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Spatial trajectories in early life: Moving on or returning home?

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Abstract

This paper investigates the residential mobility patterns of young adults upon leaving home, with an emphasis on the role of life course events in determining return migration to the home region. Using longitudinal register data for the Netherlands, the analysis shows that parental ties serve as an anchor attracting returnees: young adults appear to return to their home region when their parents still live in the region. This is more pronounced for women. It seems that women are more likely to return to provide assistance to parents, and men's return is more motivated by receiving assistance. The return inclination of men is, for instance, primarily induced by family life events, such as having children and becoming a lone father. The propensity for return is lower for graduates, young adults with a higher income, and individuals originating from less urbanised areas.

KEYWORDS

family ties, internal migration, life course shocks, spatial mobility

1 | INTRODUCTION

The location of a person's birth and childhood, described as the place of early socialisation, retains an attraction for people who have left "home." Upon leaving the parental home, young adults may move to another location, often repeatedly. Many young people move to large cities where the diversity of educational and job opportunities is high, so that they can gain new skills and accelerate their social mobility, as described by the escalator model (Fielding, 1992). When the period of settling down comes in the early thirties, the location choice preferences of couples are dominated by the desire for more space, and a safe and green environment (Elshof, van Wissen, & Mulder, 2014; Mulder, 2013). This family-building phase is likely a moment when people consider returning to their home region, either to enjoy social resources from family and friends or to provide support to them (Niedomysl & Amcoff, 2011; Wyn, Lantz, & Harris, 2012). Alternatively, some people consider returning home if they have not achieved their goals and feel disappointed (DaVanzo, 1983). The likelihood of return is even higher

if the home region provides job and housing opportunities and is an attractive residential location for family life (Rosenbaum, 1993).

The geographical mobility of young adults is of particular importance for scholars and policy makers because their moves are more often from the periphery toward urbanised centres. These flows are a major channel for population decline in peripheral regions (Haartsen & Venhorst, 2010; Kooiman, Latten, & Bontje, 2018). Such mobility is triggered by the concentration of educational and job opportunities in urban areas, as individuals aim to acquire skills and pursue a labour market career (Storper & Manville, 2006). In addition, young people are less likely to continue to reside in their rural birthplaces when there are limited opportunities there and will rather seek to explore opportunities for social mobility. This one-way geographical mobility seems to be further reinforced by ongoing rural population decline (Elshof et al., 2014).

A small fraction of leavers returns to the location where their early socialisation largely took place. Leavers may be expected to return to their place of origin if they can access location-specific capital there, at least if economic decline in shrinking regions does not outweigh the

advantages of this location-specific capital (Findlay, Mason, Harrison, Houston, & McCollum, 2008; Mulder, 2007). Empirical evidence suggests an older age structure and a negative (self-)selection of return migrants regarding their skills and labour market position (DaVanzo & Morrison, 1981). Earlier literature suggests that return migration is driven by either the failure or success of migration (Hunt, 2004; Rosenbaum, 1993). More recent literature points to social considerations, in particular care needs related to family, in explaining return migration (Albertini, Gähler, & Härkönen, 2018; Blaauboer, 2011; Mulder & Clark, 2002; Niedomysl & Hansen, 2010). This paper seeks to assess the role of life course transitions in determining the successive geographical mobility of young adults, with an emphasis on return migration.

In the Netherlands, young adults leave their municipality of origin in peripheral regions for higher education and job opportunities in large cities. Scholarly attention has been limited to understanding population decline in peripheral areas (Elzerman & Bontje, 2015; Haartsen & Venhorst, 2010; Ročak, Hospers, & Reverda, 2016; Van Dam, de Groot, & Verwest, 2006). International evidence also suggests that the majority of migrants move on to another municipality after completing their education (Findlay et al., 2008). Little is known about the drivers of return migration to the home region in the Netherlands. This paper examines the individual and regional determinants of return migration among young adults from a life course perspective, using high-quality register data. The focus on young adults under 35 who are in the first stage of their career is of particular importance, regarding their potential contribution to the vitality of local economies.

This paper extends the literature on return migration to home in several ways. Firstly, it examines the residential mobility patterns of the 1980 birth cohort, from the ages of 15 to 35 years, using register data, which enables us to accurately assess the influence of changes in the household and socioeconomic position of a single cohort in a dynamic setting. This approach limits potential methodological problems arising from processes that run across birth cohorts and ages. Second, the paper assesses the role of important life course events, such as transition to the labour market, marriage, divorce, etc. Third, the paper overcomes a more narrow definition of birthplace by looking at the surrounding area through a focus on municipality of origin and by gathering more precise information on the distance between later addresses and the origin.

This paper is organised as follows. The next section gives an overview of the related literature and guiding hypotheses. Section 3 introduces the data and documents the spatial destination of leavers of the parental home. Section 4 presents explanations for a return to the home region based on the estimations of statistical models and discusses the results. Section 5 presents the conclusions.

