ELSEVIER

Contents lists available at ScienceDirect

Advances in Life Course Research

journal homepage: www.elsevier.com/locate/alcr





Socio-spatial stratification of housing tenure trajectories in Sweden – A longitudinal cohort study

Ida Borg*, Juta Kawalerowicz, Eva K. Andersson

Department of Human Geography, Stockholm University, Svante Arrhenius väg 8, SE-106 91 Stockholm, Sweden

ARTICLE INFO

Keywords:
Housing trajectories
Tenure types
Sequence analysis
Cohorts
Longitudinal register data
Sweden

ABSTRACT

Individuals tend to be most mobile when they are between 20 and 40 years of age. This pattern is relatively stable across regions and over time. For geographical mobility, less is known about their transitions between different types of housing and tenure forms. In Sweden, households may select between, principally, three different types of tenure forms, each often coupled with a specific housing type. Households may rent from either public companies (municipality owned) or private landlords in multifamily dwellings, households may own their single-family house privately, or they can cooperatively own a multifamily house as a tenant-owner in an apartment. Yet we lack knowledge of which tenure trajectories individuals tend to follow during their most mobile years, and we also lack knowledge about which factors determine tenure trajectories. Our sample consist of individuals who in 1995 were aged 18–25 and who left their parental house between 1994 and 1995. This study tracks their tenure trajectories for 21 consecutive years starting in 1995 until 2015. The cohorts in our sample were the first who encountered the conditions on the deregulated housing market that are still in place in Sweden today. We followed these cohorts until they were between 39 and 46 years old and used sequence analysis to classify tenure trajectories. One result that stands out is the outstanding and increasing emphasis on home ownership in our sample, quite unlike the traditional picture of the Swedish housing market. Additionally, we found that resources in a broad sense and spatial context have a great impact on the type of trajectory individuals follow.

1. Introduction

Individual mobility is at its highest for those aged 20-40 years old, a pattern that is relatively stable across regions and over time. The study of this mobility often covers residential trajectories over different types of neighbourhoods or regions. Less is known about individuals' transitions between different types of dwellings and housing tenures. Such mobility between housing tenures has not been studied from a longitudinal perspective in the Swedish context. We thus lack knowledge about which housing trajectories individuals tend to follow during their most mobile years, and we do not know what factors determine such trajectories. The aim of this paper is twofold: first, using a holistic approach, we describe the housing tenure trajectories of young adults leaving the parental home and follow these housing tenure trajectories for 21 years, a period long enough to reach stable tenure state for most of the sample. Secondly, we explore possible determinants of different types of housing tenure trajectories using a social and spatial stratification framework.

This study gathers individuals' housing tenure trajectories (hereafter

tenure trajectories), starting in the year 1995. Our sample consists of individuals aged 18-25 in 1995 who left parental home between 1994 and 1995. These cohorts are thus among the first who entered the deregulated housing market conditions that prevails in the Swedish housing market to this day. A systematic shift from generous subsidies to a deregulated and marketised housing market took place when the liberal-conservative government took power in 1991 (B. Turner & Whitehead, 2002). The majority of individuals in Sweden end up in the owner-occupied housing market sector over their course of life (Angelini, Laferrère, & Weber, 2013). This tenure type is preferred for various of reasons. One important factor that may influence preferences for owner-occupied housing is the policy context. Our sample experienced a shift in policy, from tenure neutrality to today's generous subsidization of owner-occupied housing alternatives (SOU, 2014). We follow these cohorts until they are aged 39-46, that is, up until the latest year available in our data.

There has long been a need to understand how households behave in the housing market over a longer time span. Hitherto, most research on housing mobility has been focused on one transition on the housing

E-mail addresses: ida.borg@humangeo.su.se (I. Borg), juta.kawalerowicz@humangeo.su.se (J. Kawalerowicz), eva.andersson@humangeo.su.se (E.K. Andersson).

^{*} Corresponding author.

market. This transition is usually either a change of neighbourhood, or a change of housing tenure, often in terms of timing of entering the home owning sector, (Kauppinen, Skifter andersen, & Hedman, 2015; Köppe, 2017; Smits & Mulder, 2008) which is taken as a proxy for family life, wealth, integration and welfare. This paper will instead focus on the holistic tenure trajectory that individuals can follow over their life course. Other strands of research study tenure type change in older ages from retirement and onwards (Herbers, Mulder, & Mòdenes, 2014). However, neither of these studies take into consideration very long trajectories but rather study certain thresholds, e.g., at what ages moving from a house into an apartment is a common step (Andersson & Abramsson, 2012). Thus, in this paper, we will employ sequence analysis, which enables us to capture and analyse tenure trajectories over a longer time span.

In the past, research employing sequence analysis to study tenure trajectories looked mostly at the Anglophone context (Clapham, Mackie, Orford, Thomas, & Buckley, 2014; Clark, Deurloo, & Dieleman, 2003; Kneale, Lupton, Obolenskaya, & Wiggins, 2010; Köppe, 2017, 2018; Lee, Smith, & Galster, 2017; Spallek, Haynes, & Jones, 2014). These contexts are often characterized as having a strong tradition of home ownership. Sweden on the other hand, joins housing regimes having quite large parts of the housing stock devoted to rental housing, in similarity with countries such as The Netherlands, Germany, Austria and Denmark (Kemeny, 1995; Stephens, 2020). But it should be noted that home ownership is very present in Sweden too. At present, about 40% of the housing stock is owner occupied single-family housing, a further 20% is tenant-ownership, a tenancy type which is included in the owner-occupied sector (Christophers, 2013; Ruonavaara, 2005). The last couple of decades, there has been changes to the previous well-renowned Swedish housing system (Borg, 2019; Grander, 2017; Holmqvist & Turner, 2014). Changes includes reducing or abolishing large general interest subsidies (Turner & Whitehead, 2002) and marketization of public housing (Grander, 2017). There is an ongoing discussion about the future of the housing system, and more specifically, the future of the public housing sector (Blackwell & Bengtsson, 2021). Previously, the public housing sector aimed at encompassing all income groups, but recent research shows a development where economically affluent households leave rental housing in favour of owning (Andersson, 2021; Borg, 2019; Bråmå & Andersson, 2010). But at the same time, due to increasing house prices, many young adults are struggling to enter the owner-occupied sector (Öst, 2012). Finding suitable rental housing is also a struggle for many young adults, especially in housing markets with high demand such as in the metropolitan cities (Grander, 2021). Thus, it is not clear what types of housing tenure trajectories young adults follow in Sweden and they deserve a closer examination. The cohort we study left the parental home to enter a recently deregulated housing market in 1995 (coinciding with an economic recession). These changes were recent in 1995, and many of these young adults may have had preferred rental housing at that time. However, with the changes to the housing market, including bank products giving possibilities of using housing equity and cheap mortgages, the emphasis on advantages with ownership increased over time, and might have convinced many in the cohort that ownership was the best tenure option for the future.

What sets this study apart from earlier studies is the longer time span and the use of sequence analysis methods. Besides describing tenure trajectories in Sweden, the aim is also to explore how social and spatial factors, such as socio-economic status and type of local housing market at the start of one's housing career, may influence the future trajectory that individuals follow. We know from previous research that parental resources and the intention to start a family are important factors determining when individuals leave their parental home and form their own a household (see for example Damhuis, van Gent, Hochstenbach, & Musterd, 2019). However, the role of spatial factors in influencing tenure trajectories has been a somewhat neglected area of research (for tenure vacancy chains in different housing markets, see Turner (2008).

This study will analyse the whole of Sweden with its various local housing markets. We will thus incorporate the role of the structure of the local housing market as well as the characteristics of the municipality where one lives at the start of the period to see how they impact future tenure trajectories.

2. Earlier research

Sequence analysis was introduced in the mid-1990s in the social sciences by Abbott (1995). The method is most commonly coupled with a life course perspective intended to study processes that are sequential, that is, states or events that are ordered over a longer period of time. In housing, there are several examples of when this method has been applied to follow the change of tenure types over the life course (Clapham et al., 2014; Clark et al., 2003; Kneale, Lupton, Obolenskaya, & Wiggins, 2010; Köppe, 2017, 2018; Lee et al., 2017; Spallek et al., 2014). Some acknowledge that tenure trajectories are intrinsically interwoven with other life course events such as nest leaving, employment, and family formation and have thus studied these events jointly.

There is a clear predominance of analysing the UK context in research on housing tenure trajectories which employs sequence analvsis (Clapham et al., 2014, Kneale et al., 2010, Pollock 2007, Köppe, 2017, 2018). Researchers have studied different time periods and followed different cohorts. Nevertheless, the pattern they have found is quite similar. Most people manage to reach home ownership without problems as the most common trajectory that was found was the home owning trajectory. Researchers also reported on similar trajectories and experiences for the young adults before entering home ownership. During these ages, the alternatives was either to have a prolonged stay in the parental home, or hotel of mum-and-dad, or to enter the private rental sector. Young adults with resources and those who had formed a family entered home ownership earlier. Those without resources tended either to stay longer in the parental home or enter the social rental sector. Overall, British research suggests that the most common destination was to enter home ownership, but the exact trajectories before reaching that destination differed (Clapham et al., 2014, Kneale et al., 2010, Pollock 2007, Köppe, 2017, 2018). Clapham et al. (2014) or Köppe (2017, 2018) concentrated specifically on the wealth aspect of being or becoming a home owner, distinguishing between different trajectories of reaching and managing wealth. Timing, age and generational effect seem to be important for the type of wealth that could be accumulated. Köppe (2018) also found that renters are permanently excluded from housing wealth, and that this exclusion persists over generations. In our paper we analyse tenure trajectories, and not specifically wealth states or wealth development as Köppe does. However, owning either a single-family home or owning a tenant-owned apartment in Sweden can be associated with wealth accumulation. It should be noted that this wealth is not equally distributed across Swedish regions, as houses or apartment can be relatively inexpensive or hard to sell on the market in peripheral locations.

Two other studies also focusing on the Anglophonic context with similar housing systems are Clark et al. (2003) who studied US and Spallek et al. (2014) who look at Australia. Both studies also emphasized the stability of tenure type, as a majority were found in the same (home owning) tenure trajectory thought out the entire studied period.

Even though home ownership seems to be the preferred housing tenure trajectory, the rental sector should not be neglected. There is some recent evidence that the rental sector is becoming an important and growing option for many individuals during young adulthood, the so-called "generation rent" (Byrne 2020; Wong 2019). Köppe (2017) identified this group with the use of sequence analysis and concluded that there is a new housing precariat who are finding it more difficult making a successful transition into home ownership.

