

Forthcoming 2016 in T. Champion and J. Falkingham (eds) *Population Change in the United Kingdom*. London: Rowman and Littlefield International.

Household Composition and Housing Need

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After a century of falling household size which stimulated rates of house building over and above those of population growth, average household size has remained steady in the 21st century so far. Our analysis shows that population growth and population ageing has added to demand for extra housing and will continue to do so, but young adults have been less likely to form independent households – a process that started in the 1990s, well before the 2007 banking crisis and subsequent recession. To what extent this reduction in household formation is structural or temporary is still impossible to identify, but the main unknown to future housing need continues to be change in population numbers.

This chapter examines how changes in population and household composition are influencing housing demand in the UK. The chapter is aimed not only at students of demography, but also at analysts and policy makers grappling with issues relating to housing the current and future UK population. We draw on data published in the most recent, 2012-based, household projections produced by the (Department for Communities and Local Government (DCLG, 2015a). Household projections show household numbers that would result if the assumptions based in previous demographic trends in the population and rates of household formation were to be realised in practice. Household projections can be criticised for the way in which they can encourage circularity in planning: lower recent headship rates due to economic recession and lack of availability and affordability are projected forward as reduced housing need. Thus fewer houses will be built leading to further pressures on availability and affordability (Bate, 1999). Nevertheless these projections provide a useful basis from which to explore past and future trends in household formation.

The chapter begins with definitional matters and by briefly reviewing the current housing context. The following section examines the role of demographic factors in increasing housing demand. Then we apply a simple decomposition technique to quantify the relative importance of demographic factors and household structure. Finally, we consider the evidence of single people and families ‘concealed’ within households, some of whom would wish to have separate housing. We have provided UK figures where possible, but because of

the different approach to household projections by each of the national statistical agencies, later discussion focuses on England, and London within it.

Background

The Nature of the Evidence

Data sources differ in their definition of a *household* but here we will generally be using the 2011 Census definition that is consistent across all countries of the UK, i.e. “one person living alone , or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room or sitting room or dining area” (Office for National Statistics, 2014a). *Household composition* classifies households according to the relationship between members of a household. A household might consist of just one person, or more than one in a family or multiple families, and with or without others not in a family. The distribution of households according to their composition is affected by numerous factors including age structure of the population, average number of children per family, levels of partnership formation and dissolution, and the likelihood that multiple families live together within a complex household. The likelihood of forming a household is captured by the *household representative rate*, measuring the number of households per person in the *household population*, which excludes those in communal establishments like care homes and student halls of residence. Thus an average household size of 2.0 equates to an overall household representative rate of 0.5. household representative rates are generally calculated for separate age groups to identify the rising likelihood of being in an independent household among adults and with increasing age. They require the identification of a household ‘head’, ‘reference person’ or ‘representative’ which in UK statistics is not self-identified but dependent on age, sex and sometimes economic activity. Household representative rates are the same indicator as the more common ‘headship rate’, a term that has been avoided in most of the UK and in this chapter in order to avoid the implication of responsibility within the household. Representative rates reflect the preferences and constraints facing individuals to form a separate household.

To facilitate forward planning in the public and private sectors, the UK Government Department for Community and Local Government (DCLG) makes regular *projections of the future likely number of households* for England and its local authority districts. The devolved administrations for Wales, Scotland and Northern Ireland make similar projections. These household projections are trend-based, informed by the projected population and projected

household representative rates (broken down by age and sex), and by Census and Labour Force Survey data. They are therefore driven by assumptions both on future levels of fertility, mortality and migration and on future patterns of household formation behaviour relating to the way that this population groups into household units as measured by household representative rates (DCLG, 2015a; Welsh Government, 2011).

Household projections form the starting point for the objective assessment of future need for housing, as set out in government guidance (DCLG, 2015b), but the need for housing is different from the household projections for a number of reasons. The number of *dwelling*s needed is not the same as the number of households they accommodate. Some households share a front door (the main criteria for a separate dwelling or unit of accommodation), while there are always some dwellings that are unoccupied – vacant or being used as second homes or holiday homes. This adjustment between future households and need for housing is small in comparison with the likely underestimation of housing need by household projections due to ‘suppressed’ demand. Since household projections are based on recent trends they reflect only the ‘effective demand’ (Planning Advisory Service, 2014), a market-driven concept that relates to the “quantity and quality of housing which households will choose to occupy given their preferences and ability to pay (at given prices)” (Heath, 2014). Evidence for suppressed demand, which is not included in the effective demand that official projections measure, can be seen in the growing numbers both of young adults remaining in the parental home (Berrington & Stone, 2014) and of multiple families within a household (Smith, 2014), as is examined in more detail later in the chapter.

The Housing Crisis

The current housing crisis can best be seen as a mismatch between need for housing and its provision. We have already indicated that official household projections are an underestimate of housing need. Figure 1 indicates that nonetheless the rate of housebuilding in the UK in the first four years of the 2010s was 100,000 per annum lower than the demand indicated by household projections. By contrast, in the 1960s and 1970s housebuilding exceeded demand partly because a lot of old sub-standard housing was demolished but also associated with fewer families having to share accommodation, while after that until the 2000s housebuilding more closely matched changes in the number of households. The UK housing crisis of the late 2000s and early 2010s has a number of dimensions – too few, too expensive, in the wrong places, or of poor quality (Moore, 2015). These aspects are inter-related but

their relative importance for an individual will differ depending on geographical locality, income group, life course stage and so forth – different segments of the population facing different problems. Just as there are many features of the housing crisis, multiple factors are responsible: often these are presented as a list (Moore, 2015; Chu, 2014) with their relative importance being a matter of debate (Dorling, 2014). Key issues are shortage of available housing and lack of affordability.

Housing Availability

Figure 2 shows the total number of new houses built in the UK each year from 1920 to 2013, with a breakdown into those built by the private sector (for rent as well as for sale) and the contribution made by the public/housing association sector (nowadays commonly referred to as ‘social housing’). Following the Second World War house building increased, peaking in the late 1960s before declining through to the early 1980s; the number was roughly stable until 2008 when building dropped dramatically to a new low.

