing career (Helderman, 2007). Research shows the social and individual benefits from home ownership: home owners tend to have higher life satisfaction (Elsinga & Hoekstra, 2005; Rohe & Basolo, 1997; Rossi & Weber, 1996); a higher social status; and being a home owner creates a sense of financial security (Megbolugbe & Linneman, 1993). Around ages 40–50, household careers often reach a stable situation (Clark *et al.*, 2003); scholars have referred to this period as the start of the household reduction stage (Hooimeijer *et al.*, 1986). Residential relocations after these ages are more often characterized by a reduction in

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dwelling size (Clark & Deurloo, 2006). All other things being equal, most people prefer to own a home over renting one (Poggio, 2006; Saunders, 1990); however, certain situations may cause people to move out of home ownership at middle or older ages.

Understanding the move out of home ownership is highly important because it involves major changes for the individual and society as a whole. In the context of population ageing, older people's mobility on the housing market will become more relevant because the large baby boom cohorts reach older ages. Knowing that (i) nowadays, older people remain living independently more often (e.g. Fausset *et al.*, 2011) and (ii) a considerable share of them lives alone, or will be living alone (Bonnet *et al.*, 2010), there will be more older people who will be owners, and thus at risk of leaving ownership, for a longer period. Examining the long-term impact of family and housing circumstances on leaving home ownership could help predict the demand for rental dwellings on the housing market. Understanding which situations lead to a move out of home ownership is also relevant because welfare expenditure towards people living in (public) rental housing is generally higher compared to home owners. On an individual level, leaving ownership is concerned with a cost reduction. In a rental dwelling, older people can benefit from the accumulated wealth in home ownership, have fewer responsibilities with regard to repairs and maintenance of the dwelling (Oswald *et al.*, 2003) and are likely to have lower electricity and heating costs. However, leaving home ownership might be negative for subjective well-being, which has been found to be lower among renters (Gaymu & Springer, 2010; Rossi & Weber, 1996). A study on moves out of home ownership among older people could help design relevant housing and social policy. Therefore, it is important to increase our understanding of circumstances that lead to a move out of home ownership among older home owners.

In previous studies, scholars have found household and family composition to be important determinants of moves out of home ownership. One-person households and single-parent families are more likely to leave home ownership than couples with children (Dieleman *et al.*, 1995). Certain events that involve a change in the household composition, such as divorce, also increase the probability of leaving owner occupation (Dewilde, 2008; Kendig, 1984; Helderman, 2007). Other causes are related to the labour-market career; households without an employed head move more frequently to a rental dwelling (Murie *et al.*, 1991), and the transition to unemployment sometimes triggers a move out of home ownership (Feijten, 2005b). Only a few studies have addressed moves out of home ownership at older ages. At older ages, a change in family composition (Feinstein & McFadden, 1989) or marital status (Abramsson & Andersson, 2012; Painter & Lee, 2009) is associated with a greater likelihood of leaving ownership. For example, after widowhood, individuals are more likely to move out of home ownership (Painter & Lee, 2009). Furthermore, health problems (Helderman, 2007), retirement (Abramsson & Andersson, 2012) and physical disabilities (Painter & Lee, 2009) can cause a move out of home ownership among older home owners.

Although the role of family is significant in explaining moves out of home ownership, the effect of changes in the family domain has only been studied immediately or within a few years after the event. As Dykstra & Wissen (1999) state, we gain a better understanding of the present situation if past circumstances are also considered. Arguably, the absence of a partner will result in higher chances of moving out of home ownership irrespective of the duration of this absence because a partnership creates resources or raises restrictions in other life domains. After the dissolution of the partnership, home

owners might adjust their housing immediately or at any later moment, for example because situations in other life domains (such as health problems) could make moving to a rental home attractive or necessary in the absence of a partner. In this case, partnership dissolution could induce a structural change in the potential housing needs of a home owner. Some studies have found a prolonged effect of divorce (Dewilde & Stier, 2014; Feijten, 2005b; Feijten & Van Ham, 2010). Other work has shown the importance of widowhood to the move out of home ownership. These studies, however, (i) suffered from small sample sizes, which made evaluation of prolonged effects impossible (Feijten, 2005b), or (ii) evaluated the impact in only 2 years time (Painter & Lee, 2009).

The aim of this paper, therefore, was to examine the effect of past experiences in the family and housing careers on moves out of home ownership. The influence of separation and widowhood is studied in more detail than has been done thus far by evaluating the immediate but also the long-term impact; indicators of the parenthood history and the timing of leaving the parental home are also included. The model further contains indicators of the full housing history. Moves out of home ownership are uncommon in some countries, but occur regularly in others. Our study focuses on three countries in which the rental sector has been relatively large over the years, and renting is often seen as a reasonable alternative for home ownership: Denmark, Sweden and the Netherlands. Retrospective data (SHARELIFE 2008–2009) of home owners between ages 45 and 80 ($N = 2914$) were used. We conducted a discrete-time event history analysis (logistic regression of person-years) of moves out of home ownership.

Theoretical Framework

At some occasions, moving to a rental dwelling might be a better option or a necessity for home owners. In what circumstances a rental dwelling might be preferred can only be understood by referring to the different characteristics of rental versus owner-occupied dwellings. Before theorizing on the impact of family and housing careers on the chance of leaving home ownership in the short and long run, we therefore discuss these characteristics and the way in which they might lead to a preference for renting rather than owning.

Rental Versus Owner-occupied Dwellings

We have identified five characteristics of rental dwellings, in comparison with owner-occupied dwellings, that might make them attractive to home owners in certain occasions. These characteristics might, however, differ across countries because of country-specific housing market characteristics and housing policy.

First, the rental sector offers cheaper dwellings compared to the owner-occupied sector in terms of monthly payments, costs of electricity and heating and costs related to maintenance and repairs (Oswald *et al.*, 2003). The financial situation of an individual is influenced by events such as unemployment, retirement, divorce or having children because these events are likely to change the income or expenditure pattern. A home owner's financial situation (e.g. less income available: Clark *et al.*, 2003) might make a rental dwelling attractive or better affordable compared to the current owner-occupied home. Besides direct changes in income or expenditure, the amount of savings or the

capital stored in a home influences the financial situation. More savings and higher capital might make it easier to afford the costs of ownership in the long run.

Second, rental homes are on average smaller than owner-occupied dwellings. Because smaller households need less space, rental homes might fit better to the needs of a household that reduces in size and does not desire the extra living space (Clark *et al.*, 2000; Hooimeijer *et al.*, 1986).

Third, a rental dwelling offers more flexibility for future moves than an owner-occupied home. When people are forced to move, their future situation might be unsure. In this case, it might be desirable to move to a rental dwelling, which involves less financial commitment (e.g. Feijten, 2005b).

Fourth, both apartments and single-storied homes are more prevalent in rental housing (Kullberg & Ras, 2004 for the Netherlands). At older ages, individuals might not be able to maintain the entire home, or have problems with climbing the stairs; single-storied dwellings might then be in accordance with their abilities.

Finally, care and household assistance are more often provided in rental compared to owner-occupied housing, frequently in or close to a care institute (Kullberg & Ras, 2004). Older people might need a dwelling in which they can receive formal care and assistance when they experience health problems and are no longer able to live independently.

