Life Course Contingency in the Residential Trajectory. An Analysis of Residential Mobility of Young Adults in Britain.

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Abstract

This paper provides empirical evidence for testing whether initial conditions of the residential trajectory impact on further residential mobility once controlling for on-time predictors of actual moves. We suggest that the configuration of conditions of the home leaving experience like age, transition-roles in the passage to adulthood and the family structure, work as contingencies of the intensity of residential transitions over the life course. For the analysis we use a sample of young adults from the British Household Panel Surveys and follow their residential biographies since their sixteenth anniversary. The method is based on discrete-time event history analysis. To correct for selectivity, we model simultaneously parental home leaving and residential mobility once living apart. Main results indicate that early nest leaving, when mediated by the pursuit of education, is associated with higher intensities of residential change overtime. In contrast, those leaving in partnership or in full-time occupation are likely to leave locally and later and to be less likely to move later over long distances. Finally, non-intact family structures do not affect mobility over the life course, even though they speed up the initial home leaving event.

Keywords: Residential Trajectories, Parental Home Leaving, Life Course, Event History Analysis, Britain.

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Introduction

One of the main aims of the life course perspective is to connect initial conditions in the form of resources and institutional constrains with individual outcomes over one's life span. More concretely, the concept of life course contingency, denoting that "*future states and events are always dependent on the prior life history in the sense of experiences, resource allocation, choices and turning points*" (Diewald and Mayer, 2009; p.7), aims to be at the core of the analysis of individual lives. This research paper aims introducing the conception of initial events as contingencies for transitions over the life course in residential mobility research. We inquire about how initial independent residential mobility, assimilating that to the first relocation outside the parental home, may be given under conditions that affect the forthcoming residential trajectory.

We focus on the analysis of intensity or the quantum of residential mobility in the stage of young adulthood, which boasts for the highest mobility intensities. This fact is not trivial, because events in career and family domains that take place during young adulthood are main determinants of residential mobility (Willekens, 1991; Mulder, 1993). It is possible to establish a connection between determinants of residential mobility and the markers of access to full adulthood. Both are factually represented by events like ending formal education, access to full-time jobs or forming a family. We suggest that the configuration of role-transitions and other conditions experienced at the beginning of the residential trajectory, which is also part of the process to step out from parental control and search for privacy and setting one's own life (Hogan, 1976; White, 1994; Billari, 2001), may affect propensities of residential change over the life course. In this paper we test this thesis formally modelling intensities or transition rates of residential mobility conditioning on several determinants of initial home leaving retrieved from the literature on the topic. They relate to timing divergences, life course status in family-work/education domains and family structure.

For the empirical analysis we draw a sample of young adults from the British Household Panel Surveys. We track residential transitions of young adults since their 16th anniversary. The method is based in life table estimates and discrete-time intensity regression, which allow conditioning on time-varying life-statuses as well as initial conditions of the residential trajectory. We estimate simultaneously two types of residential transitions regarding the departure status: living in the parental nest and living apart. The strategy is aimed at identifying divergences in incentives of mobility as well as to account for selective processes on home leaving to co-vary with further decisions of mobility. Moreover, we also assess the distance of the moves, as the literature suggests dramatic differences in residential behaviour regarding distance.

As an advancement of results we find that early home leaving is strongly associated with residential mobility over the life course and this is mainly mediated by an incomplete transition to adulthood. Early leavers are mainly in education, which enhances all types of mobility. Leaving late is associated to family formation, which reduces chances to move further. More insights are to be found in the remaining of the paper, which is structured as follows. First a brief introduction to the life-course perspective is done and its suitability for the current research is discussed. Subsequently hypotheses, data and method are described. The text ends with the presentation of results and a brief discussion.

Research framework

There is broad agreement in the literature that the life cycle stage determines residential mobility, where younger households move more often than older households do (Green et al, 1997). Young adulthood is particularly crowded with life events in which triggers of residential moves are rooted, namely partnership and family formation, access and ending of formal tracks of education or entrance into the labour market. From the 90's on studies on residential mobility switched from the traditional life cycle perspective, which focuses on a fixed set of developmental stages, to the life-course framework (Wagner, 1989; Willekens, 1991; Mulder, 1993; Bailey and Cooke, 1998). Life course patterns denote sequences of states and events in various life domains spanning from birth to death (Diewald and Mayer, 2009). Although this perspective agrees with a developmental conception of life, it allows for more variability in life sequences as well as non-linearities such as countertransitions (Hohn and Mackensen, 1989). Therefore, the conceptual basis of the life-course framework is very appealing to analyse deviances to standard timing, order and type of life-events that societal norms made prevalent.

Analytically of great interest in the life course framework, the concept of trajectory denotes the sequence of statuses of a life domain over a human life, delimited by events or transitions. Trajectories can be characterized by the quantum or the amount of transitions and status individuals get through, the timing one spends in each of the statuses and the order or sequence of statuses. None of these characteristics that depict a trajectory are trivial for the understanding of the evolution of one's biography, as they work as life course contingencies. By contingency in the life course we mean the biography as a *sine qua non* condition, but not necessarily the immediate trigger, that leaded to the current life status. In other words, life course contingency articulates the interdependence of the prior biography with on-time status and transitions (Diewald and Mayer, 2009). Liefbroer and Corijn (1999), in an empirical research on interdependencies of family-work trajectories, say that prior stages of the work/educational trajectory are informative of the amount of effort in investment in career which will not be dedicated to family formation. In the residential trajectory, the life course contingency hypothesis is whether initial conditions of the residential trajectory opened a path of experiences, resource allocation and choices that forged a given residential trajectory. The counterhypothesis would be that initial conditions of the residential trajectory only influence the initial transition and status as on-time conditions and triggers of residential behavior do not have a 'recall effect' on past experiences, but depend on exogenous opportunities that appear overtime.

The residential trajectory contains the sequence of where and when an individual has resided throughout his life. The trajectory is composed of residential episodes, which are measures of the duration of residence in a living arrangement and delimit a residential status from when the individual settles in the living arrangement until it moves to another. In the residential trajectory contingencies have been studied as the type and the timing of immediate previous statuses of residence as well as those of other life domains like family or career (for a comprehensive overview of the literature see Bailey, 2009). However, no attention has been paid to the initial conditions of the residential trajectory as life course contingencies of forthcoming events of this biography. This research aims to fill this gap by focusing on the contingency of initial conditions of the residential trajectory on the quantum or intensity of residential relocation. We assimilate the beginning of the trajectory to the parental home leaving event, meaning by that the end of parental coresidence and the establishment of an independent living arrangement. This choice has been done under two grounds. First, the initial intended home leaving experience is associated to the search for privacy and reduction of direct parental control (White, 1994; Baizán, 2002). Thus, the young adult can be considered to be

agent in that decision, pointing the beginning of an independent residential trajectory and the conditions under which this career started[1]. Second, life events that trigger residential change may not appear since the first time home leaving. For instance, a search for intimacy outside the parental nest is normally a condition for transitions to marriage or cohabitation (Baizán, 2002). Access to full time positions in the labour market may be a necessary requirement to accumulate resources to leave the nest and to move further (Goldsheider and da Vanzo, 1989). Alternatively, the wish of studying elsewhere in higher education institutions might be associated to a desire for living economically independent (Holdsworth, 2009).

