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Ethnicity and Social Housing Allocation in England: An Exploratory Analysis of CORE

March 2018

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1. Introduction

Social housing is housing provided by local authorities or private registered social housing providers (also known as housing associations or Registered Social Landlords) at below market rents. Hence, its central purpose is to provide a safety net for the most vulnerable low-income households in society (e.g., Thornhill, 2010; Fitzpatrick and Watts, 2017). Put simply, social housing is housing with a social purpose (Oxley, 2001). Currently, around 17 per cent of all dwellings across England are in the social rented sector (Department for Communities and Local Government, 2017). This represents a decline in recent decades. Right to Buy took around 1.8 million social rented homes out of the sector between 1979 and 2015 (Provan et al., 2017). The problem of dwindling stock has been exacerbated by a slowdown in the building of new houses since the late-2000s recession (Thornhill et al., 2010).

Despite constrained supply, demand on the social rented sector remains steadfast and will likely snowball in the coming decades, especially among Black and Minority Ethnic (BME) communities. Data from the 2011 Census indicate that the White British group comprises 80 per cent of the total population of England, down from 88 per cent in 2001 (Office for National Statistics, 2012). The younger age structure of BME groups means that the proportion of BME households within the population will only increase in the coming years. Crucially, BME households' lower average incomes, in a context of rising house prices and a widening gap between rents in the private and social sectors, mean that demand for social housing among BME communities - which is already higher than for the ethnic majority - looks set to grow (Markkanen, 2009). The greater numbers of extended and multi-family households among BME communities, in addition to higher rates of overcrowding, also suggest the potential for increasing numbers of households with unmet housing needs (Department for Communities and Local Government, 2016).

Studies of ethnic residential segregation in England have highlighted ethnicity as an important variable for understanding housing behaviour. Certain BME groups are overrepresented in the social rented sector, while others are underrepresented. This is illustrated in Table 1, which compares the ethnic composition of households in new social tenancies and re-lets in 2016-17 with the total population in England and Wales. It shows that while Black and most Mixed and 'Other' Minority Ethnic groups are overrepresented in new social lettings, the Asian groups are underrepresented.

Yet, despite the overrepresentation of BME groups in the social rented sector, previous studies indicate that BME households face additional barriers in entering this sector and are more likely to be funnelled into the lowest quality and least desirable properties due to various constraints on their housing choices (e.g., Henderson and Karn, 1984; Harrison and Phillips, 2003; Reeve and Robinson, 2008). The apparent

ethnic penalty in accessing (quality) social housing is pressing, as it suggests that the forecast growth in the size of the BME population could translate into greater proportions of the population facing disadvantaged access to a welfare service designed to meet the housing needs of the poorest in society. BME households' disadvantages in accessing social housing also allude to the need for policies designed to cope with the specific needs of BME communities and so enable equal housing opportunities.

Table 1. Composition of CORE 2016-17 data by ethnicity and compared with general population, %.

Ethnic Groupings	Composition of households in new social lettings and re-lets, %	Composition of total population in England and Wales, %
White	84.0	85.8
White: British	79.6	80.5
White: Irish	0.6	0.9
White: Other	3.8	4.4
Mixed	3.0	2.2
Mixed: White and Black Caribbean	1.4	0.8
Mixed: White and Black African	0.5	0.3
Mixed: White and Asian	0.4	0.6
Mixed Other	0.7	0.5
Asian	4.2	6.8
Asian/Asian British: Indian	0.7	2.5
Asian/Asian British: Pakistani	1.5	2.0
Asian/Asian British: Bangladeshi	0.8	0.8
Asian/Asian British: Other	1.2	1.5
Black	6.7	3.4
Black/Black British: Caribbean	2.3	1.1
Black/Black British: African	3.6	1.8
Black/Black British: Other	0.8	0.5
Chinese/Other	2.0	1.8
Other Ethnic Group: Chinese	0.1	0.7
Other Ethnic Group: Gypsy/Irish Traveller	0.1	0.1
Other Ethnic Group: Arab	0.5	0.4
Other Ethnic Group: Other	1.3	0.6

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data; 2011 Census, Office for National Statistics.

At the same time, there is potential for recent changes to social housing allocation policies to impact negatively on BME communities. The Localism Act, which came

into force in June 2012 and gave greater controls to local councils over how to allocate social housing, has limited access to social housing in many parts of the country. Between June 2012 and April 2014, 126 local authorities had changed their allocations policies, with many giving priority to households in employment or seeking employment, or with a 'local connection' to the area under the guidance of central government (Spurr, 2014). Because BME households are more likely than White households to be out of work and be migrants, such changes to allocations policies have the potential to indirectly impede BME groups' access to social housing (Douglas, 2014).

Against this background, this report maps out differences in access to social housing by ethnicity and explores the characteristics of BME households in new social lettings using the latest available Continuous REcording of Lettings and Sales in Social Housing in England (CORE) data. CORE is a census of new social lettings across England, which covers both local authority and private registered social housing providers, and provides detailed information on the demographic and economic characteristics of households in new social lettings and re-lets. Accordingly, it is an invaluable resource for monitoring which groups are currently accessing social housing and which are not. Analysing the CORE data can reveal which BME groups are currently underrepresented in new social lettings and so potentially face barriers in accessing social housing. It can also tell us how BME groups in new lettings ended up there, which can inform the direction of future policies towards helping BME groups to access this welfare service on equal terms.

The report is divided into six chapters. The next chapter sets the background to the analysis by outlining the purpose of social housing and reviewing extant research evidence on the factors that underpin ethnic disparities in social housing. Chapter 3 then presents some initial descriptive analyses using CORE 2016-17 before carrying out a cluster analysis of the data. The intention behind the cluster analysis is to uncover the natural structure underlying the population of new social housing tenants, which is currently lost within the sea of the approximately 375,000 households contained in CORE 2016/17. Specifically, the cluster analysis reveals the groups or 'types' of people that are prevalent among new social lettings and how these differ by ethnicity. Chapter 4 then builds on the third by unpacking further the socioeconomic and other household characteristics of the BME groups identified in the cluster analysis. This is to identify any unique characteristics of BME households in new social lettings, thereby informing a more detailed understanding of the factors which can help or hinder BME groups' abilities to access social housing. Subsequently, Chapter 5 explores the associations between a tenant's ethnicity and his or her employment status. The purpose of this analysis is to paint a clearer picture of the barriers to employment faced by BME social housing tenants, and the potential role of social

housing policies in reducing such inequalities. Chapter 6 concludes by summarising the results, their implications for policy, and suggestions for future research.

2. Ethnicity and Social Housing Allocation in England: A Review of the Literature

Studies of ethnic residential segregation in England since the 1960s have highlighted disparities in the allocation of social housing by ethnicity. Evidence suggests that even though some BME communities are overrepresented in the social rented sector, they face greater difficulties in entering the social rented sector in the first place and are more likely to be allocated less desirable properties in the poorest areas (e.g., Henderson and Karn, 1984; Harrison and Phillips, 2003; Reeve and Robinson, 2008). This section reviews extant literature on how ethnicity potentially conditions a household's access to social housing.¹ To provide context for the discussion, the first section briefly reviews the purpose of social housing. The second section then discusses the prominent choice/constraints debate within the literature on BME communities and housing. According to this literature, it is the interactions between racial discrimination and cultural preferences that produce the disadvantages of BME communities in accessing (quality) social housing. The third section then draws on research evidence to consider how ethnicity might intersect with other markers of social stratification (e.g., gender, household size, etc.) to produce ethnic disparities in social housing.

The Purpose of Social Housing

The key purpose of social housing in England is to provide a safety net for the most vulnerable low-income households in society (e.g., Thornhill, 2010; Fitzpatrick and Watts, 2017). This was not the original intention, though. Initially, social housing was too expensive for the poor (Bevan and Cowan, 2016). Hence, instead, it was allocated based on 'desert', measured by waiting time and applicants' housekeeping standards (Fitzpatrick and Stephenson, 1999). It was only after the 1969 Cullingworth Report that need displaced desert as the foremost allocation principle (Somerville, 2001). This reflected the aims of moving away from the paternalism of allocation by desert, of 'professionalising' the sector by reducing the influence of elected officials on lettings decisions, and of minimising unlawful discrimination by curtailing the scope for officer discretion (Fitzpatrick and Pawson, 2007).

The Housing (Homeless Persons) Act 1977 obliges local authorities to provide social housing to 'unintentionally' homeless households with a 'local connection', or who are

¹ Unfortunately, a lot of the literature on this topic is quite dated, although this reiterates the need to examine contemporary patterns of new lettings using the latest CORE data.

deemed to be in 'priority need'. Under the 1996 Housing Act, priority need households include families with a pregnant woman or dependent children, as well as 'vulnerable' single people and anyone made homeless or threatened with homelessness due to an emergency, such as flood or a fire (Fitzpatrick and Stephenson, 1999). The scope of priority need was expanded further by the 2002 Homelessness (Priority Need for Accommodation) Order to include certain young people and other vulnerable homeless applicants (e.g., victims of domestic violence) (Crisis, 2015). However, the 1996 Act had already reduced local authorities' maximum duty towards statutorily homeless households, so that they are required to secure temporary accommodation for a minimum of two years only (Fitzpatrick and Pawson, 2007). In addition, Section 167 (2A) of the Housing Act 1996 allows local authority to consider other factors for determining the relative priority of applicants with similar housing needs. Examples of such 'other factors' include the financial resources available to a person to meet their housing costs and the behaviour of an applicant (Thornhill, 2010).

In addition to its role in addressing housing need, social housing serves broader social and economic goals, including area regeneration, the creation of employment opportunities, and social cohesion. For instance, housing association projects can support a range of education and training opportunities, as well as jobs and enterprise. In turn, higher levels of economic activity within a given area can lead to fewer rent arrears and contribute to lower levels of crime, child poverty, drug abuse, and anti-social behaviour (Mullins, 2010; Thornhill, 2010).