Parallel Life-Course Careers and Housing Needs

Changes throughout an individual's life could create circumstances in which a rental home is attractive. According to the life-course approach, the paths through the domains in an individual's life course are called careers and different individual careers are interconnected (Willekens, 1999). The housing career is interconnected with other careers in two ways. First, other life-course careers trigger a move when a new location or dwelling is preferred, and second, other careers generate resources or raise restrictions on the actual residential move (Mulder & Hooimeijer, 1999). Whether this move is a move out of home ownership or not will therefore depend on other life-course careers of home owners.

As Kendig (1984, pp. 282) states, compared to long-term renters, long-term home owners are 'progressively advantaged by increases of wealth and reductions of housing outlays over time'. This implies that long periods spent in home ownership are favourable. Because events in other careers intersect with the housing career (Clark & Dieleman, 1996), individuals are likely to remain home owner for a long period if parallel careers are stable. As Feijten (2005a) puts it, making commitments in one career leads to stability, also in parallel careers. Experiences in earlier life may continue to have impact later in life as they generate resources or raise restrictions in the housing career. In periods of stability, people might settle down and choose a home that satisfies their needs for a longer period because there is no need to adapt their housing to changing circumstances. Home owners might then become progressively advantaged by longer periods spent in ownership.

In contrast, disruptions in parallel careers could undo the advantage in ownership. For example, transitions in the family life cycle may increase the likelihood of moving because housing characteristics no longer meet the needs of the family (Morrow-Jones & Wenning, 2005). The disruption of a stable situation could cause an immediate move out of home ownership when it induces a direct need for a dwelling that is (i) cheaper, (ii) smaller, (iii) single-storied provides (iv) more flexibility or (v) better access to formal care.

A disruption could have a long-term effect as well because it might take time before housing needs change. For example, after a disruptive event, someone might remain owner at first, but the pressure of housing costs could eventually necessitate a move to a rental home.

The impact of separation in the short and long run. Separation obviously involves an interruption of the family career. Upon separation, at least one ex-partner needs to find another place to live. A move to a rental dwelling is likely because the benefit of shared income and costs is lost. Both men and women have been found likely to move to a rental dwelling after separation (Dewilde, 2008; Dieleman & Schouw, 1989; Feijten, 2005b; Helderman, 2007; Kendig, 1984). Women are more likely to leave ownership after separation than men (Feijten, 2005b; Helderman, 2007), probably because they are less often employed, tend to have lower incomes and therefore become dependent on welfare more frequently than men. However, as it is not unlikely that men have to pay for alimony and/or child support, many of them will also face a decline in resources. Besides better affordable, a rental home can be attractive because ex-partners need less living space (Clark *et al.*, 2000), or because the out-moving partner wants to be flexible, intending to start a new relationship in the future.

Apart from immediate difficulties, lasting burdens on the income of ex-partners might eventually induce a move to a rental dwelling. A lagged effect of separation on moving out of home ownership was found for the first year after separation for men and two or more years after separation for women (Feijten, 2005b). One might think that eventually the chances of leaving ownership would become comparable to that of singles. However, singles might have purchased a dwelling that fits their housing preferences, while a separated home owner might have purchased the dwelling during the relationship, having different housing needs. We expect an increased likelihood of leaving home ownership immediately after separation, with a stronger effect for women than men. In addition, we hypothesize a lagged effect for not just 2 years, but even longer after separation.

The impact of widowhood in the short and long run. Widowhood is another disruption of the family career. Shortly after widowhood, a reduction of living space may be desired because the remaining partner is suddenly burdened with the responsibility for maintaining the entire home. Particularly at older ages, housekeeping or maintenance may be easier in a single-storied home. Furthermore, if older people need care or assistance, the decease of a partner might be an occasion to move closer to children or into a care institute. Apart from this, a move out of ownership can be induced by a decline in income after widowhood (Chevan, 1995). Previous studies found that widow(er)s are more likely to leave home ownership than married people (Bonnet *et al.*, 2010; Feijten, 2005b; Painter & Lee, 2009).

Particularly at older ages, the loss of a spouse involves major changes in the individual situation, which might persist in the long run (e.g. in: Painter & Lee, 2009). Widowhood could be a state in which people have structurally different housing needs compared to married people. For example, a need for household assistance or care might emerge if someone faces health problems and lacks the help of a spouse. Furthermore, widow(er)s might be reluctant to leave the marital home at first because they feel attached to it; research by Chevan (1995) indeed suggests that ties to a place tend to delay a residential move. Thus, being widowed is expected to increase the probability of leaving home ownership immediately as well as in later years after widowhood.

Cohabitation and entering a new relationship. Cohabitors less often become home owners than married individuals (Mulder & Wagner, 1998) and generally make fewer commitments in their housing career (Feijten & Van Ham, 2010). Because commitments lead to stability, cohabiters are hypothesized to be more likely to move to a rental dwelling than married people.

Entering a new relationship after separation might make people less likely to leave ownership than separated singles because it reduces household costs and ends a period in which flexibility might have been important. Arguably, people in a second or further marriage, whose partnership career has been disrupted in the past, have higher probabilities of leaving ownership than people in their first marriage, which was found by Feijten & Van Ham (2010). Therefore, we hypothesize that entering a new marriage reduces the risks of leaving ownership compared to being separated; however, individuals in a second or further marriage are expected to be more likely to leave ownership than those in their first marriage.

The presence of children and the timing of first childbirth. The presence of children can influence housing needs because the number of persons in a household is relevant to the need for space. Home ownership is more likely for couples living with more children because of the amount of space in owner-occupied homes (Megbolugbe & Linneman, 1993). When a child leaves the parental home, the excess of space could make a rental dwelling attractive. In contrast, there might be no need for a (cheaper) rental home because costs of living are lower without children in the household. Abramsson & Andersson (2012) found a significant increase in the chances of a residential move in households without children. However, the effect on moving out of home ownership was small (Abramsson & Andersson, 2012; Helderman, 2007).

Being able to accumulate savings before having the first child might help to afford the high cost of home ownership because a child is also costly (Gober, 1992; Kendig, 1984). Research has shown that a late timing of first childbirth is positively associated with the chance of living in high-quality housing (Feijten & Mulder, 2005), and that couples who combine two earnings before starting a family are more often able to buy a home (Kendig, 1984). Feijten & Mulder (2005) argue that investing in home ownership preceding parenthood has a long-term advantage, because it provides the opportunity to invest in the labour-market career at relatively low household cost. Therefore, individuals whose first child was born late are expected to be less likely to leave ownership than those whose child was born early.

(In)stability in the housing career. Residential moves are accompanied by high transaction costs and could therewith reduce the progressive advantage of home owners. Making many moves could also be associated with a lower place attachment because the time spent in each dwelling is shorter. Having inhabited many dwellings is therefore expected to make a move out ownership more likely.

Because a long period in ownership increases wealth and reduces housing costs, progressive advantage in home ownership depends on the timing of first-time home ownership (Kendig, 1990). Individuals who became home owner early spent more years in ownership and are therefore more likely to own their house outright, which reduces housing costs at later ages. Besides, early home owners have profited from long periods of rising home values in all three countries. Rental homes are not likely to be attractive in this

situation. Therefore, having become home owner at a young age is expected to decrease the chances of leaving ownership at later ages.