The previous studies presented above have used sequence analysis to study tenure transitions. Yet, most of them have ignored the possible determinants of tenure trajectories (except Köppe, 2017). However,

there is a large body of research studying determinants of tenure transitions in general that are relevant here. Such studies tend to focus on one single transition on the housing market, often in conjuncture with a demographic event. For example, tenure transitions are often coupled with family formation (Chudnovskaya, 2019), leaving the parental home (Andersson, 2021) or preparing for the old age (Abramsson & Andersson, 2016). When it comes to social stratification, Turner and Hedman (2014) suggested that native Swedes are more likely to enter the home owning sector than migrants while Bråmå and Andersson (2010) and Alm Fjellborg (2021) show that natives with resources are more likely to move out of rental housing and into home ownership. This is an expected pattern given market prices on owner-occupied housing.

3. Swedish context

Sweden has long been characterized as a universal welfare state and in terms of housing this has meant that the housing market has been regulated to support households as market actors (Bengtsson, 2001). A combination of tenure legislation and generous subsidies has been the core of the Swedish housing policy. Since its instalment, there has been a gradual marketization of the Swedish housing system (Grander, 2017; Grundström & Molina, 2016; Holmqvist & Turner, 2014; Turner & Whitehead, 2002). The cohort we study in this paper experienced for instance tenure neutrality when it was still having its full effect. Tenure neutrality implies that no tenure type should be seen or treated as a favourable "end station", as in countries with a strong tradition of home ownership (Arundel & Ronald, 2021). Rather, as in line with countries such as Germany and the Netherlands, Sweden has been categorized as having an integrated or unitary rental system, meaning that the public and the private rental sectors compete on similar terms, with a larger proportion of households living in the rental sector (about 40% of the housing stock is rental housing in Sweden). Tenants in the rental sector in Sweden enjoys high quality housing, a high degree of tenure security and the rents are set in negotiations among the parties on the housing market. Countries with the opposite type of system (dual rental system) often organise a separate means-tested social rental sector for those unable to compete in the regular housing market (see Kemeny, 1995 and recent discussions on Kemeny's regime types in Stephens, 2020).

In recent decades however, there is a discussion whether tenure neutrality still can be a signifier of the Swedish housing system (Blackwell & Bengtsson, 2021; Christophers, 2013; Grander, 2018). The latter part of the period under study, the 2010 s, might be regarded as a time in which the European-wide discussions of property-based welfare reached Sweden. The financial solutions for using housing wealth developed strongly since the mid-2000s (Doling & Ronald, 2010). A key factor that influenced the intergenerational transmission of wealth was the abolishment of gift and inheritance tax in 2005. In fact, as Wind and Hedman (2018) and recently also Pfeffer and Waitkus (2021) show, the Swedish housing market has become a major driver for wealth inequality.

At the same time, there are signs of an increasing residualisation of the public rental sector in Sweden (Borg, 2019), meaning that better-off households have turned to home ownership. Ownership has at the same time become less attainable for larger proportions of the population. Previous research suggests that young adults are increasingly dependent on parental wealth to enter home ownership and dependent on their social network to enter the housing market at all (Andersson, 2021; Christophers & O'Sullivan, 2018; Öst, 2012; Pfeffer & Waitkus, 2021). Some reasons for these difficulties are increasing house prices, more widespread housing shortages, higher costs of housing and the marketisation of the Swedish housing system. A factor to keep in mind here is however that young adults tend to leave the parental home early in Sweden compared to other Western countries (Schwanitz, 2017). Typically, young people end their secondary education at the age of 18 or 19 and statistics show a high increase in mobility at this age. Students who left the parental home usually rent during their course of studies. There is rental housing devoted for students in most university cities, however,

due to housing shortages, many students are subletting on the second-hand rental market (see Appendix 1). The mobility stays high until the age of around 40 and then levels out for the rest of the life course. During this phase of high residential mobility women tend to move more frequently than men, and short distance moves are most common (Statistics Sweden, 2021).

Regarding tenure type, households may choose between five different types of housing tenures; to rent from either public authorities or private landlords in multifamily dwellings, to own their single-family house/terraced housing or, and this is a specific tenure type for Sweden; to cooperatively own a multifamily house and thus be a tenant-owner of an apartment (see Appendix 1.1 for further information on types of tenures). This tenure type has increased in metropolitan areas at the expense of the rental sector (Andersson & Turner, 2014). To access the tenant-owner sector, one buys a share into a local cooperative housing association, which gives the right to possess and use the apartment (Ruonavaara, 2005). The tenancy right functions as capital and are traded freely at market prices, just as in the owner-occupied sector. In our paper, this tenure type is treated as belonging to the owner-occupied sector (Christophers, 2013; Ruonavaara, 2005). House prices and the price for buying a share in a housing association varies a lot across Sweden. The median price for a tenant-owned apartment is about 3 million SEK (average 3,5) in the Stockholm region. The average price for home ownership in the same region is about 6 million. To enter the owner occupied sector, both the tenant-owner and the home owner usually rely on a mortgage, for which she pays interest rate and a monthly amortization. A feature of tenant-ownership is that you pay a monthly fee to the local housing association. This fee varies a lot across Sweden and across properties of different age, but for some reference, the average monthly fee, according to Statistics Sweden, for newly built tenant-owned apartments the last few years is about 4000 SEK (compare rent for newly built public rental of about 9000 SEK).

4. The life course – to understand tenure trajectories holistically and to explain tenure trajectories using a social and spatial stratification framework

"The life course consists of interlocking trajectories or pathways across the life span that are marked by sequences of events and social transitions." (Elder & O'Rand, 1995, p. 454). This is a very broad definition of the life course approach that this paper seeks to follow. Here, we are interested in the behaviour of individuals on the housing market over their course of life (Feijten & Mulder, 2002; Mulder, 1993) which can be captured by a multitude of concepts. Housing careers, housing histories, housing pathways, housing biographies, tenure choice, housing behaviour, housing transitions, housing aspirations all relate to individuals' experiences, decisions and perceptions about their housing throughout the life course (Abramsson, 2003; Clark & Onaka, 1983). In this paper, we make use of the concept tenure trajectory to denote the holistic study of households' housing market behaviour. With this approach we intend to study events, their duration, and transitions between events, and to do this simultaneously over a long period of time. In this view, single events are not isolated, but rather understood as a continuum.

The investigation of tenure trajectories from a life course perspective rests upon an understanding of individual agency as "bounded" (Evans, 2007). This means that "individuals construct their course of life through the choices and actions they take within the opportunities and constraints of history and social circumstance" (Elder, Johnson, & Crosnoe, 2003, p. 11). The choices and actions of the individuals on the housing market are thus believed to be shaped by constraints and opportunities in a given time period. Individuals make choices and act upon alternatives that they perceive. Some alternatives seem more

¹ SEK is approximately currently 0.1 Euro

Table 1Tenure composition of individuals in the sample in 1995 and in 2015.

Tenure type	1995 Freq.	1995 Perc.	2015 Freq.	2015 Perc.
Home owner	4943	10.8	29,403	64.22
Tenant-owner	8656	18.9	7276	15.9
Public rental	15,275	33.36	4191	9.15
Private rental	13,469	29.41	3901	8.52
Other rental	3443	7.52	1015	2.21
Total	45,786	100	45,786	100

Table 2Background variables used in multinomial regression to explain individuals' tenure type trajectory.

Variable	Description	Proportion/descriptive
Socio-economic factorsParental tertiary education: None (ref), One, Two	If parents in 1994 had education higher than gymnasium	One parent: 22.7%Both parents: 13.8%
Background	Being born abroad or born in Sweden to two foreign born parents.	Native 91.9%Foreign: 9.1%
Parental household income (Ref=Low): Middle or High	Based on equivalised disposable household income in 1994 in parental household	Low income: 27.6% Middle income 36.0% High income 36.4%
Demographic factorsSex (ref=female)	Whether individual is male or female	Male: 50.8%Female: 49.2%
Sibling count	Based on who were the parents in 1994, full siblings count for 1, half siblings for 0.5	Mean: 1.6, Std: 1.07
Children	Whether individual was a parent in 1995	Children: 3.4%
Family type: Married (ref), Cohabiting, Single	Type of union: married, cohabiting or single, year 1995. (note: Cohabiting includes couples with children only, other cohabiters are not registered)	Married: 1.9% Cohabiting: 2.5% Single: 95.6%
Spatial factors Overrepresented tenure: Home owner (ref), Tenant-owner, Public rent, Private rent	Overrepresented tenure type in individuals' municipality in 1995 (note: Other rent is not dominant or characteristic type for any municipality)	HO: 33.5%TO: 16.9% PuR: 28.7%PrR: 20.8%
House prices	Price for houses in 1995 in the individual's municipality, thousand SEK	Mean: 758 Std: 301
Municipality: Large cities, Metropolitan areas, Suburbs to metropolitan areas, Middle-sized towns, Other large, Other small, Rural, Sparsely populated, Industrial.	Classification of municipality where individual was resident in 1995. Classification of municipalities from Swedish Association of Local Authorities and Regions. We used the classification from year 1993, as this was the closest in time to 1994/1995, and classifications are not done yearly.	Large cities: 34.3% Metropolitan areas: 22.8% Suburbs to metropolitan: 10.0% Middle-sized towns: 12.6% Other large: 5.6% Other small: 3.0% Rural: 2.5% Sparsely populated: 2.9% Industrial: 6.3%

viable than others depending on resources and preferences, which are shaped by the social and economic background of the individual (Abramsson, 2003). A recent work by Andersson (2021) also adds that social capital, in terms of networks, are important for young adults' alternatives on the housing market. Besides social and economic factors, which are resources that are stratified, we also believe that the context in which one lives has consequences for preferences and available opportunities on the housing market (Friedrichs, Galster, & Musterd, 2003).

Thus, resources such as parental education and own income are what

may influence which tenure trajectory people tend to follow (Billari, Hiekel, & Liefbroer, 2019). Billari et al. (2019) describe that parental background influence young adults' behaviour on the housing market through three mechanisms; socialisation, actions that are possible to take, or opportunities available. The general pattern is that young adults having parents with more resources and knowledge seem to have several options and a greater freedom regarding the timing and occurrence of important demographic events that occur after leaving parental home. In addition, it has been shown that demographic events, such as forming a family of one's own, are important when making housing market choices (Chudnovskaya, 2019). Local housing market contexts differ; they may have different proportions of multifamily dwellings, single housing or possibilities to own or rent. The regional differences will pose constraints and possibilities for households with different financial, and other resources (Damhuis et al., 2019).

5. Data and methods

Our study design included three analytical steps. First, we applied sequence methods to describe and explore tenure trajectories over the life course. Second, the sequences found were clustered into typical tenure trajectories with optimal matching techniques and cluster analysis. Third, the tenure trajectories found were used as dependent variables in a multinomial logistic regression model to explore possible socio-economic, demographic spatial factors that influence these trajectories. To begin with, let us describe our data and our sample.