2 | LITERATURE

A recurring theme in the migration literature is the significant variation in geographical mobility rates over the life course, with a peak in young adulthood following departure from the parental home (Plane & Jurjevich, 2009). The human capital approach views migration as an individual investment decision. The decision to migrate arises from an evaluation of expected benefits and costs that are both monetary and nonmonetary (psychic; Sjaastad, 1962). Individuals evaluate the costs and benefits of migrating as they perceive them, subject to the information about potential destinations available to them. Gathering information is in itself a part of the migration costs. Return migrants face lower migration costs than nonreturn migrants because they posses near-perfect information about their home region and because moving costs are relatively low (DaVanzo, 1983). With near-perfect information, a prospective migrant would be able to correctly evaluate the costs and benefits of migration, and therefore make an informed decision of whether to migrate or not. The costs and benefits of migration are in part a function of individual characteristics and correspondingly are related to the stage in the life course that the individual is in. Nonmonetary costs and benefits are more important for return migrants than nonreturn migrants (Rosenbaum, 1993).

Mincer (1978) extended the original economic model of migration by involving the role of family in individual decision making processes. Migration is considered to be not only an individual decision but also a family decision, resulting in gains and losses to family or household members. The model of family migration explicitly recognises that individual family members can have conflicting interests. In this case, a migration decision is expected to be an outcome of the sum of the family's costs and benefits.

One preassumption of the existing research on return migration relates to the magnetic role of the (birth)place where an individual grew up and attended school, and where he/she developed close kinship and social networks. Such a process of socialisation within a residential location leads to the accumulation of location-specific capital, which also covers other sorts of ties and attachments to a particular location, such as developed tastes, outlooks, and norms (Blaauboer, 2011; Haartsen & Thissen, 2014; Mulder, 2007). Positive experiences during childhood contribute to an increase of location-specific capital, which increases the propensity for a person to return to his/her region of origin rather than stay in a different region where he/she has lived, presumably because the migrant has more location-specific capital at the origin than elsewhere.

One strand of the literature on return migration considers the dichotomy of two key groups of returnees: the first includes individuals who have experienced "success" and who return to contribute to their place of origin; the second group refers to people who have "failed" to achieve their goals and who return home to benefit from location-specific resources and family support (Newbold, 2001; Niedomysl & Amcoff, 2011). The typical characteristics of successful returnees are often articulated as having a good job, a higher education, and an income. Starting a steady family during an early life stage may be added to this set. By contrast, typical characteristics of failed returnees are considered to be a decline or stagnation in socioeconomic status and an interrupted family life. Obvious socioeconomic indicators of failure include job loss, dropping out of education, and a low income, and failure in social and family life is associated with health problems and life event shocks such as divorce, lone parenthood, and requiring help with childcare. We expect that return migrants are either "successful" or failed compared with nonreturners, regarding socioeconomic position and family stability (H1).

2.1 | Family and life event shocks

Family ties are still at the centre of individual considerations when choosing a residential location, though the nature of intergenerational solidarity has evolved with increasing individualisation and the development of welfare systems (Reher, 1998). The (expected) need for an exchange of intergenerational support is likely the main foundation of a decision to live at one's origin. Parents continue to support their children even after the latter become independent and start their own families, and children in turn support their parents when they need help. It has long been thought that family ties are stronger in more collectivist societies, such as Mediterranean countries, compared with Nordic countries (Reher, 1998). Recent literature on family solidarity suggests that the exchange of economic and social support takes place through various channels (Albertini et al., 2018). In Northern European countries, parents tend to support their children directly and explicitly through financial transfers, in particular when children are in education or face negative life events like unemployment and divorce. In these countries, children leave the parental home early, and although they appear to continue to count on parental support, coresidence is not a common support strategy (Albertini et al., 2018; Reher, 1998). Despite what is suggested in the existing literature, intergenerational solidarity is quite strong in Northern European countries, where eographical proximity can still be important for family relations, including the exchange of social support. At the other extreme, in Southern Europe, parental support of children consists mainly of coresidence, rather than direct economic transfers.

In the Netherlands, the timing of and pathways out of the parental home are similar to those in Nordic countries. Young adults leave home either to live independently or to share a house with a partner or others, mostly to pursue education (Zorlu & Mulder, 2011). Returning home thereafter is often a temporary response to negative life events, like partnership dissolution, unemployment, or dropping out of education (Arundel & Lennartz, 2017; Stone, Berrington, & Falkingham, 2014). Prolonged coresidence with parents is rare for boomerang children in the Netherlands. The vast majority of young adults under 30 does not coreside with their parents. This leads to the conclusion that returning to the origin does not (necessarily) imply a return to the parental home. Returnees rather move to a location close to the parental home so that an infrastructure of frequent social relations can be established. This underlines the role of the areas surrounding the location of origin. We expect that the presence of parents in the origin municipality will increase the probability of return to the home region (H2).

Established evidence suggests that there are substantial differences in residential mobility by gender. Women not only leave the parental home earlier, and more often for family formation, but their subsequent mobility is also differently affected by life course transitions and shocks (Cooke, Mulder, & Thomas, 2016; Mulder & Wagner, 2012). Gender differences in family ties have also been extensively documented (Mulder, 2007; Zorlu & Mulder, 2011). Acknowledging significant gender differences in residential mobility patterns, we hypothesise that the effects of the presence of parents in the origin municipality, as well as family union formation or dissolution, are stronger for women than men (H3). Accordingly, we conduct a separate empirical analysis by gender to assess the potentially distinct spatial mobility patterns for men and women.

