# WILEY

# RESEARCH ARTICLE

# Parents, local house prices, and leaving home in Britain

#### Correspondence

Sait Bayrakdar, Department of Sociology, University of Cambridge, Free School Lane, Cambridge CB2 3RQ, UK. Email: sb2152@cam.ac.uk

#### **Funding information**

Economic and Social Research Council Future Research Leaders, Grant/Award Number: ES/ L009498/1; Isaac Newton Trust; Economic and Social Research Council

## **Abstract**

Leaving the parental home is a significant step in young adults' housing careers and pathways to independence. Although a large literature examines how life course trajectories influence leaving home, much less is known about how the "linked lives" of parents and the local cost of housing shape young people's departures from the family residence. By enriching the U.K. Household Longitudinal Study with house price data, this study investigates how parental attributes and the geography of local housing costs influence home leaving in contemporary Britain. The results show that higher local house prices are associated with delayed departure from the parental home, although the relative magnitude of this effect is modest. By contrast, the effects of parental factors are more nuanced. Parental characteristics have little impact on the odds of leaving home to form partnerships, whereas the likelihood of departing to live alone or in shared accommodation is reduced by parental homeownership or living with both biological parents. Taken together, these findings suggest that young adults' residential pathways are shaped by the complex patterns of choice and constraint that are generated by disparities in family circumstances and local opportunity structures.

### **KEYWORDS**

housing, leaving home, linked lives, living arrangements, parents, young adults

# 1 | INTRODUCTION

Leaving the parental home has traditionally been regarded as a significant and meaningful life event that helps mark the transition to adulthood. The timing of departures and the residential outcomes of home leaving influence the risk of experiencing poverty in early adulthood, the long-term trajectory of housing careers, and the dynamics of housing demand (lacovou, 2010). Decisions to leave or stay in the parental home are also bound up with changing family relations and fluctuating intergenerational support practices (Holdsworth, 2013).

Over the last decade, scholars have debated whether the restructuring of early life course careers means that Western societies are moving towards a new model of "late, protracted and complex" transitions to adulthood (Billari & Liefbroer, 2010). Several changes in home-leaving behaviour have been posited to be part of this structural shift. First, United Kingdom (U.K.) and United States (U.S.) data indicate that there has been a significant increase in the proportion of adults younger than 35 living with a parent since 2000 (Fry, 2016;

Office for National Statistics, 2015). Second, leaving home is thought to be becoming a more protracted, fuzzy, and reversible process as many leavers subsequently "boomerang" back to the family residence and returning home becomes an increasingly normative aspect of young adulthood (Roberts, 2013; Stone, Berrington, & Falkingham, 2014). Third, trends such as the expansion of higher education and tight housing systems mean that leaving home has become a more ambiguous step that often does not sever young people's dependence on their parents. Many young Britons now leave home for temporary and semiautonomous situations such as student accommodation whereas others rely on parental support to buy or rent a dwelling (Heath & Calvert, 2013).

Explanations of temporal trends in young adults' living arrangements tend to place differing levels of emphasis on the relative importance of agency and structural constraints (Heath, 1999). Some scholars note that societal "individualisation" created by the destandardisation of life course careers, changing cultural values, and the declining power of traditional normative life pathways mean that young people are increasingly constructing their lives as reflexive

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

Copyright © 2017 The Authors Population, Space and Place Published by John Wiley & Sons Ltd

<sup>&</sup>lt;sup>1</sup>Department of Sociology, University of Cambridge, Cambridge, UK

<sup>&</sup>lt;sup>2</sup>UCL, Department of Geograph, London, UK

"choice biographies" (Furlong, 2013). In this view, young people's residential decisions are increasingly shaped by lifestyle preferences and a desire to create and project preferred identities (Clapham, 2005; Kenyon & Heath, 2001).

However, popular explanations of increased rates of parental coresidence often stress that structural constraints are increasingly restricting young people's ability to choose their residential arrangements (Redfern Review, 2016; Shelter, 2014). These discussions highlight how underemployment and unemployment, low pay, job insecurity, welfare retreat, and student debts are eroding young adults' ability to live independently at the same time as problems of housing access and affordability are making it harder to enter owner-occupation and rental systems (Berrington & Stone, 2014). The growing difficulty of overcoming these constraints could mean that parental resources and intergenerational support are now critical factors in young people's home-leaving decisions (McKee, 2012). This could restrict social mobility and exacerbate intergenerational transmissions of (dis)advantage. Moreover, the fact that intensified housing market constraints might partly explain why more young people are living with a parent suggests that the polarised local geography of housing systems may shape when and how young people leave home. Indeed, a recent survey of working young Britons living in the parental residence found that 67% of respondents reported living at home due to housing constraints (Shelter, 2014).

To shed light on these issues, this paper asks "how do parental background and local house prices influence when and how young people leave home?" We use new data from the U.K. Household Longitudinal Study (UKHLS; also known as Understanding Society) to make two novel contributions. First, we build on longitudinal research conducted using the 1958 National Child Development Study (e.g., Ermisch & Di Salvo, 1997) and the 1991–2008 British Household Panel Survey (BHPS; e.g., Ermisch, 1999) by examining how the most recent cohort of young Britons—colloquially known as millennials—are leaving home in the constrained conditions that have prevailed since 2009. Second, we assess whether local housing prices influence home-leaving behaviour while taking into account other (un)observed characteristics of origin locales. This multilevel approach extends recent cross-sectional research correlating the geography of national housing systems with living arrangements in young adulthood (Mandic, 2008).

## 2 | BACKGROUND

Comparative studies often place Britain within a north(west)ern cluster of European countries where young adults usually leave home earlier than their Mediterranean and Eastern European counterparts (lacovou, 2010; Mandic, 2008). This demographic geography has a long heritage. In preindustrial England, children often left home at a young age to work (for example, girls in domestic service), or instead tended to form independent households at marriage (Wall, 1983). This model of early exits tightly synchronised with other life events still resonated in the 1970s and 1980s when a supportive welfare system, cheap private rental sector, and tradition of educational migration meant Britons often left home at young ages to form partnerships or attend university (Berrington & Stone, 2014). In common with other countries,

women generally left home earlier and faster than men, largely because they tended to marry at younger ages. Class background also stratified leaving home processes in this period as access to resources, participation in higher education, and patterns of union formation varied across the socio-economic spectrum. For example, Ermisch and Di Salvo (1997) found that children born in 1958 had a lower likelihood of exiting the parental home into a partnership and a greater chance of leaving to live alone or share accommodation if their parents had non-manual as opposed to manual jobs.

In recent years, there has been widespread popular concern that the millennial cohort are taking longer to achieve residential independence than their parents. In Britain, this trend is often viewed negatively because leaving the parental residence has traditionally been regarded as an important and subjectively meaningful move that allows young people to establish careers, build families, and reconfigure intergenerational relationships (Holdsworth, 2013), Between 1996 and 2015, the proportion of 15- to 34-year-old Britons living with their parent(s) rose by four percentage points from 5.8 to 6.6 million (ONS, 2015). Berrington and Stone (2014) show that this increase was particularly pronounced among women aged 20-24, although a larger proportion of young men than women live at home. A similar trend towards greater parental coresidence during young adulthood has been reported for the U.S. (Fry, 2016) and some continental countries following the global economic crisis (Lennartz, Arundel, & Ronald, 2016). However, it is not clear whether these shifts are primarily due to reduced departures or more frequent return moves (Stone et al., 2014).