In order to better depict the residential trajectory for the analysis of the life course contingency hypothesis we decide to separate the trajectory in two main states: (a) coresidence with parents and (b) residence living apart. This strategy responds to conceptual and methodological reasons. First, as initial conditions of the residential trajectory are to be found in the transition from parental coresidence to an independent living arrangement, we may better observe what drives residential change for each residential state separately. Second, leaving the parental nest is not a one-time event but can be repeated over time. Indeed, patterns of nest return for short periods of time are more important nowadays (Mitchell, 2006). Return to the parental nest does not necessarily reflect immaturity but it may have to do with temporary situations of economic hardship, health problems or emotional instability (Michielin and Mulder, 2007). This turning point in the residential trajectory might be viewed as a competing event to those of relocation elsewhere. Moreover, repeated home leaving may be rooted in similar triggers to initial home leaving than those of residential change between independent living arrangements. Last, to analyse separately home leaving from further mobility is appealing for the statistical analysis of selective processes in the residential trajectories by omitted variables in the models. If leaving home is the first filter in the residential trajectory, those leaving under certain observed conditions may also be likely to be filtered towards home leaving with some unobserved characteristics[2]. If selectivity exists, we may be aware that observed conditions at home leaving are not real causes of further mobility, but just instruments. The analysis of the commented unobserved characteristics that may select people towards leaving under some conditions and then to have some specific behaviour in further mobility is suitably done in simultaneous equation modelling later commented.

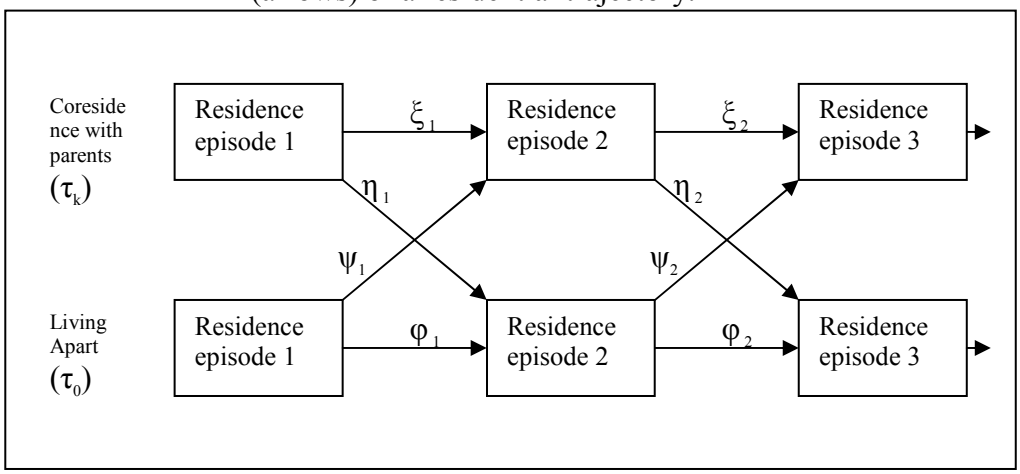
A picture of the conceptual framework here exposed is graphically presented in a flow chart of statuses-transitions, in a similar vein to Hoem (1970), who first introduced it in Demography. A flow chart of statuses and transitions are graphic representation of trajectories which allow setting the transitions of interest as outcomes and predictors. The flow chart in Figure 1 account for two states of the residential trajectory: parental coresidence and living apart. There are two possible states of departure and destination and four possible transitions. ξ_n is a residential event with no change in the status of coresidence (it may also include to go to live with the other parent if parents separated). η_n is an event of residential change and parental home leaving. ψ_n is a residential change that implies return to the nest (then, it is conditioned to previous stage of non co-residence with any parent). Last, φ_n is a residential transition where origin and destination lays outside parental home. We will use y_n to point any residential transition independently of the status of parental coresidence. Let us note that the individual

[1] Early childhood mobility may also exert influence on adult age mobility. For instance, Hagan *et al*. (1996) find that moving with parents disrupts the community linkages of children and diminishes their levels of social capital, having negative influence on educational outcomes.

[2] For instance those leaving home younger or those aiming for further studies, with no full-time job and no stable partnership, may be more open to new experiences or eager to move, than those who leave at later ages or in certain role-statuses that aim for stability in the life course. In that sense it is possible that unobserved characteristics on initial home leaving are commonly affecting further decisions of mobility.

may leave the parental nest up to 'n' times in her residential trajectory, allowing for repeated events of nest leaving.

Figure 1. Flow chart of statuses (boxes) and transitions (arrows) of a residential trajectory.



The research hypothesis searches for an effect of conditions at initial home leaving on intensities of residential mobility. The first association of interest is found below in Equation (1) which equals residential events departing outside the parental home to a function of conditions at the time of home leaving $X(\eta_1)$, previous residential statuses y_{n-1} and other pertinent covariates Z. We may also want to predict what conditions have impact on increasing or decreasing the risk of parental home leaving (Equation 2) for two reasons. First, as commented before, a simultaneous equation models will control for biases due to unobserved heterogeneity among leavers. Second, we may want to strength the interpretation of initial conditions on further relocations focusing on the analysis of nest leaving predicted by the set of theoretically-based observed conditions.

$$(1) \qquad (\varphi_{n,}\, \psi_n) = X(\eta_1) + y_{n-1}\,(\varphi_{n-1,}\, \psi_{n-1,}\, \eta_{n-1,}\, \xi_{n-1}) + Z$$

$$(2) \qquad \eta_n = y_{n-1}\,(\varphi_{n-1,}\, \psi_{n-1,}\, \eta_{n-1,}\, \xi_{n-1}) + X$$

A last issue, fundamental in residential mobility research, is the distance of the move. The literature discusses on the distance of mobility differentiating between migrations and residential variations (Courgeau, 1988). A long-distance move or migration tends to disrupt everyday life, including face-to-face interaction with social networks left behind. These moves are less common and are usually undertaken for job and educational career motives and/or by individuals less attached to family life (Clark and Davis Whiters, 2007). It is argued that long distance mobility generally associates to upward social mobility through job upgrading, being these movers more prone to improve their career prospects even if they finally decide to stay (Blau and Duncan, 1967; Huinink *et al.*, 2011). On the contrary, short moves or residential changes are more likely to be family-related (Mulder, 1993), and is primarily the result of sub-optimal housing consumption due to household-family size changes or just to improve housing conditions. In light of such distinctions analysis will account for differences between short and long distance residential mobility.

Under what conditions nest leaving impacts on residential mobility intensities?

Different conditions at initial home leaving may affect intensities of residential mobility over the life course. First, *place utility* literature poses that decreasing intensities of mobility are plausibly explained by longer residential durations as of increasing utility of location specific assets, which are opportunity costs to mobility (Da Vanzo, 1981; Greenwood, 1985; Fischer and Mallberg, 2001). As duration of residence in the first state of coresidence with parents is a linear function of age, we derive that: early home leavers are likely to have increasing intensities of mobility over the life course as of lower accumulation of location-specific or intransferable economic and social assets in the first and subsequent residential arrangements and/or locations. The location-specific thesis grounds the effect of past conditions only on the passage of time, but not on the incentives that make people move before or after. As to be early or late movers might depend on qualitatively different incentives, we make a step further into the understanding of initial residential mobility introducing insight of the life course literature.