Figure 2 about here

Reasons for the lack of new build include the global financial crisis, land supply and the cost of land, and planning regulations (Shelter, 2015). Wilcox and colleagues (2015, p. 8) argue that “greater supply of land with planning permission is generally acknowledged as a key factor in boosting supply”. However, planning regulations insist that Local Plans permit an amount of land for housing at least as great as the household projections indicate, unless any shortfall is made up by neighbouring local authorities (DCLG, 2015b). The regulations bind the government Planning Inspectors’ approval of Local Plans and thus ensure a supply of land commensurate with or greater than the projection. Thus lack of house building appears to also result from an inability, unwillingness or lack of resources to build, rather than from the supply of land. Whitehead and Williams (2011) highlight implications of global economic uncertainties on the number of housing starts together with the changes in the National Planning Policy Framework and moves towards localised community planning control regime. Whitehead and Williams (2011) believe that a considerable number of planning proposals have been abandoned as a result of the removal of output targets for local authorities.

Housing Affordability

There are a number of reasons why housing has become less affordable, especially for young adults (Kennett et al., 2013). These include the faster increases in house prices than earnings, especially for first time buyers (McKee, 2012; Whitehead & Williams, 2011). Over and above house price inflation, it has been access to credit that has been a key factor: following the global financial crash in 2008, lenders have been less willing to provide mortgages with a high loan to value ratio. Large mortgage deposits are required, which are generally unaffordable for young adults without assistance from others, usually parents (Wilcox & Pawson, 2012; Kemp, 2015). At the same time, cuts to welfare benefits have meant that lower-income households are also finding it more difficult to cover their housing costs. Post-recession austerity measures include the reduction in the value of the Local Housing Allowance, the overall welfare cap, and the restriction of the value of housing benefit for single people aged under 35 to a level required to rent a room in a shared property (Rugg et al., 2011; Berrington and Stone, 2014; Tunstall, 2015).

For some population sub-groups (e.g. wealthier couples who are both in work) affordability of owner occupation has actually improved in recent years – at least outside of London – primarily as a result of reduced interest rates (Wilcox et al., 2015). Government interventions have also targeted first time buyers (FTBs): in 2014 around one third of the 311,000 FTBs were helped on the “housing ladder”, a further third were supported by parents and just a third made it on their own (Wilcox et al., 2015). While there is some evidence that the buying propensity of young adults recovered a little in 2014 except for the very youngest age groups (Clarke, 2015), Government-funded schemes such as Help to Buy “risk making matters worse by increasing purchasing power without resulting in a commensurate increase in the supply of new homes. Hence, the average house price-to-income ratio for FTBs will remain at very high levels for the foreseeable future”. (Kemp, 2015 p. 14)

Lack of affordability and residualisation of the social housing sector means that low income families are increasingly looking to the private rented sector (Kemp, 2011). Figure 3 shows the proportion of household representatives (the household reference person) renting privately by age in 2001 and 2014. Renting privately was always commonplace among those in their early twenties, but this century’s increase has affected older adults: today around one half are renting in their late twenties and over one third of household representatives in their early thirties are renting. This is the life course stage when having children and insecurity of tenure can become a serious issue (Kemp, 2015).

Figure 3 about here

Whilst there have been previous housing crises for example in supply during the immediate post-war period, or of affordability due to high mortgage interest rates (Malpass, 1986; Bramley, 1994), new elements of the current crisis include inter-generational inequalities in housing as a result of the retirement of cohorts who own their own homes and the rising importance of the private rented sector in response to lack of affordability of owner occupation and the residualisation of the social rented sector. Property has become an “attractive speculative investment”, leading to buy-to-let (Dorling, 2014). Private landlords have benefited from the increased reliance on private rented accommodation that has resulted from the lack of affordability to buy.

Demographic Changes and Housing Need

In this section we focus on the measurement of housing demand based on past numbers of households and projections into the future, as well as evidence of additional need for housing from individuals and families not in independent households.

Population Growth

During the period since 2004 the UK population grew much faster than it had done previously, by around 450 thousand additional individuals per year as compared with around 150 thousand a year in the 1990s. Much of this increase in population growth is associated with an increase in the level of net migration to the UK (see Chapters 1 and 4). Since 1998 the rate of natural increase has also risen, in part an indirect effect of the fertility of recent immigrants (see Chapter 5), but also due to an increase in the level of fertility among UK-born women during 2002-2012. .

Figure 4 about here

The precise impact of increased international migration on housing demand is difficult to quantify since immigrants to the UK tend to be young, and to live in larger, more complex households (Whitehead, 2011; Holmans, 2013). One simple estimate of the

percentage of the future number of households that are due to projected net international migration assumes that household representative rate of that extra population is the same as the overall population. Using the 2011-based DCLG household projection, and an ONS projected net migration figure of around 122 thousand, Heath (2014) calculated that 27 per cent of England's extra households is due to immigration. Using a different approach, with foreign birthplace to represent all the surviving residents who have ever immigrated to the UK, ONS have estimated that the increase in foreign-born household reference persons is equivalent to around 66% of the 1.96 million increase in households that took place in the UK between the 2001 and 2011 censuses (Migration Watch, 2015). However, any international migration is bound to change the balance of foreign-born and UK-born householders, so that a faster-growing number of foreign-born householders is to be expected. The 2012-based DCLG Household Projections (DCLG, 2015c) suggest that net migration will account for one third of household growth between 2012 and 2037.

The housing careers of immigrants in the years following arrival in the UK are likely to be different from those of the UK born as a result of both constraints and preferences regarding living arrangements (Stone et al., 2011; Holmans, 2013). However, we do not have enough empirical evidence to know what the medium and longer term impacts will be (Robinson et al., 2007). Furthermore, their concentrations in particular geographical localities mean that the impact on local housing markets can be quite different from the overall impact (Whitehead, 2011).

Population Ageing

The UK population is ageing and will continue to do so for the first half of the 21st century. On Census day in 2001 there were 1.01 million people aged 85 or over. By 2011 this had increased by a quarter to 1.25 million, accounting for 2.2% of the whole population (compared with 1.9% in 2001). Older people tend to live in smaller households: 59% of the population aged 85+ in England and Wales lived alone in 2011, as compared with just 10% of those aged 25-34 (Office for National Statistics, 2014b). household representative rates are therefore higher at older ages with the result that population ageing increases the number of households for a given overall population size, as we discuss further below in the context of projections.

Changing Household Composition

Average Household Size

Average household size in both England and Wales and in Scotland declined almost continuously from 4.8 per household in 1851 to around 4.3 in 1921, 3.5 in 1939, 2.7 in 1981 and 2.4 in 2001. As can be seen in Figure 4, up until the mid-1950s, the majority of this reduction in household size was due to declining fertility that reduced the average number of residents aged under 20. However, from the 1920s there was also a decline in the number of resident adults in each household, indicating a spreading out of the adult population between more households.