There has been much debate about how trends in parental coresidence have been shaped by changing choices and constraints. Notions of a Second Demographic Transition suggest that greater affluence, the de-standardisation of life courses, the decline of traditional values, and weakening normative models of life pathways mean that young people (particularly women) have more opportunity to exercise agency and construct their lives as diverse "choice biographies" than previous generations (Billari & Liefbroer, 2010; Heath, 1999). In this vein, Buck and Scott (1993) indicate that leaving home has been progressively decoupled from marriage as unmarried cohabitation has become more acceptable and young people postpone forming coresidential unions. At the same time, the "individualisation" of social relations in recent decades could mean that young people increasingly prioritise self-realisation and autonomy, potentially making lifestyle preferences a more important factor in their residential decisions (Clapham, 2005; Kenyon & Heath, 2001; Roberts, 2013). Synthesising these ideas, Arnett (2000) argues that ages 18-25 now constitute a phase of "emerging adulthood" when people are released from normative structures to experiment with jobs, living arrangements, relationships, and identities.

Furlong (2013) cautions against purely celebratory readings of this shift to "choice biographies." He notes that young people's agency is always bounded by circumstances and that the erosion of life course certainties in the context of heightened structural constraints has both enhanced and individualised the risks faced by young people (Arundel & Ronald, 2016). This has forced young adults to more intensively plan and manage their lives, potentially making living outside the parental home seem less attainable and less appealing. In this view, coresidence acts as an efficient mechanism for parents to support their offspring as

insecure labour markets, low incomes, and housing cost inflation make it increasingly difficult for young people to muster the resources to live independently (McKee, 2012). In much of Britain, these constraints have been amplified by the shift to a more onerous debt-based system of student finance, as well as curtailed benefit support as the welfare system is restructured around the assumption that families are responsible for supporting young people (Berrington, Duta, & Wakeling, 2017; Berrington & Stone, 2014). In light of these trends, Shelter (2014) suggest that millennial Britons are a "clipped wing" generation who are finding it increasingly difficult to enter the housing system without family assistance.

## 2.1 | Determinants of leaving home

Researchers have examined leaving home from multiple perspectives. Post-structural and mobilities scholarship highlights how leaving home can be conceptualised as a meaningful biographical process that is influenced by power-laden normative discourses, for example, concerning the suitability of shared housing across the life course (Roberts, 2013). This literature provides useful insights about the ways in which leaving home is linked to other mobility practices, as well as changing family relations (Holdsworth, 2013).

By contrast, population researchers often analyse young people's residential decision-making in order to better understand household formation and the ways in which broad patterns of choice and constraint configure home leaving. Whereas some economic studies theorise residential decision-making as a rational utility maximising calculation (Ermisch, 1999), more nuanced life course approaches conceptualise leaving home as a heterogeneous and reversible process that is shaped by concurrent transitions, "turning point" events, interconnected "linked lives," and contextual circumstances (South & Lei, 2015; Stone et al., 2014). These perspectives emphasise that leaving home is not a single phenomenon as different factors influence the probability of departing for different situations (lacovou, 2010). The basic idea here is that people jointly weigh up whether to live with their parent(s) at the same time as they evaluate possible alternatives (Mulder, 2013). Previous work shows that three important pathways out of the parental home can be distinguished: (a) exiting to live with a partner; (b) exiting to often temporary and semiautonomous student arrangements; and (c) exiting to live alone or share accommodation outside of a family (Ermisch, 1999; Iacovou, 2010; Mulder & Clark, 2000). For young people in the parental home, the likelihood of leaving in each of these ways can be considered as "competing risks" that are differentially influenced by preferences, resources, and opportunities (Billari & Liefbroer, 2007).

Previous research provides relatively consistent evidence about how individual factors influence home leaving. In addition to gender differences, the age-graded timetables embedded in institutions influence departure patterns. As compulsory schooling in Britain usually ends around age 18, the proportion of Britons living with their parents drops markedly from around 90% at ages 15–19 to under 50% by 20–24 as young people leave home for work or further study (Office for National Statistics, 2015). A desire to leave home before normative age deadlines may also stimulate people to gradually exit the family residence as they grow older (Billari & Liefbroer, 2007). However, high

levels of parental coresidence among some ethnic minority groups (e.g., South Asians born overseas) hint that these norms might vary across ethnic subpopulations (Stone, Berrington, & Falkingham, 2011). Furthermore, prolonged education, unfavourable contextual conditions, and increasingly uncertain life course careers may mean that delayed departure and frequent returns are becoming a more accepted facet of young adulthood (Roberts, 2013). South and Lei (2015) also indicate that poor health may lower young adults' propensity to live apart from a parental carer or a supportive family environment.

Most studies find that young adults' resources strongly predict leaving home. In general, higher incomes and a more advantaged occupational position probably accelerate departure by giving young people greater opportunity to choose to move out (lacovou, 2010; le Blanc & Wolff, 2006). In contrast restricted resources, economic uncertainty, and limited benefit eligibility probably make it hard for unemployed and economically inactive young people to leave home. Ermisch (1999) also reports that young adults have a higher propensity to depart if they have a coresident partner or child, perhaps due to space pressure or a desire for privacy (Di & Liu, 2006).

Although there is a general perception that children from advantaged families enjoy a smoother passage into the housing system than their less fortunate peers (McKee, 2012), there is little clarity about how parental factors shape nest-leaving behaviour. A number of aspects of the "linked lives" of parents have been posited to influence young people's residential choices, opportunities, and constraints. Aquilino (1991) found that disrupted childhood family circumstances increased the likelihood that young Americans left home early to destinations other than college (cf. Ermisch, 1999). Aquilino attributed his findings to greater instability, conflicts and tensions, disruption, and weaker intergenerational bonds "pushing" young adults from nonintact families into moving out.

Parental resources may further influence young adults' ability and inclination to leave home. Parental higher education may accelerate departure to destinations other than partnership if educated parents socialise children to value autonomy and follow a normative middleclass pathway to adulthood where education and career development are prioritised. In contrast, studies report more equivocal effects of parental economic resources. Although parents with higher incomes and more resources can more easily support a child's preference to leave home, many studies report relatively weak effects of parental income (Ermisch, 1999; le Blanc & Wolff, 2006; South & Lei, 2015). This could be because parents use their resources to enforce leaving "on schedule" by discouraging early departures, providing accommodation until children secure a "career job," and/or by supporting later exits that are perceived as less risky (Berrington et al., 2017; Iacovou, 2010). Moreover, the impact of parental resources may be channelled through family housing conditions. Mulder (2013) posits that spacious, highquality owner-occupied dwellings make the family home into a comfortable "feathered nest," which makes leaving to live alone or share seem less appealing (also Mulder & Clark, 2000). Mulder's argument suggests that the expansion of parental homeownership, reductions in family size, and improved housing quality over time may partly explain postponed home leaving in Western societies. In recent years, innovations in communications technology have also made it easier to combine living in the parental home with maintaining an unsupervised private life.