The life course literature considers events in work and family domains triggers of residential change. The residential trajectory is parallel and surrogated to trajectories in other life domains. Family and work transitions are more likely to be factual representations of life goals while residential transitions might be only means to accomplish such goals (Mulder, 1993). Results on the interdependence between residential mobility and fertility (Kulu, 2005; Clark and Davis Withers, 2009) or residential mobility and job mobility (Clark and Davis Withers, 2002; Boyle *et al*, 2008; Huinink *et al.*, 2011) confirm that thesis. Residential change works as anticipation of life events, as bigger houses are needed when family is growing, or adaptations, as speculative moves for a job are less likely than those when the job is already found elsewhere. Under the lack of life events working as triggers, the intensities of residential mobility are much diminished, as it is clear from lowering intensities of mobility at increasing age (Green et al, 1997).

Passages to adulthood are reflected in role-statuses that the individual assume after or in preparation of events like ending formal education, partnership and family formation and access to full time occupations (White, 1994; Billari, 2001). These transition-markers are then triggers of the will of independent leaving and the access to the first independent living arrangement. Transition-markers are also likely to trigger residential change once living apart, if they have to still occur after the individual left the parental nest. In that vein, conditions under which nest leaving have been taking place in post-war Western Europe might results in diminished residential mobility once the individual left the nest, as many transitions to adulthood occurred simultaneously or in advance to the initial home leaving event. In particular, "traditional" conditions comprehended the synchronization of marriage and first access to independent leaving, some brief time before first parenthood and conditioned on previous full participation in the labour market of men. Moreover, all these events were taking place in a very short time interval (Billari, 2001).

However, "traditional" conditions are not any more predominant in contemporary home leaving in the UK. In recent decades movements directly from the parental home into couple's coresidence are much less important than they used to be few decades ago (Ermisch, 1999, 2004; Holdsworth, 2000, 2009). Moreover, the age-variance of initial home leaving has increased and departures as a student, mainly at younger ages, have increased in importance as more recent cohorts remain in education longer, with part-time or no employment and increasing dependence on parental income (Ermisch, 1999). We hypothesize that under these circumstances leaving home at earlier age than average increases mobility intensities over the life course. On the one hand, those leaving while in education are less likely to be in full

employment or to enter partnership as of still wide-spread views of incompatibility of such statuses with the role of student. Life transitions still to be done may be cause of higher mobility intensities for young leavers[3]. On the other hand, leaving for the pursuit of higher education is associated with scant personal economic resources, dependence on parental or welfare subsidies and small wage complements and living in relatively cheap housing (many times shared with mates). Under such economically unstable circumstances, return to the parental nest is also very likely.

Last, from evidence in the literature on families and children's outcomes, we raise the hypothesis that the family structure in teenagehood might have an impact on mobility intensities of young adults. The literature suggests high probability of early leaving for young adults departing from non intact families due to the lower cohesion of such families (White, 1994) or the expectation of early leaving when step-parents are in the household (Goldsheider and Goldsheider, 1999). Factors that may mediate on the early leaving of such groups are related to the advancement of transitions to adulthood (Musick and Bumpas, 1989). Among others, looser normative views, including age-related informal norms, about sexual intercourse, cohabitation as an alternative to marriage or childbearing and partnership dissolution (McLanahan and Sandefur, 1994; Ongaro and Mazzuco, 2009); and disadvantage in regard of educational outcomes and occupational attainment (Astone and MacLanahan, 1994) grounded on exposure to economic deprivation (e.g. Aasve *et al*. 2007) or stress suffered by the family conflict (Kiernan, 1992). These conditions explain why individuals from non-intact families may leave earlier, but there is not yet connection between family structure and mobility over the life course. The linkage is based on the fact that those who experienced parental separation are also more prone to have instable life courses due to higher rates of partnership dissolution and re-marriage (Axinn and Thornton, 1996) and to experience unemployment and poverty (Aassve et al, 2007). Therefore, we also expect that individuals departing from non-intact families might be more mobile due to the higher likelihood to repeated life transitions which may enhance not only further mobility among independent living arrangements, but also nest returns due to economic hardship.

Data

We make use of household panel survey data for Britain from the British Household Panel Surveys (BHPS), as many other research articles that worked the topics of residential mobility and home-leaving (e.g. Ermisch, 1999, 2004; Iacovou, 2001; Clark *et al*, 2003; Aassve et al. 2007). The BHPS is a longitudinal survey initialized in 1991 and currently account for more than 10,000 households surveyed yearly and it is representative of the British population in a longitudinal perspective. We focus in a particular population of young Britons who reached the 16th anniversary from 1992 to 1998. We consider age 16 as first time individual may be able to depart from the parental nest. Therefore, we are able to observe conditions of initial nest leaving and further residential change with no need to *condition on the future* for relevant predictors, as might be the case using retrospective survey data. The period of observation is extended until the attrition in the panel survey or 2007, which is the last panel survey utilized in the analysis.

Our results must be read with caution as we just analyse the cohort born around the end 70's and beginning 80's. Among harmful period effects for our results, we may consider that in 1998 tuition fee for higher education was re-introduced into the UK. Holdsworth (2009) finds

[3] The effect of leaving and moving while in education, however, can be seen from another perspective. Literature on Human Capital prove that those acquiring higher education will be more mobile as they may aim recovery of the returns to the educational investment (Sjaastad, 1964).

that the absolute levels of local students increased between 1998 and 2006. Most of the local students stayed at the parental home to minimize the cost of taking up higher education. However, she finds also that the relative share of mobile students holds compared to the period before 1998. In our analyses we will control for measures related to taking up studies locally such as lower parental educational background, being male and to have a child as Holdsworth (2009) suggests.

Table 1. Percentage and absolute figures of residential events according to residential status (parental coresidence or living apart) and type of move: (a) parental home leave (b) return and (c) move within state.*

Type of Move	Residential status		
	Parental Coresidence	**Living Apart**	**All**
Leaves	**74,9% (1077)**		**35,2% (1077)**
Short distance Leave	55,8% (601)		
Long distance Leave	28,6% (308)		
No distance reported	15,6% (168)		
Returns		**21,4% (347)**	**11,3% (347)**
Short distance Return		39,8% (138)	
Long distance Return		38,3% (133)	
No distance reported		21,9% (76)	
Moves within state	**25,1% (361)**	**78,6% (1274)**	**53,5% (1635)**
Short distance	81,2% (293)	77,5% (987)	
Long distance	7,8% (28)	12,1% (154)	
No distance reported	11% (40)	10,5% (133)	
Total Moves	**100% (1438)**	**100% (1621)**	**100% (3059)**
Short distance	62,2% (894)	68,6% (1058)	
Long distance	23,4% (336)	17,9% (287)	
No distance reported	14,4% (208)	13,5% (209)	

*Source: BHPS, 1992-2007. Sample selection: Individuals who reached age 16 from 1992 to 1999. Absolute figures in brackets after percentages

We draw a sample of 1439 individuals equally distributed by sex, around a 10% of not anglo-white ethnic origin, and a median age of 22 years at parental home leaving, similar to the average age reported in other studies (Iacovou, 2001; Aassve et al, 2007). Table 1 show the percentage and absolute figures of residential transitions. Residential transitions are measured as the change of living arrangement between waves. Although BHPS data does not allow tracking several moves between waves, this data assign to the individuals the living arrangement of regular residence. Thus, those who are found only temporarily, in vacation time, in the parental nest are still regarded as independent household. Within the study's observation window more than 3,000 residential events took place, which means that each individual moved in average about two times. Almost 15% of all moves are to unknown destinations or moves abroad, and we declared them as censored cases. Such cases represented most of the attrition in our sample before 2007, the last wave used for analysis.