Other parallel careers and macro-level circumstances. Another factor which may cause a move out of home ownership is unemployment (e.g. Dieleman *et al.*, 1995; Feijten, 2005b). A reduced income after unemployment could enlarge the need for a cheaper dwelling. Moreover, when an individual finds a new job at a different location, a move out of home ownership might occur (Helderman, 2007). In this situation, unemployment might lead home owners to inhabit a rental home temporarily (Feijten, 2005b), given the flexibility and lower costs.

Furthermore, the change in housing needs after retirement could trigger a move out of ownership. Some retirees may have financial problems and therefore release the capital stored in the house; others might want to invest in things other than housing. Both wishes could be facilitated by a move to a rental home, which releases the equity stored in the home (e.g. Abramsson & Andersson, 2012) and reduces heating, electricity and maintenance costs.

Individuals who have difficulties with housekeeping because of health problems might need a smaller, single-storied home. Health problems turn out to be an important motive for moving to a nursing home (e.g. Wilmoth, 2010) or more generally, out of ownership (Helderman, 2007).

Higher education could make a move out of home ownership more likely, because higher education is related to greater residential mobility. But at the same time, highly educated persons may have more means to maintain home ownership in times of financial difficulties. Research suggests that individuals with lower education and less income are more likely to move out of home ownership (Helderman, 2007).

The availability of rental dwellings and the size of the rental sector are relevant to the opportunity to move from home ownership. In general, rental dwellings are more readily available in urbanized areas compared to smaller villages or suburbs (Mulder & Wagner, 1998).

Finally, constraints and opportunities on the housing market could be important to explain residential moves. With higher house prices, home owners might have more problems to stay in the owner-occupied sector. At the same time, rising house prices increase the capital stored in the home, which might make it easier to remain home owner but might also make it more attractive to release equity by moving to rental housing. In this respect, important period effects might be observed. The recent financial and housing crisis is a clear example of a situation in which leaving home ownership might become problematic. During a downturn, it might be difficult for people to sell their home at a reasonable price. In this case, the preference or need for moving to a rental dwelling might be hampered by constraints on the housing market. However, because the retrospective data for this study were collected (2008–2009) before the financial and housing crisis, we cannot investigate how the crisis has affected the likelihood of leaving home ownership.

Housing in Denmark, Sweden and the Netherlands

Moves out of home ownership regularly occur in Denmark, Sweden and the Netherlands. The rental sectors in these countries have similar characteristics and are relatively large (Poggio, 2006). In other, for example Southern European, countries home ownership is

more normative, meaning that the rental sector is small and moves out of ownership are rare. Moreover, the countries are among those with a unitary rental market (Kemeny, 2001). The access to rental dwellings is in these countries not limited to households in need. Instead, the distinction between profit and non-profit rental housing is minimized to ensure housing for all households. As a result, renting is a reasonable alternative to ownership for many households (Kemeny, 2001; Toussaint & Elsinga, 2009). In contrast, dual rental markets have a distinct public part, which is regulated and accessible to lower-income households, and a private part, which is less regulated.

Although Denmark, Sweden and the Netherlands were selected because of their similarities regarding the role of housing and the occurrence of leaving home ownership, the differences between these countries need to be considered as well. Housing policies and housing markets in each of the three countries have gone through their own, context-specific, evolution. Initially, both home ownership and renting were subsidized in all three countries with the aim to offer affordable housing to everyone. Unlike in other Nordic countries, rental housing in Denmark remained subsidized and attractive to all income groups from the 1980s onwards (Ruonavaara, 2012; Sørvoll, 2009). In Sweden, renting a home became less attractive in the 1990s because home ownership was promoted more intensively (Ronald & Elsinga, 2012). In the Netherlands, as in Sweden, the deregulation, decentralization and market-driven housing policy was initiated from the 1990s onwards. Social rental dwellings were in short supply for a long time due to prolonged population growth and delayed welfare development, which limited Dutch residents in their housing choices during the 1990s (Boelhouwer, 2002). The social housing sector is quite large in the Netherlands, while the largest part of the rental sector in Denmark and Sweden consists of private rental housing (Andrews *et al.*, 2011; Pittini & Laino, 2011). While in the Netherlands, like in Sweden and Denmark, social housing used to be accessible to quite a large share of the population, social housing became restricted to less advantaged groups more recently (Pittini & Laino, 2011).

Another relevant difference is the legislation concerning the ownership of apartments, which was realized only in 2008 in Sweden, and longer ago in Denmark and the Netherlands. This probably limited Swedish households in their housing decisions (Sørvoll, 2009) and might have made leaving ownership more common among Swedish older households. Furthermore, transaction costs of residential property were highest in the Netherlands in the period under study (around 11 per cent), second highest in Sweden (6.5 per cent) and lowest in Denmark (2 per cent) (Global Property Guide, 2012). High transaction costs may lead to lower chances of moving within the owner occupation sector because moving to another home involves extra expenses. Arguably, high transaction costs may also result in lower chances of leaving home ownership because those who consider re-entering home ownership later would face high transaction costs at that occasion.

Because of the aforementioned differences, the probability of leaving home ownership is expected to be greatest in Denmark, followed by Sweden, and the lowest chances are expected in the Netherlands. If we acknowledge the context of the Danish, Swedish and Dutch housing policy and housing market, differences might also be expected in the way family and housing influence the move out of home ownership. However, there were too few cases and events in the data to test hypotheses about differences in effects between the countries.

Data and Methods

Data-set

The original SHARELIFE data-set (a retrospective wave of the Survey of Health, Ageing and Retirement in Europe, conducted in 2008–2009) contains information about the life histories of individuals aged 55 and over from 13 European countries (Austria, Belgium, Czech Republic, Denmark, France, Germany, Greece, Italy, the Netherlands, Poland, Spain, Sweden and Switzerland) (Börsch-Supan *et al.*, 2013). For this study, only respondents from Denmark, Sweden and the Netherlands were selected (6244). As a first step, we excluded respondents who had missing information on the key explanatory variables (116), or had never left the parental home (14). Next, only those respondents who were owner at age 45, or became home owner afterwards, were selected and followed until age 80, or until they left ownership (973 were never home owner; 280 were owner at some time, but not between ages 45 and 80). SHARELIFE does not include institutionalized persons, who form a considerable part of the older populations in the countries under study. To prevent bias resulting from this lack of representation, 480 respondents who were older than 80 at the time of interview were excluded from the sample. Up to this age, only a marginal part of the population is institutionalized (<5 per cent, Statistics Denmark, 2012; Statistics Netherlands, 2012). Finally, one respondent per household was randomly included in the sample to avoid double counting of moves. This led to the exclusion of another 1466 respondents, resulting in a total of 52 700 person-years representing 2914 home owners between ages 45 and 80.

The retrospective nature of the data potentially raises quality issues (e.g. Auriat, 1991; Van der Vaart, 1996). Errors in memory retrieval might cause incorrect or imprecise reports of life events (Auriat, 1991; Beckett *et al.*, 2001). In this study, home owners enter the sample at age 45. Because the age at the time of interview varies from 50 to 80 years, all time-varying variables recall information to a maximum of 35 years. Auriat (1993) found that the timing of moves is often recalled with errors; however, the odds of recalling the year of a move incorrectly are decreased if other important events occurred around the same time. The quality of retrospective data can be improved by asking questions about parallel events and using timelines (Auriat, 1993; Van der Vaart, 2004): both methods were used in the SHARELIFE interviews (Schröder, 2011).