This trend to smaller households is associated with both the ageing of the population and higher household representative rates at most ages. Both act to increase the proportion of one and two person households, which rose dramatically over the half century to 2011 (Figure 5). For example, in Scotland the percentage of households that consisted of just one or two persons increased from around two-fifths (41%) to over two thirds (69%). The continuously upward trend is also seen in Wales, England and Northern Ireland.

Figures 4 and 5 about here

Household projections made before the 2011 Census made assumptions that continued the decline in average household size (DCLG, 2010a), but in fact the decline stalled with average household size in 2011 being 2.24 in Scotland and 2.40 in England and Wales, having been 2.31 and 2.41 respectively in 2001. Reasons for this misalignment between the projected decline and the observed stability include the projections over-estimating household representative rates for young adults and an unanticipated increase in concealed households (Holmans, 2013). We can also see from Figure 5 that the upward trend towards more one and two person households slowed in the past decade and actually reversed in London after stabilising in the 1990s.

Household Representative Rates

In order to understand more closely what is happening to household composition it is instructive to look at household representative rates for each age and sex (Figure 6). For the official projections shown in Figure 6, the eldest male is taken as the household

representative and hence if a woman is in a couple then she will have a household representative rate of zero. As in most countries, men's representative rates rise sharply between the 15-19 and 30-34 age groups, and then increase more slowly to reach a maximum close to 1 for men aged in their sixties and early 70s. For women, we typically see representative rates increase through their early and mid-twenties as young women leave the parental home and establish independent households, some living outside a couple. The rate then remains fairly constant until women reach their sixties when representative rates rise significantly, often as a result of widowhood.

Figure 6 about here

What is of particular interest are the deviations from this general pattern observed in England over the period 1991-2011 which were in progress in both decades (Figure 7). Over the past twenty years household representative rates among women have increased in young adulthood and especially in mid-life, but have declined for those aged in their seventies and early eighties. Among men, we observe a steep decline in representative rates, especially among those aged in their late twenties. These trends reflect both period and cohort changes in the household composition. Firstly, in young adulthood, women are nowadays less likely to leave home to form a co-residential partnership but are more likely to be living alone, or sharing accommodation (Stone et al., 2011) – hence their household representative rates increasing. Furthermore, men especially are increasingly likely to remain in the parental home in their late twenties (Berrington & Stone, 2014).

Figure 7 about here

In mid-life, the rise in representative rates for women results from increased partnership dissolution and lone parenthood (Demey et al., 2011). However, women currently aged in their seventies and early eighties (who were born in the late 1920s and early 1930s) are more likely to be living in a couple household than those born previously. This is due to both increased longevity (especially for males) but also the fact that these cohorts were far more likely to have married (they were part of the golden age of the family in the post-war 1950s economy) than those born ten years earlier, nor have they experienced the rise in divorce of subsequent cohorts (Murphy, 2011). Since there appear to be three main age ranges where

change appears to have occurred: (15-34; 35-59 and 60+), we use these three age groups within our decomposition in the next section, which quantifies the extent to which overall change in household numbers results from population increase, population ageing, the changing relationship composition of the population, and representative rates conditional upon age group and relationship status.

Understanding the Drivers of Household Growth

Below we use a simple decomposition to quantify the relative importance of each driver of household growth. We examine observed growth 1991-2011 and then the growth projected in the 2012-based DCLG household projections (DCLG, 2015d). The DCLG projections are for England only and we focus on England since the different methods of projection each country that makes up the UK precludes an amalgamated dataset. London is shown separately to investigate its special pressures as already highlighted in Figure 5.

The Decomposition

In this paragraph we describe the technical calculations that inform Table 1 below, before describing the results. The overall number of households can be written as $\sum_{a,s,r}$ (household population x representative rate) where 'a', 's' and 'r' correspond to age, sex and relationship status. Changes in the household population can result from a) overall population growth; b) changes in the age and sex composition; and c) changes in the distribution by 'relationship' status, which in the DCLG work identified whether each person was in a couple, and if not whether they had been divorced, separated or widowed. On the other hand, to examine the role of changing representative rates among adults we use three broad age groups: young 15-34; middle 35-59; and older 60+ as discussed above. To obtain the impact of total population growth we apply the age and relationship-specific household representative rates from the start of the time period to the new population total, without changing the age structure. To obtain the impact of changes in age structure and relationship status composition we repeat the exercise using the starting population's household representative rates, the new population total, and the new age composition, and then relationship status composition, at the end of the time period. Adding these together provides the total change in the number of households due to population change, the "all population impact" in Table 1. Next we apply the new household representative rates for the end of the time period to the old population as at the start of the period. The sum of the effects for our three broad age groups is the total

effect of changes in household representative rates, the “all rates impact” figure in Table 1. The interaction effect represents the way in which the impacts of population and the household representative rates are interrelated: the growth of a population group which has relatively high household representative rates will further boost the household change, for example. Table 1 shows the results of the decomposition for England (top panel) and for London (bottom panel). We discuss first the drivers of observed population growth 1991-2011 before examining the assumed future contributions to household growth in the period 2011-2037.

Drivers of Past Household Growth, 1991-2011

Looking first at the results for England we can see that during the period 1991 to 2001 62,000 additional households were formed annually simply because the population grew in total size. A further 59,000 households were created due to a shift in age-sex composition – mainly the baby boom generation born during the 1960s coming into older adult ages when almost all are in couple households. Between 2001 and 2011 the number of households grew at faster rate than the previous decade, with one and a half million extra households being formed as a direct result of total population growth and a further 37,000 as a result of changes in age composition – this time towards a more elderly population where households tend, more than at any other age, to consist of just one or two adults. In both decades, shifts in the proportions in each relationship status, particularly a reduction of elderly women living alone, led to a reduced number of households.

Changes in household representative rates had less impact on the number of households. During the 1990s, an increase in the number of young (aged 15-34) women-headed households was matched by decreases among men. In the 2000s, while there was just a slight decline in the propensity of young women to form their own households, representative rates among young men fell dramatically, effectively reducing household growth by 24 thousand each year. Among those aged 35-50, household formation increased for both men and women, partly due to delayed partnership formation but also increased partnership instability and a growth in the number of lone parents. During the 2000s these trends are not so apparent. For both decades, the older population, given their relationship status, exhibit more independent living with higher representative rates.