Almost all sampled individuals move and, to a certain extent, home returns and repeated parental home leaves are observed. In fact, 45% of the moves are changes of residential status in and out the parental nest, evidencing the importance of patterns of *leave-return-leave*.

However, moves between independent living arrangements are more likely to take place than moves in-and-out the nest. Parental home-leaving is more likely to be short distance (i.e. less than 50km to previous location), while home return have equal proportion of short and long-distance moves. Long distance moves are more likely to be in-and-out the nest though.

Methods

For the study of the interdependence of biographical trajectories we use analysis of time to events. The method allows measuring the time dependence since the individual is for first time exposed to the risk of transition (here duration residence since age 16 or since living apart), assessing parallel and triggering life-courses as determinants and accounting for censored cases, or those which time of event is not observed (Blossfeld *et al*, 2007). Discrete-time hazard models are applied as our data only report the individual status at the interview time (i.e. once each year) (see Allison, 1982). A discrete hazard (a) is the probability of occurrence of the event of interest at a discrete time 'j' conditional on no previous occurrence. It is possible to estimate the effect of time-constant and time varying covariates as linear effects (i.e. proportional hazards) and also assess non-linearities by means of interaction of covariates with the baseline hazard. We apply a logit-link function (b) for the estimation of the risk of residential relocation. Results are to be read as log-odds of relocation predicted by time dependent, time-varying and time-constant covariates defined in the next section. The equation also contains a person-specific residual term which is meant to identify selectivity. The person-specific residual captures unobserved heterogeneity in the model, which is identified through multiple replications of outcomes per each individual (Lillard and Cottet, 1998).

$$\text{(a)} \quad h_j(t) = \Pr(y_j(t) = 1 \mid y_j(t-1) = 0)$$

$$\text{(b)} \quad \text{logit}\ [h_j(t)] = \log\left[\frac{h_j(t)}{1 - h_j(t)}\right] = \alpha(t) + \beta\, x_j(t)$$

The analysis of unobserved heterogeneity is essential in our paper as residential episodes are interrelated by non observable attributes of individuals like predispositions to mobility or readiness for new experiences. To fail in correcting for such interdependence will result in optimistic positive effects of current and previous statuses in other life domains or by factors in the model where selective individuals are over-represented. As observed and unobserved conditions at initial home leaving are likely to co-vary with those of further residential change, we decided to model both events simultaneously. We use the software *aML* for estimation of the simultaneous equations (Lillard and Panis, 2002) using full-maximum likelihood estimation and allowing for unconstrained correlation among the person-specific random effects to capture the effects of common unobserved heterogeneity (see Upchurch *et al*., 2003).

$$\text{(c)} \quad \log_e\left(\frac{\eta_{ij}}{1-\eta_{ij}}\right) = \alpha_j D_{Jij} + \beta' w_{ij} + \varepsilon_i^{\eta}$$

$$\text{(d)} \quad \log_e\left(\frac{(\varphi,\psi)_{ij}^{y}}{(\varphi,\psi)_{ij}^{0}}\right) = \alpha_j D_{Jij} + \beta' w_{ij} + \delta_i^{y}$$

Equation (c) models the log-odds of parental home leaving while equation (d) is a competing risk model for different types of relocations once outside the parental nest. Therefore, in

equation (d) log-odds are calculated for (1) returning to the parental nest and (2) moving between independent living arrangements. As distance of mobility is not exogenous in the decision to move, above all regarding triggering life course transition, mobility outcomes for equations (c) and (d) outcomes are considered competing risks as of the distance of the relocation. Long-distance moves stand for 50km or longer distances, and short moves stand for distances below that threshold. No separation was applied between short and long-distance returns because the nature of the return might not differ according to distance[4].

$$\text{(e)} \begin{pmatrix} \varepsilon \\ \delta \end{pmatrix} \sim N\left(\begin{pmatrix} 0 \\ 0 \end{pmatrix}, \begin{pmatrix} \sigma_{\varepsilon}^2 & \rho_{\varepsilon\delta} \\ \rho_{\varepsilon\delta} & \sigma_{\delta}^2 \end{pmatrix} \right)$$

The person-specific residuals for each model are drawn from a joint-bivariate normal distribution (e), with mean 0 and the (estimated) variance-covariance matrix contains the variance of the residual for each state of co-residence in the diagonal and the covariance in the extremes. As we do have few repeated events for parental home returns and long-distance moves, and it may not allow identifying the variance of the person-specific residuals, one person-specific residual for each departure state is specified: parental coresidence and living apart statuses.

Model specification

The models in this article are time to event models for repeated events which pool time varying and time constant covariates, including measures recorded at the moment of leaving the parental nest. The later are used to bring evidence on life course contingency hypothesis. First, age at parental initial leaving is estimated as a linear spline because it allows capturing a non-linear effect of age at home departure. A linear spline is a piecewise-linear transformation yielding slope coefficient for specified intervals of a continuous measure (see Lillard and Panis, 2002). The spline is codified in 2 nodes (bend points) or 2+1 intervals of age at departure. Intervals contain departure age between 16 and 19, considered as early-leaving; between 19 and 23, as average age at leaving; and from age 23 onwards, as late leaving. Second, life course statuses at home leaving capture the effect of transition-roles and are measured for full-time employment, in full-time education, in partnership and parenthood. Last, an indicator measuring whether at the time of leaving the nest the individual was member of a non-intact family, being that a household composed of a separated parent or with the presence of a step-parent, capture potential effects of non-intact family structure over the residential trajectory. Lone parenthood was negligible in our sample and excluded of modelling in analysis.

On-time measures of other conditions control for the effect of actual conditions in the models. Duration of residence estimated as a liner spline capture time dependent effects such as attachment or investment in location-specific attributes[5]. In addition, we use a measure of tenure of the living arrangement, a main deterrent of residential relocation (Clark *et al*. 2003), which refers to parents are owners, when still living in the nest, and the individual (or partner) as the owner, in case of independent living arrangement. Time-varying measures of on-time statuses like full-time employment, enrolment in education, partnership and parenthood do

[4] The few cases of long-distance mobility (N=33), where the individual do not return to the parental home but to the same location of residence where parents live (i.e. *local authority district*) were regarded as returns to the parental nest. We argue that they have a meaning closer to parental home returns than to further moves (elsewhere), in the sense that they come back to a known context and approach the parental nest.

[5] We excluded age in estimation as it is a linear combination of duration of residence in the coresidence equation and a linear combination of duration of residence and age at leaving home in the living apart equation.

capture the triggering effect of actual course of life on residential mobility. Further measures on resources as opportunities for relocation are the log-personal income, for individuals not having formed a family, or household income, for individuals who have a partner. Higher personal income is likely to be associated with all kinds of mobility except returns to the nest. Other time-varying information in both equations is the attained level of education, and other time-constant information is sex[6] of the individual and whether it belongs to a minority group.