Dependent Variable

The dependent variable is the *move out of home ownership*. Home owners were considered as moving out of ownership in the year their tenure was other than owner occupier (tenant, rent free, member of a cooperative, not owning the residence or other). Home owners who re-entered home ownership in the same calendar year were not considered as moving out of home ownership and remained in the sample. Frequencies of the dependent and independent variables are shown in Tables 1 (time-constant variables) and 2 (time-varying variables). Here, 15.9 per cent of the home owners in the sample moved out of home ownership (Table 1). If we select person-years at middle-ages (45–65), 16 per cent of the home owners moved out of ownership. Among those who were still owner by age 65, 9.1 per cent left ownership before age 80 (Table 2).

Table 1. Descriptive statistics of time-constant variables

	Home owners at middle + older age		Home owners at middle age (45–65)		Home owners at older age (65–80)	
	%/Mean	SD	%/Mean	SD	%/Mean	SD
Homeowners in the sample	2914		2902		1168	
Move out of home ownership						
Yes	15.9		16.0		9.1	
No	84.1		84.0		90.9	
Age at first childbirth						
Young (0–25%)	27.1		27.2		25.2	
Medium (25–75%)	40.4		40.6		45.0	
Old (75–100%)	19.5		19.4		17.7	
No children/no info	13.1		12.9		12.1	
Age first home ownership						
Young (0–25%)	27.8		27.8		21.4	
Medium (25–75%)	48.5		48.6		48.3	
Old (75–100%)	23.7		23.5		30.3	
Years of education after age 12	7.14	5.50	7.14	5.50	6.49	5.57
Gender						
Male	47.2		47.1		49.2	
Female	52.8		52.9		50.8	
Country						
Denmark	34.9		34.9		30.3	
Sweden	32.9		32.7		40.2	
The Netherlands	32.2		32.3		29.5	

Key Explanatory Variables

Situations and events in the partnership life course were included in detail in the variable *relationship status*, with the following categories: single never married; in first marriage; first year after separation; second year after separation; 3–4 years after separation; 5–10 years after separation; more than 10 years after separation; first year after widowhood; second year after widowhood; 3–4 years after widowhood; 5–10 years after widowhood; more than 10 years after widowhood; in a second or further marriage; or in unmarried cohabitation. For the first year after separation, we included dummies for men and women separately.

Whether the respondent had a *child under the median age of leaving the parental home* (Sweden: 20, the Netherlands: 22, Denmark: 20; Leopold, 2012) was included as a time-varying proxy for the presence of a child in the household; the actual age of leaving was not available.

The *timing of first childbirth* was measured in four categories: those who did not have children or missing information were included in one category; the age at first childbirth was coded as: young (first quartile of age at first childbirth); medium (second and third quartiles); or old (last quartile), see Table 3 for country and sex-specific quartiles.

Two variables related to the housing career were included. The *number of homes* the individual inhabited after leaving the parental home was included as time-varying variable, and the *age at first-time home ownership* as a time-constant variable. The latter

Table 2. Descriptive statistics of time-varying variables

	Home owners at middle and old age (45–80)		Home owners at middle age (45–65)		Home owners at older age (65–80)	
	%/Mean	SD	%/Mean	SD	%/Mean	SD
Person years in the sample	52 700		44 680		8020	
Move out of home ownership						
Yes	0.9		0.8		1.3	
No	99.1		99.2		98.7	
Relationship status						
Single never married	5.3		5.2		5.7	
First marriage	70.6		72.2		61.8	
Second or further marriage ^a	7.9		8.0		8.4	
Cohabiting (unmarried) ^a	2.0		2.2			
First year after separation, men ^b	0.2		0.3		0.1	
First year after separation, women ^b	0.2		0.2			
Second year after separation ^b	0.3		0.4			
3–4 years after separation ^b	0.7		0.8		6.9	
5–10 years after separation ^b	2.1		2.3			
> 10 years after separation ^b	5.1		4.9			
First year after widowhood ^c	0.6		0.8		1.6	
Second year after widowhood ^c	0.6				1.6	
3–4 years after widowhood ^d	0.9		0.7		3.6	
5–10 years after widowhood ^d	1.8		1.2		10.3	
> 10 years after widowhood ^d	1.7		0.9			
Child under median age of leaving parental home						
Yes	49.1		55.3			
No	50.9		44.7			
Number of inhabited homes	4.49	2.63	4.46	2.61	4.68	2.72
Financial hardship						
Yes	2.8		3.2			
No	97.2		96.8			
Paid working career						
Working ^e	65.4		75.7		8.5	
Not in the labour force	32.7		22.1		91.5	
Unemployed ^e	1.9		2.2			
Skill level of job						
Skill level 1 ^g	8.3		8.4		11.9	
Skill level 2	51.8		51.4		54.0	
Skill level 3 ^f	10.6		10.8		34.1	
Skill level 4 ^f	26.7		27.0			
Never paid work/unknown/armed forces ^g	2.7		2.4			
Poor health						
Yes	11.9		11.4		14.6	
No	88.1		88.6		85.4	
Age	55.82	7.77	53.39	5.47	69.36	3.64
Degree of urbanization						
Large city ^h	7.6		7.7		24.8	
Suburb or outskirts ^h	19.3		19.6			
Large or small town	48.2		48.0		49.4	
Rural area or village (+ no info)	24.9		24.8		25.7	

(Continued)

Table 2. *Continued*

	Home owners at middle and old age (45–80)		Home owners at middle age (45–65)		Home owners at older age (65–80)	
	%/Mean	SD	%/Mean	SD	%/Mean	SD
Period						
Before 1990 ⁱ	16.9		19.9			
Between 1990 and 1995	15.1		17.8		0.5	
Between 1995 and 2000	20.6		22.0		12.9	
Between 2000 and 2005	23.8		22.4		31.5	
After 2005	23.6		17.9		55.1	
Average house prices						
Stable or decrease	56.5		56.8		55.3	
Increase	43.5		43.2		44.7	

^a Second or further marriage and cohabitation for age 65–80.

^b 1–2 years and > 2 years after separation for age 65–80.

^c 1–2 years after widowhood for age 45–65.

^d 3–5 years and > 5 years after widowhood for age 65–80.

^e Working and unemployed for age 65–80.

^f Skill level 1 and npw/unknown/ armed forces for age 65–80.

^g Skill level 3 and skill level 4 for age 65–80.

^h Large city and suburb or outskirts for age 65–80.

ⁱ Before 1990 not present for age 65–80.

indicator was measured in three categories (Table 3): young (first quartile of age at first-time home owner), medium (second and third quartiles) and old (last quartile).

Control Variables

The variable *financial hardship* measures self-reported periods of financial problems and was used as a time-varying proxy for income. Time-varying information about the paid *working career* of the respondent was included in three categories: working, unemployed or not in the labour force. Unemployment also includes individuals who left the labour force temporarily or who left a paid job but did not enter retirement. Therefore, being ‘not in the labour force’

Table 3. Quartile ages at first childbirth and first-time home ownership

	Denmark		Sweden		The Netherlands	
	Men	Women	Men	Women	Men	Women
Age at first childbirth						
25% experienced first childbirth	24	22	24	21	25	24
75% experienced first childbirth	29	27	30	27	31	28
Age at first-time home ownership						
25% became first-time owner	25	23	26	25	27	25
75% became first-time owner	32	31	35	35	38	35

means being retired or having never done paid work. *Skill level of the job* is used as another time-varying indicator of socio-economic status. Jobs with skill level 1 are elementary occupations (ISCO-88 classification nr. 9 and 0; Hoffmann & Scott, 1992); skill level 2 for individuals employed as clerk, service, shop, craft or skilled agricultural worker, or plant or machine operator (4–8); skill level 3 corresponds to technicians and associate professionals (3); and skill level 4 jobs are professionals, legislators, senior officials and managers (1 and 2). In periods of unemployment, the skill level of the previous job was assigned, and in retirement, the skill level of the most important job was used. Home owners who never did paid work were employed in the armed forces, or whose job type was unknown were included in a separate category. Furthermore, number of *years of education* after age 12 was included to measure the educational level.