Fears that the polarised geography of the British housing system may be creating spatially unequal opportunities to leave home also pervade contemporary debates about millennials' residential circumstances. Observing that a growing proportion of young adults are living with a parent, the Redfern Review (2016, p. 53) into declining U.K. homeownership noted that "it is difficult to believe that, all of a sudden, the preference of 25–34-year-olds has changed so that they want to stay at home. Their decisions must be being influenced by the changing availability of housing and the changing affordability constraints faced by this group" [our emphasis]. This view is supported by international evidence that more young people live with their parents if housing is costly, there is less rental stock, and young people have restricted access to mortgages (Di & Liu, 2006; Mandic, 2008).

Extant British longitudinal evidence largely supports this view. Using 20th-century data, Ermisch (1999) and Ermisch and Di Salvo (1997) found that higher regional house prices reduced departures from the parental home, especially to partnership. Mulder and Clark (2000) report similar findings for the United States, adding that local prices have little impact on departures to distant areas or exits to education. Their study also indicates that urbanisation influences home leaving. On the one hand, greater job access and the ease of meeting people and maintaining Living Apart Together relationships might reduce the need for young people to leave home when their parents reside in urban areas. However, these patterns could be offset by a greater concentration of urban rental opportunities. Young people's inclination to leave the parental "safety net" could also be lower in less favourable local labour markets.

# 3 | DATA AND METHODS

## 3.1 | Data and measures

This study uses the first five waves of the UKHLS (University of Essex, 2015). UKHLS is a nationally representative panel survey collecting annual information about individuals and households. The survey began in 2009 when over 50,000 adults in 30,000 households completed face-to-face interviews (Knies, 2016). Former members of the BHPS were invited to participate from Wave 2, although we exclude these individuals because of high attrition during the BHPS to UKHLS transition. Cases from the UKHLS Ethnic Minority Boost subsample were also excluded because these sample members are heavily clustered in certain urban centres.

Our approach is modelled on Ermisch's (1999) analysis of home-leaving events in the first five BHPS waves (covering 1991–1995). The initial sample comprised all fully interviewed young adults aged 16 to 30 with complete data who were living with a parent at wave t (n = 5.535 individuals providing 11,265 person-year observations). These cases were "at risk" of leaving the parental home between waves t and t + 1. We do not limit our sample to first departures as only 30 individuals are observed to depart the parental home more than once, although it is important to note that we know relatively

little about young people's mobility and residential arrangements in the gaps between annual survey observations. Although UKHLS also provides little information about how young people interpret and experience their departure events, the large sample nevertheless provides a unique opportunity to examine broad socio-spatial disparities in patterns of home-leaving behaviour.

The dependent variable is coded following Ermisch (1999) and other studies (lacovou, 2010). We distinguish three routes out of the parental home by combining information on the composition of wave t+1 households with information on labour force status obtained during t+1 interviews. These routes are (a) exiting as a full-time student (135 observations); (b) exiting to live with a partner but not as a student (305 observations); and (c) exiting to live alone or with others but not as a student (276 observations).

The independent variables were defined using previous research. We distinguish three types of lagged independent variable: individual characteristics, parental attributes, and features of the origin Local Authority District (henceforth district) at wave t.<sup>2</sup> The individual controls include an age variable (centred on 16); a female dummy; a dummy separating White Britons from other ethnic groups<sup>3</sup>; a family status indicator recording whether individuals have a coresident partner and/or child(ren); and a dummy to identify respondents with limiting health conditions. Dummies were also defined for unemployment and full-time studentship. As previous research shows that income strongly influences home leaving, we include a variable recording young adults' total monthly gross income in 2015 pounds.<sup>4</sup> Pooled year dummies were included to pick up period effects.

Several variables were defined to capture how parental "linked lives" and the characteristics of origin households influence home leaving. Separate dummies identify parents with higher degrees and respondents living with both biological parents. To capture the impact of origin household structure, we follow Ermisch (1999) by defining a large household dummy to indicate whether there are at least two persons in the wave *t* household who are not the focal individual's parent, partner, or child. Comparisons of model fit showed that this dummy performs better than a room stress indicator. Parental income is measured as total real combined income, <sup>5</sup> and we also control for parental housing tenure. Finally, we control for parental age (the younger if two parents are present).

Data on average district house prices in the month of the wave t interview were obtained from U.K. House Price Index datasets collected by the Land Registry (ONS, 2016). These data smooth out short-term price fluctuations by taking a rolling three monthly average of local transactional prices. After adjusting the nominal values to 2015

 $<sup>^1</sup>$ Northern Ireland is oversampled, but extra checks using regional controls indicate that this does not affect the results. Dropping Northern Ireland from the sample slightly alters the p values of some coefficients, but not their direction or relative magnitude. We bear this in mind in the discussion.

<sup>&</sup>lt;sup>2</sup>It is important to note that districts are an administrative geography, which may not reflect local housing markets. As with most geographic analysis, the choice of spatial unit may also influence results. Nonetheless, we consider the district level to be a more appropriate approximation of local context than the regional scale used by most previous studies. Mix-adjusted rather than raw transactional data on house prices are also available at the district level.

<sup>&</sup>lt;sup>3</sup>The sample size precludes using a more detailed categorisation.

 $<sup>^4</sup>$ We focus on income rather than class because occupational status is often fluid in early adulthood. Many sample members have also never worked.

<sup>&</sup>lt;sup>5</sup>Rerunning the models using parental occupational class rather than income yields qualitatively similar conclusions about the effects of parental socio-economic position.

prices, we used a natural log transformation to take into account their highly skewed distribution (2015 range = £71,715 to £1,304,543; mean = £222,995; median = £190,325). Because some London boroughs have exceptionally high prices, which could act as influential outliers, we also reran our analyses using a linear price variable top coded at the 99th percentile of district prices. This did not alter the findings.

Independent variables were defined to capture additional origin district characteristics. To pick up the impact that house price volatility might have on decision-making, we control for local nominal price changes in the last 2 years (defined in percentage terms). District population density was constructed as a categorical indicator using 2011 census data (the 25th and 75th sample percentiles were used as cut points), and we also control for the district unemployment rate. We defined but later discarded a district homeownership rate variable after experiments indicated that this was never significant. We also tested alternative models with regional fixed effects but found that these neither changed the thrust of the results nor improved model fit.

#### 3.2 | Methods

We estimated multilevel random intercepts probit models to analyse three types of home-leaving behaviour: (a) leaving the parental home to any destination; (b) leaving to live with a partner (but not as a student); and (c) leaving to live alone or with others (but not as a student). Henceforth, we refer to these transitions as (a) departing to any destination, (b) departing to partnership, and (c) departing to other destinations, respectively. The multilevel models nest person-year cases within districts (384 in the full sample), and standard errors are corrected for the clustering of person-years within individuals. During preliminary work, we estimated separate models for men and women, but we have chosen to report results for the combined sample as there were few gender differences in the magnitude or direction of effects (cf. Ermisch, 1999).