Last, two dummy variables capture other characteristics of the residential trajectory. One of them indicates whether the individual experienced a residential change before initial home leaving and captures the effect of mobility experience. The other one indicates whether the individual returned to the nest (in the coresidence equation) or whether is the second time outside the nest (in the living apart equation). Moreover, a separated spline for the duration of residence was calculated for the returnees in the coresidence equation. In the living apart equation we also include a dummy variable flagging those individuals who already moved being outside the parental nest. As we have several residential espiodes, the comented measure was necessary in order to separate the effects of higher order residential episodes on the intensities of residential change. As the structure of economic opportunity is an important characteristic for access to non-family living (White, 1994), we also accounted for parental household characteristics on predicting home leaving. As parental resources play a key role on the leaving decision (Da Vanzo and Goldsheider, 1990; Baizán, 2002) we controlled for household income weighted by family size. Parental education (i.e. one parent obtained a university degree) is also regarded as of age-norms on nest leaving (Billari and Liefbroer, 2007). In particular, highly educated parents are keener on early leaving for the pursuit of higher education of children (Holdsworth, 2000). Sex-age composition of siblings also indicates the amount of parental attention that children may receive in the nest (Goldsheider and Da Vanzo, 1989), but also the amount of financial capital for long-distance settling out (Konrad et al, 2001). In general, females are more likely to leave earlier in the presence of brothers, as cultural regularity pressure them to do more housework (Ulenhberg and Cooney, 1990).

Results

Life table estimates are first shown to shed light on the direction of the associations previous to multivariate analysis. Life table estimates are survival probabilities, namely the proportion of individuals who did not do a transition (i.e. stayers) the current year out of those that were at risk (and still observe). Table 2 shows life table estimates of initial (i.e. not repeated) parental coresidence for all sampled individuals and for those who are observed leaving the nest for first time in the observation window of the study. Although the later does not account for right censored observations, it allows breaking down by status (i.e. life course and family structure) at the time of initial leaving. As predicted by the literature those leaving at younger ages for first time are more likely to do so while enrolled in education, while those who leave while in partnership or full-time work are likely to move at relatively older ages. No clear differences are observed for those leaving while already parents (or becoming parents at the time of leaving), however, there are very few cases to confirm that result. Leaving from a non-intact family takes place at significantly younger ages, though differences are not as clear as for transition-role statuses. Not shown here, we also observed that many of these early leaves from non-intact families are done over short distances. Just as a remark, in general, leaving home

[6] We obtain a slight but significant difference in the timing at initial leaving between men and women (half of the sampled women left at age 22, while men at age 23). We tried separated models by sex, but convergence of the models was an issue that keep us from separating analysis by sex.

moving over long distances happens at younger than older ages, as leaving over long distances is associated with pursuing higher education. This is an indication of heterogeneity among early leavers.

Table 2. Life table estimates of initial parental coresidence since age 16*.

	Age					
	19	21	23	25	27	
Total						
All sample	88%	66%	51%	38%	21%	
Leavers	80%	49%	28%	14%	4%	
By status at initial home leaving (only leavers)						**Log-rank Test**
In full-time education	70%	17%	1%	0%	0%	Chi2= 462.05 / p<.001
Not in full-time education	84%	59%	36%	17%	6%	
In partnership	89%	68%	42%	21%	8%	Chi2= 125.55 / p<.001
Not in partnership	75%	35%	18%	8%	2%	
In full-time work	89%	67%	43%	21%	7%	Chi2= 224.76 / p<.001
Not in full time work	71%	29%	12%	6%	2%	
Parent	84%	58%	24%	11%	4%	Chi2= 0.11 / p<.738
Not parent	80%	47%	29%	14%	4%	
Intact family	84%	54%	32%	16%	6%	Chi2= 28.38 / p<.001
Non-intact family	74%	40%	23%	11%	2%	

*Estimates presented as percentages and calculated only for observations that were observed leaving the parental nest in the sample, except for the estimates of the category "all sample" for which right-censored observations were accounted.

Table 3 presents life table estimates for first time residence in an independent living arrangement. As before, results are presented by life course status at leaving home, but also by type of move once living apart: short distance, long distance and return to the nest. Long distance moves occur more intensively and earlier if the individual was enrolled in education at home leaving than for those in partnership or full-time employment. The same pattern is observed for short distance moves, but differences on the intensities are not that important five years after home leaving. Moreover, intensities of short distance residential change are much higher for all categories than those of long distance moves. Implications of these results are that almost everybody move further at least once over short distances, but those who left the nest enrolled in education do so faster, meaning that they gain some time to move again. Nest return patterns are similar to those observed for long distance further moves, but it is remarkable that returnees (mainly those who left home enrolled in education) are likely to return quite fast (i.e. three years after leaving). Ermisch (1999) argues that the BHPS over-estimates home returns and this is associated with lower attrition of individuals with extended educational stages. We expect to correct that in the multivariate analysis[7].

The association of age at home leaving and intensities of residential mobility is presented as the result from a *naïve* duration model for the first episode of residence living apart predicted by age at home leaving and duration of residence. Figure 2 show the slope coefficients of the linear spline of the age at home leaving for the three competing outcomes. Increasing

[7] In the multivariate analysis we do control for characteristics associated with attrition in the survey like income, level of education and minority groups (see Ermisch, 2004).

intensities for all three possible mobility outcomes are only observed for early leavers (i.e. before age 20), where local moves have the lowest log-odds though this is the most probable type of move after leaving. Moving over long distances or returning the nest has higher log odds for early leavers though they are les likely to happen. In contrast, those leaving after age 20 have decreasing intensities for all types of mobility[8].

Table 3. Life table estimates of first time residence in an independent living arrangement by life course status at home leaving and type of move

	Years since home leaving					Log-rank Test
	1	2	3	4	5	
Type of move						
Short distance further move						
All leavers	79%	65%	55%	47%	38%	
In full-time education	58%	43%	36%	33%	26%	Chi2= 116.38 /
Not in full-time education	85%	72%	61%	52%	42%	p<.001
In partnership	87%	75%	66%	55%	43%	Chi2= 64.80 /
Not in partnership	74%	58%	47%	42%	35%	p<.001
In full-time work	83%	69%	58%	48%	39%	Chi2= 9.61 /
Not in full time work	75%	61%	52%	47%	37%	p<.002
Long distance further move						
All leavers	95%	92%	89%	85%	83%	
In full-time education	88%	78%	72%	65%	61%	Chi2= 45.55 /
Not in full-time education	96%	95%	93%	89%	88%	p<.001
In partnership	99%	98%	96%	91%	89%	Chi2= 23.79 /
Not in partnership	92%	87%	84%	80%	78%	p<.001
In full-time work	96%	94%	93%	90%	88%	Chi2= 12.50 /
Not in full time work	93%	89%	85%	79%	78%	p<.001
Nest return						
All leavers	80%	70%	67%	63%	59%	
In full-time education	60%	43%	38%	38%	38%	Chi2= 81.50 /
Not in full-time education	86%	79%	76%	71%	66%	p<.001
In partnership	89%	81%	78%	73%	69%	Chi2= 35.13 /
Not in partnership	74%	63%	59%	56%	52%	p<.001
In full-time work	89%	80%	78%	72%	68%	Chi2= 29.33 /
Not in full time work	72%	60%	57%	54%	50%	p<.001