In this study, we follow tenure type changes. Tenure type was operationalised by the combination of building type and property ownership, which is available in the Swedish property tax registers (see Table 1.1 in Appendix for information on how tenure type is operationalised) This resulted in five categories; 1. Home ownership, 2. Tenant ownership (bostadsrätt), 3. Public rental, 4. Private rental and 5. Other rental.

Our sample consist of young adults leaving the parental home. For the construction of the sample, we used information on the year of birth and family status from register data. Sequence analysis is applied to study the tenure trajectories of individuals who were aged 18-25 in 1995 (the point when we start tracking tenure trajectories) and who changed their family status from a child in a family to any other category of family status between 1994 and 1995. There were 105,237 individuals who fulfilled these criteria.² To understand the complete trajectories of people's housing tenures over the life course, only individuals with a complete housing tenure history over the years 1995-2015, that is 21 years, are included. The individuals were studied first at the ages of 18-25 and over the years until they reached the ages of 39-46. Reasons for not having a complete housing tenure trajectory in our data might be due to immigration, emigration, death during the period studied, but for most part, we had missing information on either owner of the property and/or type of property in property registers (see Table 1.1 in Appendix to see how we combined this information to create tenure type). This resulted in 46,683 complete housing sequences. We then dropped observations for which there were missing covariates in regression analysis, and this led to a final subset consisting of 45,785 observations.

Individuals in our sample were quite equally divided between tenure forms in 1995 but there was a change to an emphasis on home ownership by 2015 (for sample selection see below). Table 1.

The tenure type variable and all data in this study were analysed through the micro data on-line system offered by Statistics Sweden in a collection of registers in the project Migrant Trajectories. The registers cover the entire Swedish population for the period 1995–2016. For the third step in the analytical procedure, our multinomial regression

² Note that the first year we include in our analysis is 1995, a year after individuals left their parental home. The type of tenure of their parental home is therefore not included as the first state of the sequence.

 Table 3

 Clusters of trajectories reordered into groups of trajectories with short descriptions and abbreviations for the clusters.

Trajectory group	$\label{thm:continuous} \begin{tabular}{ll} Typical states (Pr=Public rental, Pr=Private rental, BRF=Tenant ownership, HO=Home ownership, Oth=Other) \end{tabular}$	Short description	Freq. weighted	Perc. weighted
Ownership	PuR/1-PrR/1-HO/19	Early entry into home ownership	10,476	22.88%
Ownership	PuR/2-PrR/3-BRF/16	Majority tenant ownership	6633	14.49%
Transition trajectories	PrR/1-BRF/8-HO/12	From tenant ownership to home ownership	6509	14.22%
Transition trajectories	PrR/8-HO/13	From private rent to home ownership	6336	13.84%
Transition trajectories	PuR/8-HO/13	From public rent to home ownership	5723	12.50%
Rental trajectories	PuR/4-PrR/2-PuR/15	Majority public rent	4700	10.27%
Rental trajectories	PuR/1-PrR/3-PuR/2-PrR/15	Majority private rent	4220	9.22%
Rental trajectories	PuR/2-PrR/1-Oth/2-PrR/3-Oth/13	Majority other rent	1189	2.60%
Total			45,786	

analysis, we used the variables described in Table 2.

Sequence analysis³ is now a longstanding, traditional and powerful method to follow individuals over their course of life and identify typical trajectories (Aisenbrey & Fasang, 2010). This article thus builds on previous research that has also used sequence analysis to study housing tenure trajectories. In simple words, sequence analysis is a method of following individuals throughout their course of life and often includes grouping similar trajectories into clusters. For instance, for an individual, a sequence of two episodes of public rental (2) can be followed by two episodes of home ownership (1). Such a sequence would appear as 2211 in the data. In a first analytical step, the observed sequences were described and plotted. And in a second, more analytical step, we compared each string of episodes to other sequences and cluster strings around typical trajectories. This procedure produces the most typical tenure trajectories that can be observed from the data. From here, we used our typical tenure trajectories as a dependent variable in a multinomial regression analysis to examine possible determinants of these trajectories.

How we arrived at the most typical tenure trajectories deserves more explanation, as important choices were made here. First, we created a matrix of pairwise dissimilarity that described to what extent each sequence resembled all other sequences in the dataset. There are several types of algorithms for creating dissimilarity matrix; we relied on optimal matching (OM) carried out in R using the TraMiner package (Gabadinho, Ritschard, Müller, & Studer, 2011), which is one of the most popular options (Abbott & Forrest, 1986). OM is a method that calculates the least costly way to transform one sequence into another, and to do so, the algorithm uses two types of operation: insertions/deletions and substitutions. This is to ascertain "costs" from one state to another. We again relied on the default option, which sets insertion and deletion cost to one and has a constant value for the substitution matrix, where all substitution costs are set to 2 (for a discussion see Studer & Ritschard, 2016). This means that we do not distinguish between more or less costly transitions, although one might think that transitioning from private rental to home ownership could be considered more "costly" than for instance transitioning from tenant ownership to home ownership. In order to be able to describe our typical tenure trajectories we performed cluster analysis. We used hierarchical agglomerative

clustering with Ward's algorithm with partition around the medoids (PAM) implemented in WeightedCluster R package (Studer, 2013). Cluster analysis aims to create grouping of a set of objects in such a way that observations within these groups are as homogenous as possible while each group is also being different from other groups. We relied on two steps to decide how many clusters to choose. First, we looked at the distribution of clusters in a dendrogram (not shown) and second, we looked at the results from PAM statistics. With PAM, one predefines the number of clusters, so we thus computed PAM solutions for a varying number of clusters between 4 and 15 and then we selected the solution that both made sense conceptually and had most acceptable quality in terms of partitioning statistics (ASW). Quality of partitioning statistics are shown in Table 3 in the appendix. We discovered early that if we only looked at the quality of partitioning statistics, we would only capture a limited number of clusters that represented stability. But since we are interested in whether people change tenures during their course of life, we decided to find a solution with several clusters, while also ensuring sufficiently high quality of partitioning. We thus found that an eight-cluster solution was the best trade-off between capturing both stability and change in tenure trajectories while also taking the quality of partitioning into account.

6. Results

6.1. Typology of tenure trajectories

The cluster analysis revealed eight distinct types of housing tenure trajectories. The state distribution for eight clusters is depicted in Fig. 1, while sequence frequency plot is shown in Fig. 2 (see Fasang & Liao, 2014). The first type of plots shows how common different states are at different points in time. Fig. 2 shows ten most frequent sequences in each cluster. The sequences are ordered by decreasing frequency from bottom up and their widths are proportional to their frequency. The y-axis shows what proportion of sequences in each cluster are accounted for by these ten most frequent sequences. In Fig. 2, we see that for early entry into home ownership, the ten most frequent sequences account for 35.8% while for majority other rent they account for only 8.3%. For ease of interpretation, we have categorised these eight clusters into three groups, rental trajectories, owning trajectories and transition into ownership trajectories. In Figs. 1 and 2, at the top, we find the two ownership trajectories, early entry into home ownership and majority tenant-ownership. They are followed by the three transition trajectories where individuals start in the rental sector and eventually enter home ownership. And lastly in the figures, three types of rental trajectories are shown.

The ownership trajectories (n = 17,109) are rather common trajectories. The most frequent tenure trajectory (n = 10,476) is characterised by a short initial phase in the public rental sector, then a short phase in the private rental sector, followed by a long and stable period of home ownership for 19 years, see Table 3 below. The second most common

³ Coding of sequence analysis is available here: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/TPU6TG<https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdataverse.harvard.edu%2Fdataset.xhtml%3FpersistentId%3Ddoi%3A10.7910%2FDVN%2FTPU6TG&data=04%7C01%7Ccorrections.macmillan%40elsevier.com%7Cffeb4db37b2643b5903b08d9fb640c93%7C9274ee3f94254109a27f9fb15c10675d%7C0%7C0%7C637817229420250399%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTil6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=Vv62el5sGtoJrhwbQWlZd0f%2FIs9HsYwruaG7JE%2Bwa6M%3D&reserved=0>

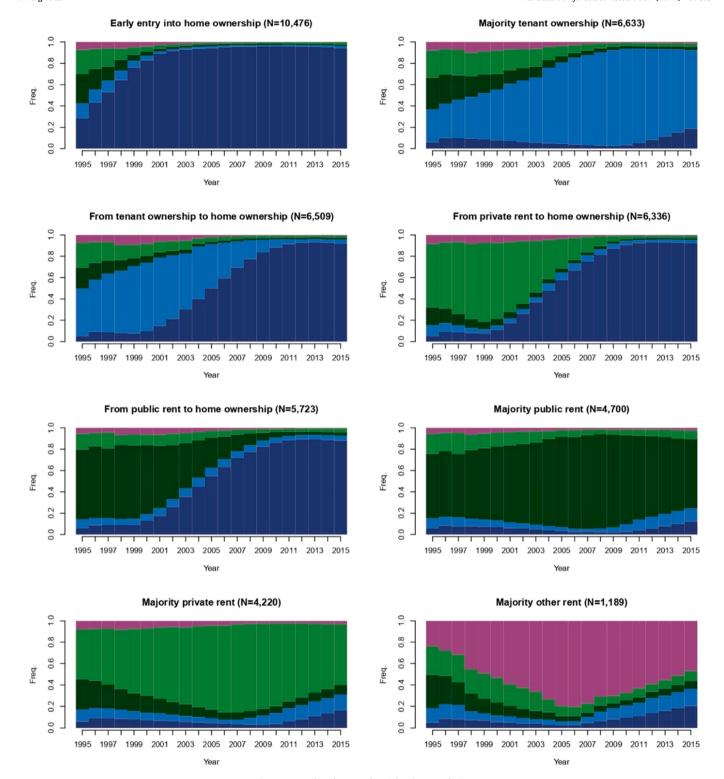


Fig. 1. State distributions for eight cluster solution.

trajectory within this group (n = 6633) is categorised by a relatively long initial period of being a tenant in the rental sector before turning to a long and stable period of tenant ownership.