Attrition from longitudinal surveys often correlates with residential mobility, and if this attrition is selective, then it could bias analyses of leaving home. In our sample, 1,218 cases (10.8%) are lost at t + 1, and we cannot tell if they have left home because the entire origin household disappears. Furthermore, 519 cases (4.6%) are known to leave home, but because they were not interviewed at t + 1, we do not know their exact destination (42.0% of known departures). To examine whether these cases are selective, Table 1 compares their attributes with the characteristics of the full sample, those who remain at home, and those who exit to a known destination. Compared to that of the full sample, the risk of being completely lost is higher among minorities, people whose parents do not have a degree or who rent, and people in larger households. Complete attrition is also concentrated in earlier survey sweeps, whereas people suspicious of the survey or whose household did not fully participate at t are over-represented among those who have dropped out at t + 1. Compared to those moving out to a known destination, those who depart and drop out are disproportionately male, not White British, single and childless, unemployed or a student, from large households, living in the least urbanised areas or places with higher house prices, suspicious of the survey, and with lower incomes. To reduce the risk of attrition bias, we include all of these variables in our models.

To further test for selection effects, we followed Stone et al. (2014) and conducted sensitivity checks by using Stata's heckprob

command to respecify our final analyses as probit models with sample selection. To estimate these models, we used two wave t interview participation variables as instruments predicting selection into the sample, before excluding these instruments from the stage 2 equations of interest (Stone et al., 2014, for a detailed explanation). In line with the Stone et al. (2014) results, Wald tests show that the interview variables significantly predict sample selection (i.e., attrition) but do not contribute to models of home leaving (Appendix Table A1). For the any destination model, we considered the 1,218 cases lost completely at t+1 to have selected out of the sample, and the 519 cases without a known destination were added to this pool for the destination-specific models. As there are negligible differences between the two sets of estimates, we conclude—insofar as is possible—that our results are probably not seriously biased by selective attrition (see Appendix Table A2).

#### 4 | ANALYSIS

Table 1 provides descriptive evidence about the factors associated with leaving the parental home. In line with previous research, Table 1 shows that older individuals, women, White Britons, and young people living in the parental home with a partner and/or child at wave t are over-represented among those who have left at t+1. In contrast, being in full-time education or having a lower income are associated with remaining in the parental residence, whereas there is no obvious trend in home-leaving behaviour across the study period.

Table 1 also shows that there are relatively minor differences between the parental characteristics of individuals who do and do not leave home between waves t and t+1. Although those moving out are disproportionately likely not to have been living with both biological parents, in other respects, both groups of home leavers have fairly similar parental backgrounds to the sample of young people who do not leave home. By contrast, the associations between district level variables and leaving home are slightly clearer cut. Relative to young people who do not leave home, those who move out to a known destination are more likely to live in less urbanised districts and districts with lower unemployment rates and lower house prices.

Table 2 shows three random intercepts probit models predicting departure to any destination, <sup>6</sup> exits to partnership (but not as a student), and leaving home to other destinations (but not as a student). In all models, there is little unexplained district level variance, and most of the individual controls have the anticipated effects. Age increases the likelihood of leaving home to any destination and partnership but has no significant impact on the likelihood of leaving home to other destinations. These results could indicate that young people's residential decisions are influenced by accumulated resources and a desire to leave home in line with age-graded norms about living arrangements. Women have a higher propensity to leave home than men, and White Britons are considerably more likely to leave home than young people from other ethnic backgrounds. Living in the parental home with a partner or child is strongly predictive of departure, indicating that living in a multigenerational family is often a transitional state rather than a

<sup>&</sup>lt;sup>6</sup>The number of cases in this model exceeds the number in the destination-specific models because we are able to include the 519 exits to unknown destinations.

**TABLE 1** Descriptive statistics

	<b>,</b> 11		Not cores	No	
	All cases	Coresident at $t + 1$	Destination known	Destination unknown	info at t + 1
Categorical variable (percentages)					
Female	50.81	49.50	59.50	53.56	54.02
Not White British	14.99	15.21	6.98	10.21	20.20
Family status					
No coresident partner or child	95.53	96.82	82.80	91.71	95.24
Coresident partner	1.51	1.15	6.20	2.50	0.99
Coresident child	2.20	1.55	7.70	4.24	2.79
Coresident partner and child	0.76	0.48	3.40	1.54	0.9
Limiting health condition	15.30	15.30	19.00	16.60	12.70
Unemployed	11.26	10.77	10.20	15.03	13.79
Full-time student	44.14	46.22	25.70	32.76	44.7
Lives with both biological parents	57.37	58.85	51.50	51.45	52.6
Parental degree	24.97	25.58	27.23	26.97	18.3
Parental housing tenure					
Homeowner	71.26	72.61	70.10	70.91	62.4
Social tenancy	20.36	19.72	21.50	19.46	24.63
Private tenancy	8.38	7.67	8.40	9.63	12.9
Large household	30.59	30.28	25.98	31.79	35.0
District population density					
Low	25.89	25.41	28.20	35.26	23.9
Medium	50.64	50.87	53.90	45.09	49.4
High	23.47	23.72	17.90	19.65	26.60
Interview date					
2009-2010	41.36	39.41	41.62	42.97	54.6
2011-2012	45.46	46.86	44.69	43.16	36.78
2013-2014	13.18	13.73	13.69	13.87	8.6
Household interview participation <sup>a</sup>					
All members fully interviewed	74.36	75.76	74.90	73.03	64.5
All members interview or proxy	12.15	11.87	12.40	10.60	14.7
Interviews and refusals	13.48	12.37	12.70	16.38	20.7
Respondent is suspicious <sup>a</sup>	3.84	3.59	2.50	4.24	6.3
Continuous variables (means)					
Age	20.08	19.89	21.78	21.25	19.9
Parental age	48.02	48.07	49.02	48.63	46.8
Income (£1,000)	0.62	0.59	0.97	0.79	0.5
Parental income (£1,000)	2.87	3.58	3.57	3.61	3.10
District house price (£1,000)	184.34	184.31	174.67	186.54	189.2
District price change	-0.64	-0.64	-0.78	-0.29	-0.7
Unemployment rate	6.47	6.48	6.33	6.15	6.66
N	11,265	8,812	716	519	1,218

<sup>&</sup>lt;sup>a</sup>Included in selection model (Appendix Table A2) but excluded from the main analysis.

long-term choice. Unsurprisingly, the odds of leaving home to partnership are much greater for individuals living with a partner in the parental home than for those with no partner. The strong positive association between living with a child at *t* and moving out to other destinations is probably because public welfare provision supports the residential independence of young mothers with coresident children through the benefit and social housing systems (Berrington et al., 2017).