For London, the number of households grew by 24,000 when averaged annually, in the period 1991 to 2001 and by the same amount annually between 2001 and 2011. Almost

all of this growth was due to an increase in total population. Changes in the population age structure and relationship composition had only a minimal impact on household growth, whilst in both decades household representative rates, especially for those aged under 35 declined. The experience of England outside the capital shows the same trends as are described for England as a whole, both in the past and in the future.

Drivers of Future Household Growth, 2011-2037

The 2012-based projections (DCLG, 2015a) estimate that the number of households in England will increase from 22.3 million to 27.5 million over the period 2012 to 2037 – an average annual growth of 210,000 per year (even greater than that seen for the previous decade). Table 1 indicates that over two-thirds of this household growth is projected to result from increases in the total population, whilst changes in population age structure (primarily the ageing of the large ‘baby boom cohorts’ born in the 1960s) will also significantly add to household growth, particularly in the period 2021-2037. It is noticeable that the projections assume that changes in household representative rates will have little further impact on the future growth in the number of households in England as a whole. The rates are assumed to increase slightly for women, but to reduce slightly for young men. The projections thus assume that the recent lower rates of household formation among young adults will not be reversed in the next twenty years.

Future population ageing means that the proportion of one and two-person households will increase, which explains why the projections suggest that the number of households will increase faster than the household population, and that as a result average household size in England is projected to fall 2.35 to 2.21 (DCLG, 2015a).

Focusing on London we see that annual projected household growth is twice that seen in the past decade. Annually an additional 50 thousand households are estimated to require accommodation (roughly one quarter of all the projected increase in demand for England). This growth is being driven entirely by population growth and changes in the population age composition. If not all this growth could be accommodated in London, some must be converted into migration to areas outside London.

Since the projection used in this decomposition, updated national population projections show a slightly more rapid increase, mainly due to upwardly revised projections

of international migration, amounting to 534 thousand more people in 2037 (ONS, 2015). This translates into approximately a further 5-10 thousand households per annum. It emphasises that the growth in population, and the uncertainty in that growth, are the major factors in assessing overall need for housing.

Further Evidence of Changes in Living Arrangements 2001-2011

The 2011 UK Census results suggested that there had been unanticipated changes in household composition over the previous decade, halting the century-long decline in average household size. Two key changes are discussed below: the tendency for increased co-residence between adult children and their parents; and an increase in the number of multi-family households.

Young Adults' Living Arrangements

An increasing proportion of young adults are co-residing with their parents (Figure 8). The trend for increased co-residence predates the economic recession (Berrington & Stone, 2014) but is likely to have been accentuated by it, especially among young men. The vast majority of those living with their parents do not have a family of their own, but between 2000 and 2014 there has been an increase, especially for women in their twenties, in the proportion living with either a partner or child in a multi-generational household. Institutional changes, including the increase in participation in higher education, changes to the youth labour market and the delay in the age at which family formation occurs, mean that young men and women are nowadays less likely to leave home upon partnership formation. Those who leave the parental home for reasons other than family formation are more likely to return home, the so-called "Boomerang Generation". Evidence from longitudinal data suggests that young people return when they require support, such as after finishing full time education, ending a job, or as a result of partnership dissolution (Stone et al., 2014).

To some extent the changing living arrangements of young adults results from the delay in family formation to later ages: The likelihood of being married by age 30 has declined dramatically in England and Wales: over half (59%) of men born in 1962 were married by age 30 compared to just over one third (36%) of men born in 1972 and one quarter (24%) of those born in 1982 (Office for National Statistics, 2014c). However, the increase in cohabitation means that the proportion living in a couple has remained steady at ages 25 and above, although there has been a decline for those aged under 25 associated with

a concomitant increase in the proportions either living with their parents or sharing accommodation (Berrington & Stone, 2014). The proportions of young adults living with their parents varies across the UK, most notably with higher co-residence in Northern Ireland.

Figure 8 about here

The postponement of family formation and decrease in rates of household formation are both associated with the changing nature of the transition to adulthood, with it becoming more protracted and non-linear. The drivers of young adults' living arrangements are diverse. Some are more structural and long standing, including cultural shifts in expectations for the age at family formation, institutional shifts in the proportions attending higher education, and increased economic uncertainty resulting from globalization and the changing nature of the youth labour market). Others are associated more obviously with the global recession of the late 2000s, such as restrictions on access to credit; increased austerity and reductions in the generosity of welfare (Berrington and Stone, 2014). It is thus difficult to predict whether the depressed household formation will continue.

The Rise in Concealed Families

Concealed families are used as an indication of potential extra housing need. They are defined as a second family living in a household, that does not include the representative of the household. The concealed family may be a married or cohabiting couple with or without children, or a single parent family. Thus concealed families are different from and extra to the single adults in their parental home discussed above.

Concealed families have been measured by the Census since 1951, and their more than halving in number over the next 20 years has been taken as an indicator of the success of housing policy then (Table 2). However the sharp increase to 289,000 in England and Wales in 2011, suggests that it would be useful to reintroduce the category in future projections to provide planners with an indication of unmet need for housing. Prior to 2008 concealed family representative rates had provided projections of the number of concealed families for this reason (DCLG, 2010b).

Concealed families are particularly common among young adults. The 2011 Census for England and Wales shows 13% of all families with reference person aged under 25 are concealed in other households (16% in London). Not all concealed households represent

unmet need, and the proportion that does represent unmet need varies with cultural norms. For example, a larger number of adults per household in the Asian communities is partly a reflection of desired household arrangements (Smith, 2014; Catney and Simpson, 2014).

Table 2 about here

Conclusion

Until the mid-2030s housing demand in England is projected to increase even faster than in recent decades, largely as a result of the increasing size of the population resulting from both natural increase and sustained net immigration, now projected to be around 170,000 net migrants per year (Office for National Statistics, 2015). Given that net international migration was estimated to be over 330,000 for the year ending March 2015, some have questioned whether the impact of international migration on future household growth is underestimated (McDonald and Whitehead, 2015). Any uncertainties in migration projections therefore feed into uncertainties in housing projections, not only at national level but also at local level. There are also uncertainties about assumptions regarding the types of households that future immigrants are likely to form.