3 | DATA

This research uses individual-level register data from the system of social statistical datasets of Statistics Netherlands (Bakker, van Rooijen, & van Toor, 2014). This system of interlinked microlevel datasets provides a comprehensive collection of all sorts of information from the entire Dutch population, unregistered individuals excluded. One of the biggest advantages of using this type of data to conduct scientific research is that it allows researchers to study rare events like return migration more easily than, for example, survey data. Furthermore, register data are arguably the most reliable source of longitudinal data and it reduces the time and costs of collecting the data (Bakker et al., 2014). A potential downside to this type of data is that some people deliberately register themselves elsewhere in order to profit from certain benefits, such as the increased financial benefits for students living away from their parents. Taking small potential errors like this into account, the benefits of using this type of data still outweigh the use of (retrospective) survey data.

3.1 | Who leaves the parental home and municipality?

Relying on the entire birth cohort of 1980 residing in the Netherlands in 2001, we constructed a variable (moving out) with three categories, based on the residential address of individuals at two time points: in 1995 and 2001. We assume the municipality in which individuals lived in 1995 (aged 15) to be the location in which they were predominantly socialised. People, who migrated to a foreign country, died in the period between 1995 and 2001, or for other reasons show that missing data were excluded from the analyses. Hence, we ended up with the 180,471 individuals for the analysis. The first category, "Living with parents," includes all people still living with their parents in 2001 (aged 21). The second category, "Moved within municipality," includes all people not living with their parents in 2001, but who remained in the same municipality. The third and final category, "Moved across municipality," includes all those not living with their parents and in a different municipality compared with 1995.

Table 1 presents the distribution of the research population among these three categories according to a selection of background variables. In 2001, almost two thirds of the research population was still living with their parents. Forty-three percent of the population that had moved out of the parental home had stayed within the municipality, and 20% had moved out of the municipality. Table 1 shows a strong correlation between moving out and background variables. A higher education level strongly corresponds to a higher probability of moving across municipalities. Almost 60% of university graduates left their original municipality, and this is around 25% for

TABLE 1 Distribution of the selected variables among movers between 1995 and 2001 and stayers

Variable	Categories	Living with parents	Moved within municipality	Moved across municipality	
		%	%	%	N
	Overall distribution	65.4	14.8	19.8	180,471
Education attained (2001)	Primary	70.8	19.7	9.6	20,567
	Intermediate	71.3	16.5	12.2	85,611
	Higher vocational	63.9	11.3	24.8	52,912
	University	35.9	5.5	58.6	19,567
Urbanisation (1995)	Highly urbanised	59.3	28.2	12.5	32,629
	Urbanised	65.2	16.7	18.2	52,722
	Moderately urbanised	67.6	10.8	21.6	33,023
	Little urbanised	68.0	8.5	23.5	43,683
	Nonurbanised	67.2	7.5	25.3	18,390
Family status (1995)	Unmarried couple child	54.8	24.3	20.9	5,573
	Married couple child	67.5	12.9	19.6	151,608
	Single parent household	54.2	24.8	21.0	23,290
Gender	Male	74.6	10.5	14.9	92,108
	Female	55.8	19.3	24.9	88,351
Ethnicity	Dutch	68.1	11.6	20.2	148,600
	Moroccan	33.5	55.3	11.3	4,570
	Turkish	35.7	54.0	10.4	4,588
	Surinamese	54.4	29.5	16.1	4,482
	Other	61.6	16.8	21.6	18,219

graduates of higher vocational training, and is less than 10% for individuals with only a primary education. More than 70% of medium and low educated were still living at the parental home at the age of 21.

The residential pattern by urbanisation level indicates that individuals originating from less urbanised municipalities are most likely to move across municipalities, and people in higher urbanised municipalities are most likely to move within the municipality borders. Regarding family structure in 1995, little difference is observed in relation to the probability of moving across municipalities. The only pronounced difference is for youth in a (parental) household setting of a married couple with children. In 2001, they were more likely to live in the parental home, and less likely to move within the municipality. Furthermore, women were more likely to move across municipality boundaries, and men remained more in the parental home, something that is a reiterating pattern (Blaauboer, 2011; Mulder, 2007). Another well-known pattern relates to the residential behaviour of migrant populations that are concentrated in big cities, who usually move within municipality boundaries (Zorlu & Gaalen, 2016).

4 | RETURN MIGRATION

Now we look at the research population in terms of all individuals who moved across municipal boundaries between 1995 and 2001. This population encompasses 35,244 individuals who lived independently from their parents in 2001 as well as in 2015. Using 2015 as the reference year gives the research population 14 years to return, when the observed cohort had reached the age of 34/35. We observe mobility at time intervals between 2001 and 2015 (2004, 2007, and 2010), during which time it is likely that some people might have returned to their municipality of origin and left it again or moved away from their municipality.

4.1 | Inclination to return

Theoretically, when it comes to decisions regarding place of residence, individuals are assumed to have the following choice set:

1. staying in their current municipality,

2. moving to another municipality that is not their original municipality, or

3. returning to the municipality in which they grew up.