The most common housing tenure trajectories are in the group of transition trajectories (n = 18,568), they are displayed in light blue rows in Table 3. The most common transition trajectory (n = 6509) is characterised by a short initial phase in the private rental sector, then a longer dominant period of tenant ownership which is followed by a long and stable period of home ownership. This can be seen as a tenure

trajectory in which housing capital is gradually built using tenant ownership and finally individuals are moving into home ownership. The other two transition trajectories, where again home ownership is the end state, are also quite frequent. These two trajectories differ in that one trajectory starts in the private rental sector (n = 6336), and the other starts in the public rental sector (n = 5723). However, it is remarkable that the period of being in the rental sector is equally long (eight years) for both of these transition trajectories, which then end in home ownership. Some of these years in the rental sector, before entering

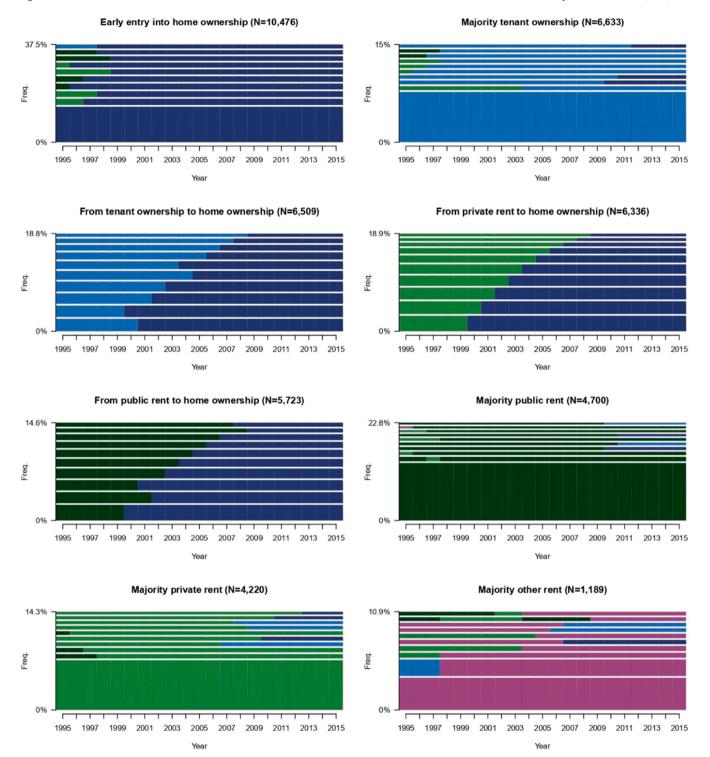


Fig. 2. Sequence frequency plots for eight cluster solution.

home ownership, could be periods of living in student accommodation while studying at universities.

Summing up, both the *ownership trajectories* and the *transition trajectories*, a total of 35,677 individuals end up in ownership (tenant and home ownership). This overwhelming majority (78%) ending up in ownership is somewhat surprising given the traditional emphasis on rental in the Swedish housing system. Next, we describe *rental trajectories*.

Among the *rental trajectories* (yellow rows in Table 3), the most common trajectory (n = 4700) is for individuals who start out in the

public rental sector, enter the private rental sector for a short while and then return to the public rental sector for the rest of the time period. Another rental trajectory (n = 4220) is to stay in the private rental sector after being both a private and a public rental tenant. The least common trajectory (n = 1189), and least common type of tenure overall, is to stay for a longer time in the rental sector where landlords can be private non-profit foundations and the like. At the end of the time period, this trajectory also ends with home ownership, but this is not the dominant tenure type.

Considering the years in the x-axis in Fig. 1, there is a first phase of

Table 4 Multinomial logistic regression with housing trajectory types as dependent variables. * *p < 0.05; * **p < 0.01.

	Majority tenant ownership	From tenant ownership to home ownership	From private rent to home ownership	From public rent to home ownership	Majority public rent	Majority private rent	Majority other rent
Socio-economic factors							
Parental household income	0.794 * **	0.99	0.931	0.756 * **	0.606 * **	0.734 * **	0.756 * **
(Ref: Low)							
	-0.032	-0.04	-0.036	-0.029	-0.024	-0.031	-0.046
Parental household income	0.746 * **	0.987	0.759 * **	0.552 * **	0.325 * **	0.476 * **	0.541 * **
(Ref: Low)							
	-0.03	-0.04	-0.031	-0.023	-0.015	-0.022	-0.034
One parent post-secondary	1.411 * **	1.307 * **	1.281 * **	1.128 * **	0.899 * *	1.027	1.08
educ (Ref: None)							
	-0.056	-0.051	-0.05	-0.047	-0.042	-0.048	-0.078
Both parent post-secondary	2.201 * **	2.025 * **	1.422 * **	1.372 * **	0.939	1.329 * **	1.498 * **
educ (Ref: None)	-0.086	-0.081	-0.062	-0.064	-0.051	-0.066	-0.101
Domographia factors	-0.000	-0.081	-0.002	-0.004	-0.031	-0.000	-0.101
Demographic factors	1.446 * **	1.177 * **	1 041	1 110 * **	1.310 * **	1.338 * **	1 240 * **
Male (Ref: Female)			1.041	1.113 * **			1.349 * **
Parata a bardana a d	-0.048	-0.039	-0.034	-0.037	-0.048	-0.051	-0.082
Foreign background	2.364 * **	1.584 * **	1.258 * **	1.801 * **	3.309 * **	2.403 * **	2.318 * **
Sibling (count)	-0.103	-0.079	-0.068	-0.088	-0.141	-0.118	-0.168
Sibling (count) 0.912 * ** -0.015		0.944 * **	0.983	0.99	1.060 * **	1.012	1.015
01.11 (1		-0.015	-0.016	-0.015	-0.016	-0.017	-0.028
Children (early age 18–25 years)	0.688 * **	0.359 * **	0.551 * **	0.939	1.648 * **	1.399 * **	0.967 * **
	-0.036	-0.016	-0.028	-0.039	-0.069	-0.071	-0.011
Cohabiting (Ref: Married)	1.323 * **	2.620 * **	1.521 * **	1.001	1.276 * **	1.241 * **	1.433 * **
	-0.055	-0.109	-0.064	-0.034	-0.042	-0.048	-0.013
Single (Ref: Married)	2.978 * **	2.512 * **	2.967 * **	1.656 * **	2.697 * **	3.482 * **	4.214 * **
	-0.12	-0.096	-0.119	-0.061	-0.103	-0.144	-0.19
Spatial factors							
Metropolitan (Ref: Large cities)	0.977	1.062	0.941	1.013	1.527 * **	1.095	2.292 * **
	-0.047	-0.053	-0.051	-0.056	-0.087	-0.061	-0.127
Suburbs (Ref: Large cities)	0.755 * **	0.781 * **	0.463 * **	0.694 * **	1.048	0.659 * **	0.94
,	-0.045	-0.047	-0.032	-0.044	-0.067	-0.048	-0.046
Industrial (Ref: Large cities)	0.610 * **	0.868 * *	0.552 * **	0.829 * **	0.740 * **	0.743 * **	0.410 * **
muustim (nen zarge entes)	-0.045	-0.052	-0.035	-0.048	-0.053	-0.057	-0.004
Middle-sized towns (Ref:	0.781 * **	0.851 * **	0.808 * **	0.906 * *	0.901	1.025	0.525 * **
Large cities)							
	-0.041	-0.041	-0.036	-0.042	-0.049	-0.056	-0.011
Other large (Ref: Large cities)	0.673 * **	0.792 * **	0.624 * **	0.810 * **	0.800 * **	0.749 * **	0.509 * **
	-0.049	-0.051	-0.038	-0.047	-0.056	-0.057	-0.008
Other small (Ref: Large cities)	0.406 * **	0.648 * **	0.674 * **	0.594 * **	0.905	0.742 * **	0.396 * **
•	-0.017	-0.05	-0.047	-0.043	-0.069	-0.047	-0.001
Rural (Ref: Large cities)	0.348 * **	0.488 * **	0.487 * **	0.616 * **	0.650 * **	0.723 * **	0.246 * **
. 0	-0.006	-0.036	-0.035	-0.043	-0.05	-0.044	-0.0004
Sparsely populated (Ref: Large cities)	0.601 * **	0.553 * **	0.511 * **	0.756 * **	0.710 * **	0.623 * **	0.135 * **
Zurge cities)	-0.036	-0.043	-0.036	-0.051	-0.055	-0.02	-0.0001
Overrepresented: tenant	2.493 * **	2.507 * **	1.505 * **	1.103	1.386 * **	1.844 * **	1.111
owner (Ref: HO)							
	-0.117	-0.113	-0.075	-0.058	-0.078	-0.102	-0.074
Overrepresented: public rent (Ref: HO)	1.740 * **	1.413 * **	1.567 * **	1.952 * **	2.174 * **	2.016 * **	1.430 * **
	-0.075	-0.06	-0.068	-0.081	-0.097	-0.096	-0.076
Overrepresented: private rent (Ref: HO)	2.006 * **	1.415 * **	2.008 * **	1.038	1.675 * **	2.638 * **	1.114 * *
	-0.097	-0.071	-0.099	-0.056	-0.091	-0.142	-0.06
House prices in 1995	1.002 * **	1.001 * **	1.001 * **	1.001 * **	1.001 * **	1.001 * **	1.002 * **
	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
Constant	0.045 * **	0.080 * **	0.127 * **	0.203 * **	0.066 * **	0.033 * **	0.008 * **
Comptimit	-0.002	-0.003	-0.005	-0.007	-0.002	-0.001	-0.0003
n	45,786	45,786	45,786	45,786	-0.002 45,786	45,786	45,786
Akaike Inf. Crit.	171,880.6	171,880.6	171,880.6	171,880.6	171,880.6	171,880.6	171,880.6
AMBINE IIII. GIII.	1/1,000.0	1/1,000.0	1/1,000.0	1/1,000.0	1/1,000.0	1/1,000.0	1/1,000.0

high change of tenure in the sample population until about the year 2003. This does not mean that residential mobility as such is lower thereafter, but the individuals in our sample have found their tenure type (thus mobility within tenure is not shown). After 2003, the youngest in the study population have reached the age of 26 and individuals in the sample more or less stay in the same tenure type throughout the rest of the period.

Comparing our findings with earlier European research using sequence analysis to analyse tenure trajectories we find our three rental trajectories interesting. Despite the fact that the studies we accounted for above often found about 8–12 tenure trajectories, none of these studies had alternatives with stable rental trajectories of the kind we find in Sweden for our sample. Instead, our interpretation of previous research on the Anglophonic context is that the only stable and long-

term rental trajectory is found within the social housing sector, and that this trajectory is often coupled with disadvantage (Baker, Pham, Leishman, Daniel, & Bentley, 2021; Clapham et al., 2014; Clark et al., 2003; Kneale, Lupton, Obolenskaya, & Wiggins, 2010; Köppe, 2017, 2018; Lee et al., 2017; Spallek et al., 2014). Nevertheless, the importance and the growth of the private rental sector over the last decade has, according to the literature, meant that many young adults tend to stay in the private rental sector for a long period of time (Byrne, 2020; Wong 2019). Thus, a private rental sector trajectory like the one we found for our sample might be found in the Anglophonic context for subsequent cohorts (Pawson, Hulse, & Morris, 2017). In our study, we find three rental trajectories, of which two trajectories end up in public rental and one trajectory in private rental sector. With trajectories covering 21 years this means the sample population is aged 39-46 at the end of the trajectories, thus also covering older ages than previous studies. Here, we find that individuals in the rental trajectory group stay in rental dwellings. Thus, rental housing is a long-term option for many households in Sweden (19%). These stable rental trajectories might be a result from strong security of tenancy in Sweden. In countries with similar housing system as Sweden, such rental trajectories might also be found in these contexts (Bayrakdar, Coulter, Lersch, & Vidal, 2018; Kemp & Kofner, 2010; Lennartz, Arundel, & Ronald, 2015).