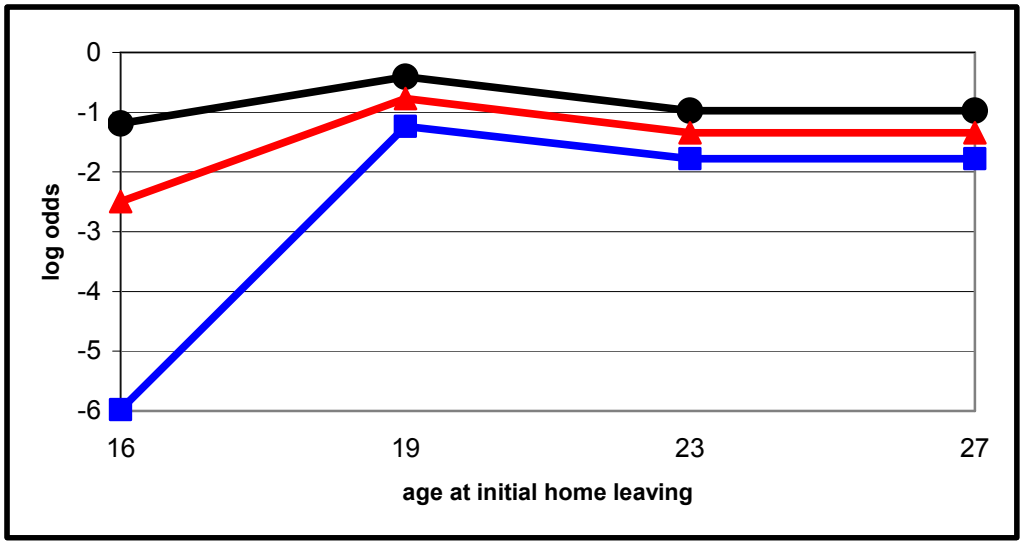
*Estimates presented as percentages. Nest return also contains long distance moves of return to the town where parents live.

Now we turn to the multivariate analysis assessing all episodes of residence of each individual in order to shed light on the life course contingency over the residential trajectory. Table 4 contains numerical results of relocation estimates once living in an independent living arrangement for three competing risks: short distance (<50km), long distance (>=50km) or nest return. The first column for each competing risk in Table 4 presents models which only account for conditions at home leaving as well as residence duration and residence episode order. It is remarkable that significance levels for age at home leaving are very low when controlling for substantive conditions that affected initial home leaving. Early leaving is not anymore significantly associated to residential change, but those leaving later have still decreasing

[8] In the plot one can observe the almost insignificant, but still negative, effect of leaving after age 27 on all types of further mobility. As of the limitation of a maximum span of the observation window to 16 years after the 16th anniversary, it is difficult to observe mobility for late leavers except when they move just after the initial leaving.

intensities of residential relocation over short distances and returns to the nest. The inclusion of transition-roles at home leaving in the model, which are highly significant predicting all kind of moves, is not trivial but explains the reduction of the effect of age at home leaving (compared with previous significant coefficient in Figure 2)[9]. Leaving while enrolled in full time education impacts positively on all types of moves. In fact, these individuals are less likely to have gone through transitions to marriage and family formation which also work as triggers of further mobility. Moreover, those leaving while in education may have lower personal incomes and more subject to home return after ending education or while in education. Leaving for partnership formation is negatively associated to all kind of moves, which reflects the low residential intensities of people in partnership over the life-course. Finally, those moving out home while in full-time occupation are more likely to move locally, being that a possible positive income effect on housing relocation. We find scant evidence of an effect of the family structure on mobility once outside the parental home, and it is only reflected on higher mobility over short distances.

Figure 2. Log-odds of residential mobility outside parental home
by age at initial home leaving and type of move*



*Notes: Age at home leaving is modeled as a linear spline. Red line refers to nest returns, black line to short disctance further moves and blue line to long distance further moves

Other on-time covariates traditionally associated with residential mobility are included into the models and presented in the second column for each type of move in Table 4. The inclusion of these covariates reduces the strength and statistical significance of the initial conditions. As expected on-time conditions are more likely to influence actual behaviour and to be associated with previous conditions. Results of the newly included covariates are expected. Those in on-time partnership are likely to move locally and unlikely to return to the nest. The inclusion of information on current partnership may be much related to the change of direction of the effect of leaving while in partnership for home return outcomes, which turned to be significantly positive. We think that those leaving the parental nest to form a partnership are more likely to dissolve the union and, therefore, return home after dissolution. Similar to the predictions for current partnership, those still enrolled in education are likely to move over short distances, but

[9] Interactions of the age at home leaving with the reasons to do so prove to be insignificant and for that reason they are not shown.

they are less likely to return to the nest. To have children inhibits of any kind of further mobility or home return and, as predicted by previous literature, those in unemployment have increasing intensities of home return. Educational attainment has a positive effect for all types of mobility and may also explain reduction in the coefficient of leaving enrolled in education, because investment in migration is parallel to investment in education as Human capital theories point (Sjaastad, 1964). Last, owning a house have a negative effect on residential change and may be associated to the reduction of the effect of leaving in partnership, which in many cases is accompanied by the acquisition of a dwelling. The third column for each type of mobility in Table 4 must be read regarding the second equation (i.e. parental coresidence in Table 5) as it is the result of simultaneous equations estimation. Results indicate that selection is not harmful for previous results as the correlation between residuals is not significantly different from zero. This means that the two types of transitions here analysed are quite well predicted by observed measures included in analysis[10]. We only observe slight changes in the level of the coefficients.

Last, we turn to briefly comment the results for the equation of parental coresidence (see Table 5). We only comment on the model that was estimated simultaneously to bring more evidence on factors associated with home leaving. First, to become a parent or enter partnership increases the intensities of short distance home leaving. The effect turned to be insignificant for long distance moves the individual is parent when leaving. In contrast, those leaving enrolled in education are more likely to do it over long distances and less likely to do it locally. This information bring us more evidence on local leaving associated with scant intentions to move afterwards, as they do it under conditions that deter further mobility, like family formation. Instead, long distance home leaves are more likely to account for high intensity movers like those who pursuit further education. To support this thesis, we find that local home leave is associated with high personal income while long distance moves have more to do with income of the parental household and education of the parents. We also find that children from non intact families will be more likely to move outside the nest for all types of moves. Sibling's composition, resembling the effect of household resources, has only an effect on short distance home leaving.

Discussion and conclusions:

The life course framework conceives life as trajectories formed of transitions and statuses spanning from birth to dead. Trajectories are traced for different life domains and are allowed to be interdependent between them. Regarding that, we aimed to test the thesis of life course contingency for the residential trajectory. That is, whether initial conditions of the first residential event to independent living is still affecting further mobility over the life course, once controlling for on-time triggers and conditions. We particularly focused on the age at initial home leaving as a clear mediator of the opportunities for further moving. Obviously, those who leave home earlier have more time to make further residential transitions. We point, however, that the effect of age at home leaving is mediated by substantive *explananda* of the transitions to adulthood like transition-roles measured as life statuses of family and career domains, effects of family structure in childhood or teenagehood or selectivity in the form of readiness to move. We discuss the validity of these theses on light of results from a time-to-event analysis on repeated residential episodes of young Britons extracted from the BHPS and measured since their sixteenth anniversary.