Accordingly, we construct a dependent variable, "return," with these categories, to assess the spatial mobility patterns of 35,244 individuals who had left their origin municipality between 1995 and 2001, as shown in Table 2. The first category is comprised of those who

TABLE 2 Distribution in 2015 of 35,244 individuals who had left their origin municipality by 2001

Destination	N	%
Stayed in the same municipality as in 2001	8,950	25.39
Moved on to another municipality	20,433	57.98
Returned to origin municipality (as in 1995)	5,861	16.63
Total	35,244	100

"stayed" and includes all individuals who in 2015 lived in the same municipality to that in which they lived in 2001. This group encompasses about 25.4% of the research population. The second category is comprised of those who "moved on" and includes all individuals who in 2015 lived in a different municipality compared with both 2001 and 1995. This group makes up the majority of the research population (almost 58%). The third and final category are those who "returned," which includes all individuals who in 2015 lived in the same municipality as that in which they lived in 1995 (and who resided in a different municipality in 2001; 16.6%). This dependent variable with three categories helps us to distinguish the determinants of spatial mobility with various purposes.

4.2 | Measures of covariates

The variables of gender and ethnicity are time-invariant. The remaining variables are measured either for a particular year or for the actual moment of premove or as an explicit transitory process. The geographical context of movers is approximated by the degree of urbanisation of the origin municipality (five levels), measured in 1995. The "degree of urbanisation" measures the concentration of human activities based on the average address density in municipalities. The highest urbanisation degree, highly urbanised, includes 2,500 or more addresses per square kilometre, and the lowest urbanisation degree, not-urbanised, includes fewer than 500 addresses per square kilometre. The other urbanisation degrees in between are classified as urbanised, moderately urbanised and little urbanised, and refer to 1,500 to 2,500 addresses, 1,000 to 1,500 addresses, and 500 to 1,000 addresses per square kilometre, respectively.

The variable "completed education" is measured (only) for 2014. Four levels of completed education are distinguished: primary, low, medium (vocational and general), and high (high vocational and university). Geographical distance from one's origin is likely related to the decision to return. Living closer to (at a large distance from) the parental house may generate a lesser (greater) need to return for social contacts and may be associated with a low (high) return probability. Alternatively, a greater distance may be associated with a lower return probability if the distance captures a mental farewell to the birth place, weakened social ties, or a move from the periphery to an urban centre.

To measure the effects of geographical inertia and family ties, we use two geographical distance variables and two indicator variables for the enduring presence of parents in the origin municipality. Distance from the origin address (parental home) is measured at five time points: 2001, 2004, 2007, 2010, and 2015. The first distance variable measures the number of kilometres between a person's address in 2001 and the origin address in 1995, and the second distance variable measures the distance between a person's last observed address in 2004, 2007, 2010, and 2015 and the origin address in 1995. The second distance variable is thus only relevant for those who moved multiple times after 2001 and is used in quadratic specification.

Our data include information on some background variables for the years 2001, 2004, 2007, 2010, and 2015, which allows us to construct variables measuring current position and transitions from one position to another. We use the five observation years to construct the relevant characteristics of potential movers, such as distance, housing situation (tenure and value), and income. Two variables measure housing position: a dummy indicator variable for housing tenure (renting or owner-occupied) and the logarithm of the estimated house value (in Euros). Actual income is also measured on a logarithmic scale.

As a main proxy for the position of movers at the "beginning," we use household structure and socioeconomic position, as measured in 2001. The variable "household structure" distinguishes single households, couple households with or without children, and single-parent households, and socioeconomic position is specified as employee, self-employed, student, benefit recipient, or other.

In addition, we use information on changes in household structure and labour market position in order to capture the effects of life course transitions on the probability of return migration. Changes in household structure that occur before a move are captured by three dummy indicators: becoming a single-person household, becoming a single-parent household, or becoming a household with children. Changes in socioeconomic position are measured by three dummy variables: the transition from study to work, from study to benefits, and from work to benefits. In addition, we use earnings to better capture socioeconomic position.

Table 3 presents the distribution of selected variables for the population of interest. Men and Turkish migrants are more likely to return to their municipality of origin, and (former) students are more likely to move on rather than return. Strikingly, the return migration probability is highest for people originating from highly urbanised areas, and this probability is the lowest for young adults from nonurbanised areas. This points to a trend of population decline in peripheral areas.

4.3 | Explaining return migration

Considering the nominal structure of our dependent variable in this analysis, the probabilities of the choice set are estimated by multinomial choice models.

We estimate a regression model, in which the propensity to move is determined by a vector of individuals' characteristics. Assuming that an individual household bases its decision on the evaluation of the three choices simultaneously, the mobility behaviour of individuals is predicted by the following multinomial logit model:

$$P(\text{return}_i = j | x_i, z_i) = \frac{\exp(x_i \beta_j + z_i \gamma_j)}{1 + \sum_{l=1}^{3} \exp(x_i \beta_j + z_i \gamma_j)}, \quad j = 1, 2, 3.$$

In the model, x_i is a set of covariates measuring individual characteristics such as gender and ethnicity, as well as the degree of urbanisation of the municipality; z_i is a vector of covariates that measure transitions in household structure and socioeconomic position; and β_j and γ_j are parameters to estimate.