The models also indicate that economic factors shape young adults' residential choices. Although unemployment has no significant effects, leaving home to nonstudent destinations is less likely for full-time students than for young people who are not in full-time education. This could reflect resource constraints, ties to local educational institutions, and/or uncertainty about future earnings. As anticipated, higher incomes in young adulthood are associated with an increased propensity to leave home by any pathway. This reinforces lacovou's

**TABLE 2** Multilevel random intercepts probit models of leaving home

	Any destina	Partnersh	nip	Other destination		
Variable	Coeff.	SE	Coeff.	SE	Coeff.	SE
Individual characteristics						
Age	0.041***	0.009	0.053***	0.014	0.017	0.013
Female	0.169***	0.035	0.253***	0.060	0.202***	0.059
Not White British	-0.280***	0.062	-0.450***	0.125	-0.328**	0.114
Family status (ref no coresident partner or child)						
Coresident partner	0.668***	0.107	1.160***	0.122	-0.342	0.248
Coresident child	0.584***	0.095	0.111	0.150	0.751***	0.115
Coresident partner and child	0.853***	0.153	1.227***	0.175	-0.472	0.398
Limiting health condition	0.028	0.046	-0.014	0.077	0.069	0.072
Unemployed	0.109	0.061	-0.071	0.103	0.038	0.094
Full-time student	-0.030	0.049	-0.458***	0.093	-0.322***	0.083
Income	0.119***	0.029	0.173***	0.040	0.118**	0.042
Parental attributes						
Parental age	-0.011***	0.003	-0.021***	0.006	-0.001	0.005
Lives with both biological parents	-0.171***	0.038	-0.034	0.064	-0.272***	0.062
Parental degree	0.144***	0.043	0.037	0.076	0.216**	0.070
Parental income	-0.007	0.010	-0.007	0.022	-0.019	0.019
Age # parental income	0.006***	0.002	0.004	0.003	0.006**	0.002
Parental tenure (ref ownership)						
Social rent	0.068	0.048	0.070	0.080	0.180*	0.076
Private rent	0.117	0.065	0.085	0.112	0.232*	0.102
Large household	0.060	0.040	-0.033	0.070	0.096	0.066
District characteristics						
Ln district house price	-0.203*	0.082	-0.334*	0.143	-0.459***	0.134
District population density (ref low)						
Medium	-0.104*	0.047	-0.070	0.078	0.059	0.071
High	-0.120	0.072	-0.068	0.120	0.011	0.110
District price change	0.002	0.003	-0.002	0.006	-0.001	0.005
District unemployment rate	-0.036*	0.015	-0.029	0.025	-0.044	0.023
Constant	0.338	0.491	0.528	0.858	0.541	0.804
District intercept variance	0.022*	0.009	0.040	0.025	0.000	0.000
BIC (BIC of null model)	7,165.399 (7,48	9.873)	2,475.022 (2,712	1.412)	2,446.337 (2,51	5.345)
N observations	10,047		9,528		9,528	
N districts	384		383		383	

Note. Estimated using Stata 14.1. Models include period dummies (results not shown).

BIC = Bayesian information criterion.

(2010) argument that resources grant young people the freedom to overcome the financial costs associated with leaving home and maintaining a separate household.

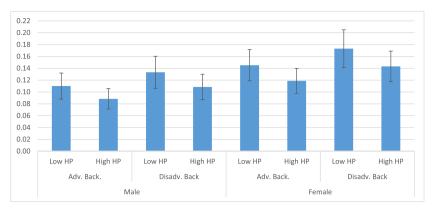
The "linked lives" of parents and the characteristics of origin households seem to affect home leaving in more nuanced ways. In general, the parental variables—except age—have no significant association with departures to partnership. By contrast, living with both biological parents reduces the likelihood of leaving home in the models of departure to any and other destinations. This could indicate that a less stable childhood reduces intergenerational connectivity and thus the

relative appeal of remaining in the parental home (South & Lei, 2015). In line with notions of parental socialisation, young people have a higher likelihood of leaving home to any destination or to live alone/ share if their parents have higher educational qualifications and thus greater human and cultural capital. This pattern might also reflect the effect of unmeasured parental resources and potentially unobserved wealth transfers. Moreover, the models suggest that a "feathered nest" characterised by parental homeownership discourages housing related exits to other destinations but has little overall impact on leaving home or departure specifically to partnership. The positive interaction of

<sup>\*</sup>p ≤ .05.

<sup>\*\*</sup> $p \le .01$ .

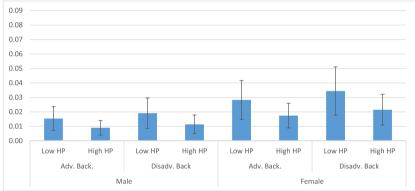
<sup>\*\*\*</sup> $p \le .001$ .



Note: Predicted probabilities are derived from the 'Any destination' model in Table 2. Covariates are held at fixed values. HP=district house price. Adv. Back.=advantaged background. Disadv.Back=disadvantaged background.



**FIGURE 1** Predicted probability of leaving home to any destination



Note: Predicted probabilities are derived from the 'Partnership' model in Table 2. Covariates are held at fixed values. HP=district house price. Adv. Back.=advantaged background. Disadv.Back=disadvantaged background.

**FIGURE 2** Predicted probability of leaving home to partnership

parental income with age also supports the notion that parents use their transferable resources to accelerate departure when children are older. We can speculate that this might be due to parental preferences for privacy or a desire to encourage offspring to follow the historical British norm of early home leaving. Given that even the richest survey data rarely allow us to test how and why parents may configure their children's residential behaviour, further qualitative analysis is needed to better understand the mechanisms through which leaving home can be shaped by intergenerationally "linked lives" and flows of family care and support.

At the district level, Table 2 shows that higher local house prices are associated with a significantly lower propensity to leave home, especially to form coresidential partnerships or live alone/share. It is possible that local house prices exert a weaker constraining effect in the model of exits to any destination because education-related departures frequently carry young people over long distances<sup>8</sup> and into special forms of semiautonomous accommodation (e.g., university halls of residence) or particular rental submarkets (e.g., Houses in Multiple Occupation). Although price volatility has no significant effects, living

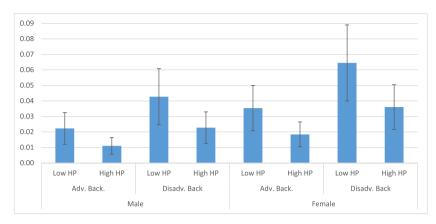
in more densely populated districts is weakly associated with a lower likelihood of leaving home in the any destination model (p = .09 for high-density districts). This might suggest that young people in urban areas often prolong coresidence to save money and perhaps attend a local university while using daily mobility, communications technologies, and/or Living Apart Together relationships to maintain autonomy and develop their life course careers. Higher district unemployment is also associated with a slight tendency to delay departure, possibly because a dearth of local employment opportunities makes young adults reluctant to leave the parental "safety net."

To gauge the magnitude of the parental and house price effects, Figures 1–3 use the models in Table 2 to present predicted probabilities of leaving home. Each figure shows the estimated probability that a hypothetical man and woman leaves home to one of our three destinations of interest while varying their parental attributes (divided into an advantaged and disadvantaged profile) and placing them in a district with either low or high house prices. Note that the scale of the y axis differs across the figures. We define an advantaged parental background in socio-demographic terms as living with both biological parents, having at least one parent educated to degree level, parental

<sup>&</sup>lt;sup>7</sup>Further analysis found no significant interactions between parental income and the local price of housing.

<sup>&</sup>lt;sup>8</sup>In our sample, 86% of exits to full-time education cross district boundaries, in comparison to roughly 35% of the other types of departure.

<sup>&</sup>lt;sup>9</sup>It may be risky to compare predicted probabilities across Figures 1–3 because each figure is derived from a different probit model (see Mood, 2010).