Health was measured by a time-varying indicator of self-reported periods of poor health. Two more individual variables were included in the model: *gender* and a continuous variable for *age*.

Macro-level variables included in the model are *country*, *degree of urbanization*, *housing prices* and *period*. *Degree of urbanization* was measured in four categories: large city, suburb or outskirts, large or small village and rural area. In order to control for the situation of the housing market, an annual measure for *house prices* was included (Figure 1). This variable indicates whether house prices were decreasing or increasing for (at least) two consecutive years. However, interpretation of significance would be problematic as the assumption of independent observations for every individual in the sample is violated. The results will therefore be interpreted only according to the direction of the effect. Finally, a variable was included to control for *period* because housing policies, regulations and housing market situations vary: before 1990, between 1990 and 1995, between 1995 and 2000, between 2000 and 2005, and after 2005.

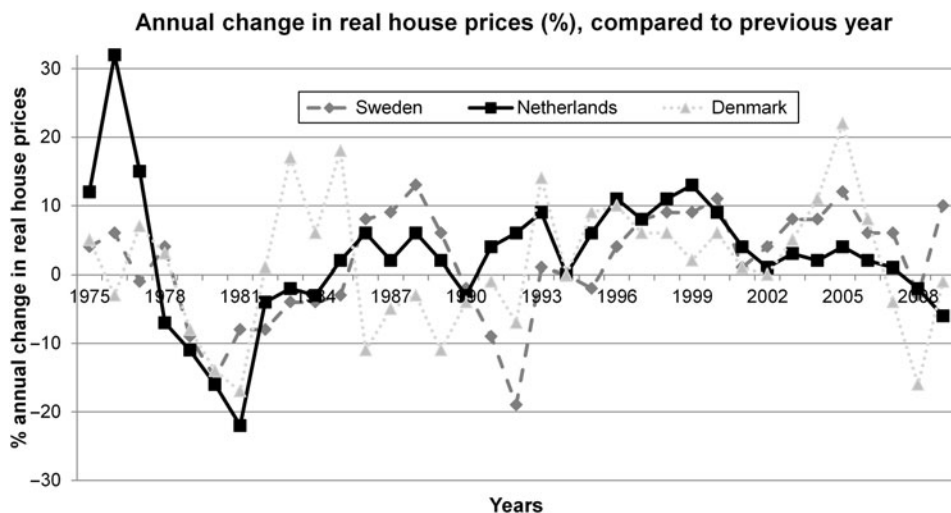


Figure 1. Annual change in house prices, 1975–2009. Source: (The Economist, 2011).

Method of Analysis

The method used is logistic regression, applied as discrete-time event history analysis; the units of analysis are person years. Discrete-time logit models provide a good approximation of continuous time models in event history analysis (Allison, 1982; Mills, 2011; Yamaguchi, 1991). Two major advantages that make the method suitable for our study are the possibility to include time-dependent covariates (Yamaguchi, 1991) and the usefulness in examining complex parallel processes (Mills, 2011). The discrete-time logit model is specified by the following equation (Yamaguchi, 1991):

$$\log \frac{\lambda(t_i; X)}{1 - \lambda(t_i; X)} = \alpha_i + \sum_k \beta_k X_k,$$

where $\lambda(t_i; X)$ is the conditional probability of moving out of home ownership, in year t_i , for a covariate vector X . α_i is the log odds of an event occurrence for a baseline respondent, with value '0' for all independent variables. The exponent of the β parameters in the model is the odds ratio, the multiplicative effect of variables on the odds of experiencing an event.

Models

Some situations, such as separation, occur more often at middle ages, while other circumstances, such as widowhood, are more common at older ages. Therefore, we estimated three models of the move out of home ownership: one including all person-years from ages 45 to 80, another including ages 45–64 and a third for ages 65–80. Some categories were merged in the age-specific models because of too few cases or events per category. In the model for middle ages, the first 2 years after widowed were included in one category. In the model for older ages, we had to merge some more variables: we could only distinguish between the first two, and later years after separation, widowhood was categorized in 3–5 years and 5 and more years after widowhood and we had to merge the person-years in cohabitation with person-years in a second or further marriage. In the same model, skill levels 3 and 4 were put together, skill level 1 was combined with the remaining category (never paid work, armed forces or unknown) and years of unemployment were grouped together with working years. Next, in the variable *degree of urbanization*, large city was merged with the category suburb or outskirts. Finally, in the model for older ages, the proxy for the presence of a child in the household, and the variable financial hardship were not included. Additional analyses were performed to check for differences between men and women and differences between the three countries. During the process of running models, we carefully checked the coefficients and standard errors of all the variables after adding variables to the model. There were no reasons to suspect collinearity between independent variables included in the models.

We pooled the data for all three countries before estimating the models. This was necessary because the number of events in the separate countries was rather small, leading to statistical power problems for models for the separate countries. Nevertheless, we also estimated separate models, of which we briefly discuss the findings.

Results

The Impact of Separation in the Short and Long Run

In accordance with the expectations, separation has a great impact on the move out of home ownership (Table 4). In the first year after separation, men, but particularly women, have high odds of leaving home ownership, probably because directly after separation at least one partner is forced to change residence (Feijten, 2005b). As expected, women turn out to be more likely to make such a move. Although the immediate effect is the strongest, the effect of the disruption persists over time, which is in line with our hypothesis. Individuals who separated 3 or 4 years ago, and did not start a new relationship, had 6.4 times higher odds of leaving home ownership than respondents in their first marriage. Even home owners who separated more than 10 years ago had significantly higher chances of moving out of ownership than home owners in their first marriage. These findings are in line with the idea that it might take time before the impact of a disruption in parallel careers is discernible and moving to a rental dwelling becomes attractive or necessary.

After separation, an individual is not only more likely to leave home ownership than married persons, but also at a significantly greater risk to leave ownership compared to singles. This conforms to the idea that singles might have bought a home that fits to their needs, while for separated persons the dwelling that was purchased before the separation might not be in accordance with their current housing needs.

The results for middle (Table 5) and older ages (Table 6) were similar. A detailed analysis of the effects of separation was not possible at older ages; nonetheless, home owners who had been separated for at least 2 years had significantly higher chances to move out of ownership than those in their first marriage.

The Impact of Widowhood in the Short and Long Run

Compared to home owners in their first marriage, those whose partner died had significantly higher odds of leaving ownership. The effect is strongest in the first year after the death of a spouse, but persists in the years thereafter (Table 4). From 5 years after widowhood onwards, the effect of widowhood seems to decrease. Nevertheless, the odds of moving out of ownership are estimated to be still significantly higher for a home owner who became widowed more than 10 years ago, than for someone in a first marriage. These findings are in line with the idea that a disruption in the partnership career can cause both an immediate need for moving to a more suitable dwelling and a change in needs in the years following the disruption. It seems likely that widowhood results in a long-term change in the housing needs of home owners.