TABLE 3 Distribution of the selected variables by return outcome

Variable	Categories	Stayed %	Moved on %	Returned %	N
Return migration by the year 2015		25.4	58.0	16.6	35,241
Urbanisation (1995)	Highly urbanised	25.0	51.2	23.8	3,998
	Urbanised	25.6	57.1	17.3	9,441
	Moderately urbanised	25.1	59.8	15.1	7,039
	Little urbanised	24.6	59.7	15.7	10,148
	Nonurbanised	27.3	59.2	13.5	4,603
Gender	Male	23.6	61.1	15.3	13,411
	Female	26.5	56.1	17.5	21,830
Ethnicity	Dutch	25.0	58.6	16.5	29,718
	Moroccan	35.8	40.6	23.6	505
	Turkish	30.7	37.7	31.6	462
	Surinamese	32.9	45.1	22.0	690
	Other	25.5	60.5	14.0	3,866
Socioeconomic position in 2001	Employee	32.8	46.2	21.0	10,416
	Student	21.1	64.6	14.3	22,520
	Other	33.9	46.6	19.5	2,308

4.4 | Estimation results

Acknowledging different mobility patterns by gender, we estimate separate multinomial logit models for women and men, focusing on the population that left their original municipality. The reference group comprises those who stayed (i.e., those who, in 2015, lived in the same municipality as the one to which they moved in 2001). The parameter estimates for men and women are presented in relative risk ratio metrics in Tables 4 and 5. Concerning the less straightforward interpretation of relative risk ratios, we also present the average marginal effects that reflect the change in predicted probabilities of observing an outcome as a result of a change in a particular predictor (Wooldridge, 2010). Because most of our covariates are categorical variables, marginal effects give easily interpretable results from multinomial logit models, in the form of differences in the probability of an outcome with respect to the reference category of a particular predictor. Marginal effects are, however, less informative for our continuous variables, such as distance and income, because these variables are usually evaluated at their mean values. Therefore, we plot the effect of distance on the return probability over a range of kilometres using the parameter estimate (see Figure 1).

Because marginal effects give more interpretable results, in particular for discrete variables, we discuss the results on the basis of marginal effects. Individuals who lived in more urbanised municipalities in 1995 are more likely to return: the probability of returning home is 13.7% higher for men from highly urbanised municipalities compared with men from nonurbanised municipalities. This result confirms the earlier results of Amcoff and Niedomysl (2013). To learn more about the background of return migrants to highly urbanised areas, an additional analysis was conducted. Firstly, a binary logit model for highly urbanised areas was estimated for the return migrants only. Secondly, a binary logit model of return migration

was estimated for the subsample of individuals from highly urbanised areas.[1] This analysis indicates that return migrants to highly urbanised municipalities are often singles, men, lone parent households, tenants, individuals who recently completed a study program, and individuals with a migration background. Such a population composition suggests that individuals return to highly urbanised municipalities when they are potentially in need of social support from a broad network formed in their youth and/or when they prefer a more tolerant urban living environment.

Given the urbanisation level of the origin, individuals living in a highly urbanised municipality in 2001 are less likely to return to the origin. This pattern is much stronger for men than for women. The likelihood of moving on is significantly positively correlated with the urbanisation degree in 2001, in particular for women. Notable indeed is the significantly higher probability of moving on for women residing in urbanised areas in 2001, holding constant the degree of urbanisation of the origin.

Considering the young age structure of the research population, aged 21–35 in this period, the inclination to move toward cities may be expected. In this life phase, people are potentially attracted to city life as it offers jobs as well as tertiary education institutions, making it attractive for both students and employees (Storper & Manville, 2006). Our data indicate a clear tendency of individuals to move to more urbanised areas, in particular for higher education. The estimates also show that the likelihood of returning to the origin is the lowest for people living in highly urbanised areas. Once people have settled in a highly urbanised area, young adults apparently feel reluctant to leave. It is worth noting, however, that people aged 34–35 might not yet have reached an age at which they feel the need to cash in on their relative prosperity in a low-cost but high-amenity region, from the

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[1]The results from this analysis are not shown here but are available upon request.

TABLE 4 Multinomial logit regression for return migration for women in the period of 2001–2015, relative risk ratios (RRR), and marginal effects (ME)