However, choice has also become an important principle in social housing allocation, as in other public services across England. Traditionally, the process of social housing allocation in England has been property-led. That is, councils matched vacant properties with suitable applicants, with one household receiving a take-it-or-leave-it offer of that property only (Pawson and Kintrea, 2002). Since the early-2000s, however, there has been a shift towards an applicant-led 'choice-based' approach (Pawson et al., 2006; Berry, 2007). Under the choice-based system, applicants for social housing apply or 'bid' for any publicly advertised, available-to-let council and housing association properties for which they are deemed eligible (Pawson et al., 2006). Allocation is according to need and waiting time. The bidder with the highest priority gets first refusal of a property, with the next bidder on the list getting second refusal, and so on (Shelter, 2016). Strict rules limit the scope for housing staff, elected councillors, and housing association committees to exercise unfair discretion in the allocation process (Pawson and Kintrea, 2002). The precise rules of allocation vary by area, and some councils supplement the choice-based lettings scheme with direct offers of housing to applicants on council and housing association waiting lists (Shelter, 2016a).

The Constrained Housing Choices of BME Households

Although allocation of social housing in England is intended to reflect need and BME households are disproportionately from low-income backgrounds, extant research suggests that BME households face various disadvantages in accessing social housing. Some housing behaviour research suggests that the underrepresentation of certain BME groups in social housing – most notably, South Asian groups – is rooted in cultural preferences. For example, studies have shown a preference for owner occupation among Pakistani communities, which reflects the prevalence and desideratum of property and land ownership in Pakistan (e.g., Dahya, 1974; Ballard, 1994). It also helps to explain why home ownership is common among the Pakistani ethnic group at 60 per cent (Barton, 2017). Other studies indicate that BME communities may avoid social housing due to cultural perceptions of social housing as a ‘welfare tenure’ or tenure of ‘last resort’, or as somewhere in which racial harassment is more likely (e.g., Ratcliffe, 1981; Habeebullah and Slater, 1990; Chahal and Julienne, 1999; Ratcliffe, 2001; Phillips et al., 2007).

However, there is evidence of growing demand for social housing among younger generations of BME households (Markkanen, 2008). Hence, rather than being a product of solely choice, most research on ethnic minority housing in Britain agrees that the disadvantages of BME communities in accessing social housing are a product of choice *and* structural constraints, with different studies placing varying emphasis on either structure or agency (Beider, 2012). In other words, although BME individuals may experience discrimination, they are not simply passive recipients of such discrimination; rather, they exercise choices and preferences in relation to tenure, property size, layout and location, albeit within a system of greater external constraints and structural forces than for those of the ethnic majority (e.g., Peach, 1998; Robinson, 2002; Harrison and Phillips, 2003). In turn, the choices and actions of individuals can influence the system at large. For example, in studying an Italian community in Bedford, Sarre et al. (1989) found that private lenders often prevented Italians from securing loans to buy homes, in part because of stereotypes of Italians as ‘unreliable’ and ‘feckless’. However, the subsequent loss of business, as it moved to more progressive organisations, together with evidence that Italian homeowners were no more likely to default on their payments than other groups, triggered lenders to reform their practices.

According to the literature, broader structural inequalities can serve to constrain BME households’ choices when it comes to applying for social housing and choosing which properties to bid for in two main ways. First, social housing policies and processes, which may otherwise appear fair and impartial, can inadvertently contribute to restricting BME households’ housing choices by failing to address their specific needs

(Robinson, 2008). Policies often neglect that households lack perfect knowledge of their entitlement to, and ways of accessing, social housing, which precludes the exercise of rational choice (Robinson, 2008; Ratcliffe, 2009). For example, Pawson et al. (2006) found that BME people who were not fluent in English faced difficulties in accessing social housing under choice-based lettings, either because adequate help and information was not available to them, or because they were unaware of the existence of such support in the first place. Additionally, individuals without access to computing facilities may struggle to make bids, especially on more desirable properties that tend to be snatched up quickly (Beider and Netto, 2012).

What is more, because ethnic minority households are disproportionately represented among the homeless and poorly housed, they are not necessarily as well placed as (mostly White) transfer applicants to hold out for higher-quality housing. Consequently, they may be forced to widen their 'choice' of areas and property types (Jeffers and Hoggett, 1995; Cowan and Marsh, 2004). Statistics suggest that BME households are around three times more likely to become statutorily homeless than the majority White population, although rates of homelessness are highest among people of Black African and Black Caribbean origins (Gervais and Rehman, 2005). The problem is that under choice-based lettings, those in the greatest and most urgent need of housing may have to bid 'realistically', i.e., for low demand properties that can be attained quickly (Galbraith, 2017). Furthermore, the fear of having their priority status revoked may lead applicants in the least secure circumstances to accept undesirable or unsuitable properties (Dudleston and Harkins, 2007).

Failure to address racial harassment in the local area can also limit the housing choices of BME households. Focus group research suggests that fears over racial harassment can dictate many BME groups' housing choices, with many actively choosing to avoid certain areas perceived as racist (Markkanen, 2008). Furthermore, where supposed 'White' or 'no-go' zones have a high concentration of social housing, BME households may be deterred from applying for social housing altogether (Robinson et al., 2007). Indeed, research suggests that even under choice-based lettings, BME households are more likely than majority ethnic households to end up in deprived areas and ethnic enclaves, thereby compounding ethnic segregation (Manley and van Ham, 2011; van Ham and Manley, 2015; Gulliver, 2015). This is despite the increasing openness of younger BME households to living in more ethnically diverse areas (e.g., Phillips, 2008).

Second, broader inequalities and structures of state provision and regulation can lead to or exacerbate discrimination against BME households in the allocation of social housing (Robinson, 2002). For instance, the setting of 'local connection' rules to at least two years under the encouragement of central government risks indirectly discriminating against migrants, who are disproportionately BME (Douglas, 2014). The

discretion that local authorities have in defining local connection thresholds risks subjecting the abilities of migrants to access social housing to a 'postcode lottery', as local connection rules in some local authorities are lengthy. For instance, the London Borough of Hillingdon gives preference to households that have lived in the borough for at least ten years continuously.

Intersections between Ethnicity and Other Aspects of 'Difference'

Of course, people have multiple identities rooted in other markers of social stratification besides ethnicity, such as gender, age, religion, and class (Robinson et al., 2005). Hence, ethnic distinctions in social housing allocation may be mediated, or compounded, by other markers of social stratification (Platt, 2011).

Socioeconomic Factors

Phillips (1998) argues that socioeconomic class grouping also underpins the housing patterns of BME groups in Britain. The socioeconomic disadvantages of certain ethnic groups can increase their demand for social housing (Markkanen, 2008) and/or hinder their competitive position within the social rented sector by potentially preventing them for holding out for better-quality housing (Bowes et al., 2002). While people of Indian and Mixed White/Asian heritage are slightly better off than White people, Pakistani, Bangladeshi, and Caribbean ethnic groups are worse-off on average (Berthoud, 2005; Clark and Drinkwater, 2007).² In addition, data indicate that Pakistani heads of household are concentrated in low-paid employment and have high rates of unemployment (Bowes et al., 2002; Markkanen, 2008), while rates of female employment among Pakistani and Bangladeshi households are exceptionally low (Peach, 1999; Clark and Drinkwater, 2007). Pakistani and Bangladeshi heads of households also have lower levels of education compared with other ethnic groups (Bowes et al., 2002). Changing educational profiles have, however, modified ethnic differences in educational attainment, with British-born BME people achieving better qualification levels than their migrant parents (Clark and Drinkwater, 2007). So, while the average educational level of some BME groups is below that of the White British group, young people from BME backgrounds are almost as likely to stay in full-time education and enter higher education as those with a White British background (Markkanen, 2008).

² Although, as aforementioned, individuals of Pakistani origin are more likely to owner occupiers - as are individuals of Indian origin - the housing quality and local area may be substandard (e.g., Darlington-Pollock et al., 2017).

Household Size/Composition

Large families are prevalent among certain BME groups. For example, South Asian elderly people commonly live with one of their sons, children often stay home longer, and fertility rates among Pakistani and Bangladeshi households are higher than for other ethnic groups. Yet, large properties (four or more bedrooms) comprise only a tiny minority of social housing stock (Markkanen, 2008). Hence, demand for properties to accommodate multi-family households cannot always be met within the social rented sector, which may deter individuals from such communities from applying (Bowes et al., 2002). Meanwhile, the high proportion of single person and single mother households in the Caribbean community potentially contributes to the historically higher-than-expected representation of Caribbean people in social housing. Single-adult households may be less able to afford market rents or to buy a property and are more likely to have their property size needs met in the social rented sector.

Nationality

There is evidence that the perception that migrants are prioritised in the allocation of social housing is unfounded (e.g., Robinson 2010). Data suggest that only a very small proportion of new social housing lettings are to non-UK nationals, partly because most are required to be a registered worker or to have secured habitual residence to be eligible for social housing. However, available evidence also suggests that new immigrants and migrants are often unaware of their social rights, the opportunities for social housing, or how to access them. While refugees are eligible for social housing, knowledge and understanding of the social rented sector can be patchy among refugee communities, too (Robinson, 2008). Additionally, evidence shows that refugees who do secure an allocation of social housing often end up in deprived estates in low-demand areas that have been left behind by households who are able to wait longer for better properties (Robinson, 2010).

Age

The younger age structure of BME groups also influences patterns of tenure among the BME population. It underpins lower rates of home ownership among the BME population overall, since saving for a deposit and earning enough for a mortgage take time and have become increasingly hard for young people (Finney and Harries, 2013). Furthermore, evidence suggests that younger BME social housing tenants face fewer language barriers than their parents in accessing social housing (Wood, 2013). They are also more likely to be more aware of, and able to access, welfare services (Robinson et al., 2005). The abilities of BME young people to access social housing may, however, vary by ethnicity. For example, research has shown that African

Caribbean young people, many of whom come from families with a tradition of social renting, are more familiar with social renting options and how to apply than their South Asian counterparts (Harrison et al., 2005; Simpson et al., 2007). At the same time, Phillips (2008) argues that social housing is becoming increasingly important for BME young people. She highlights how commentators have observed 'hidden' youth homelessness among BME groups, which is particularly acute among Asian youth, whereby young people are living in severely overcrowded households or are sharing with friends. The greater vulnerability of BME youth to homelessness is rooted in the disproportionate numbers facing debt, unemployment, and family disputes (see also Watts et al., 2015).