6. 2. Multinomial logistic regression

In order to explore the influence of socio-economic, demographic and spatial factors for the housing tenure trajectories individuals tend to follow, we conducted a multinomial logistic regression analysis. Our dependent variables were the eight tenure trajectories described above. Our baseline dependent variable, to which all the other trajectories were compared, was *early entry into home ownership*. This trajectory is thus not shown in the table below. Early entry into home ownership was the most common trajectory found in our sample.

In order to identify factors that influence our observed housing tenure trajectories, we used information on the parental equivalised disposable household income in 1994, individual's parental education in 1994, and foreign background to determine the role of socioeconomic status for type of trajectory that an individual follow. We considered several demographic factors; gender, number of siblings in 1995, and whether the individual was a parent in 1995, and we also considered household status in 1995 in terms of being single, married or cohabiting. And lastly, previous research has shown that characteristics of the region or municipality where one grew up may be important for future pathways, so we took three spatial factors into account. First, we used an aggregation of Swedish municipalities developed by the Swedish Association of Local Authorities and Regions from 1993 that divides Sweden's 290 municipalities into nine categories: metropolitan cities, suburbs to metropolitan cities, large municipalities, industrial municipalities, rural or small municipalities and sparsely populated municipalities. Second, we used two variables depicting the type of housing market in the region by including 1995 prices of single-family houses in the municipality, and we also considered the dominating tenure type in the municipality in that year. It should be noted that all determinants are measured when the individual starts their trajectory on the housing market, in 1995. We are thus not able to capture changes in potential determinants over time.

The results from the multinomial logistic regression are shown in Table 4 below. We also used effects R packaged to compiled figures to show the effects of independent variables as predicted probabilities, they are available in the Appendix, (see Figs. A2–A11). The estimates in Table 4 are shown in relative risk ratios. The columns are sorted on

ownership trajectories, transition trajectories, and rental trajectories, from the most common trajectory to the least common.

Looking at the results from the multinomial regression, we can see that, first, for socio-economic factors, all (significant) coefficients regarding income are lower than 1, which means that when holding all other covariates constant, individuals moving out of middle or high income households are less likely to follow any other tenure trajectory than the baseline one, early entry into home ownership. Reversely put, individuals leaving a parental home that has low income are the least likely to enter early entry into home ownership. This finding is in line with earlier research on young adults entering the owner-occupied sector (Andersson, 2021; Helderman & Mulder, 2007; Köppe, 2018). In this research, it is found that low-income households are unable to realize their preferences due to unaffordability on the housing market. Following the transition trajectory that starts in the private rental sector and ends with home ownership, there is no significant difference between middle- and low-income earners. The lowest relative risk for high-income individuals is rental trajectories. This could reflect the fact that entering the home owning sector in Sweden requires a mortgage from a bank, which often requires a stable and high income for the down payment and for the payment of the interest rate (as well as a fee for residents in tenant-cooperatives).

The other indicator of socio-economic status explaining trajectory type is the role of parental post-secondary education, which is often coupled with high income and stable employment of parents. An interesting pattern emerges for individuals having one or both parents with post-secondary education; compared to the reference category of entering home ownership early, one is more likely to enter transition tenure trajectories that end up in home ownership. This is also true for those starting in the public rental sector and make a transition into home ownership. We can see that having one parent with post-secondary education is associated with being less likely to follow the trajectory ending up in the public rental sector for a long time (16 years) compared to early home ownership. At the same time, having two parents with post-secondary education also means being more likely to enter the ownership trajectories and the transition trajectories, as well as entering the rental trajectories characterised as Majority private rent and Other rental compared to early entry to home-ownership. Note that for Other rental trajectory there are a relatively large number of spells in Other tenure type which is most common in the old university city of Lund (18%), and is also common in Sweden's second biggest city, Gothenburg

Turning to the demographic factors, we can see a gendered dimension where men generally have a higher likelihood than women to be in any other tenure trajectory than early entry to home ownership; this is true regardless of family status. This means that women, to a greater extent, enter home ownership early. Previous research has suggested that women tend to leave the parental home earlier than men, and this might be reflected here (Buck & Scott, 1993). Moreover, after controlling for other variables in the model, having a foreign background, that is either being born in Sweden to foreign born parents or being born abroad, means being more likely to follow any other trajectory than early home ownership. Additionally, having foreign background makes one three times more likely to follow the trajectory ending up with a stable and long period in the public rental sector. Next, the presence of siblings could influence preferences for leaving the parental home early or late, and might also limit the parental resources available for each child (Aquilino, 1991; Avery, Goldscheider, & Speare, 1992). We see that for each one-unit increase in the number of siblings, individuals are less likely to be in the ownership trajectory characterised as a long period of tenant-ownership compared to enter ownership early. With

more siblings, individuals are also more likely to enter the rental trajectory with majority years in public rental. This finding could indicate support of the resource dilution hypothesis (see Curran, 2021 for recent work in the US context), meaning that individuals leaving parental home with fewer resources (because of siblings) face an initial or long period of renting.

If, however, individuals included in our sample become parents before 1995 (that is before they are between 18 and -25 years old (which is well below the average age of first childbearing in Sweden), they are more likely to enter the rental trajectories within the public rental sector compared to early entry into home ownership. Notably, having children at young age also gives individuals a much lower likelihood of entering the transition trajectory starting in tenant ownership, but eventually entering a long period of home ownership. Regardless of children, if one is cohabiting instead of being married to a partner, rather than entering home ownership early, one is more likely to follow an ownership trajectory characterised by being a tenant-owner for a longer period of time, before entering the home owning sector. Cohabiters (with children), compared to married couples, are also more likely to enter all three rental trajectories, one where one stays longer in the private rental sector, one where one stays longer in the public sector, and the other where one rents from non-profit foundations (Other rental). Overall, singles are much more likely to enter any other trajectory than an early entry into home ownership. In particular, singles are more than three times more likely to enter the rental trajectory dominated by private rental, and four times more likely to enter Other rental compared to the reference trajectory of early home ownership entry. This indicates a stronger likelihood for singles to live in rental accommodation, compared to couples. Perhaps preferences play a role but also pooling resources from two earners is an important factor when applying for a mortgage.

Previous research has shown that contextual factors may influence an individual's future trajectory on the housing market. In our model we take three spatial factors into consideration: the type of municipality, the main tenure type in the municipality, and house prices. All of these variables were measured in 1995 so we are not always able to capture the municipality where the individual grew up, due to previous mobility. The classification of municipalities is produced by the Swedish Association of Local Authorities and Regions and rests upon thorough analyses of municipalities demographic, economic and social patterns. This categorization is widely used by academics and is also applied in official statistics. We use large cities as a reference category. Compared to large cities, living in metropolitan areas (Stockholm, Gothenburg and Malmö) makes individuals more likely to follow two of the rental tenure trajectories, public rental and Other rental tenure types, than early entry into home ownership. In particular, living in metropolitan municipalities makes individuals two times more likely to enter the trajectory characterised as Other rental tenure type. This is perhaps unsurprising as this tenure type has a clear geographical clustering in large cities. Living in suburbs instead of living in large cities makes individuals less likely to follow any of the owner-occupied trajectories and the trajectory characterized as living in private rental for a longer period of time. Thus, suburbs, compared to large cities, offer opportunities for early entry into home ownership. For smaller municipalities (industrial, other small, rural, sparsely populated) there are quite similar outlooks. In any of these types of municipalities, individuals are less likely to follow any other trajectory than early entry into home ownership. In middle-sized towns, compared to large cities, individuals are less like to enter transition trajectories and rental trajectory characterized with other types of rental tenures than entering early home ownership.

For municipalities with overrepresentation of tenant ownership, the model shows that the risk of following a trajectory of tenant ownership is about two times higher than entering home ownership early for our sample population. Following the same pattern; in municipalities with an overrepresentation of public rental housing, the likelihood of ending up in the rental trajectory, was also the highest, more than twice as high as entering home ownership early (reference) for the study population. Thus, the structure of the housing market in terms of tenure types seems highly relevant to the tenure trajectory taken by individuals in our study. Note that the characteristic tenure type was measured in 1995 and thus shows the most overrepresented tenure in municipalities where the individuals under study resided when they were between the ages of 18-25, which are also the years when they most probably entered the housing market. Lastly, we tested if house prices could give an indication of tenure trajectories taken by our sample population. In line with our expectations, the results showed that with increasing house prices the risk of entering home ownership early was significantly reduced, that is, all other tenure trajectories are more likely when housing is expensive.

7. Concluding discussion

The aim of this paper was twofold; first, using a holistic approach, one aim was to describe housing tenure trajectories of young adults leaving the parental home, and to follow their housing tenure trajectories from young adulthood to mid-life ages. The second aim was to explore possible determinants of different types of housing tenure trajectories using a social and spatial stratification framework. We found eight different types of typical tenure trajectories that the population under study followed. First, we found a remarkable stability in terms of followed tenure type. Most individuals, after a short while in the rental sector, tended to enter the home owning sector or the tenant-ownership sector and stay there for a long period of time. Our results from Sweden were thus similar to findings on tenure trajectories in other contexts. It is interesting that we also found that there is not only one type of owneroccupied trajectory, but instead there are five different routes into ownership. This diversity should be taken into account for future studies, especially when applying methods that focus on one type of transition on the housing market, for instance studying entrance into the owner occupied sector. However, unlike the Anglophone contexts, we found three rental trajectories where rental housing is a long-term or even permanent option for a great number of individuals. Our results point to the importance of taking a long-time span into account when studying transitions on the housing market. Our study is thus unique as we follow individuals for 21 years and over the most mobile years of their lives. This time span has allowed us to see individuals' behaviour on the housing market as a continuum, rather than isolated events.