Variable	Categories	Moved on		Returned	
		RRR	ME	RRR	ME
Urbanisation of municipality (1995)	Highly urbanised	1.010	−0,050	1.858***	0,081
	Urbanised	0.911	−0,047	1.442***	0,053
	Moderately urbanised	1.078	−0,006	1.311***	0,026
	Little urbanised	1.106	−0,005	1.384***	0,031
	Not urbanised (ref.)				
Urbanisation of municipality (2001)	Highly urbanised	1.402**	0,090	0.761*	−0,066
	Urbanised	1.590***	0,085	1.088	−0,030
	Moderately urbanised	1.474***	0,070	1.096	−0,022
	Little urbanised	1.276*	0,054	0.939	−0,031
	Not urbanised (ref.)				
Distance from origin	Distance (km) in 2001	1.006**	−0,001	1.022***	0,002
	Distance (km)	1.006**	0,002	0.976***	−0,003
	Distance-square	1.000***		1.000	
Presence of parents in origin	Both parents	1.053	−0,095	3.529***	0,162
	Only mother	0.951	−0,095	2.773***	0,139
	Only father	0.926	−0,075	2.053***	0,101
Household composition	HH-Single (ref.)				
	HH-Unmarried couple no child	0.801***	−0,041	0.960	0,014
	HH-Married couple no child	0.634***	−0,076	0.831	0,013
	HH-Unmarried couple with child	0.292***	−0,198	0.529***	0,008
	HH-Married couple with child	0.208***	−0,253	0.460***	0,009
	HH-Single parent	0.437***	−0,120	0.537**	−0,016
	HH-Other	0.892	−0,028	1.065	0,018
	HH-Institutional	0.849	−0,041	1.092	0,026
Change in household	Become single HH	0.938	0,024	0.646***	−0,052
	Become HH with children	0.246***	−0,210	0.448***	0,011
	Become single parent HH	0.386***	−0,178	0.896	0,065
Country of origin	Native Dutch (ref.)				
	Moroccan	0.547***	−0,073	0.530***	−0,035
	Turkish	0.687*	−0,087	1.142	0,053
	Surinamese	0.627***	−0,069	0.747*	−0,002
	Other	0.951	0,009	0.785**	−0,026
Housing	Tenure-Owner (ref.)				
	Tenure-Rental	1.739***	0,071	1.574***	0,013
	Tenure-Other	1.880***	0,073	1.820***	0,026
	Log housing value	0.937***	−0,011	0.974***	0,002
Education level (2014)	Educ.-Primary (ref.)				
	Educ.-Low	1.163	0,028	1.022	−0,011
	Educ.-Medium	1.351**	0,049	1.125	−0,011
	Educ.-High	1.052	0,058	0.546***	−0,083
	Educ.-Unknown	1.620***	0,104	0.912	−0,055
Socioeconomic position in 2001	Employee (ref.)				
	Self-employed	0.760	−0,049	0.919	0,009
	Benefits	0.724**	−0,043	0.731*	−0,019
	Student	2.490***	0,155	1.427**	−0,030
	Other	0.971	0,004	0.880	−0,016
Change in socioeconomic position	From study to work	0.528***	−0,106	0.789*	0,022
	From study to benefits	0.227***	−0,222	0.428***	0,011
	From work to benefits	0.713**	−0,047	0.794*	−0,002
Income	Log income	0.566***	−0,081	0.691***	−0,001
	Income missing	0.112***	−0,294	0.190***	−0,036
	Constant	18.483***		1.753*	
	N	21,828			
	Preudo-R-sq	0.145			

Note. "Stayed" is the reference group.

Legend:

*p < .05. **p < 0.01. ***p < 0.001.

perspective of the escalator theory, which predicts a stepping off of the escalator as the third step after the accumulation of human capital (Findlay et al., 2008).

Interestingly, the probability of moving, in particular the probability of returning, is positively correlated with the initial distance between the origin address in 1995 and the address in 2001,

TABLE 5 Multinomial logit regression for return migration for men in the period of 2001–2015, relative risk ratios (RRR), and marginal effects (ME)

| Variable	Categories	Moved on		Returned	
		RRR	ME	RRR	ME
Urbanisation of municipality (1995)	Highly urbanised	1.070	−0,084	3.470***	0,137
	Urbanised	1.059	−0,042	1.955***	0,072
	Moderately urbanised	1.086	−0,011	1.413**	0,033
	Little urbanised	1.028	−0,018	1.339**	0,031
	Not urbanised (ref.)				
Urbanisation of municipality (2001)	Highly urbanised	0.627**	0,017	0.256***	−0,119
	Urbanised	0.885	0,048	0.403***	−0,094
	Moderately urbanised	1.092	0,036	0.785	−0,035
	Little urbanised	1.004	0,020	0.786	−0,028
	Not urbanised (ref.)				
Distance from origin	Distance (km) in 2001	1.010***	0,000	1.024***	0,002
	Distance (km)	1.000	0,001	0.976***	−0,002
	Distance-square	1.000***		1.000	
Presence of parents in origin	Both parents	1.179**	−0,056	3.064***	0,115
	Only mother	0.893	−0,090	2.403***	0,109
	Only father	0.989	−0,061	2.122***	0,087
Household composition	HH-Single (ref.)				
	HH-Unmarried couple no child	0.780***	−0,044	0.958	0,015
	HH-Married couple no child	0.902	−0,001	0.787	−0,019
	HH-Unmarried couple with child	0.590*	−0,106	1.064	0,048
	HH-Married couple with child	0.695	−0,058	0.853	0,010
	HH-Single parent	0.568	−0,136	1.408	0,084
	HH-Other	0.841	−0,025	0.901	0,002
	HH-Institutional	0.875	−0,023	0.967	0,007
Change in household	Become single HH	0.884	−0,001	0.747*	−0,024
	Become HH with children	0.520***	−0,138	1.176*	0,070
	Become single parent HH	1.041	−0,073	2.799***	0,115
Country of origin	Native Dutch (ref.)				
	Moroccan	0.731	−0,095	1.560	0,075
	Turkish	0.697	−0,116	1.812**	0,096
	Surinamese	0.875	−0,039	1.183	0,030
	Other	0.867	−0,018	0.882	−0,003
Housing	Tenure-Owner (ref.)				
	Tenure-Rental	1.437***	0,044	1.391***	0,009
	Tenure-Other	1.521**	0,043	1.611**	0,022
	Log housing value	0.954***	−0,008	0.989	0,002
Education level (2014)	Educ.-Primary (ref.)				
	Educ.-Low	0.923	−0,014	0.977	0,004
	Educ.-Medium	1.263	0,012	1.521**	0,030
	Educ.-High	1.228	0,067	0.706*	−0,056
	Educ.-Unknown	2.337***	0,165	0.977	−0,069
Socioeconomic position in 2001	Employee (ref.)				
	Self-employed	0.916	−0,041	1.367	0,043
	Benefits	0.245***	−0,182	0.323***	−0,019
	Student	1.670***	0,100	0.983	−0,042
	Other	0.692*	−0,024	0.551**	−0,039
Change in socioeconomic position	From study to work	0.755**	−0,050	0.949	0,016
	From study to benefits	0.191***	−0,234	0.341***	0,007
	From work to benefits	0.528***	−0,055	0.424***	−0,048
Income	Log income	0.308***	−0,147	0.366***	−0,023
	Income missing	0.015***	−0,484	0.017***	−0,139
	Constant	226.226***		24.290***	
	N	13,410			
	Preudo-R-sq	0.161			