Health

In terms of health, South Asian ethnic groups and Black Caribbean groups consistently fare worse relative to the majority ethnic group. This contrasts with the relatively better health of Black Africans and Chinese. Despite their relative health advantage, Whites and White British are in poorer health than Bangladeshis and Black Caribbeans from 2001 when in social rentals, even after controlling for age. Hence, Darlington-Pollock and Norman (2017) suggest that ethnic minorities in the poorest health may be less able or willing to access social housing. They suggest that ethnic minority households in the poorest health may instead be restricted to high-cost private rentals or poor-quality owner occupier dwellings.

3. An Exploratory Analysis of the CORE 2016-17 Dataset

The COntinuous REcording of Lettings and Sales in Social Housing in England (CORE) dataset contains around 375,000 cases for the year 2016/17. Hence, a cluster analysis is the first logical step to uncovering the natural structure underlying this sea of data, which is the aim of this chapter. Prior to the cluster analysis, the first section maps out the geographical distribution of new social lettings to BME groups across England. This is because rates of BME representation within new social lettings vary by region and local authority; hence, the BME groups identified in the cluster analysis are concentrated in certain areas. Accordingly, not all local authorities face the same levels of demand from BME group or the challenges of addressing ethnic disparities in new social lettings. The second section then explains the rationale and procedure of a two-step cluster analysis. The third section presents the results of the cluster analysis.

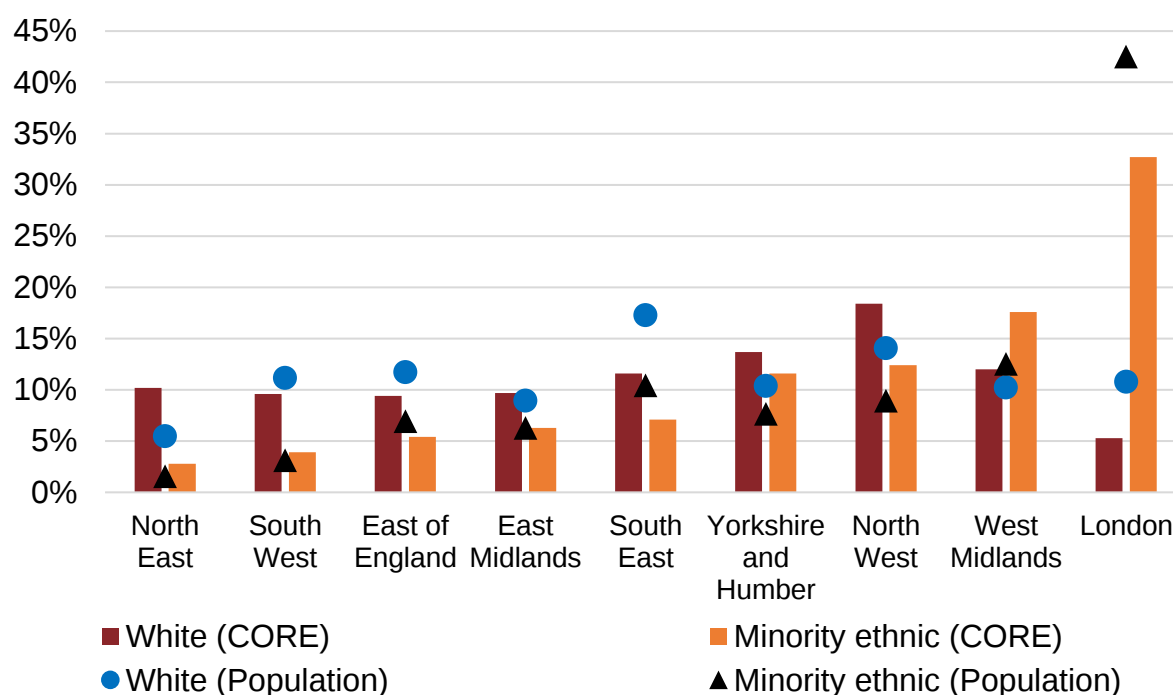
Regional Differences in New Social Lettings to BME Households

Housing is the most highly skewed of all welfare services; that is, there is a very strong association between social housing investment and an area's deprivation. In addition, social housing is more prevalent in urban areas with dense populations and a relatively high share of BME households (Cangiano, 2008).

Thus, Markkanen (2008) argues that the apparent overrepresentation of some BME groups in social housing is at least partly explained by their geographical concentration in regions in which social renting is more common. Analysing CORE 2006-07 data, Markkanen found that new lettings to BME social tenants were concentrated in regions in which social renting is more prevalent and BME groups comprise a larger share of the total population. For instance, most BME households in social housing are in London, and many London local authorities have disproportionately high percentages of social housing out of total dwelling stock, as well as high BME populations.

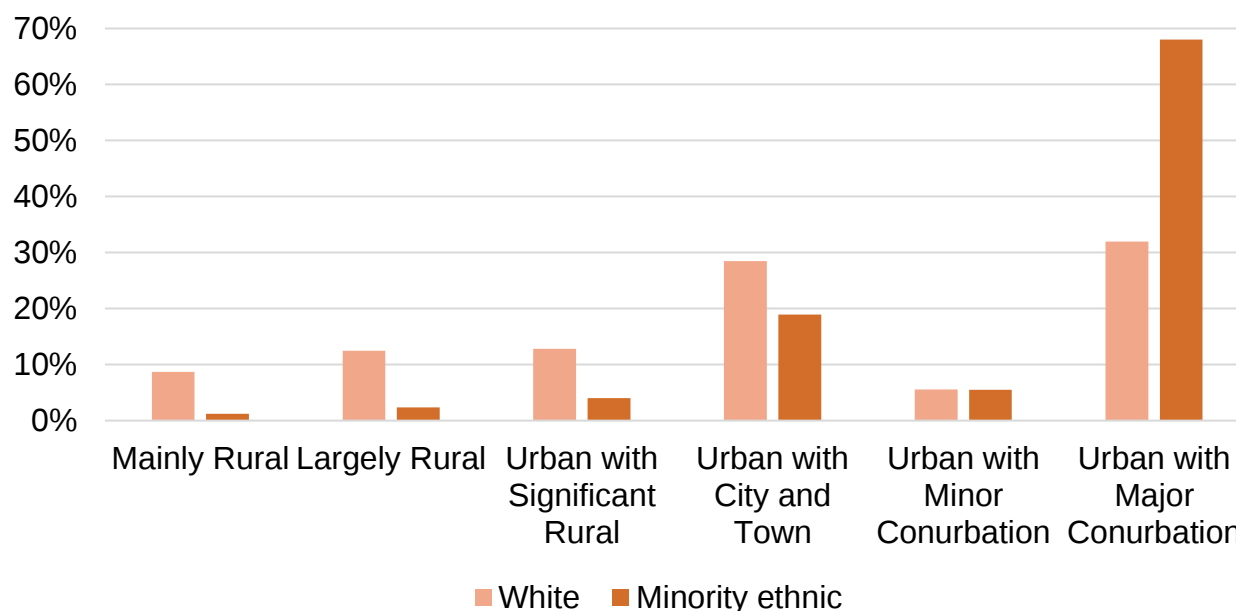
These geographical patterns are confirmed in descriptive analyses of CORE 2016-17. Figure 1 indicates that the proportions of social tenants from BME backgrounds are higher in regions in which the BME population overall is larger, with London accounting for around one-third of all new lettings to BME tenants and the West Midlands accounting for 18 per cent of new social lettings to BME groups. Correspondingly, new social lettings to BME households tend to cluster in urban, built-up areas (Figure 2).

Figure 1. Distribution of CORE households and England population by ethnicity and government region, %.



Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Figure 2. Distribution of new social lettings to BME households by Rural-Urban classification, %.



Notes: Calculations are based on cases for which data on ethnicity are complete, i.e., were not refused by the tenant; $n = 303,633$.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

What is more, within each region, BME social tenants tend to cluster into a small number of local authorities only. The top ten local authorities for new social lettings to BME groups in 2016/17 accounted for 31 per cent of all new social lettings to BME households. Conversely, new lettings to the White British group are spread throughout the country, with the ten top local authorities for new social lettings to White British households absorbing only 15 per cent of new lettings to such households. Unsurprisingly, BME households are underrepresented in local authorities with small BME populations. For instance, 0.2 per cent and 0.3 per cent of new social lettings in North Norfolk and North Devon went to BME households; in these local authorities, 98.6 per cent and 97.9 per cent of the population respectively are White.

Breaking down new social lettings to BME households by ethnic grouping, Table 2 shows that the ten top local authorities for new social lettings to Black households accounted for approximately 36 per cent of new lettings to such households. Among the top ten districts are Birmingham, Manchester, and London boroughs with large Black minorities and a high prevalence of social housing.

Table 2. Top ten local authorities for new social lettings to Black households.

Local Authority (LA)	Proportion of total Black social tenants in LA, %	Black population as percentage of total LA population, %	Social housing as a percentage of all dwellings in LA, %
Birmingham	9.6	8.9	24.8
Southwark	3.7	26.8	42.7
Manchester	3.6	8.6	31.0
Leeds	3.2	3.5	21.5
Lambeth	3.1	25.9	35.0
Croydon	2.8	20.2	17.2
Lewisham	2.7	27.2	30.1
Hackney	2.7	23.1	42.9
Waltham Forest	2.5	17.4	22.0
Sheffield	2.4	3.6	23.9
Average for all LAs	N/A	2.2	16.2

Sources: 2016/17 Continuous Recording of Social Housing Lettings and Sales data; Number of Dwellings by Tenure and District: England 2016; 2011 Census: Ethnic Group, Local Authorities.

Similarly, the ten top local authorities for new social lettings to Asian households accounted for 39 per cent of new lettings to such households. Again, the top ten districts are Birmingham, Bradford, and London boroughs with large Asian minorities and high levels of social housing (Table 3). Notably, 11 per cent of new lettings to Indian households were in Leicester, 15 per cent to Pakistani were in Birmingham while an additional 12 per cent were in Bradford, and 36 per cent of new lettings to Bangladeshi households were in Tower Hamlets alone. This is despite the

underrepresentation of Asian groups in social housing – while comprising around 8 per cent of the whole population of England, Asian groups took only 4 per cent of new social lettings in 2016-17 (Table 1).

Table 3. Top ten local authorities for new social lettings to Asian households.