Furthermore, there are a number of reasons why trend-based projections – which essentially project forward recent behavioural trends – are only the starting point for planning to meet housing need. Firstly, they do not take account physical limitations such as crowded urban areas or planning restrictions such as the green belt around urban areas. Secondly, the projection assumes that recent levels of household formation will continue into the future, including the significantly lower rates of household formation among young adults. Whilst this may seem reasonable in the short-term, the projections are predicated on past effective demand and exclude suppressed demand represented by delayed partnerships and concealed families, which could usefully be re-introduced into projection outputs to help estimate a more complete picture of need for housing.

Thirdly, the mismatch between the need for and the supply of housing is, above all, due to a lack of appropriate housing at the lower end of the income range. There is a problem with a low supply of housing, driving up prices for homebuyers, putting pressure on social housing and driving up the cost of private renting. Additionally there is a mismatch between the price of housing including rents, and the available incomes, especially for younger people. The mismatch can probably only be tackled by investment in social housing, since

initiatives to encourage home-buying or expand housing supply have been successful only at the margins. As noted by McDonald and Whitehead (2015) recent rates of house building for the four years 2011/12 to 2014/15 have only been sufficient to supply half the homes identified in the DCLG projections for England. This means that even more houses will have to be built in the forthcoming years over and above – a target that is likely to be unobtainable especially in London and the south East where the growth in the number of households is anticipated to be largest. Secondly, the lack of housing availability may well act to reduce household formation to levels lower than that predicted in the 2012-based projections. Whilst this would reduce the demand for housing, a less obvious housing crisis could emerge – one where poorer standards were the expectation. The Royal Institute of British Architects (RIBA) using government guidelines for minimum reasonable standards noted that ‘more than half of the new homes built today are not big enough to meet the needs of the people who buy them’ (RIBA, 2015, p. 3)

Planning for housing need in the UK would benefit from investment in household statistics and their analysis. Different approaches to housing projections in each country of the UK make time series difficult to construct, but the more serious problem that assessments of housing need must face is incomplete data. For example, household projections for England rely on incomplete analysis of the Census, which may affect both the projections and our decomposition of change (Simpson and McDonald, 2015). Furthermore estimates of England’s household numbers between 2001 and 2011 are linearly interpolated rather than estimated directly, making the impact of the economic shock of 2008 more difficult to trace.

The largest question that remains may be the nature of the reduction in effective housing demand that has undoubtedly taken place in the first decades of the 21st Century. Although more of a halt in overall rates of household formation than a real reduction, the increased number of those remaining in parental or shared households who would previously have found separate accommodation is real enough for those affected. Having indicated the variety of causes in this chapter, further work should be focused on understanding long-term structural changes that may be involved and on developing scenarios that indicate how the current housing crisis may best be overcome.

The level of overall population growth is by far the biggest driver of housing demand. Revisions to national population projections that acknowledge the long-term increase in net migration to the UK emphasise this driver. In-migration will not strongly affect the confident projection of an ageing population which also increases housing demand. Behavioural

changes do have some impact that differs between age groups. Judging by Scandinavian standards where over 40% of households are of one-person compared to the UK's 30% (Jamieson and Simpson, 2014), the currently stalled average household size discussed in this chapter has not reached a lower limit. While small in their impact compared to population growth and ageing, behavioural changes in living arrangements are the targets of social policy. Governments can help to maintain the currently tight relationship between income and independent living among new generations, or they can find ways of subsidising affordable housing. These policies will determine whether housing is mainly geared to monetary demand or to satisfying wider aspirations to adequate housing for all.

Acknowledgements

The authors thank the Department of Communities and Local Government who provided advice about data sources, and the Family Team within the Office for National Statistics for their advice on data sources and for producing a special table from the UK Labour Force Survey. The editors provided helpful comments on a draft version of the chapter and comments on presentations to the British Society of Population Studies and the British Academy were valuable stages in the chapter's development. The UK Labour Force Survey is carried out by the Office for National Statistics and Northern Ireland Statistics and Research Agency. Data were made available with permission of the UK Data Service. The UK Census is Crown Copyright.

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Table 1. Decomposition of observed and projected household change, 1991-2037.**England and London.**

England – all	Thousands per year			
	1991-01	2001-11	2011-21	2021-37
Total Population	+62	+152	+161	+135
Age-sex composition	+59	+37	+59	+66
Relationship status	-9	-8	-18	-9
<i>All population impact</i>	+111	+181	+201	+192
Rates 15-34f	+6	-6	+3	+3
Rates 15-34m	-10	-24	-3	-5
Rates 35-59f	+6	-2	+5	+4
Rates 35-59m	+3	-2	+3	+3
Rates 60+f	+8	+6	+3	+2
Rates 60m	+1	+1	+1	+1
<i>All rates impact</i>	+14	-27	+13	+7
<i>Interaction</i>	+10	+4	+5	+4
Total household change	+136	+158	+219	+204
<hr/>				
London	Thousands per year			
	1991-01	2001-11	2011-21	2021-37
Total Population	+21	+37	+44	+35
Age-sex composition	+3	-1	+11	+14
Relationship status	+2	+1	-0	+0
<i>All population impact</i>	+27	+36	+54	+49
Rates 15-34f	-1	-3	-0	+0
Rates 15-34m	-4	-7	-2	-1
Rates 35-59f	+1	-1	+1	+1
Rates 35-59m	+0	-1	+0	+1
Rates 60+f	+1	+0	+1	+1
Rates 60m	+0	-0	+0	+0
<i>All rates impact</i>	-3	-11	+0	+2
<i>Interaction</i>	+0	-1	+1	+1
Total household change	+24	+24	+55	+52

England without London	Thousands per year			
	1991-01	2001-11	2011-21	2021-37
Total Population	+40	+115	+117	+100
Age-sex composition	+56	+38	+48	+53
Relationship status	-12	-9	-18	-9
<i>All population impact</i>	+85	+144	+147	+143
Rates 15-34f	+7	-3	+3	+3
Rates 15-34m	-5	-17	-2	-4
Rates 35-59f	+5	-1	+4	+3
Rates 35-59m	+2	-1	+3	+1
Rates 60+f	+7	+6	+3	+2
Rates 60m	+1	+1	+1	+1
<i>All rates impact</i>	+17	-15	+12	+5
<i>Interaction</i>	+10	+5	+4	+3
<u>Total</u>	+112	+134	+163	+152