[10] In previous models of simultaneous estimation with less covariates, the correlation was significant and positive, which prove that the addition of relevant covariates was the reason of insignificance of the common unobserved heterogeneity in the complete model.

Our results in general confirm that early home leaving is not anymore associated to higher intensities of residential change once we control for statuses in other life domains measured at the time of nest living. In fact early leavers are more likely to be enrolled in education, which is a clear indicator of mobility and mobility over long distances which are not nest returns. As Blau and Duncan (1967) already remarked, those with higher potential for occupational achievement are more likely to make use of the wider opportunity structure offered by spatial mobility. Due to initial economic hardship of young people in education, return to the nest is also highly probable. In contrast, leaving the nest at later ages tend to be associated to transitions to marriage/cohabitation or when having already full-time employed. In general these late leavers are more likely to leave locally and to have lower intensities to move further or return home. This result is more evident for those leaving while in partnership. As Goldscheider and Da Vanzo (1989) suggest, those who leave home to live with the partner, are more likely to do it late when they hold enough resources to become and independent household unit. These authors indicate that this is more likely to happen for marital than for non-marital unions, which search for a long-lasting dwelling when leaving, being that the reason for scant couple mobility. Those working in a full-time job when leaving are still more likely to move over short distances, reflecting possible housing improvements as a result of better payment over-time in the occupation. Once controlling for initial and on-time statuses in work and family life domains, scant evidence is found for other initial conditions such as differences in family structure, where children from non-intact families are more likely to leave earlier, but this is not directly affecting further mobility over the life course. In fact, departing from non-intact family structures takes place over short distances which according to general mobility thesis may make not agree with higher tastes for mobility. Moreover, according to the literature on family structure effects on children outcomes, such individuals are less likely to invest in human capital but more likely to enter full-time employment and to form a family earlier, which may deter further mobility.

Although our analyses focused on the early stage of life of the young adulthood, which contains the highest intensities of residential mobility, the thesis here exposed maybe easily extendable to mobility patterns over the whole life span. Further research may analyse whether there is a decreasing impact of initial conditions as a function of age, due to an expected stronger predicting effect of on-time life events. Moreover, for the sake of parsimony the analysis here presented ignored variance on the effects of age and causes of initial home-leaving according to basic demographic characteristics. It is well known that differences in the age at parental home leaving emerge according to sex or ethnic minority status. A further development to the model here presented would be whether this demographic attributes have divergent effects on the residential trajectory when interacted with initial conditions at leaving. However, for such analysis a larger sample size than the one used here is required.

Last, one should complement the analysis here presented regarding two central issues in life course research. Further research may complement this analysis paying attention not only to the status at home leaving, but also to event synchronization in order to shed more light on the triggers of home leaving. A good strategy to analyse such simultaneity may be the use of 'fuzzy-timeframes', allowing events to lie in an interval before and after the parental home leaving event (Courgeau and Lelièvre, 1992). Second, as a complement to the *timing* and the *quantum* of events, one should work measures of *sequencing* or *ordering of events* in the residential trajectory and the triggering life domains. On the one hand, sequences of statuses regarding not only coresidence and distance, but also rural-suburban-urban place types, location of family ties and so on are very important to be researched in order to shed more light on typologies of residential trajectories. For that reason, sequential analysis like the one of Stovan and Bolan (2004) analysing typologies of residential trajectories might be further

worked. On the other hand, as previous literature on transitions to adulthood poses, the normative order of events of the passage to adulthood is also part of the life-course contingency on life trajectories (Elder, 1999; Hogan, 1976; Rindfuss *et al*. 1987). In light of the analysis here presented, we may expect that those leaving the nest early than average (or those returning to the nest) are more likely to follow non-standard sequences of transitions to adulthood, being that the reason of increased intensities of residential mobility over the life course.

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Table 4. Log-odds of residential mobility (living apart from parents).

	Short distance move (<50km)			Long distance move (>=50km)			Home return		
	Initial Conditions	add on-time predictors	add heterogeneity	Initial Conditions	add on-time predictors	add heterogeneity	Initial Conditions	add on-time predictors	add heterogeneity
Age at home leaving (linear spline)									
age 16 to 19	0.0680	-0.0847	-0.0969	0.8454	0.6790	0.6401	0.2668	0.1518	0.1490
	(0.1245)	(0.1376)	(0.2142)	(0.5852)	(0.6422)	(0.6698)	(0.1878)	(0.2229)	(0.2708)
age 19 to 23	-0.1649 ***	-0.1181 ***	-0.1736 ***	-0.0221	-0.0094	-0.0675	-0.0922 *	-0.1089 *	-0.1578 **
	(0.0306)	(0.0363)	(0.0523)	(0.0621)	(0.0693)	(0.0786)	(0.0529)	(0.0569)	(0.0669)
age 23 onwards	-0.0001 ***	-0.0001	-0.0001 *	0.0000	0.0001	0.0000	0.0000	0.0000	-0.0001
	(0.0000)	(0.0000)	(0.0001)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Duration of residence	0.0000	0.0000	0.0001	-0.0002 ***	-0.0002 ***	-0.0001 **	-0.2453 ***	-0.1917 ***	-0.1083
	(0.0000)	(0.0000)	(0.0001)	(0.0000)	(0.0001)	(0.0001)	(0.0577)	(0.0639)	(0.0660)
Higher order episodes	-0.2995 ***	-0.2834 ***	-0.4875 ***	0.3861 *	0.3408	0.1054	-0.5562 ***	-0.6453 ***	-0.8405 ***
	(0.0846)	(0.1008)	(0.1280)	(0.2213)	(0.2466)	(0.2723)	(0.1445)	(0.1719)	(0.1890)
Life course status at home leaving									
In full-time education	0.7940 ***	0.5839 ***	0.7336 ***	1.0549 ***	0.6554 **	0.8498 **	0.7809 ***	0.6689 ***	0.8664 ***
	(0.1100)	(0.1365)	(0.1908)	(0.2496)	(0.3058)	(0.3412)	(0.1687)	(0.2137)	(0.2447)
In partnership	-0.4734 ***	-0.2632 **	-0.3519 **	-0.8597 ***	-0.3238	-0.4202	-0.5017 ***	1.0288 ***	0.9424 ***
	(0.0898)	(0.1122)	(0.1620)	(0.2224)	(0.3103)	(0.3364)	(0.1628)	(0.1906)	(0.2220)
In full-time occupation	0.4600 ***	0.4847 ***	0.5589 ***	0.3158	0.2367	0.3525	-0.1689	0.0649	0.1661
	(0.1062)	(0.1235)	(0.1742)	(0.2361)	(0.3037)	(0.3310)	(0.1847)	(0.2215)	(0.2490)
Family structure before home leaving									
Non intact family (with or without step-parent)	0.1508 *	0.0667	0.0809	0.0844	0.0405	0.0603	0.0871	0.0525	0.0603
	(0.0776)	(0.0839)	(0.1124)	(0.1820)	(0.2049)	(0.2200)	(0.1429)	(0.1600)	(0.1780)
On-time life course statuses									
In partnership		0.5110 ***	0.4895 ***		0.2741	0.2606		-3.2628 ***	-3.2949 ***
		(0.0998)	(0.1166)		(0.2306)	(0.2403)		(0.3279)	(0.3296)
Children		-0.4316 ***	-0.4133 ***		-1.2099 ***	-1.1974 ***		-1.0118 ***	-1.0227 ***
		(0.1113)	(0.1355)		(0.3417)	(0.3535)		(0.2904)	(0.3043)
Unemployed		0.0830	0.1356		0.3276	0.3857		0.9848 ***	1.0503 ***
		(0.1596)	(0.1739)		(0.3230)	(0.3342)		(0.2387)	(0.2516)
Enrolled in education		0.4897 ***	0.4690 ***		0.2272	0.1985		-0.8352 ***	-0.8843 ***
		(0.1163)	(0.1308)		(0.2459)	(0.2534)		(0.2229)	(0.2336)
Level of attained education									
Higher secondary (A level)		0.3949 ***	0.4267 ***		0.2399	0.2472		0.2247	0.2309
		(0.0894)	(0.1110)		(0.2404)	(0.2481)		(0.1931)	(0.2055)
University degree		0.5106 ***	0.5594 ***		0.6629 ***	0.7004 ***		0.8087 ***	0.8507 ***
		(0.1342)	(0.1686)		(0.2559)	(0.2712)		(0.2314)	(0.2479)
House tenure		-1.4383 ***	-1.6137 ***		-1.5907 ***	-1.7484 ***		-0.6404 ***	-0.8632 ***
		(0.0877)	(0.1043)		(0.2442)	(0.2526)		(0.1738)	(0.1884)
Unobserved heterogeneity			0.711***			0.711***			0.711***
			(0.0835)			(0.0835)			(0.0835)