Local Authority (LA)	Proportion of total Asian social tenants in LA, %	Asian population as percentage of total LA population, %	Social housing as a percentage of all dwellings in LA, %
Birmingham	9.8	25.4	24.8
Tower Hamlets	8.0	38.0	38.3
Bradford	5.3	26.4	15.1
Leicester	3.0	35.8	24.6
Manchester	2.8	14.4	31.0
Leeds	2.6	6.9	21.5
Sandwell	2.3	18.9	27.8
Sheffield	2.2	6.7	23.9
Newham	1.5	42.2	27.5
Newcastle upon Tyne	1.5	7.6	29.5
Average for all LAs	N/A	4.9	16.2

Sources: 2016/17 Continuous Recording of Social Housing Lettings and Sales data; Number of Dwellings by Tenure and District: England 2016; 2011 Census: Ethnic Group, Local Authorities.

The underrepresentation of Asian groups in new social lettings in spite of their location in areas dense with social housing indicates that either Asian households are less likely to want to rent social housing, or face specific barriers in accessing social housing. The literature review suggested that it is likely a combination of both choice and barriers. As discussed, Asian groups are less likely to seek out social rented housing because of more widespread negative perceptions of social housing and a cultural preference for owner occupation (e.g., Ballard, 1994; Phillips et al., 2007). However, the greater prevalence of properties that can accommodate multi-adult and multi-family households in the private rented sector may also detract Asian households from the social rented sector (Crofts, 2017). Indeed, rates of private renting increased between 1991 and 2016 from 8 to 24 per cent among Indian groups, and from 11 to 23 per cent among Pakistani groups respectively (Finney and Harries, 2013; Barton, 2017). Similarly, rates of private renting among households with an ‘Other Asian’ head are at 35 per cent compared with a UK average of 17 per cent. In addition, rates of home ownership among the Indian group continue to be relatively high at 67 per cent and 60 per cent respectively, compared with 65 per cent of all UK households (Barton, 2017).

Table 4. Top ten local authorities for new social lettings to Mixed households.

Local Authority (LA)	Proportion of total Mixed social tenants in LA, %	Mixed population as percentage of total LA population, %	Social housing as a percentage of all dwellings in LA, %
Birmingham	7.0	4.4	24.8
Leeds	3.6	2.7	21.5
Sheffield	3.1	2.4	23.9
Manchester	3.1	4.7	31.0
Sandwell	2.5	3.4	27.8
Liverpool	2.3	2.5	26.9
Nottingham	2.3	6.7	26.9
Wolverhampton	1.8	5.1	26.6
Bristol, City of	1.8	3.6	20.4
Islington	1.7	6.5	40.8
Average for all LAs	N/A	1.8	16.2

Sources: 2016/17 Continuous Recording of Social Housing Lettings and Sales data; Number of Dwellings by Tenure and District: England 2016; 2011 Census: Ethnic Group, Local Authorities.

Table 5. Top ten local authorities for new social lettings to Chinese/Other households.

Local Authority (LA)	Proportion of total Chinese/Other social tenants in LA, %	Chinese/Other population as percentage of total LA population, %	Social housing as a percentage of all dwellings in LA, %
Birmingham	9.5	3.2	24.8
Kirklees	5.1	1.0	15.5
Liverpool	4.4	3.5	26.9
Sheffield	4.0	3.5	23.9
Manchester	3.7	5.8	31.0
Leeds	3.6	1.9	21.5
Newcastle upon Tyne	2.8	3.6	29.5
Leicester	2.3	3.9	24.6
Hackney	1.9	6.7	42.9
Salford	1.7	2.2	27.9
Average for all LAs	N/A	1.3	16.2

Sources: 2016/17 Continuous Recording of Social Housing Lettings and Sales data; Number of Dwellings by Tenure and District: England 2016; 2011 Census: Ethnic Group, Local Authorities.

Mixed groups are slightly less geographically concentrated, as the ten top local authorities for new social lettings to Mixed households accounted for 27 per cent of new lettings to such households. Again, the top ten districts include Birmingham and

Manchester; however, only one London borough (Islington) features in the top ten (Table 4). Meanwhile, the ten top local authorities for new social lettings to Chinese/Other BME households accounted for 39 per cent of new lettings to such households (Table 5).

Two Step Clustering: Rationale and Procedure

Cluster analysis is a data reduction tool that involves organising cases into meaningful groups. An important advantage of cluster analysis for the purposes of this study concerns its robustness to violations of assumptions regarding the underlying distributions of variables and their independence from one other (e.g., Chan, 2005; Norušis, 2012). For example, a one-sample chi-square test revealed that the ethnicity variable does not follow a multinomial distribution, as the observed number of counts within each category differ from their expected values under a multinomial probability model ($p = 0.000$). Furthermore, it is likely that many of the variables that capturing the different household characteristics are statistically associated with each another (e.g., single-person households and age). Yet, because cluster analysis does not involve hypothesis testing and calculations of observed significance levels, it still performs well when continuous variables are not normally distributed, categorical variables do not have a multinomial distribution, and the variables of analysis are associated with one another (multicollinearity) (Norušis, 2012).

The choices of clustering algorithm and model parameters (i.e., the measure of distance between cases and clusters and optimal number of clusters) depend partly on the data that are being used (Suhr, 2014). Norušis (2012) advises using the IBM SPSS Statistics two-step procedure when, as in this study, there is a large volume of data, i.e. more than 1,000 cases. A two-step cluster analysis involves organising the cases into an initial set of 'pre-clusters', from which the final clusters can be derived (Norušis, 2012). By merging cases into a smaller number of pre-clusters and using these pre-clusters in place of the raw data to develop the final clusters, a two-step cluster approach provides for the determination of a more sensible and manageable number of clusters than might otherwise be achievable with a large dataset. In turn, it is easier to pick out the key patterns within the data.

An alternative approach to clustering, which can also cope effectively with a large dataset, is the *k*-means cluster method. Yet, the IBM SPSS *k*-means procedure is most appropriate when the variables used to cluster cases are strictly metric (Kent, 2015). This is because the *k*-means procedure uses a Euclidean measure of distance, whereby (dis)similarities between objects are a function of the straight-line distance between them. Accordingly, a shorter line indicates that objects are 'closer', i.e., more similar, while a longer line indicates that they are less similar (Saitluanga, 2017). Such a measure makes the *k*-means procedure unsuitable for the purposes of this study

given that we are interested in grouping social tenants by binary and nominal variables that do not follow a natural order (e.g., gender and ethnicity). For such unordered categorical variables, the absence of a natural metric precludes the derivation of an arithmetically-based distance measure for capturing (dis)similarities between objects. In contrast, the IBM SPSS Statistics two-step procedure allows for the selection of a probability-based distance measure, whereby the distance between two observations depends on the decrease in the log-likelihood of merging two clusters (SPSS, 2013).

As the name implies, the IBM SPSS two-step cluster analysis proceeds in two stages. The first stage organises cases into a smaller number of pre-clusters using a sequential clustering algorithm. This algorithm involves scanning cases, one-by-one, to determine whether a given case should be merged into a previously formed pre-cluster, or should instead form its own cluster according to the selected distance criterion. The desired number of pre-clusters needs to be large enough to produce an accurate result, but small enough to enable the efficient organisation of pre-clusters into the final clusters (SPSS, 2013). The second stage then involves amalgamating the pre-clusters into the final clusters using a standard hierarchical clustering algorithm. This entails successively merging the pre-clusters into a larger number of clusters until the desired number of cases is reached (agglomerative clustering). The algorithm can determine the 'optimal' number of final clusters automatically using either Schwarz's Bayesian Criterion or Akaike's Information Criterion. In addition, the algorithm can standardise variables. It can also deal effectively with outliers - cases that are very different from other cases but are not necessarily similar to one another - by assigning them to an 'outlier cluster'. The inclusion of an outlier cluster helps to reduce the final number of clusters produced and increase the homogeneity of clusters (Norušis, 2012; SPSS, 2013).

Cluster analysis always produces a solution, no matter how many variables or cases used or the appropriateness of choices regarding these factors. Furthermore, in hierarchical clustering, once a case has been assigned to a cluster, it cannot move to a different cluster as the analysis proceeds (Cornish, 2007). Therefore, it is important to determine quality of the cluster analysis and the conceptual meaningfulness of the clusters.

There are various measures for quantifying the 'goodness' of the cluster solution. One such measure is the silhouette coefficient. This measure is based on the average distance between a given element within a cluster and all other elements in that cluster, as well as between the given element and all elements in each of the other clusters. The value of the silhouette coefficient can range from -1 to $+1$. A value closer to -1 indicates a poor cluster solution. Conversely, a value closer to $+1$ indicates that within-cluster distances are small (i.e. high in-group homogeneity), while between-

cluster differences are large (low between-group homogeneity), and therefore the cluster solution is strong (Norušis, 2012).

Results

A series of cluster analyses were performed with the aim of achieving a silhouette coefficient as close to +1 as possible and at a minimum 0.7, since this indicates a strong structure to the data has been found (Kaufman and Rousseeuw, 2005). This was very much a process of trial and error, which involved adding and subtracting variables one-by-one until a silhouette coefficient of at least 0.7 emerged. Table 6 provides an overview of the strongest cluster solutions produced. To achieve a higher silhouette coefficient, in certain instances the dataset was divided into different groups initially (e.g., males versus females), with each group obtaining a separate cluster solution.

Cluster Solution 2 offers the highest silhouette coefficient (0.8) even without the need for an outlier cluster. This cluster solution groups households by the economic status of the head of household, ethnicity of the head of household, and household structure. The strength of the silhouette coefficient suggests that these variables are important markers of stratification among new social housing tenants.

Table 7 presents the details of the clusters produced by Cluster Solution 2. Some clusters are more homogenous than others. For instance, Cluster 1 contains strictly White single males who are not available for work, whereas Cluster 16 encompasses a variety of ethnicities (63 per cent are Black while 37 per cent are Asian), economic statuses (83 per cent are employed while 17 per cent are unemployed), and household structures (42 per cent are couples with children, 36 per cent are lone parents, and the remainder are single males). Table 7 shows that single White people who are not available for work (Clusters 1 and 2) comprise the largest group in the population of new social housing tenants, accounting for around 31 per cent of the population. White lone parents are also a significant population group (Clusters 3, 6, 14, and 15). However, economic status varies widely within this subgroup. Moreover, Table 7 reveals that clusters can be divided into those containing strictly White households (Clusters 1 to 13) and those containing strictly BME households (Clusters 14 to 18). This suggests that ethnicity is an important dimension of variation among households in new social lettings.