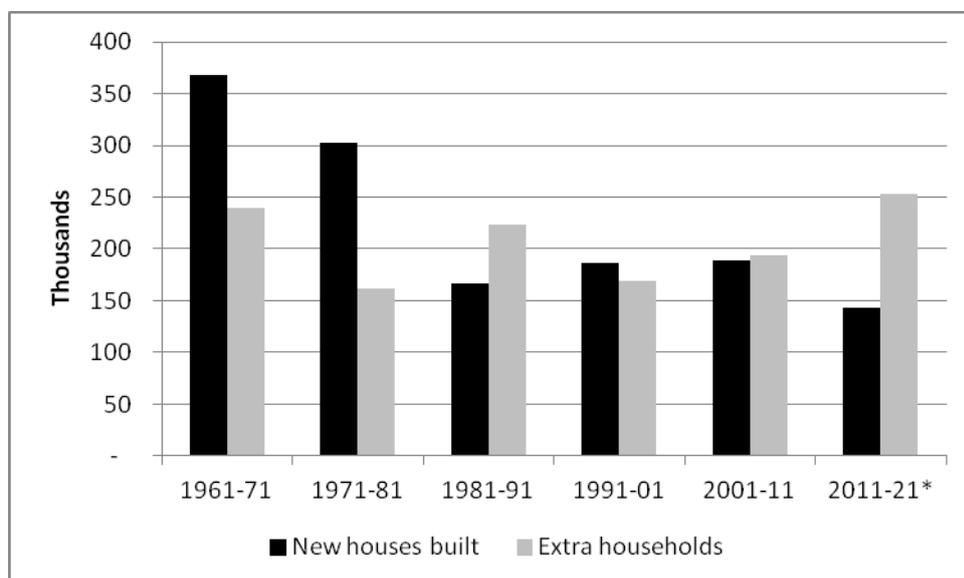
Source: authors' calculations using 2012-based DCLG (2015d) household projections detailed data.

Table 2. Households and concealed families 1951-2011, England and Wales.

Year	Households (thousands)	Concealed families (thousands)	Households plus concealed families (thousands)
1951	13,259	935	14,194
1961	14,724	702	15,426
1971	16,871	426	17,297
1981	No census data		
1991	20,213	273	20,486
2001	21,825	170	21,995
2011	23,740	289	24,036

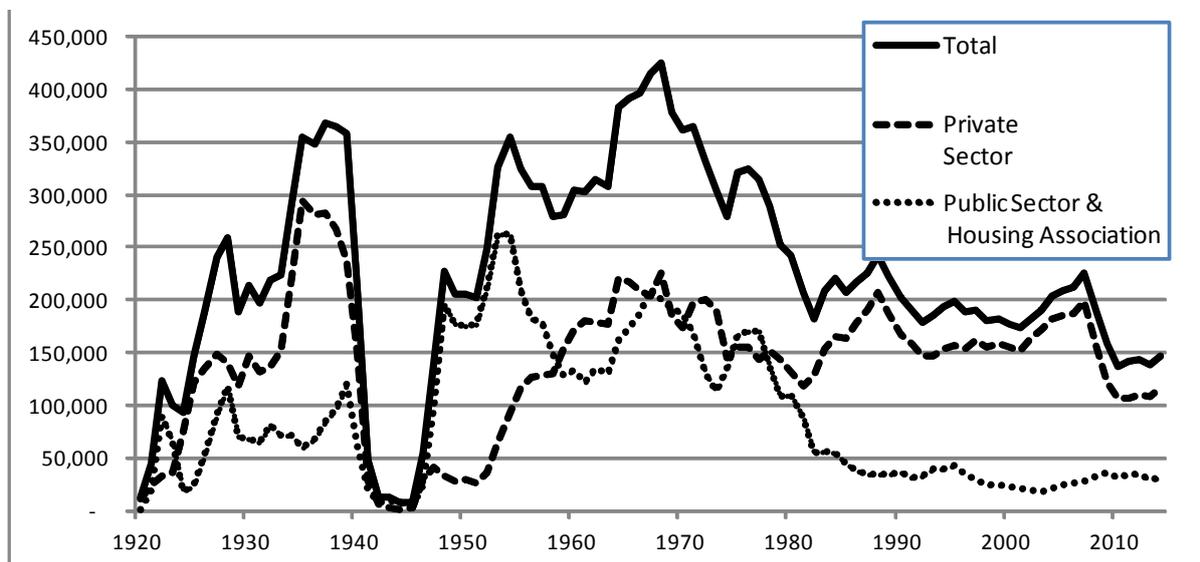
Source: Censuses (Holmans, 2014, p.4)

Figure 1. Change in number of households and housebuilding, annual averages for decades 1961-2021, England.



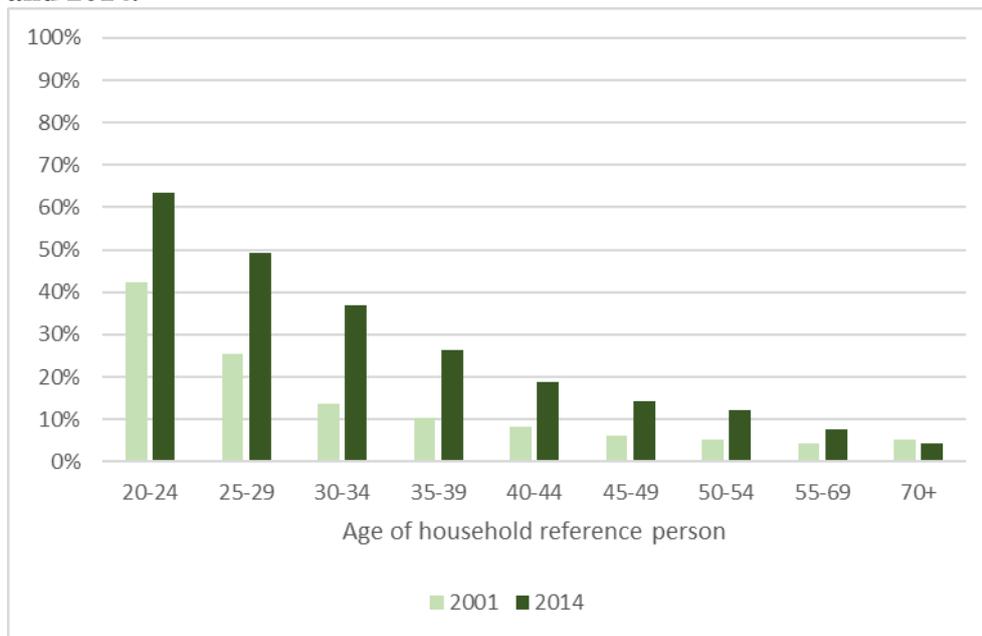
Source: DCLG Live tables of households, household projections and housing completions.
 Note: 2011-21: households as projected in DCLG annual average (2015b), housing completions annual average 2011-2014.