From Tables 5 and 6, it can be seen that the effect of widowhood on moving out of home ownership differs between middle and older ages. At middle ages, home owners have the highest likelihood of leaving owner occupation 3–4 years after the decease of their partner, while at older ages, the effect of widowhood is especially strong in the first year. We expected higher chances of leaving ownership particularly at older ages, because of problems in housekeeping, or the excess of space after widowhood. A move to a rental dwelling might then be attractive or necessary. At middle ages, widowhood likely causes few immediate problems, because at these ages, people are unlikely to face severe health problems. In contrast, at older ages, the loss of a spouse appears to affect housing needs or preferences immediately, which conforms to the logic that at older ages widow(er)s more

Table 4. Logistic regression of moving out of home ownership (home owners aged 45–80)

	<i>B</i>	SE	Exp (<i>B</i>)
<i>Family life-course variables</i>			
Marital status (ref = 1st marriage)			
Single never married	0.152	0.262	1.165
First year after separation, male	3.711***	0.283	40.901
First year after separation, female	4.302***	0.244	73.817
Second year after separation	2.546***	0.316	12.752
3 and 4 years after separation	1.822***	0.309	6.183
5–10 years after separation	0.866***	0.282	2.377
More than 10 years after separation	1.041***	0.172	2.832
First year after widowhood	1.768***	0.309	5.859
Second year after widowhood	1.480***	0.351	4.395
3 and 4 years after widowhood	1.419***	0.286	4.131
5–10 years after widowhood	1.217***	0.231	3.377
More than 10 years after widowhood	0.883***	0.280	2.419
Second or further marriage	0.344*	0.185	1.410
Cohabiting (unmarried)	0.644*	0.335	1.904
Child under median age of leaving the parental home	0.209	0.140	1.232
Age first childbirth (ref = medium)			
Young	0.297**	0.117	1.345
Old	– 0.308**	0.151	0.735
No children/no info	– 0.093	0.189	0.911
<i>Housing career variables</i>			
Inhabited homes	0.036*	0.018	1.037
Age at first-time home owner (ref = medium)			
Young	– 0.187	0.123	0.830
Old	– 0.011	0.117	0.989
<i>Socio-economic variables</i>			
Financial hardship	0.586***	0.191	1.797
Paid working career (ref = working)			
Not in the labour force	0.460***	0.134	1.584
Unemployed	0.847***	0.259	2.332
Skill level of job (ref = skill level 1)			
Skill level 2	– 0.179	0.160	0.836
Skill level 3	– 0.037	0.212	0.964
Skill level 4	– 0.286	0.194	0.751
Never paid work/ no info	– 0.170	0.357	0.843
Years of education after age 12	– 0.006	0.010	0.994
Poor health	0.036	0.138	1.037
Female	0.047	0.105	1.048
Age	0.021**	0.010	1.021
<i>Macro-level variables</i>			
Country (ref = Denmark)			
Sweden	– 0.139	0.113	0.870
The Netherlands	– 0.508***	0.140	0.602
Degree of urbanization (ref = large city)			
Suburb or outskirts	– 0.370**	0.188	0.691
Large or small town	– 0.289*	0.162	0.749
Rural area or village (+ no info)	– 0.721***	0.187	0.486
Period (ref = after 2005)			
Before 1990	0.055	0.207	1.056
Between 1990 and 1995	0.255	0.187	1.291

(Continued)

Table 4. Continued

	<i>B</i>	SE	Exp (<i>B</i>)
Between 1995 and 2000	0.383	0.158	1.467
Between 2000 and 2005	0.350**	0.139	1.419
Increase in house prices (compared to previous year)	0.099	NUI	NUI
Constant	− 6.386***	0.549	0.002
Initial − 2 loglikelihood	5315.65		
Model − 2 loglikelihood	4755.18		
Improvement	560.47, df = 42, <i>p</i> = 0.00		
<i>N</i> person years (<i>N</i> moves out of ownership)	52 700 (464)		

p* < 0.1; *p* < 0.05; ****p* < 0.01.

Abbreviation: NUI – not useful for interpretation.

often need immediate care or (household) assistance which was previously provided by the deceased partner. It should be noted that because welfare regulations after separation and widowhood are different in the three countries, the effect of separation or widowhood on the likelihood of leaving home ownership might differ as well.

Cohabitation and Entering a New Relationship

As expected, the risk of leaving home ownership in a second or further marriage was higher than in a first marriage (significant at 0.1 level; Table 4). Also in line with expectations, entering a second or further marriage was associated with a lower probability of leaving home ownership compared to being separated or widowed. Apparently, a rental dwelling is less attractive because of the increase in household size, additional household income and shared household costs in a new relationship. The findings for middle ages (Table 5) are similar to the findings for the complete sample. At older ages (Table 6), the probabilities of moving out of home ownership are not estimated to be significantly higher in a second or further marriage (or in cohabitation) than in a first marriage.

Furthermore, cohabiters had a greater probability of leaving owner occupation than married home owners. The same holds when we focus on middle ages. This finding is in line with the idea that a longer period of stability in parallel careers, such as is often seen among married couples, strengthens the progressive advantage in home ownership.

The Presence of Children and Timing of First Childbirth

The minor importance of having a child under the median age of leaving the parental home is an unexpected finding. This proxy for the presence children in the household was not significantly associated with the odds of leaving home ownership. According to Abramsson & Andersson (2012), the excess of space in the home after the nest leaving might cause a move to a smaller dwelling, but this is not found in the model. One cause of the absence of an effect might be the rather unsatisfactory measurement of the presence of children.

Having had the first child at a relatively old age was associated with lower odds of leaving home ownership compared to having had the first child in the second and third

Table 5. Logistic regression of moving out of home ownership (home owners aged 45–64)

	<i>B</i>	SE	Exp (<i>B</i>)
<i>Family life-course variables</i>			
Marital status (ref = 1st marriage)			
Single never married	0.334	0.275	1.397
First year after separation, male	3.649***	0.292	38.434
First year after separation, female	4.278***	0.251	72.102
Second year after separation	2.569***	0.319	13.051
3 and 4 years after separation	1.849***	0.313	6.353
5–10 years after separation	0.841***	0.295	2.318
More than 10 years after separation	1.067***	0.195	2.907
1–2 years after widowhood	1.168***	0.424	3.216
3 and 4 years after widowhood	1.885***	0.338	6.585
5–10 years after widowhood	1.237***	0.334	3.445
More than 10 years after widowhood	1.025**	0.425	2.787
Second or further marriage	0.355*	0.206	1.426
Cohabiting (unmarried)	0.616*	0.355	1.852
Child under median age of leaving the parental home	0.216	0.153	1.241
Age first childbirth (ref = medium)			
Young	0.234*	0.135	1.264
Old	–0.425**	0.175	0.653
No children/no info	–0.024	0.201	0.976
<i>Housing career variables</i>			
Inhabited homes	0.049**	0.021	1.050
Age at first-time home owner (ref = medium)			
Young	–0.129	0.136	0.879
Old	0.013	0.138	1.013
<i>Socio-economic variables</i>			
Financial hardship	0.667***	0.197	1.949
Paid working career (ref = working)			
Not in the labour force	0.528***	0.148	1.696
Unemployed	0.894***	0.259	2.446
Skill level of job (ref = skill level 1)			
Skill level 2	–0.011	0.194	0.989
Skill level 3	0.246	0.242	1.279
Skill level 4	–0.005	0.226	0.995
Never paid work/no info	–0.304	0.490	0.738
Years of education after age 12	–0.012	0.011	0.988
Poor health	–0.138	0.169	0.871
Female	0.036	0.121	1.037
Age	0.012	0.014	1.012
<i>Macro-level variables</i>			
Country (ref = Denmark)			
Sweden	–0.039	0.129	0.962
The Netherlands	–0.539***	0.161	0.583
Degree of urbanization (ref = large city)			
Suburb or outskirts	–0.316	0.201	0.729
Large or small town	–0.415**	0.176	0.660
Rural area or village (+ no info)	–0.829***	0.208	0.437
Period (ref = after 2005)			
Before 1990	0.040	0.227	1.041
Between 1990 and 1995	0.221	0.210	1.247
Between 1995 and 2000	0.399**	0.187	1.490