Table 6. Cluster solutions for new social housing tenants.

	Clustering variables	Number of complete cases ¹	Number of clusters	Average silhouette coefficient	'Outlier' cluster
<i>Cluster Solution 1</i>	Ethnicity of head	232,724	15	0.7	No outlier
	Household structure				
	Sources of income				
	Nationality of head				
<i>Cluster Solution 2</i>	Economic status of head	286,724	18	0.8	No outlier
	Ethnicity of head				
	Household structure				
<i>Cluster Solutions 3-4, by whether head of household is White or not</i>	Ethnicity of head	144,915 for White	8 for White 17 for non-White	0.8 for White 0.7 for non-White	No outlier
	Household structure	29,632 for non-White			
	Net weekly income				
<i>Cluster Solutions 5-7, by age categories</i>	Ethnicity of head	40,580 for <25	4 for <25	0.7 for <25	10% of cases
	Household structure	108,491 for 25-59	4 for 25-59	0.7 for 25-59	
	Net weekly income	25,038 for 60+	3 for 60+	0.7 for 60+	
<i>Cluster Solutions 8-9, by letting type: General Needs (GN) and Supported Housing (SH)</i>	Ethnicity of head	126,669 for GN 45,858 for SH	13 for GN 8 for SH	0.8 for GN 0.7 For SH	10% of cases
	Household type				
	Economic status of head				
	Net weekly income				

Notes: ¹Complete cases are those for which data on the clustering variables are not missing. Any cases with missing data on these variables were excluded.

Sources: 2016/17 Continuous Recording of Social Housing Lettings and Sales data; own calculations.

Table 7. Taxonomy of social housing tenants based on Cluster Solution 2.

Cluster	Cluster Composition			
	<i>Economic Status</i>	<i>Ethnicity</i>	<i>Household Category</i>	<i>Size</i>
1	Economically inactive (100.0%)	White (100.0%)	Single male (100.0%)	15.9% (<i>n</i> = 45,538)
2	Economically inactive (100.0%)	White (100.0%)	Single female (100.0%)	14.9% (<i>n</i> = 42,727)
3	Economically inactive (100.0%)	White (100.0%)	Lone parent (100.0%)	8.8% (<i>n</i> = 25,211)
4	Employed (100.0%)	White (100.0%)	Couple, dependent children (100.0%)	5.7% (<i>n</i> = 16,403)
5	In training/unemployed (100.0%)	White (100.0%)	Single male (100.0%)	5.5% (<i>n</i> = 15,889)
6	Employed (100.0%)	White (100.0%)	Lone parent (100.0%)	5.5% (<i>n</i> = 15,886)
7	Economically inactive (100.0%)	White (100.0%)	Couple, no children (100.0%)	5.2% (<i>n</i> = 14,840)
8	Employed (100.0%)	White (100.0%)	Single male (100.0%)	4.9% (<i>n</i> = 14,051)
9	Employed (100.0%)	White (100.0%)	Single female (100.0%)	4.5% (<i>n</i> = 12,851)
10	Economically inactive (100.0%)	White (100.0%)	Couple, dependent children (100.0%)	3.8% (<i>n</i> = 10,811)
11	Employed (100.0%)	White (100.0%)	Couple, no children (100.0%)	3.3% (<i>n</i> = 9,469)
12	In training/unemployed (100.0%)	White (100.0%)	Single female (100.0%)	2.8% (<i>n</i> = 7,932)
13	In training/unemployed (100.0%)	White (100.0%)	Lone parent (58.1%)	3.5% (<i>n</i> = 10,002)
14	Economically inactive (49.6%)	Black (39.4%)	Single male (100.0%)	4.2% (<i>n</i> = 12,003)
15	Economically inactive (100.0%)	Black (55.5%)	Lone parent (38.9%)	2.8% (<i>n</i> = 8,086)
16	Employed (83.4%)	Black (62.9%)	Couple, dependent children (41.6%)	3.7% (<i>n</i> = 10,589)
17	Economically inactive (43.8%)	Mixed (63.5%)	Single female (37.4%)	3.0% (<i>n</i> = 8,615)
18	Employed (48.5%)	Black (54.8%)	Single female (59.9%)	2.0% (<i>n</i> = 5,821)

Sources: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

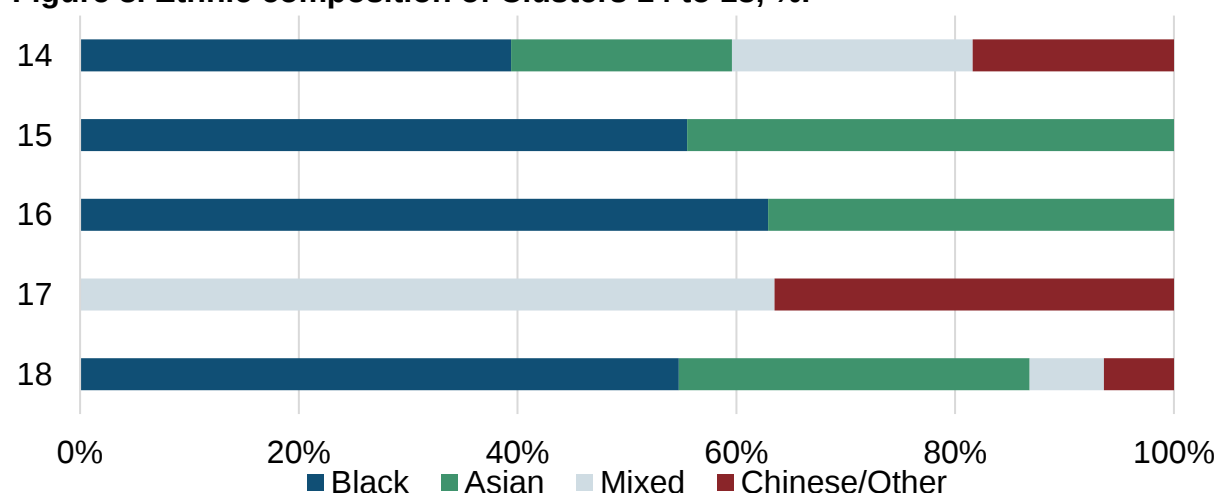
4. Disaggregating the BME Clusters

The cluster analysis established that ethnicity is an important marker of differentiation between households within new social lettings. This suggests that BME households might face unique barriers in accessing social housing and require policies to cope with their specific needs. Against this background, this chapter further disaggregates the BME clusters (Clusters 14 to 18) and compares the characteristics of the more homogeneous clusters with the characteristics and circumstances of White households in CORE who are in similar situations.

Key Characteristics of the BME Clusters

Figures 1 and 2 and Table 3 give a breakdown of the ethnic, household, and employment characteristics of Clusters 14 to 18.

Figure 3. Ethnic composition of Clusters 14 to 18, %.



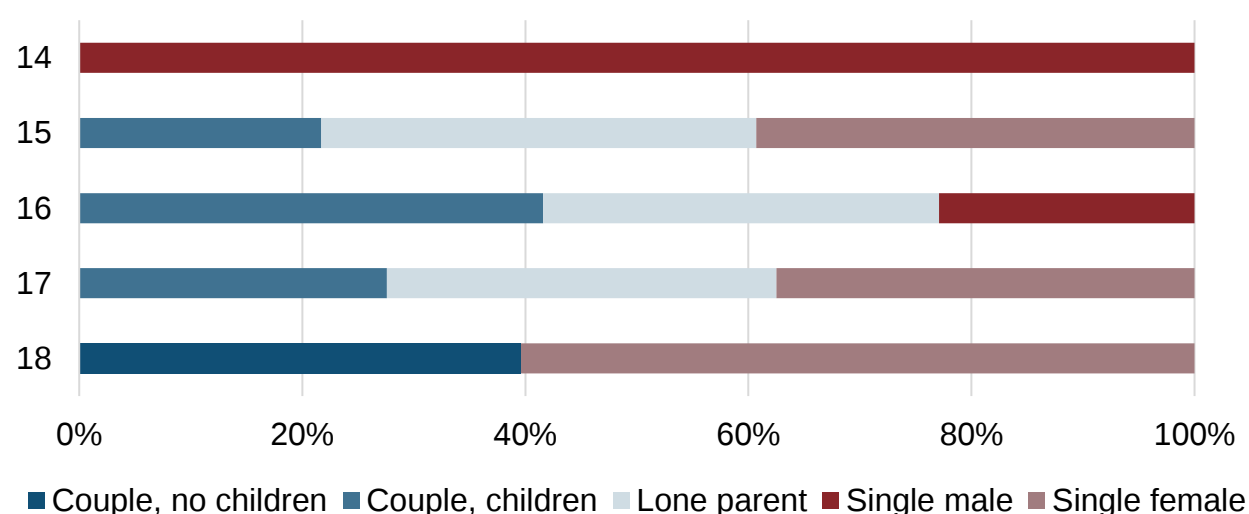
Notes: Calculations are based on cases for which data on ethnicity, sex, and economic status are complete, i.e., were not refused by the tenant; $n = 45,114$.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Examining the clusters by other variables within CORE highlights certain similarities between them. To begin with, the age profiles of these clusters are alike, in that most are aged 25-39 years, with very few aged sixty and over. This reflects the young age profile of BME households. Their profiles in terms of nationality are also very similar, with around 69-75 per cent comprising UK nationals, 4-13 per cent comprising individuals from other European Economic Area countries, and 17 to 26 consisting of individuals from any other country. Among the population of White tenants in new social lettings in 2016/17, just 92 per cent are non-UK nationals. Furthermore, households contained within Clusters 14 to 18 are concentrated in London (32 per cent) and the West Midlands (18 per cent), with one in ten living in Birmingham. Hence,

households from these clusters are underrepresented among the South (11 per cent) as well as within mainly or largely rural areas (4 per cent compared with 21 per cent for White households in CORE 2016-17). Again, this reflects patterns of ethnic segregation in the population more broadly. Most households in Clusters 14 to 18 obtained their current tenancy by applying directly (39 per cent) or through nomination by a local authority (27 per cent). A significant minority (10 per cent) comprise internal transfers. Additionally, 69 per cent have lived in the local authority area for more than five years, with a minority (16 per cent) having lived there for under one year.

Figure 4. Household types within Clusters 14 to 18, %.