**FIGURE 3** Predicted probability of leaving home to other destinations

*Note:* Predicted probabilities are derived from the 'Other destination' model in Table 2. Covariates are held at fixed values. HP=district house price. Adv. Back.=advantaged background. Disadv.Back=disadvantaged background.

homeownership, and having a parental income of £4,500 per month. The disadvantaged profile is defined as not living with both parents, having no parent with a degree, parental social tenancy, and having a parental income of £1,750 per month. The hypothetical low-cost district is defined to have a mean house price of £121,000 (roughly equivalent to 2015 prices in Wakefield, Bridgend, or South Ayrshire), and the high-cost district has a mean of £225,000 (roughly equivalent to 2015 prices in Barking and Dagenham, Worthing, or Edinburgh). These values approximate the 25th and 75th sample percentiles. The hypothetical profile is also set to be White British, employed, single, and healthy and with all other covariates fixed at sample means.

Figure 1 shows the predicted probabilities of leaving home to any destination. In general, the probability of leaving home is higher for the disadvantaged than advantaged profile, probably largely due to the effect of parental partnership status. Higher house prices do dampen the probability of moving out, but the size of this effect is rather modest. Similar patterns are evident in Figure 2 (departures to partnership) and Figure 3 (departures to other destinations).

## 5 | CONCLUSIONS

In many Western societies, the deteriorating economic position of young adults and enhanced difficulties entering housing systems have fuelled a pessimistic popular narrative that millennials are "failing to launch" into adult independence (Arundel & Ronald, 2016). Although changing preferences associated with long-term cultural and economic trends partly explain the restructuring of young people's living arrangements (Kenyon & Heath, 2001), patterns of delayed home leaving and frequent returns to the parental residence are often thought to signal that families are providing more housing support during an increasingly uncertain transition to adulthood. This process could reshape family relations and exacerbate intergenerational transmissions of (dis)advantage, particularly if young people's ability to move out has become more contingent on parental assistance. Furthermore, there is growing concern that young people's ability and inclination to leave home may vary geographically with the local cost of housing. As little is known

about how socially and spatially uneven choices and constraints influence pathways out of the parental home, this study examined how parental background and local house prices have shaped young Britons' home-leaving behaviour since 2009.

The results confirm that leaving home is a heterogeneous process that is influenced by life course trajectories, intergenerationally "linked lives," and geography. In line with previous research, we find that individual factors strongly influence the likelihood of leaving home to all destinations. In general, the relative odds of departure are lower for men, ethnic minorities, younger adults, students, those with lower incomes, and people without a coresident partner or child. These findings reiterate that structural trends such as postponed family formation, prolonged educational enrolment, weak income growth, and increased ethnic diversity are integrally related to the recent growth of parental coresidence in young adulthood (Berrington & Stone, 2014). Housing policy interventions designed to boost supply and affordability are therefore unlikely to dramatically alter patterns of household formation in young adulthood, at least in the short term. Furthermore, the countervailing thrust of other policy domains-for example, reductions in public welfare provision, an emphasis on labour market "flexibility," and changes to student finance-are likely to seriously undermine young people's ability to leave home and live independently over the coming years.

Intergenerational "linked lives" and conditions in the parental home have comparatively complex associations with leaving home. Although parental factors generally have limited relevance for departures to partnership, parental higher education accelerates departure to destinations other than a coresidential union. This could be because educated parents socialise children to opt for a normative middle-class life path where autonomy is prized and family formation is postponed to allow for educational and career investments. More advantaged parents may also use their transferable resources to ensure that young people leave home in line with traditional normative timetables. Taken together, these patterns suggest that incorporating information on personal values and actual support transfers (perhaps through in-depth qualitative analysis) should be a future research priority.

As posited by Mulder (2013), the results suggest that a "feathered nest" characterised by parental homeownership—as well as the

presence of both biological parents—reduces the likelihood of departing to live alone or in shared accommodation. This could be because origin living conditions carry little weight in decisions to move in with a partner or move out to study, whereas parental housing circumstances and intergenerational relationships are a very relevant consideration when choosing whether to move out to obtain greater independence.

The geography of local housing costs also has implications for young adults' residential pathways. Consistent with previous work, we find that the odds of leaving home (especially to form partnerships or live alone/share) are reduced by higher house prices, although the magnitude and significance of this price gradient is considerably smaller than is often posited in public debates about constrained housing access. As local house prices correlate strongly with private rent levels, these patterns should probably be interpreted as the general impact of local housing costs.

Importantly, local housing costs may not be the only spatial influence on home leaving as the likelihood of departure is also somewhat lower in places with higher unemployment or greater population density. This latter finding may suggest that there is less need to leave home when living in urban centres where good transport infrastructure allows access to a dense concentration of opportunities, amenities, and services. Moreover, some rural areas have cultures and traditions of youth outmigration. Going forward, we need to test these ideas by using alternative research methods to examine whether young people in urban and rural areas perceive prolonged coresidence to be a desired choice. In addition, studies could probe the practices and technologies (e.g., Living Apart Together relationships, flexi working, commuting, and/or virtual social interactions) that young people use to preserve their autonomy and develop their life course careers while living at home in different places.

This study also indicates several broader directions for further research. First, it may be important to unpack whether gender and life events configure how young people leave home in different places. Second, geographers must explore how the characteristics of origin areas and potential destinations jointly influence pathways out of the parental home. Third, the close links between living arrangements in the parental home and decisions to move out mean that longer term analyses of changes in household structures over the life course are crucial to better understand leaving home. The second and third directions will be tricky to develop because decisions about living arrangements and where to live cannot easily be identified and separated by analysing short periods of longitudinal data. Moreover, quantitative research modelling leaving home events can tell us little about the often drawn-out subjective process of transition to adulthood, or how young people experience and plan their residential changes. Enhancing our knowledge of how choices, circumstances, and constraints intersect to shape long-term pathways out of the parental home may therefore require developing novel multimethod biographical empirical strategies. These could involve supplementing multilevel analysis of patterns in residential biographies (perhaps using population register datasets with very large samples and limited attrition) with longitudinal qualitative research examining young people's accounts and interpretations of their residential decisionmaking experiences.

#### **ACKNOWLEDGEMENTS**

This research was funded by an Economic and Social Research Council Future Research Leaders award (ES/L009498/). Additional financial support was provided by the Isaac Newton Trust.

Understanding Society (UKHLS) is an initiative funded by the Economic and Social Research Council and various government departments, with scientific leadership by the Institute for Social and Economic Research, University of Essex, and survey delivery by NatCen Social Research and Kantar Public. The research data are distributed by the U.K. Data Service. The authors are solely responsible for all analyses and interpretations of the data.

The U.K. House Price Index data are published by Land Registry© Crown, copyright 2016. Census statistics are adapted from data from the Office for National Statistics licensed under the Open Government Licence v3.0.

Rory Coulter contributed to this study while working in the Department of Sociology at the University of Cambridge. The authors would like to thank Michael Thomas and Clara Mulder for their insightful comments on earlier versions of this work. Critical feedback from seminar presentations at the University of Groningen and Tilburg University has further enhanced this study.