(Continued)

Table 5. Continued

	<i>B</i>	SE	Exp (<i>B</i>)
Between 2000 and 2005	0.382**	0.180	1.465
Increase in house prices (compared to previous year)	0.141	NUI	NUI
Constant	−6.093***	0.883	0.002
Initial −2 loglikelihood	4169.08		
Model −2 loglikelihood	3685.86		
Improvement	483.22, df = 41, $p = 0.00$		
<i>N</i> person years (<i>N</i> moves out of ownership)	44 680 (358)		

Abbreviation: NUI – not useful for interpretation.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

quartiles of the age at first childbirth. A late timing of first childbirth seems to offer stability at older ages, while an early first childbirth is associated with significantly higher odds of leaving home ownership. This is in line with the idea that having time to accumulate savings before having the first child will bring long-term advantages in the housing career. From Tables 5 and 6, we see that the effect of late first childbirth is mainly prevalent at middle ages, while the effect of early first childbirth is mainly observed at older ages.

(In)stability in the Housing Career

The effects of the housing career variables are in the expected direction. Having inhabited more homes is associated with a greater probability of moving out of home ownership (Table 4). The model for older ages shows no effect of having inhabited more homes (Table 6), while at middle ages the effect is significant and positive (Table 5).

Having become home owner at a young age turns out to decrease the likelihood of leaving home ownership, which is in line with the idea that a longer period of value accumulation will provide advantages in the housing career at later ages. Contrary to the model for all ages, early home ownership does not significantly increase the odds of leaving ownership in the age stratified models.

Other Parallel Careers and Macro-Level Circumstances

Financial hardship, being out of the labour force and unemployment were positively related to the likelihood of moving out of home ownership, while a higher skill level of the job had a negative but non-significant effect. This is in line with the idea that having few resources or a low socio-economic status might provoke the need for moving to a cheaper dwelling. There is a marked difference between the models for middle and older ages. Whereas we found no significant influence of a higher skill level on the move out of home ownership at middle ages, at older ages people with a higher skill level were significantly less likely to leave ownership. The effect of education on the move out of home ownership was small. It might well be that the positive (more

Table 6. Logistic regression of moving out of home ownership (home owners aged 65–80)

	<i>B</i>	SE	Exp (<i>B</i>)
<i>Family life-course variables</i>			
Marital status (ref = 1st marriage)			
Single never married	– 1.111	1.036	0.329
First 2 years after separation	4.237***	0.868	69.223
More than 2 years after separation	0.896**	0.358	2.451
First year after widowhood	1.972***	0.396	7.185
Second year after widowhood	1.545***	0.458	4.687
3–5 years after widowhood	0.913**	0.423	2.491
More than 5 years after widowhood	0.805***	0.298	2.237
Multiple marriage or cohabiting (unmarried)	0.369	0.401	1.446
Age first childbirth (ref = medium)			
Young	0.550**	0.241	1.733
Old	– 0.066	0.304	0.936
No children/no info	– 0.101	0.390	0.904
<i>Housing career variables</i>			
Inhabited homes	0.000	0.040	1.000
Age at first-time home owner (ref = medium)			
Young	– 0.548 *	0.304	0.578
Old	– 0.148	0.227	0.862
<i>Socio-economic variables</i>			
Working or unemployed (ref = not in the labour force)	– 0.956	0.606	0.384
Skill level of job (ref = skill level 1 or never paid work)			
Skill level 2	– 0.518*	0.264	0.596
Skill level 3 and Skill level 4	– 1.032***	0.357	0.356
Years of education after 12	0.019	0.020	1.020
Poor health	0.484*	0.251	1.622
Female	0.085	0.218	1.088
Age	0.074**	0.031	1.077
<i>Macro-level variables</i>			
Country (ref = Denmark)			
Sweden	– 0.442*	0.237	0.643
The Netherlands	– 0.584**	0.286	0.558
Degree of urbanization (ref = large city or suburb)			
Large or small town	– 0.764**	0.299	0.466
Rural area or village (+ no info)	– 0.463*	0.249	0.630
Period (ref = after 2005)			
Before 1995	2.375***	0.689	10.752
Between 1995 and 2000	0.388	0.372	1.474
Between 2000 and 2005	0.401 *	0.235	1.494
Increase in house prices (compared to previous year)	0.086	NUI	NUI

(Continued)

Table 6. Continued

	<i>B</i>	SE	Exp (<i>B</i>)
Constant	−9.182***	2.279	0.000
Initial −2 loglikelihood	1127.75		
Model −2 loglikelihood	1012.62		
Improvement	115.13, <i>df</i> = 29, <i>p</i> = 0.00		
<i>N</i> person years (<i>N</i> moves out of ownership)	8020 (106)		

Abbreviation: NUI – not useful for interpretation.

p* < 0.1; *p* < 0.05; ****p* < 0.01.

residential flexibility) and negative impact of education (more financial stability) cancel each other out.

In the models for all ages and middle ages, we found no influence of self-reported periods of poor health on the likelihood of moving out of home ownership. In these models, an effect of health was found in a model without socio-economic indicators, but disappeared when we added the variables financial hardship and paid working career. However, at older ages, a period of poor health does increase the odds of moving out of home ownership significantly (at 0.1 level). The likelihood of moving out of ownership increases slightly with age in all models, but only significantly in the model for older ages. The difference between men and women is not significant in any model.

Conform our hypothesis, the chances of leaving ownership were estimated to be highest in Denmark, slightly lower in Sweden and significantly lower in the Netherlands. An unexpected finding in the model for older ages was the significantly lower probability of leaving home ownership of Swedes compared to Danes. Swedes were expected to have high chances of leaving ownership especially at older ages, because, in most of the period under study, a move to an apartment was by definition a move out of ownership in Sweden. In accordance with reasoning, leaving ownership was most likely in large cities. Living in a village or rural area was associated with a significant lower likelihood of moving out of home ownership, probably because rental dwellings are more readily available in large cities. Furthermore, we found that the chances of leaving ownership were significantly higher between 1995 and 2005 compared to the years before and after these years. The results at middle ages were similar; however, at older ages home owners were estimated to be more likely to leave ownership before 1995. Finally, increasing house prices seem to stimulate the move out of owner occupation in all three models.