Notes: Calculations are based on cases for which data on ethnicity, sex, and economic status are complete, i.e., were not refused by the tenant; $n = 45,114$.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Table 8. Composition of Clusters 14 to 18 by economic status, %.

	Cluster				
	14	15	16	17	18
Employed	9.4	0.0	83.3	38.8	48.9
Government training scheme	0.4	0.0	0.2	0.4	0.4
Unemployed	42.2	0.0	16.4	18.7	33.3
Retired	6.4	9.1	0.0	3.4	7.9
Not seeking work	12.1	59.4	0.0	23.8	3.6
Student	5.4	8.8	0.0	3.9	0.5
Sick or disabled	24.1	22.6	0.0	11.0	5.4
Total	100.0	100.0	100.0	100.0	100.0

Notes: Calculations are based on cases for which data on ethnicity, sex, and economic status are complete, i.e. were not refused by the tenant; $n = 45,114$. Columns may not sum to 100.0% exactly due to rounding.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Cluster 14: BME Single Males

As Figures 1 and 2 and Table 3 show, Cluster 14 comprises a heterogeneous mix of BME single male tenants in terms of ethnicity and employment status. Just over half of BME single males in Cluster 14 are in Supported Housing tenancies. The concentration of Cluster 14 tenants in Supported Housing likely reflects relatively high rates of sickness and disability. In addition, 77 per cent of tenancies in Cluster 14 are let by private registered social housing providers.

This cluster appears financially worse-off than a lot of other CORE households. Notably, three-quarters of households in this cluster rely on state benefits for all their income; this compares to 53 per cent of the whole CORE population. Furthermore, the mean affordability rate³ for this cluster is 0.53 in contrast to an average across all CORE 2016-17 of 0.43.

In addition, 58 per cent of single males in Cluster 14 did not go through choice-based lettings; this compares to 35 per cent for the whole CORE population. Still, most tenants in Cluster 14 (53 per cent) applied directly for their current tenancy, although a considerable proportion were nominated by their local housing authority (31 per cent). This may be because rates of prior homelessness are high within this group at 51 per cent, with many having previously been living with friends or family (21 per cent) or in Supported Housing (14 per cent). Even so, only one-quarter of single males in Cluster 14 were given reasonable preference. Within this cluster, the most common reason given for leaving last settled home is overcrowding (18 per cent) compared with 11 per cent for all CORE households.

An interesting point of comparison is between the BME single males contained in Cluster 14 and the White single males found in Clusters 1 (economically inactive), 5 (unemployed), and 8 (employed). Comparing these groups can reveal if the characteristics of BME single males in new social lettings, as well as they arrived at their current tenancy, are significantly different from White single males. Hence, Table 9 details the key dimensions of difference between BME single males in Cluster 14 and White single males in Clusters 1, 5, and 8 combined.

³ The affordability rate is rent divided by income. Therefore, a high affordability rate reflects relatively high rent and relatively low income, whereas a low affordability rate indicates low rent but high income. In other words, the higher the value of the affordability rate statistic, the less affordable a property is for that household.

Table 9. Characteristics of BME single males in Cluster 14 compared with White single males in Clusters 1, 5, and 8.

	BME Single Males	White Single Males
In employment	9.4	19.0
Unemployed	42.6	21.4
Economically inactive	48.0	59.6
In supported housing, %	53.0	46.8
In receipt of Housing Benefit/Universal Credit, %	90.7	81.1
Rates of sickness and disability, %	23.3	30.9
Dependent on state benefits for all income, %	76.2	66.0
Mean affordability rate	0.53	0.50
Obtained property through choice-based letting, %	41.6	54.5
Given reasonable preference, %	25.0	23.3
Previously homeless, %	50.6	32.9
Previously sleeping rough, %	6.7	6.1
Previously staying in Bed & Breakfast/other temporary accommodation, %	11.0	6.2
Non-UK national, %	29.9	2.5

Notes: Calculations are based on cases for which data on the relevant variables are complete.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data

The table indicates several differences between the White single males and BME single males. For a start, a greater proportion of BME single male tenants than White single male tenants receive Housing Benefit or Universal Credit and are dependent on state benefits for all their income. This may reflect the lower employment rate for BME single males and slightly lower affordability rate. In addition, a greater proportion of BME single male tenants than White single male tenants are in supported housing and were previously homeless, as prior research has shown (Chapter 2), although the absolute numbers of White single males who were previously homeless within the CORE dataset are higher (24,261 compared with 7,709 BME single males). Furthermore, and as previous research has also shown, rates of sickness and disability are lower among BME single males than for White single males.

In addition, a slightly higher proportion of BME single males were given reasonable preference, while lower proportions of BME single males obtained their current

tenancy through choice-based lettings. The lower use of choice-based lettings among BME single males may be partly because of prior tenure. Although similar proportions of BME as White single males were previously sleeping rough, a higher percentage of BME single males were previously staying in temporary accommodation. As highlighted in the literature review, the needs of those in the least secure housing situations may be too urgent to participate in choice-based lettings or to hold out for 'better' choices. People who are homeless or staying in temporary accommodation may be further disadvantaged in the bidding process by inadequate access to the internet. The danger is that a lack of choice pushes such households into low demand areas, thereby consolidating their marginalisation (Shelter, 2005). At the same time, BME single males are more likely than White single males to be foreign nationals (Table 9), which means they are more likely to face language barriers in accessing welfare services or be less aware of such services.

Cluster 15: Economically Inactive Black and Asian Females

Cluster 15 contains Black and Asian households only (Figure 1). Within this cluster, 72 per cent of tenants are in General Needs housing, while 65 per cent rent from a private registered landlord. Among tenants in Cluster 15, 31 per cent come from a previous General Needs letting, while 13 per cent are from the private rented sector and 17 per cent were living with friends and family. The mean affordability rate for this cluster is 0.40, slightly better than the CORE average of 0.43.

Within Cluster 15, 92 per cent of households are headed by a female and all are headed by an economically inactive individual (Table 3). Within this group, 22 per cent of households are couples with children, 39 per cent are single females, and 39 per cent are lone parent families. More broadly, one-quarter of all Black households in CORE are lone parent families compared with 20 per cent of the whole CORE population. This is in keeping with research that lone motherhood tends to be more prevalent within Black groups, which may help to explain the overrepresentation of Black groups in new social lettings. The high prevalence of lone parenthood in this group also means that for many households in Cluster 15, economic inactivity likely stems from childcare responsibilities. Indeed, 30 per cent of households in Cluster 15 contain a child aged under five, and in 80 per cent of such households there is only one adult. In turn, high rates of economic inactivity mean that, as for the previous cluster, tenants in Cluster 15 are disproportionately dependent on benefits for their income, with 70 per cent deriving their entire income from benefits and a further 16 per cent relying on benefits for at least some of their income. The high prevalence of lone mothers and single females in this cluster might also explain why domestic violence is a prevalent reason for leaving the last settled home, with 18 per cent of tenants in Cluster 15 giving this reason.

Again, it is instructive to compare economically inactive BME tenants in Cluster 15 with their White counterparts. These can be found in Clusters 10 (economically inactive White couples with dependent children), 3 (economically inactive White single females), and 2 (economically inactive White lone parents). Table 10 details the key dimensions of difference between BME tenants in Cluster 15 and White tenants in Clusters 2, 3, and 10 combined.

Table 10. Characteristics of economically inactive, predominantly female Black and Asian tenants in Cluster 15 compared with economically inactive, predominantly female White tenants in Clusters 2, 3, and 10.

	Black and Asian	White
In supported housing, %	28.1	32.7
In receipt of Housing Benefit/Universal Credit, %	93.2	91.5
Rates of sickness and disability, %	20.7	26.1
Dependent on state benefits for all income, %	69.6	75.2
Mean affordability rate	0.40	0.39
Obtained property through choice-based letting, %	61.9	68.1
Left last settled home because of domestic violence, %	17.9	9.3
Given reasonable preference, %	37.2	29.5
Previously homeless, %	40.1	22.8
Previously sleeping rough, %	0.5	1.0
Previously staying in Bed & Breakfast/other temporary accommodation, %	16.1	6.4

Notes: Calculations are based on cases for which data on the relevant variables are complete.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

The table indicates several differences between the BME economically inactive, predominantly female-headed households and White economically inactive female households. Notably, although the shares of each group in Supported Housing and in receipt of Housing Benefit or Universal Credit are roughly similar, rates of sickness and disability are once again higher among the White group. In addition, although all households are economically inactive, a higher proportion of White households depend on state benefits for all of their incomes. Even so, rates of affordability are similar across both groups.

Another important difference between the groups concerns how they came to be in social housing. BME women within CORE are more likely to have been forced to leave their previous home because of domestic violence. This is mostly explained by high rates of domestic violence among South Asian women in CORE. Among the Indian ethnic group, 26 per cent of all female tenants gave domestic violence as the reason for fleeing their last home. The corresponding figures for the Pakistani and Bangladeshi groups are 32 per cent and 17 per cent respectively.

While domestic violence affects women of all ethnic groups in CORE, the specific situations of South Asian and other BME women who experience domestic violence can present them with unique disadvantages. Notably, BME women for whom English is not their first language or who have recently arrived in the UK are at risk of not knowing how to access social housing or being unable to access it altogether. In addition, where mainstream services are not sufficiently culturally-sensitive, and culturally-specific services lack the skills or expertise in such specialist areas as domestic violence and housing, then BME women can be caught in a no-man's-land (e.g., Batsleer et al., 2002; Burman, 2003; Burman et al., 2004; Burman and Chantler, 2005). Accordingly, the evidence that a significant portion of South Asian women in new social lettings are there because of domestic violence suggests that ensuring that these women can continue to access social housing in the future should be a policy priority.

In addition, BME women are more likely to have been previously homeless and to have come from temporary accommodation. However, only a very small minority of both BME and White female-headed economically inactive households were previously sleeping rough. Even so, the fact that greater proportions of BME tenants come from temporary accommodation may mean that they are forced to take the first property they can get, which may indirectly exacerbate existing ethnic inequalities in the quality of social housing (see Chapter 2).