Notes: Discrete-time transition rate model with competing risks for short distance and long distance further moves and return to the parental nest. Asymptotic standard errors below coefficients in brackets. Probability levels: ***0.01, **0.05, *0.1. Omitted covariates in the second and third columns for each type of mobility are sex, minority group, household income, second home leaving episode and an intercept term. Models with heterogeneity are estimated simultaneously with the models of home leaving (equation omitted) and only including one heterogeneity term for the three competing outcomes.

Table 5. Log-odds of parental home leaving.

	Short distance move (<50km)			Long distance move (>=50km)		
	Initial Conditions	add other covariates	add heterogeneity	Initial Conditions	add other covariates	add heterogeneity
Age (linear spline)						
age 16 to 19	0.8552 ***	0.5001 ***	0.6900 ***	1.8747 ***	1.6663 ***	1.7735 ***
	(0.1357)	(0.1726)	(0.2025)	(0.2325)	(0.2614)	(0.2723)
age 19 to 23	0.1770 ***	-0.0527	0.0629	-0.0579	-0.0186	0.1175
	(0.0411)	(0.0550)	(0.0654)	(0.0547)	(0.0641)	(0.0758)
age 23 to 27	0.1202 *	-0.0440	0.0506	-0.2391 **	-0.2791 **	-0.2072
	(0.0618)	(0.0776)	(0.0928)	(0.1140)	(0.1338)	(0.1431)
age 27 onwards	-0.0578	-0.2836 ***	-0.2708 **	-0.7627 *	-0.8597 *	-0.8474 *
	(0.0792)	(0.0944)	(0.1221)	(0.4553)	(0.4821)	(0.4941)
2nd order event (returnees)	3.8961 ***	2.5479 ***	2.1760 ***	5.3024 ***	4.3753 ***	3.8070 ***
	(0.3976)	(0.5154)	(0.5983)	(0.7034)	(0.7711)	(0.8000)
Duration of coresidence (after return)						
1 to 2 year	-0.7034 ***	-0.6431 ***	-0.6932 ***	-1.6153 ***	-1.4283 ***	-1.3928 ***
	(0.1406)	(0.1741)	(0.2012)	(0.2448)	(0.2734)	(0.2835)
2 years onwards	-0.3351 **	-0.0880	-0.0879	0.4875 ***	0.5101 ***	0.4388 **
	(0.1455)	(0.1372)	(0.1704)	(0.1771)	(0.1863)	(0.2048)
Family structure						
Non intact family (with or without step-parent)	0.5542 ***	0.9179 ***	1.1176 ***	-0.0063	0.4337 ***	0.6705 ***
	(0.0930)	(0.1173)	(0.1632)	(0.1358)	(0.1572)	(0.1958)
Life course statuses						
In partnership		3.6843 ***	4.6793 ***		2.4792 ***	3.4964 ***
		(0.1138)	(0.2065)		(0.2316)	(0.2942)
Children		0.3570 ***	0.7258 ***		-0.9593 *	-0.6450
		(0.1366)	(0.1966)		(0.5156)	(0.5457)
Unemployed		0.0482	-0.0883		-0.0473	-0.0772
		(0.1854)	(0.2207)		(0.3239)	(0.3472)
Enrolled in education		-0.6498 ***	-0.5876 ***		0.9562 ***	0.9728 ***
		(0.2007)	(0.2222)		(0.1708)	(0.1883)
Level of attained education						
Higher secondary (A level)		0.8909 ***	1.2331 ***		1.9378 ***	2.3402 ***
		(0.1746)	(0.2445)		(0.2643)	(0.3041)
University degree		0.5793 ***	0.7890 ***		1.1647 ***	1.3672 ***
		(0.1102)	(0.1637)		(0.1884)	(0.2094)
Personal income		0.2474 *	0.2450		-0.8793 ***	-0.8699 ***
		(0.1343)	(0.1581)		(0.1613)	(0.1756)
Household income		0.3313 **	0.3324 **		0.6568 ***	0.6974 ***
		(0.1359)	(0.1687)		(0.1471)	(0.1700)
Parental education (higher education)		0.3593 *	0.5124 *		0.3274 *	0.4505 *
		(0.1863)	(0.2767)		(0.1777)	(0.2546)
One sib		0.3459 **	0.1597		0.2710	0.2405
		(0.1456)	(0.1821)		(0.1682)	(0.2007)
Two or more sibs		0.4072 **	0.1912		0.0154	-0.0412
		(0.1639)	(0.2143)		(0.2001)	(0.2399)
Female* male sibs		0.5444 ***	0.6146 ***		-0.0979	-0.0271
		(0.1677)	(0.2209)		(0.1932)	(0.2420)
Unobserved heterogeneity			1.3675 ***			1.3675 ***
			(0.1631)			(0.1631)

Notes: Discrete-time transition rate model with competing risks for short distance and long distance parental home leaves. Asymptotic standard errors below coefficients in brackets. Probability levels: ***0.01, **0.05, *0.1. Omitted covariates in the second and third columns for each type of mobility are sex, minority group, previous residential mobility, house tenure and an intercept term. Models with heterogeneity are estimated simultaneously with the models of residential mobility when living apart (equation omitted) and only including one heterogeneity term for the two competing outcomes.