In order to explore determinants that may influence which type of tenure trajectory individuals tend to follow, we carried out a multinomial regression analysis. Our results showed that socio-economic factors, in terms of leaving a parental home with high income, increased the likelihood of entering the home owning sector early. Having parents with university education increased the likelihood of following the trajectories ending up in owning, either tenant ownership or the transition trajectories. These results may indicate a life course in urban areas among individuals with 'middle class' parents that involves spending time 'preparing' (studies, travel, occasional work and later family formation) before entering the ownership sector. This finding resonates well with recent literature on young adults' pathways to adulthood or pathways between education and work (Lorentzen, Bäckman, Ilmakunnas, & Kauppinen, 2019; Salmela-Aro, Kiuru, Nurmi, & Eerola,

2011; Schwanitz, 2017; Sironi, Barban, & Impicciatore, 2015). Thus, it seems that young adults from more advantageous backgrounds are able to "prepare" and perhaps not have a stable income or housing during their young adulthood when at the same time, their counterparts from families with less resources ends up in rental trajectories. One reason to this pattern might be the transmission of socio-economic position in combination with transmission of knowledge that higher educated parents offer. Thus, the expectation of high education for own children ensures better position in the labour market which, sooner or later, enables home ownership. Billari et al. (2019) hypothesized that parental background influence both the intention and occurrence of demographic events such as moving into home ownership. Parental influence may come from processes of socialisation and transmission of knowledge, but most importantly perhaps through financing their owner-occupied housing (Druta & Ronald, 2017; Heath & Calvert, 2013; Helderman & Mulder, 2007; Köppe, 2018).

Across Western Europe, there are increasing concerns about young adults' situation on the housing market. In a UK context, "generation rent" are unable to attain home ownership, and in Sweden, recent research suggests that large parts of the younger population are unable to either enter the owner-occupied sector or find suitable rental housing (Andersson, 2021; Grander, 2021; Hochstenbach & Boterman, 2015). The cohort we followed in our study met a housing market that perhaps offered more opportunities than what today's young adults experience. Several policy changes have gradually dissolved the previously renowned tenure neutrality. With tenure neutrality, home owners should not have any financial benefits over renters (Christophers, 2013; Lundqvist, 1987). The cohort we studied encountered banks with generous lending rules and minimal deposit requirements. Their parental wealth could finance housing as inheritance and gift tax was abolished in 2005. Sitting tenants were allowed to convert their rental contract into a tenant-ownership paying half of the market price. And lastly, interest rates have been kept low over several decades. As a result, rental housing is on average 300 Euros more expensive per month than the counterpart in the owner occupied sector (SOU, 2014).

To conclude, we followed cohorts born between the years 1970 and 1977, that were among the first to meet the type of housing market that is still in place today. If the patterns of tenure trajectories found in this study are also followed for future generations, we can see that resources and spatial context have a great impact on the type of trajectory individuals follow. These choices may have repercussions for well-being in older ages, as Sweden might be turning towards becoming an assetbased welfare state. In such systems, accumulating wealth through housing ownership is becoming more important for pension ages. This is challenging the idea of tenure neutrality that once had an important function in the Swedish housing system. Thus, unequal access to the home ownership sector is a key challenge for the Swedish housing market.

Acknowledgements

We acknowledge financial support from the Swedish Foundation for Humanities and Social Sciences (Riksbankens Jubileumsfond, RJ), grant registration M18-0214:1, and from the Swedish Research Council (VR), grant 2020-01046.

Appendix

A.1. Operationalization of tenure types

Table A1. Illustrating the variable tenure type with five alternatives: public rental housing, private rental housing, home-ownership, tenant-ownership and other rental. The alternatives emerge after combining information on type of property and the owner of the property (information from tax property register, linked with and anonymous ID-number to every individual residing in Sweden). It should be noted that we cannot capture individuals residing in the so called second-hand

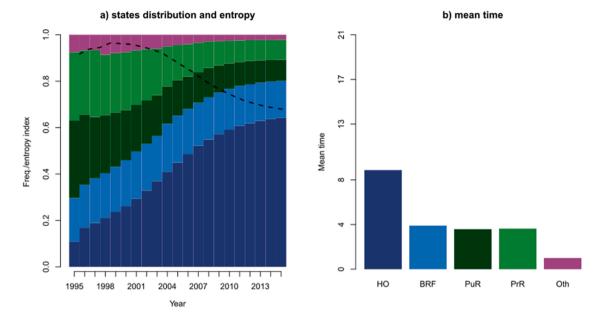
Table A1
Housing tenure types in Sweden, combining owner of property and type of property.

	Type of property		
Owner of the property	Semi-detached houses (rowhouses)	Single-family houses	Multi-family dwellings
Municipal housing companies	Public rental housing (few, but exists)	N.a (very uncommon)	Public rental housing (majority)
Private landlords	N.a (very uncommon)	N.a (very uncommon)	Private rental housing
Private ownership	Home ownership	Home ownership	Owner-occupied apartments. Emerging tenure type in Sweden since 2009. Below 1% of the housing stock. Not included in our analysis.
Housing association	Tenant- ownership	N.a (very uncommon)	Tenant-ownership
Private foundation, church, private organizations	N.a (very uncommon)	N.a (very uncommon)	Other rental

rental market, who are sub-letting. This is a drawback in our study since this second-hand rental market is popular among young adults and has also increased since deregulation of sub-letting rents in 2013, especially in the larger cities.

A.2. Descriptive results

Fig. A1 shows descriptive results for state sequences. Each tenure type is represented by a colour; home ownership is dark blue, tenant ownership is light blue, public rental is dark green, private rental is light green and other rental is magenta. For our sample of individuals ranging between 18 and 46 years there is much movement between states, that is tenure types, over the years 1995–2015, reflected in the wavelike distribution of states in Fig. A1 a). Fig. A1 b) confirms that the mean time in home ownership is the longest, whereas the mean time in the other ownership tenure is the second longest. Thereafter, rental tenures all have a shorter mean time as states for the individuals in this sample. Lastly, in Fig. A1 c) the modal states across years show public and private rental to be most common in the first five years, changing to home ownership being the most common in the remaining 16 years.



c) modal state sequence

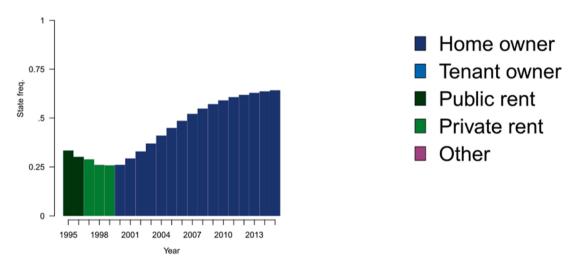


Fig. A1. Tenure sequence for individuals aged 18–25 who left parental home between 1994 and 1995.

A.3. Quality of partitioning statistics

Table A2.

Table A2Quality of partitioning.

	PBC	HG	HGSD	ASW	ASWw	CH	R2	CHsq	R2sq	HC
cluster4	0.665	0.846	0.834	0.363	0.363	8762.554	0.365	21735.810	0.588	0.087
cluster5	0.602	0.823	0.810	0.291	0.291	7864.842	0.407	20112.530	0.637	0.104
cluster6	0.555	0.819	0.806	0.293	0.293	7193.394	0.440	18539.180	0.669	0.110
cluster7	0.522	0.817	0.804	0.294	0.294	6725.715	0.469	17468.650	0.696	0.111
cluster8	0.537	0.854	0.842	0.308	0.308	6306.259	0.491	17618.290	0.729	0.093
cluster9	0.532	0.868	0.856	0.295	0.295	5885.884	0.507	16659.980	0.744	0.088
cluster10	0.485	0.846	0.833	0.270	0.270	5428.140	0.516	15206.780	0.749	0.102
cluster11	0.451	0.836	0.823	0.236	0.236	5169.767	0.530	14587.040	0.761	0.115
cluster12	0.432	0.832	0.819	0.239	0.239	4936.939	0.543	13958.340	0.770	0.117
cluster13	0.432	0.850	0.837	0.245	0.245	4678.486	0.551	13420.730	0.779	0.108
cluster14	0.424	0.856	0.844	0.246	0.246	4423.885	0.557	12743.750	0.784	0.104
cluster15	0.423	0.866	0.854	0.243	0.243	4235.216	0.564	12336,460	0.791	0.099

A.4. Predicted probabilities, Figs. A2-A11 below

.

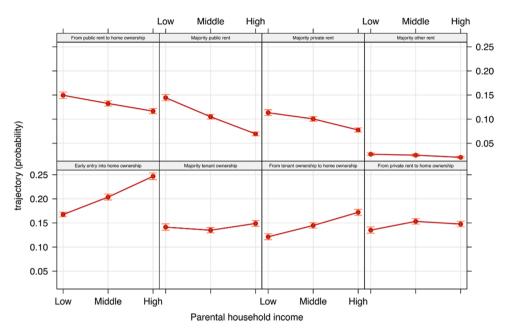


Fig. A2. Predicted probability of following tenure trajectories by parental household income.

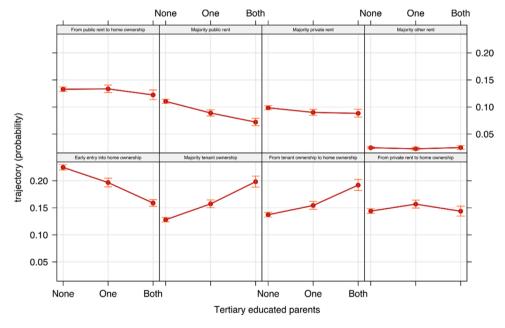


Fig. A3. Predicted probability of following tenure trajectories by the number of parents with tertiary education.

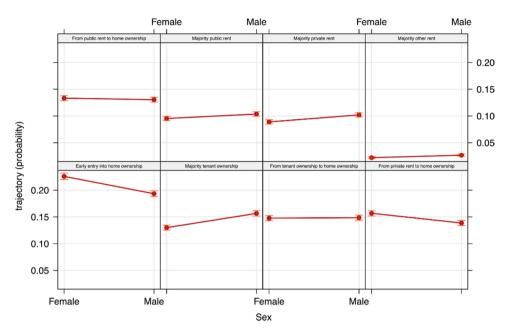
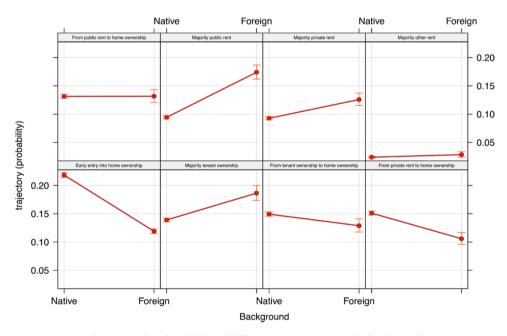


Fig. A4. Predicted probability of following tenure trajectories by sex.