Additional Analyses

Additional analyses were performed to check for differences in effects between men and women and between the three countries (results not shown).

The effect of separation for men and women separately was partly included in the model, but estimating a complete interaction between relationship status and gender was impossible because of the small number of widowed men in the data-set. Models that were run for men and women separately revealed that the skill level of the job and the country of residence were the only other variables besides separation that had a clearly different effect. For men, a higher skill level increased the chances to leave home ownership, while

women with a lower skill level were more likely to leave ownership. Swedish men were not significantly less likely to leave home ownership than Danish men, while Swedish women had significant lower chances than Danish women.

There were some minor differences in effects between Denmark, Sweden and the Netherlands. Among the key explanatory variables, relationship status had a comparable impact, but was not highly significant for all categories in Sweden and the Netherlands. Early timing of first childbirth was not associated with higher chances of leaving home ownership in Sweden, but later timing was associated with lower chances in all three countries. In Denmark, early timing of first-time ownership was associated with lower chances of leaving ownership, while in Sweden late timing was associated with higher probabilities. In the Netherlands, surprisingly, later timing was associated with lower chances of leaving ownership. Finally, contrary to Denmark and the Netherlands, we could not find evidence of a positive association between financial hardship, unemployment and leaving ownership in Sweden.

Discussion

In this paper, we studied the influence of family and housing careers on moving out of home ownership at middle and older ages. Hypotheses were derived from theoretical arguments about the preference for or necessity of moving to a rental dwelling in certain life-course circumstances faced by home owners in our sample. Compared to owner-occupied dwellings, homes in the rental sector are often (i) cheaper, (ii) smaller, (iii) single-storied, and provide (iv) more flexibility and (v) better access to formal care. We argued that stability and disruptions in parallel life-course careers influence the attractiveness of rental dwellings to home owners, or the necessity to move to such dwellings.

We conclude that disruptions and changes in family and housing careers indeed make a move out of home ownership at middle and older ages more likely among Danish, Swedish and Dutch home owners in the sample. We find evidence of both an immediate and a long-term effect of disruptions in the partnership career. While previous studies showed the importance of separation for moving to a rental dwelling shortly (e.g. Dewilde, 2008; Helderman, 2007) and slightly longer after separation (e.g. Feijten, 2005b), we found a great positive effect on the likelihood of moving out of ownership up to more than 10 years after separation. This finding indicates that lasting pressure on household costs might eventually make a move to a rental dwelling likely. This analysis was the first to examine both the immediate and long-term effect of widowhood on the move out of home ownership, while others showed the relevance of widowhood in the short run (e.g. Feijten, 2005b; Painter & Lee, 2009). Widowhood increased the probability of leaving ownership in the first, until even more than 10 years after widowhood. This finding suggests that after widowhood housing needs become profoundly different than before. Carrying the sole responsibility for an owner-occupied home might become undesired or problematic when widow(er)s face physical limitations, a problem that would have been easier to handle in the presence of a partner. Past experiences in the family and housing careers—becoming home owner early and having a first child late—make moving out of home ownership less likely at later ages. Apparently, accumulating savings and investments in the labour career and home ownership before having the first child create stability in the long run, decreasing the need to adapt housing to changing circumstances at later ages.

Disruptions in other careers are also associated with higher chances of leaving home ownership. For example, financial problems, unemployment and retirement lead to moves out of home ownership, which is in accordance with previous findings (e.g. Dieleman *et al.*, 1995; Helderma, 2007). At older ages, having a good socio-economic position (having (had) a job with high skill level) and having a stable working career make leaving ownership less likely. However, the relative importance of these circumstances is small compared to disruptions in the partnership career. One would expect that, at older ages, health problems would be highly important in explaining why home owners leave their owner-occupied home for a rental dwelling. But surprisingly, although the number of separations is small at older ages, separation is strongly associated with the likelihood of moving out of ownership at these ages. Up to more than 5 years after the actual event, widowhood is also an important cause of leaving home ownership. This implies that disruptions of the partnership career are more important to moves out of home ownership than the physical condition of home owners. The small effect of health might be explained from the fact that moves to care institutes were not incorporated in this study, while health problems might be a more important reason for leaving home ownership for a long-term care facility than for leaving ownership for a rental home.

Given population ageing, the results could shed some light on future challenges. The long-term findings are relevant because there will be a large number of home owners who will be living in home ownership for a longer period. First, more people are living alone at older ages because of the increase in the number of single-person households among the baby boom cohorts. Second, these cohorts are living independently in their own home for a longer period because of gains in (healthy) life expectancy. With more people living alone, living independently and living longer, the demand for rental dwellings increases in the long run. As a result, the goal of governments to secure suitable housing to everyone might become of key-importance. On the one hand, governments might facilitate the dynamics on the housing market by offering suitable rental dwellings to those who need it. On the other hand, policy could be directed towards living independently in home ownership for as long as possible because a great share of people living in public rental housing may lead to higher welfare expenditure. This study reveals that changes and situations that occurred longer ago in the family and housing need to be considered.

Several European countries already support older people to live independently (ageing in place) by giving more responsibilities to the family and providing more home care rather than long-term institutional care (Pavolini & Ranci, 2008). Older people living independently have a smaller claim on the welfare state because moves into long-term care institutes are often accompanied by expensive professional assistance. It is doubtful, however, whether the implications of this policy will be entirely positive. Because people remain living independent more often instead of moving to an institute (Fausset *et al.*, 2011), the need for physical adjustments to the home, or moves to age-friendly rental dwellings might become larger. The results of this study have shown that the family and housing careers influence the demand for rental dwellings. Furthermore, ageing in place could increase the responsibilities for the family, and particularly children, in providing household assistance, offering care and selling the home upon institutionalization or decease of the family member. The welfare and housing context might, however, imply different challenges between countries.

Appropriate housing is a key determinant of individual well-being (Angelini & Laferrère, 2012) and moves from ownership to renting can therefore affect individual

well-being. The results of this study indicate that changes in the family and housing careers have an impact on housing preferences and needs at older ages. Although some studies have shown the importance of home ownership for subjective well-being (Rohe & Stegman, 1994; Rossi & Weber, 1996), the role of housing in subjective well-being remains something to be investigated in more detail. Moreover, it remains unclear what decision processes underlie the observed moves out of home ownership. A forced move out of home ownership might have negative consequences for individual well-being because the move was unwanted. A voluntary move, however, might be positive for well-being because inhabiting a rental dwelling could involve a cost reduction and a more suitable environment. For a better understanding of decision-making processes among elderly, future research could focus on reasons for leaving home ownership.

This paper has shown that investigating the long-term impact of stability and disruptions in the family life course is helpful to understand the move out of home ownership better. However, the study has some limitations. In the countries under study, renting is a reasonable alternative to home ownership, and the housing markets are characterized by a considerable rental part. Therefore, our findings might apply only to countries with a comparable interrelation between home ownership and renting. Also, the small number of cases and events per country prevented us from comparing the impact of family and housing across the countries. In addition, the data did not allow us to study moves into care institutes. The lack of information about the presence of children in the household is also a disadvantage; we had to use a rather unsatisfactory proxy for this factor. Moreover, the weak measurement of income is a limitation of the study; this is a well-known problem in retrospective data. Detailed information about income would help distinguish between the direct effect of a decline in resources and the long-term impact of disruptions.

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