Figure 2: Annual numbers of new houses built 1920-2014.



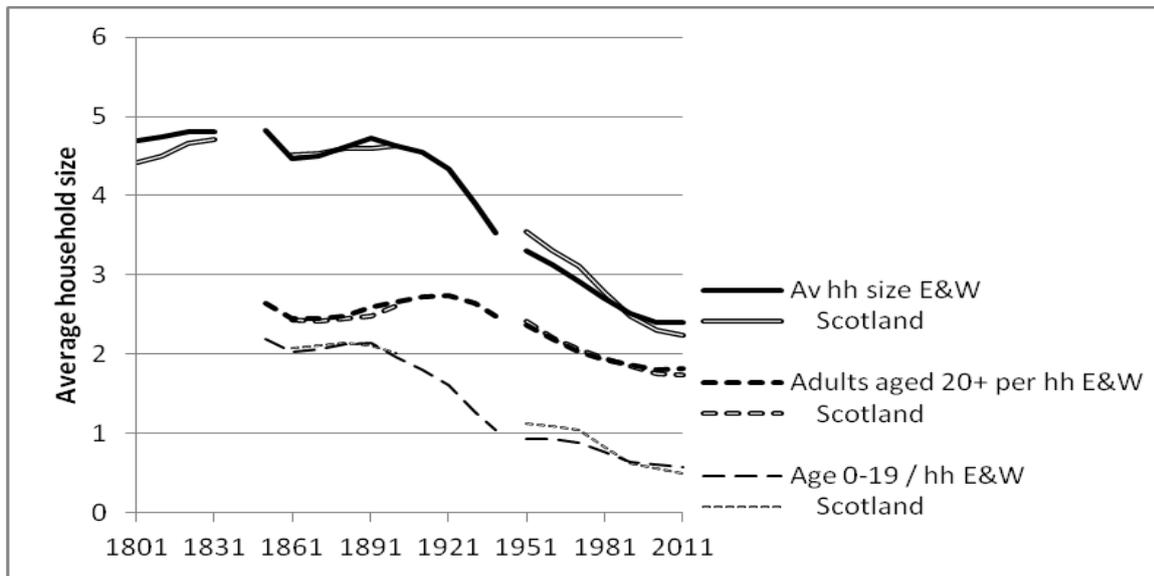
Source: From 1946: DCLG live tables of housing completions. Earlier: Scottish Government (2014, chart 3), and Holmans (2005); Northern Ireland, less than 5% of UK total, included only from 1948.

Figure 3: Percentage private renting by age of household reference person, UK, 2001 and 2014.



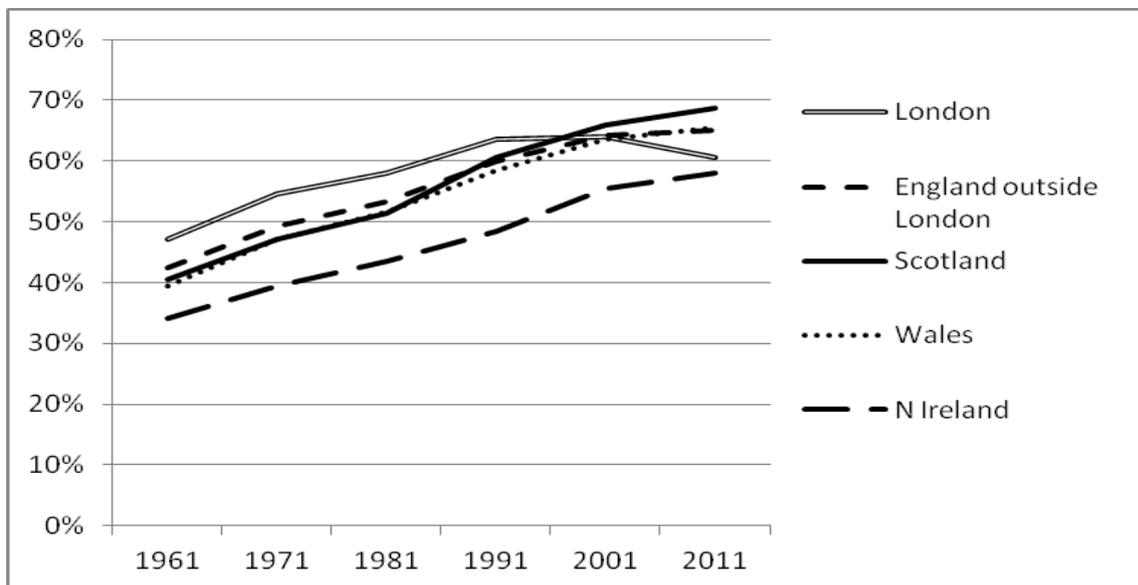
Source: authors' analyses of Labour Force Survey

Figure 4: Average household size and adults per household, 1801-2011. England and Wales, Scotland.



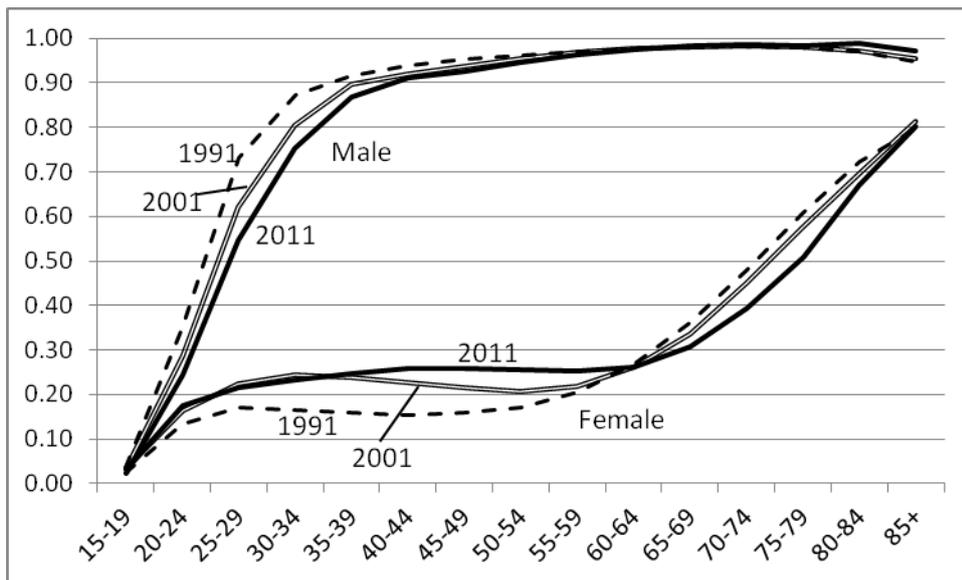
Source: Censuses and 1939 population registration (Holmans 2005; authors' from 2011 Census)