 $\textbf{Fig. A5.} \ \ \textbf{Predicted probability of following tenure trajectories by background.}$

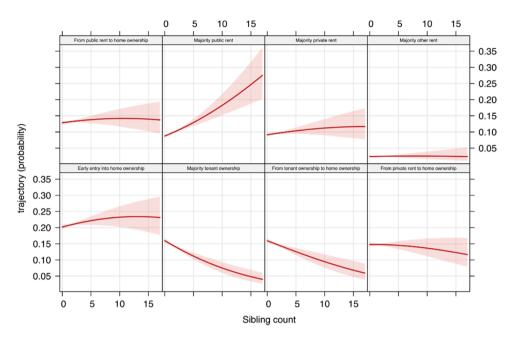


Fig. A6. Predicted probability of following tenure trajectories by number of siblings.

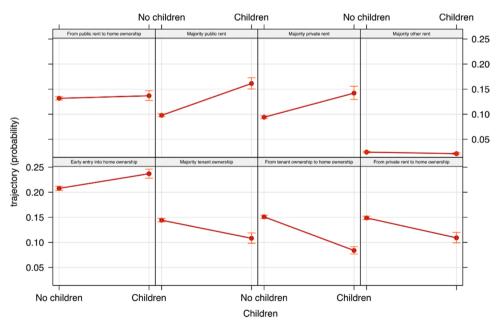


Fig. A7. Predicted probability of following tenure trajectories by individual's parental status.

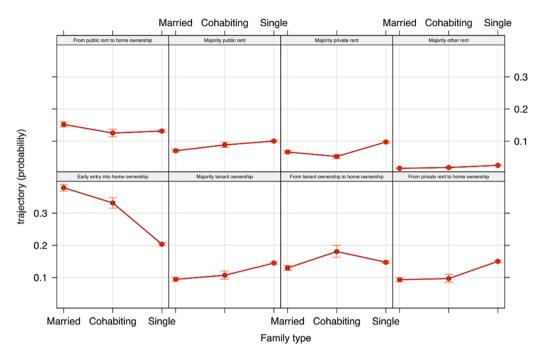


Fig. A8. Predicted probability of following tenure trajectories by individual's' family type.

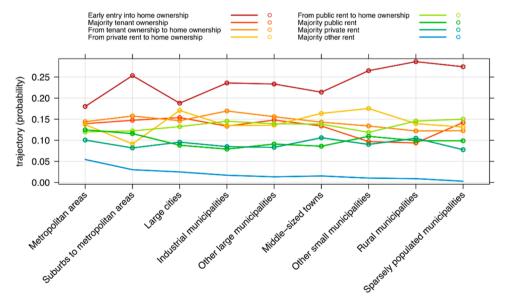


Fig. A9. Predicted probability of following tenure trajectories by individual's municipality type.

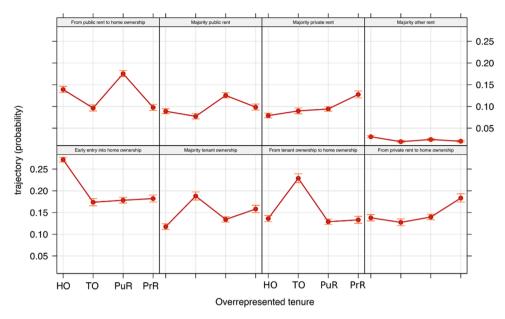


Fig. A10. Predicted probability of following tenure trajectories by overrepresented tenure type in individuals' municipality.

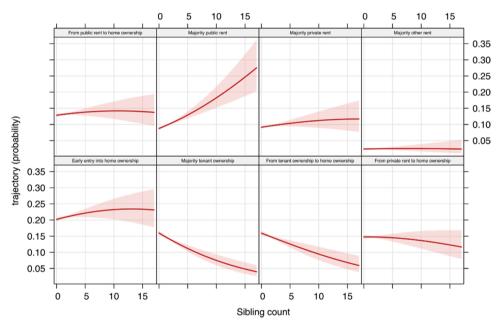


Fig. A11. Predicted probability of following tenure trajectories by price for houses in individual's municipality, thousand SEK.

References

Abbott, A. (1995). Sequence analysis: new methods for old ideas. *Annual Review of Sociology, 21*(1), 93–113. https://doi.org/10.1146/annurev.so.21.080195.000521 Abbott, A., & Forrest, J. (1986). Optimal matching methods for historical sequences. *Journal of Interdisciplinary History, 16*(3), 471. https://doi.org/10.2307/204500 Abramsson, M. (2003). Housing careers in a changing welfare state. *Umeā Univ.*

Abramsson, M., & Andersson, E. (2016). Changing preferences with ageing – housing choices and housing plans of older people. *Housing, Theory and Society, 33*(2), 217–241. https://doi.org/10.1080/14036096.2015.1104385

Aisenbrey, S., & Fasang, A. E. (2010). New life for old ideas: the 'second wave' of sequence analysis bringing the 'course' back into the life course. Sociological Methods & Research, 38(3), 420–462. https://doi.org/10.1177/0049124109357532

Alm Fjellborg, Andreas (2021). Leaving poor neighbourhoods: the role of income and housing tenure. Housing Studies, 36(7), 1122–1142. https://doi.org/10.1080/ 02673037.2020.1748177

Andersson, A. B. (2021). Social capital and leaving the nest: Channels and housing tenures. *Social Networks*, 65, 8–18. https://doi.org/10.1016/j.socnet.2020.10.002

Andersson, E., & Abramsson, M. (2012). Changing residential mobility rates of older people in Sweden. *Ageing & Society*, 32(06), 963. https://doi.org/10.1017/

Andersson, R., & Turner, L. M. (2014). Segregation, gentrification, and residualisation: From public housing to market-driven housing allocation in inner city Stockholm. *International Journal of Housing Policy, 14*(1), 3–29. https://doi.org/10.1080/14616718.2013.872949

Angelini, V., Laferrère, A., & Weber, G. (2013). Home-ownership in Europe: How did it happen? Advances in Life Course Research, 18(1), 83–90. https://doi.org/10.1016/j. alcr.2012.10.006

Aquilino, W. S. (1991). Family structure and home-leaving: A further specification of the relationship. *Journal of Marriage and Family*, 53(4), 999–1010. https://doi.org/ 10.2307/353003

Arundel, R., & Ronald, R. (2021). The false promise of homeownership: Homeowner societies in an era of declining access and rising inequality. *Urban Studies*, *58*(6), 1120–1140. https://doi.org/10.1177/0042098019895227

Avery, R., Goldscheider, F., & Speare, A. (1992). Feathered nest/gilded cage: Parental income and leaving home in the transition to adulthood. *Demography*, 29(3), 375–388. https://doi.org/10.2307/2061824

- Baker, E., Pham, A., Leishman, C., Daniel, L., & Bentley, R. (2021). Urban social housing pathways: A linked administrative data analysis. *Urban Policy and Research*, 39(1), 1–15. https://doi.org/10.1080/08111146.2020.1838894
- Bayrakdar, S., Coulter, R., Lersch, P., & Vidal, S. (2018). Family formation, parental background and young adults' first entry into homeownership in Britain and Germany. *Housing Studies*, 0(0), 1–23. https://doi.org/10.1080/ 02673037.2018.1509949
- Bengtsson, B. (2001). Housing as a social right: Implications for welfare state theory. Scandinavian Political Studies, 24(4), 255–275.
- Billari, F. C., Hiekel, N., & Liefbroer, A. C. (2019). The social stratification of choice in the transition to adulthood. European Sociological Review, 35(5), 599–615. https://doi.org/10.1093/esr/icz025
- Blackwell, T., & Bengtsson, B. (2021). The resilience of social rental housing in the United Kingdom, Sweden and Denmark. How institutions matter. *Housing Studies*, 0 (0), 1–21. https://doi.org/10.1080/02673037.2021.1879996
- Borg, I. (2019). Universalism lost? The magnitude and spatial pattern of residualisation in the public housing sector in Sweden 1993–2012. *Journal of Housing and the Built Environment*, 34(2), 405–424. https://doi.org/10.1007/s10901-018-09638-8
- Bråmå, Å., & Andersson, R. (2010). Who leaves rental housing? Examining possible explanations for ethnic housing segmentation in Uppsala, Sweden. *Journal of Housing* and the Built Environment, 25(3), 331–352.
- Buck, N., & Scott, J. (1993). She's leaving home: But why? An analysis of young people leaving the parental home. *Journal of Marriage and Family*, 55(4), 863–874. https://doi.org/10.2307/357769
- Byrne, Michael (2020). Generation rent and the financialization of housing: a comparative exploration of the growth of the private rental sector in Ireland, the UK and Spain. *Housing Studies*, 35(4), 743–765. https://doi.org/10.1080/ 02673037.2019.1632813
- Christophers, B. (2013). A monstrous hybrid: The political economy of housing in early twenty-first century Sweden. *New Political Economy*, 18(6), 885–911. https://doi. org/10.1080/13563467.2012.753521
- Christophers, B., & O'Sullivan, D. (2018). Intersections of inequality in homeownership in Sweden. *Housing Studies*, 0(0), 1–28. https://doi.org/10.1080/ 02673037.2018.1495695
- Chudnovskaya, M. (2019). Housing context and childbearing in Sweden: A cohort study. Housing Studies, 34(3), 469–488. https://doi.org/10.1080/02673037.2018.1458288
- Clapham, D., Mackie, P., Orford, S., Thomas, I., & Buckley, K. (2014). The housing pathways of young people in the UK. Environment and Planning A: Economy and Space, 46(8), 2016–2031. https://doi.org/10.1068/a46273
- Clark, W. A., & Onaka, J. L. (1983). Life cycle and housing adjustment as explanations of residential mobility. *Urban Studies*, 20(1), 47–57.
- Clark, W. A. V., Deurloo, M. C., & Dieleman, F. M. (2003). Housing careers in the United States, 1968-93: Modelling the sequencing of housing states. *Urban Studies*, 40(1), 143–160. https://doi.org/10.1080/00420980220080211
- Curran, M. A. (2021). The efficacy of cash supports for children by race and family size: Understanding disparities and opportunities for equity. *Race and Social Problems*, 13 (1), 34–48. https://doi.org/10.1007/s12552-021-09315-6
- Damhuis, R., Gent, W., van, Hochstenbach, C., & Musterd, S. (2019). The regional and local dynamics of life course and housing. A Research Agenda for Housing. (htt ps://www.elgaronline.com/view/edcoll/9781788116503/9781788116503.00018. xml).
- Doling, J., & Ronald, R. (2010). Home ownership and asset-based welfare. Journal of Housing and the Built Environment, 25(2), 165–173. https://doi.org/10.1007/s10901-009-9177-6
- Druta, O., & Ronald, R. (2017). Young adults' pathways into homeownership and the negotiation of intra-family support: A home, the ideal gift. *Sociology, 51*(4), 783–799. https://doi.org/10.1177/0038038516629900
- Elder, G. H., Johnson, M. K., & Crosnoe, R. (2003). The emergence and development of life course theory. In J. T. Mortimer, & M. J. Shanahan (Eds.), *Handbook of the Life Course* (pp. 3–19). US: Springer. https://doi.org/10.1007/978-0-306-48247-2_1.
- Elder, G. H., & O'Rand, A. (1995). Adult lives in a changing society. In K. Cook, G. A. Fine, & J. S. House (Eds.), Sociological Perspectives on Social Psychology (pp. 452–475). Allyn and Bacon.
- Evans, K. (2007). Concepts of bounded agency in education, work, and the personal lives of young adults. *International Journal of Psychology*, 42(2), 85–93. https://doi.org/ 10.1080/00207590600991237
- Fasang, A. E., & Liao, T. F. (2014). Visualizing sequences in the social sciences: relative frequency sequence plots. Sociological Methods & Research, 43(4), 643–676. https://doi.org/10.1177/0049124113506563
- Feijten, P., & Mulder, C. H. (2002). The timing of household events and housing events in the Netherlands: A longitudinal perspective. *Housing Studies*, 17(5), 773–792. https://doi.org/10.1080/0267303022000009808
- Friedrichs, J., Galster, G., & Musterd, S. (2003). Neighbourhood effects on social opportunities: The European and American research and policy context. *Housing Studies*, 18(6), 797–806. https://doi.org/10.1080/0267303032000156291
- Gabadinho, A., Ritschard, G., Müller, N. S., & Studer, M. (2011). Analyzing and visualizing state sequences in R with TraMineR. *Journal of Statistical Software*, 40(1), 1–37. https://doi.org/10.18637/jss.v040.i04
- Grander, M. (2017). New public housing: A selective model disguised as universal? Implications of the market adaptation of Swedish public housing. *International Journal of Housing Policy, Journal Article*, 1–18. https://doi.org/10.1080/19491247.2016.1265266
- Grander, M. (2018). Off the beaten track? Selectivity, discretion and path-shaping in Swedish public housing. Housing. Theory and Society, Journal Article, 1–16. https://doi.org/10.1080/14036096.2018.1513065