Cluster 16: Economically Active Black and Asian Households

Cluster 16 also comprises Black and Asian households only (Figure 1). Yet, unlike Cluster 15, all households in Cluster 16 are economically active (Table 3), with 49 per cent in full-time employment, 35 per cent in part-time employment, and 16 per cent currently registered as unemployed. In addition, this cluster contains roughly equal numbers of males and females and a mixture of household types (Figure 2). Because they are economically active, tenants in Cluster 16 are, on average, financially better off than those in Clusters 14 and 15. Within Cluster 16, around half of households do

not receive any income from benefits, and the mean affordability rate is 0.37. Furthermore, only 6 per cent are in Supported Housing. Around three-quarters obtained their current tenancy through choice-based lettings, a similar proportion as for all economically active White households within CORE. In terms of previous tenure, 32 per cent came from a General Needs tenancy, 20 per cent from the private rented sector, and 18 per cent from living with family and friends. The most common reason for leaving the last settled home was overcrowding (26 per cent); this compares with 10 per cent of economically active White households in CORE, again reflecting the higher risk of overcrowding among BME households. In addition, 32 per cent of households in Cluster 16 were previously homeless, while 38 per cent were given reasonable preference. The corresponding figures for White economically active households are 23 per cent and 25 per cent. Hence, as for other household types, economically active Black and Asian households in Cluster 16 have higher proportions of prior homelessness and reasonable preference than White households in similar circumstances.

Cluster 17: Mixed, Chinese, and ‘Other’ Households

Cluster 17 is a highly heterogenous cluster, which is broken down in more detail Table 11. The most prevalent groups within this cluster are Mixed lone parents and Mixed single females. As for the Black ethnic group, lone parents are overrepresented among all Mixed households in CORE. This is particularly the case for the White and Black Caribbean group, of which 28.1 per cent of CORE households are lone parents, and the White and Black African group, of which 24 per cent of CORE households are lone parents.

Table 11. Composition of Cluster 17 by ethnicity and household structure as a percentage of total, %.

	Couple with children	Lone parent	Single female
Mixed	11.3	25.6	26.5
Chinese/Other	16.1	9.5	10.8

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

The prevalence of lone parents and single females within this cluster means that the majority of heads of households (81 per cent) of this cluster are women. The majority (80 per cent) of tenants in this cluster are also in General Needs housing, and 68 per cent are in private registered provider tenancies. Two-thirds of this groups acquired their current tenancy through choice-based lettings, with 30 per cent originating from another General Needs tenancy, 15 per cent from a private tenancy, and 19 per cent from living with family and friends. The main reason for seeking social housing was

overcrowding (17 per cent). Within this cluster, 36 per cent of tenants were previously homeless. The same percentage of tenants was given reasonable preference. In addition, mean affordability is 0.40, and 74 per cent of households derive some or all of their incomes from benefits.

Cluster 18: BME Childless Couples and Single Females

The final cluster contains mostly Black and Asian households as well as a small proportion of Mixed and Chinese/other BME households (Figure 1). All households in this cluster are childless. Around 40 per cent are couples, while the remaining 60 per cent are single females. Hence, the majority of heads of household within this cluster are, again, women (78 per cent, Figure 3). Most tenants in this category are in full-time employment (32 per cent) or seeking employment (33 per cent). A further 17 per cent are in part-time employment, while the remaining 18 per cent are economically inactive (Table 3). Within this cluster, 60 per cent acquired their current tenancy through choice-based lettings. Many were previously living with friends or family (29 per cent), while sizeable proportions come from another social sector tenancy (24 per cent) or a private sector tenancy (15 per cent). Average affordability in this cluster is the same as for single males in Cluster 14 at 0.53. But while 40 per cent of tenants in Cluster 18 depend on benefits for all of their income, 41 per cent do not receive benefits at all. The majority (71 per cent) are in General Needs lettings, and 72 per cent are with private registered providers. Around one-third of tenants in this cluster were previously homeless, but only 27 per cent were given reasonable preference. The reasons for leaving the last settled home are varied within this group, but among the most prominent are domestic violence (10 per cent), overcrowding (11 per cent), being asked to leave by family or friends (13 per cent), or needing to move to independent accommodation (13 per cent).

5. Employment and Ethnicity Among Social Housing Tenants

The emergence of ethnicity and employment as key variables in the cluster analysis suggests that there is potentially a statistically significant relationship between a social tenant's ethnicity and his or her economic status. This would be in keeping with prior research that suggests that BME people face additional employment disadvantages compared with White people. Accordingly, the next three sections of this chapter explore the nature of the association between a tenant's ethnicity and employment status for: (i) single tenants; (ii) lone parents; and (iii) working-age couples. Subsequently, the chapter tries to identify the factors which may be responsible for explaining these patterns. In turn, the findings can inform future social housing allocation policies, in particular: whether working-related conditions will impact negatively on BME groups; and for which groups employment initiatives targeted at social housing tenants would be most beneficial.

Single Tenants

Single tenants are by far the largest group of new social housing tenants, as they account for over half of the total population contained in CORE for 2016/17. It is not surprising, then, that single people are the most prevalent household type within each ethnic group (Table 12, Column 3).

Table 12. Single tenants in CORE 2016/17.

	Count	As a percentage of all tenants in ethnic group, %	As a percentage of all tenants in CORE, %
	[1]	[3]	[2]
White	142,987	56.1	47.2
Black	11,073	54.1	3.7
Asian	5,561	43.8	1.8
Mixed	5,053	56.7	1.7
Chinese/Other	3,236	52.9	1.1
Total	167,910	56.9	56.9

Notes: Calculations are based on cases for which data on ethnicity are complete, i.e. were not refused by the tenant.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

The majority of single tenants (54.9 per cent) are men (Table 13). Across most ethnic groups, the share of single tenants is not much larger than the share of female tenants. The most notable exception is the Chinese/Other group, among which 70.2 per cent

are males ($n = 2,273$) and 29.8 per cent are females ($n = 963$).

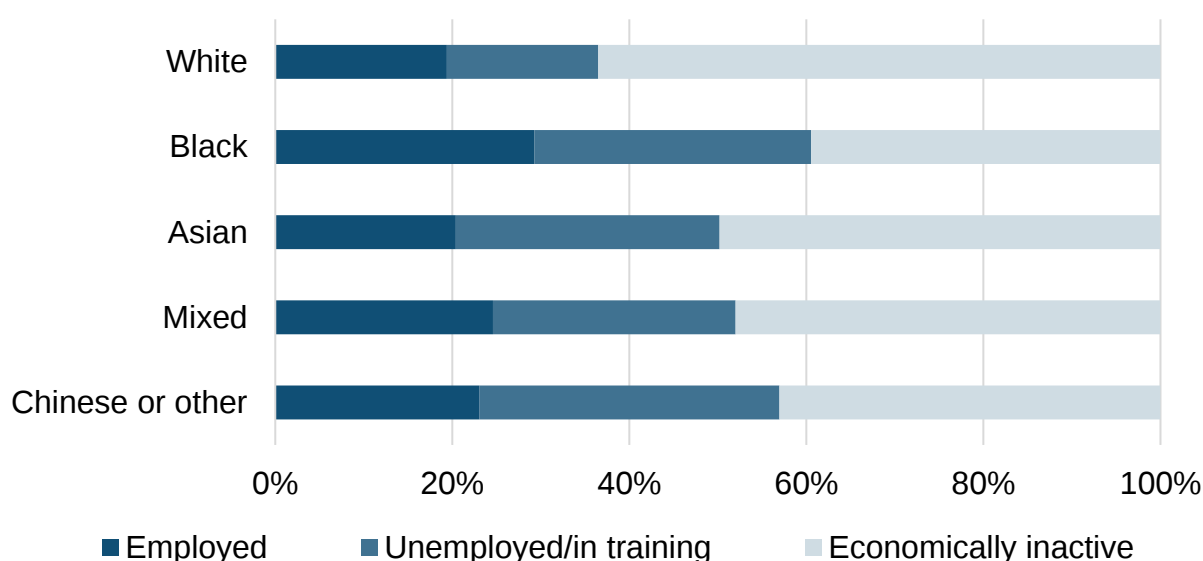
Table 13. Single tenants by ethnicity and sex, %.

	White	Black	Asian	Mixed	Chinese/Other	Total
Male	54.1	60.0	58.2	53.5	70.2	54.9
Female	45.9	40.0	41.8	46.5	29.8	45.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Calculations are based on cases for which data on ethnicity and sex are complete, i.e. were not refused by the tenant; $n = 167,910$.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Figure 5. Economic status of single tenants in CORE by ethnicity, %.



Notes: Calculations are based on cases for which data on sex, ethnicity, and economic status are complete, i.e. were not refused by the tenant; $n = 163,194$.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Like the cluster analysis, Figure 5 indicates a potential relationship between ethnicity and economic activity. Notably, White single tenants have higher rates of economic inactivity compared with single tenants of all Minority Ethnic groups. Additionally, BME single tenants have slightly higher rates of employment than White single tenants. These patterns hold when the subpopulation of single tenants is broken down by sex (Appendix 1). Across each ethnic group, slightly higher proportions of single female tenants are in employment (excluding the Asian group) or economically inactive compared with single male tenants. Accordingly, a smaller proportion of single females are registered as unemployed compared with single males in their ethnic group.

To ascertain whether the relationship between a single tenant's ethnicity and his or her employment status is statistically significant, or whether the patterns we observe

in the cluster analysis and Table 6 are meaningless and due merely to chance, we can use Pearson's chi-square test for independence (Pearson, 1900; Fisher, 1922). The chi-square test is the most appropriate measure of the relationship between variables when our variables are categorical, as in this instance.⁴ Pearson's chi-square, χ^2 , is given by:

$$\chi^2 = \sum \frac{(n_{ij} - \mu_{ij})^2}{\mu_{ij}}$$

Where i is ethnicity, j is economic status, n is the data or frequency observed in each category, and μ is the frequency that we might expect to observe in each category due to chance. For instance, if we have an overall employment rate of 50 per cent and a sample of ten White tenants, then we would expect half of the tenants in our sample – i.e., five – to be employed. However, if the observed frequency differs significantly from five, then we can surmise that the observed frequency may not be due to chance but may instead reveal that ethnicity and employment are associated in some way. Note that a chi-square test cannot inform us of the *direction* of any identified relationship; rather, it simply tells us that there is some form of a relationship between variables.