Figure 5: One and two-person households as a percentage of all households 1961—2011, London, England outside London, Scotland, Wales, and Northern Ireland.



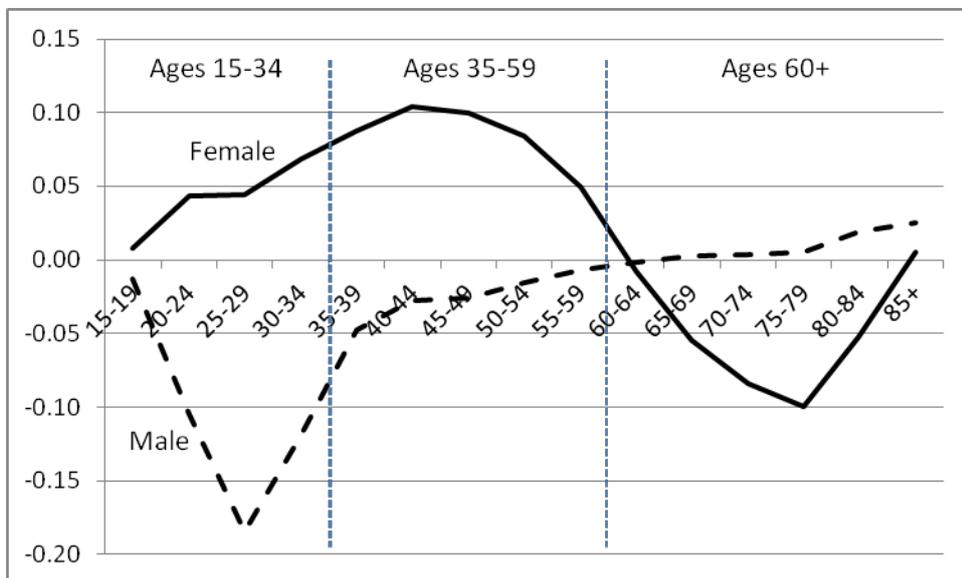
Source: authors' analyses of national Censuses

Figure 6: England household representative rates: 1991, 2001 and 2011.



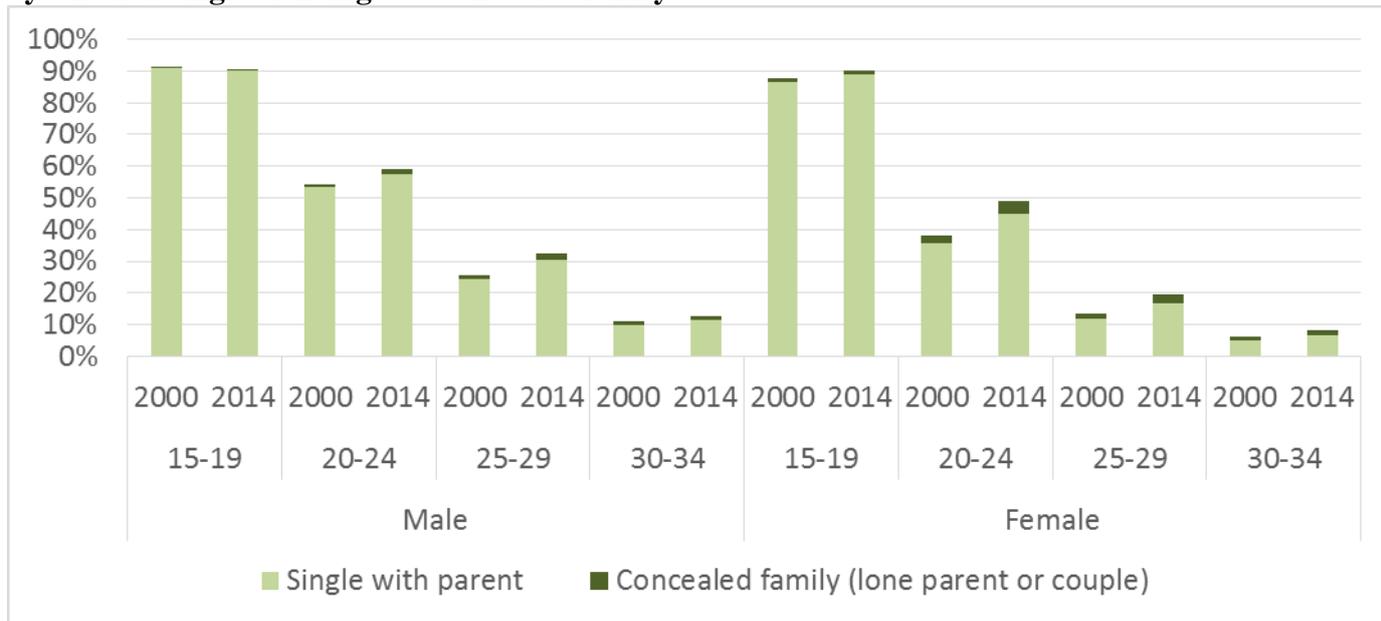
Source: DCLG (2015b) 2012-based household projections: detailed data for modelling and analytical purposes.

Figure 7: England household representative rates: change 1991-2011. Males and females by age group.



Source: DCLG (2015b) 2012-based household projections: detailed data for modelling and analytical purposes.

Figure 8: Percentage of UK young adults living with at least one parent, broken down by whether single or living as a concealed family.



Source: Authors' analysis of Office for National Statistics Special Table of UK Labour Force Survey.

Note: The term 'parent' includes grandparents, step parents or foster parents. Students living in halls of residence during term-time and living with their parents outside term-time are counted as not living with their parents.