- Grander, M. (2021). The inbetweeners of the housing markets young adults facing housing inequality in Malmö, Sweden. *Housing Studies*, 0(0), 1–18. https://doi.org/ 10.1080/02673037.2021.1893278
- Grundström, K., & Molina, I. (2016). From Folkhem to lifestyle housing in Sweden: Segregation and urban form, 1930s–2010s. *International Journal of Housing Policy*, *Journal Article*, 1–21. https://doi.org/10.1080/14616718.2015.1122695
- Heath, S., & Calvert, E. (2013). Gifts, loans and intergenerational support for young adults. Sociology, 47(6), 1120–1135. https://doi.org/10.1177/003803851245573
- Helderman, A., & Mulder, C. (2007). Intergenerational transmission of homeownership: The roles of gifts and continuities in housing market characteristics. *Urban Studies*, 44(2), 231–247. https://doi.org/10.1080/00420980601075018
- Herbers, D. J., Mulder, C. H., & Mòdenes, J. A. (2014). Moving out of home ownership in later life: The influence of the family and housing careers. *Housing Studies*, 29(7), 910–936. https://doi.org/10.1080/02673037.2014.923090
- Hochstenbach, C., & Boterman, W. R. (2015). Navigating the field of housing: Housing pathways of young people in Amsterdam. *Journal of Housing and the Built Environment*, 30(2), 257–274. https://doi.org/10.1007/s10901-014-9405-6
- Holmqvist, E., & Turner, L. M. (2014). Swedish welfare state and housing markets: Under economic and political pressure. *Journal of Housing and the Built Environment*, 29(2), 237–254. https://doi.org/10.1007/s10901-013-9391-0
- Kauppinen, T. M., Skifter andersen, H., & Hedman, L. (2015). Determinants of immigrants' entry to homeownership in three nordic capital city regions. Geografiska Annaler Series B Human Geography, 97(4), 343–362. https://doi.org/10.1111/ geob.12085
- Kemeny, J. (1995). From public housing to the social market: Rental policy strategies in comparative perspective. Routledge.
- Kemp, P. A., & Kofner, S. (2010). Contrasting varieties of private renting: England and Germany. *International Journal of Housing Policy*, 10(4), 379–398. https://doi.org/ 10.1080/14616718.2010.526401
- Kneale, D., Lupton, R., Obolenskaya, P., & Wiggins, R. (2010). A cross-cohort description of young people's housing experience in Britain over 30 years: An application of sequence analysis. London: UCL Social Research Institute, University College.
- Köppe, S. (2017). Britain's new housing precariat: Housing wealth pathways out of homeownership. *International Journal of Housing Policy*, 17(2), 177–200. https://doi. org/10.1080/14616718.2016.1185286
- Köppe, S. (2018). Passing it on: Inheritance, coresidence and the influence of parental support on homeownership and housing pathways. *Housing Studies*, 33(2), 224–246. https://doi.org/10.1080/02673037.2017.1408778
- Lee, K. O., Smith, R., & Galster, G. (2017). Subsidized housing and residential trajectories: An application of matched sequence analysis. *Housing Policy Debate*, *Journal Article*, 1–32. https://doi.org/10.1080/10511482.2017.1316757
- Lennartz, C., Arundel, R., & Ronald, R. (2015). Younger adults and homeownership in Europe through the global financial crisis. *Population, Space and Place, Journal Article*
- Lorentzen, T., Bäckman, O., Ilmakunnas, I., & Kauppinen, T. (2019). Pathways to adulthood: Sequences in the school-to-work transition in Finland, Norway and Sweden. Social Indicators Research, 141(3), 1285–1305. https://doi.org/10.1007/ s11205-018-1877-4
- Lundqvist, L. J. (1987). Sweden's housing policy and the quest for tenure neutrality. Scandinavian Housing and Planning Research, 4(2), 119–133. https://doi.org/ 10.1080/02815738708730124
- Mulder C. H. (1993). Migration dynamics: A life course approach. AmsterdamThesis. \https://dare.uva.nl/search?identifier=39ccf468-f727-4f9f-8903-5cde7d49f66f\rangle.
- Öst, C. E. (2012). Parental wealth and first-time homeownership: A cohort study of family background and young adults' housing situation in Sweden. *Urban Studies*, 49 (10), 2137–2152. https://doi.org/10.1177/0042098011427185
- Pawson, H., Hulse, K., & Morris, A. (2017). Interpreting the rise of long-term private renting in a liberal welfare regime context. *Housing Studies*, 32(8), 1062–1084. https://doi.org/10.1080/02673037.2017.1301400
- Pfeffer, F. T., & Waitkus, N. (2021). The wealth inequality of nations. American Sociological Review. https://doi.org/10.1177/00031224211027800
- Pollock, G. (2007). Holistic Trajectories: A Study of Combined Employment, Housing and Family Careers by Using Multiple-sequence Analysis. *Journal of the Royal Statistical Society. Series A (Statistics in Society)*, 170(1), 167–183. http://www.jstor.org/stable/4623140
- Ruonavaara, H. (2005). How divergent housing institutions evolve: A comparison of Swedish tenant co-operatives and finnish shareholders' housing companies. *Housing, Theory and Society*, 22(4), 213–236. https://doi.org/10.1080/14036090500375373
- Salmela-Aro, K., Kiuru, N., Nurmi, J.-E., & Eerola, M. (2011). Mapping pathways to adulthood among Finnish university students: Sequences, patterns, variations in family- and work-related roles. Advances in Life Course Research, 16(1), 25–41. https://doi.org/10.1016/j.alcr.2011.01.003
- Schwanitz, K. (2017). The transition to adulthood and pathways out of the parental home: A cross-national analysis. Advances in Life Course Research, 32, 21–34. https://doi.org/10.1016/j.alcr.2017.03.001
- Sironi, M., Barban, N., & Impicciatore, R. (2015). Parental social class and the transition to adulthood in Italy and the United States. Advances in Life Course Research, 26, 89–104. https://doi.org/10.1016/j.alcr.2015.09.004
- Smits, A., & Mulder, C. H. (2008). Family dynamics and first-time homeownership. Housing Studies, 23(6), 917–933. https://doi.org/10.1080/02673030802416601
- SOU, 2014:1. (2014). Vissa bostadsbeskattningsfrågor (2014:1). (https://www.regeringen.se/rattsliga-dokument/statens-offentliga-utredningar/2014/01/sou-20141/).
- Spallek, M., Haynes, M., & Jones, A. (2014). Holistic housing pathways for Australian families through the childbearing years. *Longitudinal & Life Course Studies*, 5(2), 205–226.

- Statistics Sweden(2021). Flyttar inom Sverige. (https://www.scb.se/hitta-statistik/sverige-i-siffror/manniskorna-i-sverige/flyttar-inom-sverige/).
- Stephens, M. (2020). How housing systems are changing and why: A critique of kemeny's theory of housing regimes. *Housing, Theory and Society, 0*(0), 1–27. https://doi.org/10.1080/14036096.2020.1814404
- Studer, M. (2013). WeightedCluster Library Manual: A practical Guide to creating typologies of trajectories in the Social Sciences with R. https://doi.org/10.12682/lives.2296-1658.2013.24
- Studer, M., & Ritschard, G. (2016). What matters in differences between life trajectories: A comparative review of sequence dissimilarity measures. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 179(2), 481–511. https://doi.org/10.1111/rssa.12125
- Turner, B., & Whitehead, C. M. (2002). Reducing housing subsidy: Swedish housing policy in an international context. *Urban Studies*, 39(2), 201–217.
- Turner, L. M. (2008). Who gets what and why? vacancy chains in Stockholm's housing market. *International Journal of Housing Policy*, 8(1), 1–19. https://doi.org/10.1080/ 14616710701817133
- Turner, L. M., & Hedman, L. (2014). Linking integration and housing career: A longitudinal analysis of immigrant groups in Sweden. *Housing Studies*, 29(2), 270–290. https://doi.org/10.1080/02673037.2014.851177
- Wind, B., & Hedman, L. (2018). The uneven distribution of capital gains in times of socio-spatial inequality: Evidence from Swedish housing pathways between 1995 and 2010. *Urban Studies*, 55(12), 2721–2742. https://doi.org/10.1177/0042098017730520
- Wong, Mark Tsun On (2019). Intergenerational family support for 'Generation Rent': the family home for socially disengaged young people. *Housing Studies*, *34*(1), 1–23. https://doi.org/10.1080/02673037.2017.1364713