#### **REFERENCES**

- Aquilino, W. S. (1991). Family structure and home-leaving: A further specification of the relationship. *Journal of Marriage and Family*, 53(4), 999–1010.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–480.
- Arundel, R., & Ronald, R. (2016). Parental co-residence, shared living and emerging adulthood in Europe: Semi-dependent housing across welfare regime and housing system contexts. *Journal of Youth Studies*, 19(7), 885–905.
- Berrington, A., & Stone, J. (2014). Young adults' transitions to residential independence in the UK: The role of social and housing policy. In L. Antonucci, M. Hamilton, & S. Roberts (Eds.), Young people and social policy in Europe: Dealing with risk, inequality and precarity in times of crisis (pp. 210–235). Basingstoke: Palgrave Macmillan.
- Berrington A., Duta A. & Wakeling, P. (2017). Youth social citizenship and class inequalities in transitions to adulthood in the UK. ESRC Centre for population change working paper 81. ESRC Centre for Population Change: Southampton. Available at: http://www.cpc.ac.uk/publications/cpc working papers.php (accessed 28/03/17).
- Billari, F. C., & Liefbroer, A. C. (2007). Should I stay or should I go? The impact of age norms on leaving home. *Demography*, 44(1), 181–198.
- Billari, F. C., & Liefbroer, A. C. (2010). Towards a new pattern of transition to adulthood? *Advances in Life Course Research*, 15(2–3), 59–75.
- le Blanc, D., & Wolff, F. C. (2006). Leaving home in Europe: The role of parents' and children's incomes. *Review of Economics of the Household*, 4(1), 53–73.
- Buck, N., & Scott, J. (1993). She's leaving home: But why? An analysis of young people leaving the parental home. *Journal of Marriage and the Family*, 55(4), 863–874.
- Clapham, D. (2005). The meaning of housing: A pathways approach. Bristol: Policy Press.
- Di, Z., & Liu, X. (2006). The effects of housing push factors and rent expectations on household formation of young adults. *Journal of Real Estate Research*, 28(2), 149–166.
- Ermisch, J. (1999). Prices, parents, and young people's household formation. *Journal of Urban Economics*, 45(1), 47–71.

- Ermisch, J., & Di Salvo, P. (1997). The economic determinants of young people's household formation. *Economica*, 64(256), 627–644.
- Fry, R. (2016). For first time in modern era, living with parents edges out other living arrangements for 18- to 34-year-olds. Washington DC: Pew Research Center.
- Furlong, A. (2013). Youth studies: An introduction. Oxford: Routledge.
- Heath, S. (1999). Young adults and household formation in the 1990s. British Journal of Sociology of Education, 20(4), 545–561.
- Heath, S., & Calvert, E. (2013). Gifts, loans and intergenerational support for young adults. *Sociology*, 47(6), 1120–1135.
- Holdsworth, C. (2013). Family and intimate mobilities. Basingstoke: Palgrave Macmillan
- lacovou, M. (2010). Leaving home: Independence, togetherness and income. Advances in Life Course Research, 15(4), 147–160.
- Kenyon, E., & Heath, S. (2001). Choosing this life: Narratives of choice amongst house sharers. *Housing Studies*, 16(5), 619–635.
- Knies, G. (Ed) (2016). Society—UK Household Longitudinal Study: Wave 1-6, 2009-2015, user manual. Colchester: University of Essex.
- Lennartz, C., Arundel, R., & Ronald, R. (2016). Younger adults and homeownership in Europe through the global financial crisis. *Population*, *Space and Place*, 22(8), 823–835.
- Mandic, S. (2008). Home-leaving and its structural determinants in Western and Eastern Europe: An exploratory study. *Housing Studies*, 23(4), 615–637.
- McKee, K. (2012). Young people, homeownership and future welfare. *Housing Studies*, 27(6), 853–862.
- Mood, C. (2010). Logistic regression: Why we cannot do what we think we can do, and what we can do about it. *European Sociological Review*, 26(1), 67–82.
- Mulder, C. H. (2013). Family dynamics and housing: Conceptual issues and empirical findings. *Demographic Research*, 29(14), 355–378.
- Mulder, C. H., & Clark, W. A. V. (2000). Leaving home and leaving the state: Evidence from the United States. *International Journal of Population Geography*, 6(6), 423–437.

- Office for National Statistics (ONS) (2015). Families and households: 2015. Newport: Office for National Statistics.
- ONS (2016). Development of a single official house price index. Newport: Office for National Statistics.
- Redfern Review. (2016). The Redfern Review into the decline of home ownership. Available at: http://www.redfernreview.org/ (accessed 28/03/17).
- Roberts, S. (2013). Youth studies, housing transitions and the "missing middle": Time for a rethink? *Sociological Research Online*, 18(3), 1–12.
- Shelter (2014). The clipped wing generation: Analysis of adults living at home with their parents. London: Shelter.
- South, S. J., & Lei, L. (2015). Failures-to-launch and boomerang kids: Contemporary determinants of leaving and returning to the parental home. *Social Forces Advance Access*, *94*(2), 863–890.
- Stone, J., Berrington, A., & Falkingham, J. (2011). The changing determinants of UK young adults' living arrangements. *Demographic Research*, 25(20), 629–666.
- Stone, J., Berrington, A., & Falkingham, J. (2014). Gender, turning points, and boomerangs: Returning home in young adulthood in Great Britain. *Demography*, 51(1), 257–276.
- University of Essex. Institute for Social and Economic Research. (2015). Understanding Society: Waves 1-5, 2009-2014. [data collection]. 7th Edition. UK Data Service. SN: 6614, doi: 10.5255/UKDA-SN-6614-7.
- Wall, R. (1983). The household: Demographic and economic change in England, 1650–1970. In R. Wall, J. Robin, & P. Laslett (Eds.), Family forms in historic Europe (pp. 493–512). Cambridge: Cambridge University Press.

**How to cite this article:** Bayrakdar S, Coulter, R. Parents, local house prices, and leaving home in Britain. *Population Space and Place.* 2017;e2087. https://doi.org/10.1002/psp.2087

# **APPENDIX**

**TABLE A1** Wald tests of instrumental variables

				Models of leaving home								
	Attrition model			Any destination			Partnership			Other destinations		
Instrument	df	Wald statistic	p value	df	Wald statistic	p value	df	Wald statistic	p value	df	Wald statistic	p value
Household interview outcome	2	66.82	<0.001	2	3.66	0.16	2	0.27	0.87	2	0.29	0.86
Respondent is suspicious	1	5.58	0.01	1	0.01	0.93	1	0.05	0.83	1	0.49	0.48
Both instruments	3	71.41	<0.001	3	3.66	0.30	3	0.33	0.95	3	0.86	0.84

Note. All models also include the covariates in Table 1.