Note. "Stayed" is the reference group.

Legend:

*p < .05. **p < 0.01. ***p < 0.001.

suggesting that those who move across longer distances are more likely to return. However, given the distance in 2001, the last distance from the origin of subsequent moves is negatively correlated

with return probability. This suggests that individuals who moved to a location closer to the origin after 2001 are more likely to ultimately return. But if individuals moved on to a location that is a
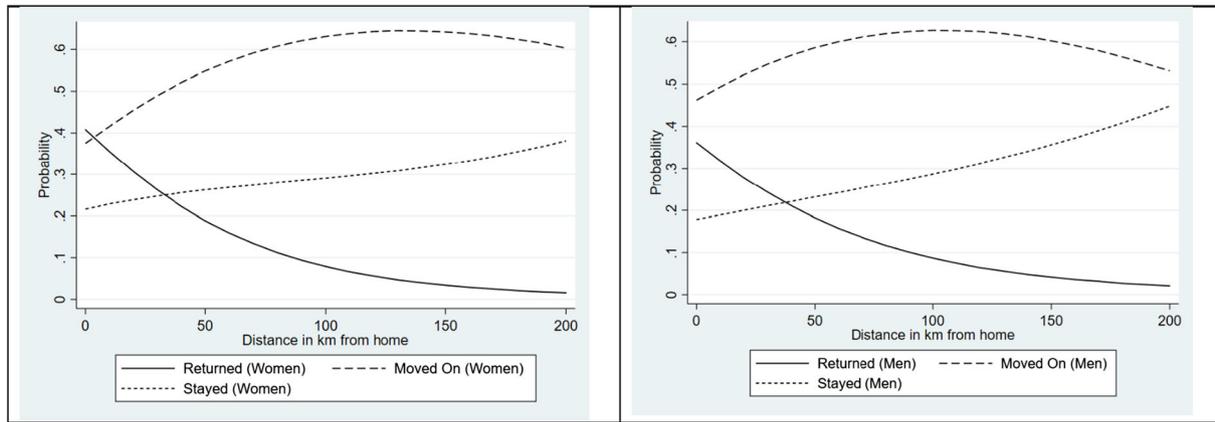
FIGURE 1   Predicted probabilities of moving by gender

further distance from the origin than the distance in 2001, the probability of returning is lower.

To facilitate the interpretation of the distance effect, we plot the predicted probabilities of the potential outcomes over distance to home from a multinomial model for men and women together, with the same variables as in Tables 4 and 5, holding the other covariates at their actual values. Figure 1 shows a declining probability of return with increased distance from the origin address for both men and women. The probability of moving on initially increases with a distance of up to around 120 km, after which it starts to decline slightly. The probability of staying increases with increased distance more sharply for men than for women. The overall pattern of change in the probabilities is, however, quite similar for men and women.

The continued residence of both parents in the origin municipality is associated with a 16% higher probability of return for women and an almost 11.5% higher return probability for men. A slightly lower effect is observed when only the mother or the father is still living in the origin municipality. When household composition is considered, the estimated differences in return probabilities are significant only for women: women living in couple households (both married and unmarried) with children have a significantly higher return probability, and single mothers are less likely to return. The probability of moving on is, on the other hand, much lower for women in households with children. For men, the seemingly higher return probability is not statistically significant. However, men in an unmarried couple household with or without children have a significantly lower probability of moving on compared with those in single households; this is similar to women. The relatively low probabilities of moving on for households with children confirm earlier evidence regarding the significantly low mobility of households with children (Kley & Mulder, 2010), and the slightly higher return probability for women in a couple household with children could be interpreted as a revealed preference of women to return to the home region because of family solidarity. This result confirms the finding of Blaauboer et al. (2013) that couples with young children live closer to the female partner's parent(s). Obviously, living closer to the female partner's parents gains more importance when

the household has minor children and can utilise the support of the parents as babysitters and relies on the stronger family ties of the female partner due to traditional gender roles.

In addition, a recent transition to a household with children increases the return probability for women and men by 1.1 and 7 percentage points, respectively, confirming findings from the literature (Blaauboer et al., 2013). A substantial gender difference is also estimated for a transition to a single-parent household (i.e., becoming a lone parent), which is a likely outcome following a union dissolution: as men transition to a single-parent household, their return probability is 11.5 percentage points higher on average, and for women an estimated difference of 6.5 percentage points is not statistically significant. This relatively higher return probability for lone fathers may indicate a greater need for family support and lone mothers could better manage a single parent household. Moreover, after a union dissolution divorced fathers leave the house more often (Mulder & Wagner, 2010). A transition to a household with children or to single-parent household lowers the probability of moving on drastically, particularly for women, that is, 17.8 and 21 percentage points, respectively. The decline is much less pronounced for men, at circa 14 percentage points if men transition to a family with children. Becoming single again (without children) lowers the return probability for women and men by 5.2 and 2.4 percentage points, respectively.