 TABLE A2
 Comparison of coefficients from multilevel and Heckman sample selection probit models

Any destinations		Partne	ership	Other destination		
Multilevel	Heckprob	Multilevel	Heckprob	Multilevel	Heckprob	
0.041***	0.038***	0.053***	0.050***	0.017	0.020	
0.169***	0.154***	0.253***	0.241***	0.202***	0.211**	
-0.280***	-0.293***	-0.450***	-0.451***	-0.328**	-0.305*	
0.668***	0.664***	1.160***	1.125***	-0.342	-0.345	
0.584***	0.549***	0.111	0.100	0.751***	0.753**	
0.853***	0.825***	1.227***	1.197***	-0.472	-0.422	
0.028	0.046	-0.014	-0.003	0.069	0.051	
0.109	0.091	-0.071	-0.069	0.038	0.069	
-0.030	-0.035	-0.458***	-0.451***	-0.322***	-0.303**	
0.119***	0.115***	0.173***	0.169***	0.118**	0.117**	
-0.011***	-0.009**	-0.021***	-0.020***	-0.001	-0.003	
-0.171***	-0.169***	-0.034	-0.028	-0.272***	-0.274**	
0.144***	0.150***	0.037	0.040	0.216**	0.198**	
-0.007	-0.006	-0.007	-0.008	-0.019	-0.021	
0.006***	0.006**	0.004	0.004	0.006**	0.007*	
0.068	0.052	0.070	0.068	0.180*	0.180*	
0.117	0.084	0.085	0.073	0.232*	0.267*	
0.060	0.048	-0.033	-0.039	0.096	0.106	
-0.203*	-0.222**	-0.334*	-0.346**	-0.459***	-0.420**	
-0.104*	-0.101*	-0.070	-0.064	0.059	0.044	
-0.120		-0.068	-0.044	0.011	-0.006	
		-0.002	-0.001	-0.001	-0.001	
-0.036*	-0.037**	-0.029	-0.031	-0.044	-0.041	
0.220	0.204	0.529	0.570	0.541	0.410	
0.338	0.284	0.328	0.579	0.341	0.612	
	-0.225***		-0.152***		-0.151**	
	-0.343***		-0.317***		-0.317**	
	0.041*** 0.169*** -0.280***  0.668*** 0.584*** 0.853*** 0.028 0.109 -0.030 0.119***  -0.011*** -0.171*** 0.144*** -0.007 0.006***  0.068 0.117 0.060 -0.203*  -0.104* -0.120 0.002	Multilevel         Heckprob           0.041***         0.038***           0.169***         0.154***           -0.280***         -0.293***           0.668***         0.664***           0.584***         0.549***           0.825***         0.028           0.0109         0.091           -0.030         -0.035           0.119***         0.115***           -0.011***         -0.009**           -0.171***         -0.169***           0.144***         0.150***           -0.006         0.006**           0.068         0.052           0.117         0.084           0.060         0.048           -0.203*         -0.222**           -0.104*         -0.101*           -0.120         -0.107           0.002         -0.036*           -0.036*         -0.037**           0.338         0.284	Multilevel         Heckprob         Multilevel           0.041***         0.038***         0.053***           0.169***         0.154***         0.253***           -0.280***         -0.293***         -0.450***           0.668***         0.664***         1.160***           0.584***         0.549***         0.111           0.853***         0.825***         1.227***           0.028         0.046         -0.014           0.109         0.091         -0.071           -0.030         -0.035         -0.458***           0.119****         0.115****         0.173***           -0.011***         -0.009**         -0.021***           -0.171****         -0.169***         -0.034           0.144***         0.150***         0.037           -0.007         -0.006         -0.007           0.006**         0.006         -0.007           0.17         0.084         0.085           0.060         0.048         -0.033           -0.203*         -0.222**         -0.334*           -0.104*         -0.107         -0.68           0.002         -0.002         -0.002           -0.036*         -0.037**	Multilevel         Heckprob         Multilevel         Heckprob           0.041****         0.053****         0.050****           0.169****         0.154****         0.253****         0.241****           -0.280****         -0.293****         -0.450****         -0.451****           0.668****         0.664****         1.160****         1.125****           0.584****         0.549****         0.111         0.100           0.853****         0.825****         1.227****         1.197***           0.028         0.046         -0.014         -0.003           0.109         0.091         -0.071         -0.069           -0.030         -0.035         -0.458****         -0.451***           0.119****         0.115****         0.173****         0.169****           -0.011****         -0.009***         -0.021****         -0.020****           -0.111****         -0.169****         -0.021****         -0.020****           -0.011****         -0.169****         -0.021****         -0.020****           -0.017****         -0.169****         -0.034         -0.028           0.144****         0.150****         0.004         -0.004           0.068         0.052         0.070	Multilevel         Heckprob         Multilevel         Heckprob         Multilevel           0.041****         0.038****         0.053****         0.050****         0.017           0.169****         0.154****         0.253****         0.241****         0.202***           -0.280*****         -0.293****         -0.450****         -0.451****         -0.328***           0.668*****         0.664****         1.160****         1.125****         -0.342           0.584****         0.549****         0.111         0.100         0.751****           0.028         0.046         -0.014         -0.003         0.069           0.109         0.091         -0.071         -0.069         0.038           -0.030         -0.035         -0.458****         -0.451****         -0.322****           0.119****         0.115****         0.173****         0.169****         0.118***           -0.011****         -0.009***         -0.021****         -0.020***         -0.001           -0.14****         0.150****         -0.034         -0.028         -0.272****           0.144****         0.150****         0.037         0.040         0.216***           -0.007         -0.008         -0.019         0.006***	

TABLE A2 (Continued)

	Any destinations		Part	nership	Other destination		
Variable	Multilevel	Heckprob	Multilevel	Heckprob	Multilevel	Heckprob	
Suspicious interviewee		-0.245***		-0.233***		-0.236**	
Individual characteristics							
Age		-0.013		-0.024**		-0.024**	
Female		-0.066*		-0.083**		-0.082**	
Not White British		-0.110*		-0.030		-0.030	
Family status (ref no coresident partner or child)							
Coresident partner		0.292		0.128		0.133	
Coresident child		-0.090		-0.145		-0.139	
Coresident partner and child		0.031		-0.077		-0.077	
Limiting health condition		0.123*		0.093*		0.092*	
Unemployed		-0.109		-0.171**		-0.171**	
Full-time student		-0.039		-0.053		-0.055	
Income		0.010		-0.013		-0.013	
Parental attributes							
Parental age		0.015***		0.015***		0.015***	
Lives with both parents		0.041		0.093**		0.093**	
Parental degree		0.132**		0.061		0.060	
Parental income		0.010		0.011		0.011	
Age # parental income		0.000		-0.003		-0.003	
Parental tenure (ref ownership)							
Social rent		-0.092*		-0.065		-0.067	
Private rent		-0.262***		-0.244***		-0.245***	
Large household		0.000		-0.031		-0.031	
District characteristics							
Ln district house price		-0.153*		-0.123*		-0.123*	
District population density (ref low)							
Medium		-0.045		0.066		0.067	
High		-0.017		0.089		0.090	
District price increase		0.001		-0.002		-0.002	
District unemployment rate		-0.011		-0.003		-0.003	
ρ		0.555*		0.121		-0.398	
District intercept variance	0.022*		0.040		0.000		
N observations	10,047	11,265	9,528	11,265	9,528	11,265	

 $\it Note. \ Estimated \ using \ Stata \ 14.1. \ Models \ include \ period \ dummies \ (results \ not \ shown).$ 

<sup>\*</sup> $p \le .05$ .

<sup>\*\*</sup> $p \le .01$ .

<sup>\*\*\*</sup> $p \le .001$ .