Given the set of background variables in the models, the majority of ethnic minority women have a lower probability of return compared with Dutch women, ranging from −0.2 percentage points for Surinamese to −3.5 percentage points for Moroccan women. Turkish women seem to have a higher return probability (5.3 percentage points) than Dutch women, but this is not statistically significant. The relative probability of moving on is significantly lower for almost all ethnic minority women. For ethnic minority men, we observe few mobility differences; only Turkish men have a significantly higher return probability (9.6 percentage points) compared with Dutch men.

Differences in housing tenure generate few distinct residential mobility patterns. Residents of owner-occupied houses are less likely to return or move on compared with tenants. The estimated

differences are quite similar for men and women. This result confirms existing evidence for the mobility-preventing role of homeownership as a particular form of location-specific capital (Mulder & Wagner, 2012).

The socioeconomic characteristics of young adults, such as education, income, socioeconomic position, and changes thereof, affect their spatial mobility significantly. The likelihood of returning is significantly lower for graduates than for those with a primary education level. This effect is more pronounced for women. Interestingly, the return probability is relatively high for medium educated men, compared with individuals with only primary education. Regarding socioeconomic position, benefit recipients are less likely to return compared with employees, and so are female students. In general, students (both male and female) have a much higher probability of moving on. A transition to benefits, either from being a student or from work, decreases a person's spatial mobility, in particular the likelihood of moving on and to a lesser extent the probability of return. Finally, the likelihood of returning is inversely related to (actual) income, implying that economically successful young adults are less likely to return to their home region. The estimates show that a higher income significantly decreases the tendency for spatial mobility, both the likelihood of moving on and of returning. This tendency is stronger for men than for women. The results of the socioeconomic variables renounce the success-failure dichotomy for this particular population of young adults.

In summary, the likelihood of return migration is particularly high for young adults who originally come from more urbanised areas, and who have parent(s) still residing in the origin municipality. It is significantly lower for individuals who have a better socioeconomic position in terms of higher education and income. The impact of these background variables varies significantly by gender. The return probability of women is positively affected by factors related to family ties, such as the presence of parent(s) in the origin municipality, but is inversely influenced by a higher education level. For men, the presence of parent(s) in the origin municipality has a smaller effect on the return probability, and having children and becoming a lone parent are more dominant reasons to return, typically an indication of care needs. These results generate grounds for interpreting the main motivation for return migration as being gender-specific: returning women are likely to provide support to their parents, and men are likely to expect to acquire support from their parents.

5 | CONCLUSION

This paper examines spatial mobility trajectories upon leaving the parental home in the Netherlands, using register data for the entire 1980 birth cohort over 20 years. The longitudinal analysis shows that almost 20% of young adults born in 1980 had left their municipality by age 21, and 15% had moved within the municipality and the remaining 65% was still living with their parents. About 17% of the around 35,000 individuals who had left their municipality at age 21 had returned to their origin municipality by age 35, and a significant

majority of them (58%) had moved on to another municipality. Only 25% stayed in the municipality where they lived at age 21. Overall, the results reveal a significant outmigration of youth with high educational aspirations from peripheral regions to more urbanised areas. Once these youths complete their higher education, most are inclined not to return to their home region. This trend suggests persistent population decline in the periphery.

After presenting descriptive spatial mobility patterns of nest leavers, this study examines the determinants of return migration and moving on to another destination. The estimations of subsequent spatial mobility after leaving the home region show that family ties, life event shocks, and education are strong predictors of spatial mobility, in particular the probability of return, when the estimates are controlled for a large number of background variables. The likelihood of return is much higher for those whose parents still reside in the home region. The likelihood of return migration is much higher for individuals who were socialised in more urbanised municipalities, as well as for individuals who are lower educated and a tenant. By contrast, the likelihood of return is significantly lower for individuals who are university graduates, who have a higher income or who become a benefit recipient.

This study reveals significant gender differences in residential mobility patterns and their drivers. The presence of parents in the home region has a more pronounced effect on the return migration probability of women compared with men. A transition to benefit dependence lowers the likelihood of return, although this effect is stronger for men than for women. The same applies for income: higher income reduces the inclination for return migration, in particular for men. The likelihood of return is stronger for Turkish men than Dutch men, and for university educated men, and no statistically significant effects are found for their female counterparts. If men become a single parent, their probability of return is substantially higher (by 11.5 percentage points) than for men with children who remain in a couple. There is no such statistically significant effect for women transitioning to single-mother households. Becoming part of a household with children increases the likelihood of return for men, and women are less likely to return or move on after forming a household with children.

In conclusion, the study provides solid evidence for the close relationship between return migration and family ties. Family appears to serve as a safety network in the Netherlands when nonsteady developments in the life course occur. By contrast, the propensity to return to the origin municipality is much lower when young adults are able to steadily accumulate social capital and when they form a stable family: acquiring a higher education and being part of a couple household with children both erode return migration intentions.

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