A chi-square test involves testing a null hypothesis, H_0 , and an alternative hypothesis, H_1 . In this case, H_0 states that among the population of single tenants in CORE, ethnicity is *not* associated with economic status. Conversely, H_1 states that a single tenant's ethnicity *is* associated with his or her economic status. Whether we reject or fail to reject H_0 is determined through comparing the test statistic, χ^2 , against a 'critical value'. The critical value is a product of: (i) the degrees of freedom, df , in the test; and (2) the probability value, p , of the test. The number of degrees of freedom is determined using the following formula:

$$df = (\text{number of rows} - 1) * (\text{number of columns} - 1)$$

In this case, we have five rows, corresponding to five ethnicity groups, and three columns, since tenants can be employed, unemployed, or economically inactive. Hence: $df = (5 - 1) * (3 - 1) = 8$.

⁴ A categorical variable is one that comprises categories of objects or entities. Hence, employment status - classified as employed, unemployed, or economically inactive - is a categorical variable, since individuals can fall into only one of these categories. Similarly, ethnicity is a categorical variable (Field, 2009).

If χ^2 is larger than the test statistic at 8 degrees of freedom, then we can reject H_0 and conclude there is a relationship between ethnicity and economic status. For 8 degrees of freedom, the critical value at the 5 per cent significance level is 15.5073 and at the 1 per cent significance level is 20.0902.

Running the analysis produced a test statistic of 3889.206 with a p-value of 0.000. Such a small p-value means that the probability of obtaining this test statistic value by chance is extremely unlikely. In addition, none of the expected counts were below 5, thereby ensuring the accuracy of the test statistic. Because χ^2 is larger than our critical values and is highly significant ($p = 0.00$), we can reject H_0 . Hence, a single tenant's ethnicity is associated with his or her employment status.⁵

The chi-square test tells us that a single tenant's ethnicity is associated with his or her economic status. Yet, it does not tell us about the nature of this association. For this purpose, we require a multinomial logistic regression analysis. Multinomial or polychotomous logistic regression allows us to predict to which of three or more categories a person is likely to belong given information on another variable (Field, 2009). Hence, it can tell us the likelihood that a single tenant will be employed rather than unemployed, or employed rather than economically inactive, based on his or her ethnicity.

Table 14 presents the results of the multinomial regression analysis. The most important column in Table 14 is Column 3, which gives the odds ratios. The odds ratios give the odds of a given event (e.g., being unemployed rather employed) occurring in the comparison group (e.g., Black single tenants) compared to the baseline group, i.e., White single tenants. An odds ratio of 1 indicates that the odds of a particular outcome are equal in both groups. An odds ratio greater than 1 indicates that the odds of the given event occurring are greater for the comparison group than for White single tenants. Conversely, an odds ratio of below 1 indicates that the odds of the event occurring are lower for the comparison group than for White single tenants.

Table 14 tells us that:

- Black single tenants are more likely than White single tenants to be unemployed or in training rather than employed. The odds ratio indicates that as ethnicity changes from White to Black, the change in the odds of being unemployed compared to being employed is 1.21. In other words, the odds of a Black single

⁵ The chi-square test was repeated separately for each single male tenants and single female tenants; however, the results for males and females suggest the same conclusion, i.e., that ethnicity is associated with employment status.

tenant being unemployed compared to being employed is 1.21 times greater than the odds of a White single tenant being unemployed compared to being employed. However, Black single tenants are also less likely than White single tenants to be economically inactive rather than employed or registered as unemployed. The odds ratio tells us that as ethnicity changes from White to Black, the change in the odds of being employed compared to being economically inactive is 2.43. Put another way, the odds of a Black single tenant being economically inactive compared to being in employment are about two-and-a-half those of a White single tenant. Similarly, Black single tenants are almost three times as likely as White single tenants to be registered as unemployed rather than economically inactive.

- Asian single tenants are also more likely than White single tenants to be employed rather than unemployed. The odds of an Asian single tenant being unemployed compared to being employed are 1.65 times greater more than for a White single tenant. However, Asian single tenants are less likely than White single tenants to be economically inactive rather than in work or looking for work. Specifically, the odds of an Asian single tenant being employed rather than economically inactive are 1.35 times greater than for a White single tenant; and Asian single tenants are more than twice as likely as White single tenants to be job seeking or in training rather than economically inactive.
- Single tenants of Mixed ethnic origins are more likely than White single tenants to be unemployed rather than employed. The odds that a single tenant of Mixed ethnic origins is unemployed rather than in work are 1.26 times greater more than for a White single tenant. Yet, compared with the White group, single tenants of Mixed ethnic origins are 1.68 times more likely to be employed rather than economically inactive, and more than twice as likely to be jobseekers rather than economically inactive.
- Chinese/Other single tenants are also more likely than White single tenants to be unemployed rather than employed. The odds of a Chinese/Other single tenant being unemployed compared to being employed are 1.66 times greater than for a White single tenant. Still, Chinese/Other single tenants are almost 1.76 times more likely than White single tenants to be employed rather than economically inactive, and almost three times as likely as White single tenants to be looking for employment rather than economically inactive.

In summary, Table 14 tells us that BME single tenants are more likely than their White counterparts to be unemployed rather than in employment. Compared to the White group, Asian and Chinese/Other single tenants have the highest odds of being unemployed rather than employed. However, Table 6 also tells us that, compared with White single tenants, BME single tenants are less likely to be economically inactive rather than in work or looking for work. Black single tenants have the greatest odds of being

employed rather than economically inactive, while Black and Chinese/Other single tenants have the greatest odds of being economically active but unemployed rather than economically inactive.

Table 14. Results of the multinomial regression with White single tenants as the baseline category.

		95% CI for Odds Ratio		
	<i>B (SE)</i>	<i>Lower</i>	<i>Odds Ratio</i>	<i>Upper</i>
	[1]	[2]	[3]	[4]
<i>Unemployed/in training rather than employed</i>				
Intercept	-0.12 (0.01)***			
Black single tenants	0.18 (0.03)***	1.15	1.21	1.27
Asian single tenants	0.50 (0.04)***	1.52	1.65	1.78
Mixed single tenants	0.23 (0.04)***	1.16	1.26	1.36
Chinese/Other single tenants	0.51 (0.05)***	1.51	1.66	1.83
<i>Employed rather than economically inactive</i>				
Intercept	-1.19 (0.01)***			
Black single tenants	0.89 (0.03)***	2.32	2.43	2.55
Asian single tenants	0.30 (0.04)***	1.25	1.35	1.45
Mixed single tenants	0.52 (0.04)***	1.57	1.68	1.80
Chinese/Other single tenants	0.56 (0.05)***	1.61	1.76	1.93
<i>Unemployed/in training rather than economically inactive</i>				
Intercept	-1.31 (0.01)***			
Black single tenants	1.08 (0.02)***	2.80	2.94	3.08
Asian single tenants	0.80 (0.03)***	2.08	2.22	2.36
Mixed single tenants	0.75 (0.04)***	1.98	2.12	2.27
Chinese/Other single tenants	1.07 (0.04)***	2.70	2.93	3.17

Notes: $R^2 = 0.023$ (Cox & Snell), 0.027 (Nagelkerke). Model $\chi^2(8) = 3718.002$ $p < 0.001$. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Sources: 2016/17 Continuous Recording of Social Housing Lettings and Sales data; own calculations.

So, while economically active BME single tenants have lower odds of being in employment than White single tenants, BME single tenants are less likely to be registered as economically inactive than White single tenants.

Lone Parents

After single people, the next most common household type within CORE comprises lone parents, who account for 19.8 per cent of CORE households. Of these, 93.5 per cent are lone mothers. The ethnic group with the greatest share of lone parents is

Black (24.9 per cent), while the ethnic group with the smallest share of lone parents is Chinese/other (14.0 per cent); however, 82.3 per cent of lone parents are White.

Among the population of lone parents contained in CORE, 13.2 per cent are in full-time employment while 21.4 per cent are in part-time employment. Just over half are economically inactive. As for single people, economic status among lone parents seems to vary by ethnicity (Table 15). Black single parents have the highest employment rates, while Asian and Chinese/Other lone parents have the lowest. Rates of economic inactivity are highest for White, Asian, and Chinese/Other lone parents, but lowest for lone parents with Black and Mixed ethnic origins. This is despite narrow inter-ethnic differences among lone parents in terms of age (Figure 6) and family characteristics (Table 16).

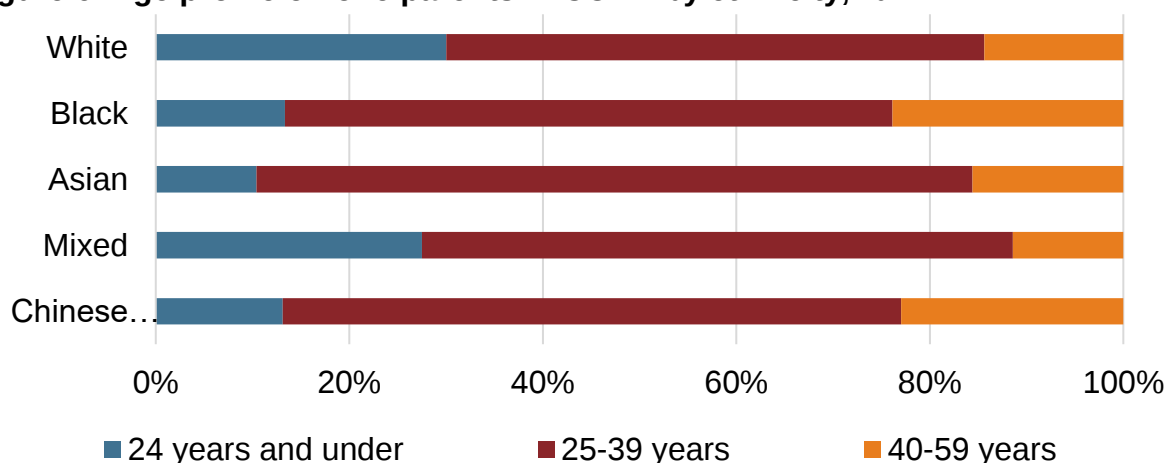
Table 15. Economic status of lone parents within CORE by ethnicity, %.

	White	Black	Asian	Mixed	Chinese/Other
Employed	34.7	47.5	24.6	39.3	29.7
Government training scheme	0.1	0.2	0.3	0.1	0.4
Unemployed	12.6	14.9	18.2	14.0	19.3
Not seeking work	43.1	28.6	49.5	37.9	39.0
Student	1.3	4.1	1.2	3.2	1.5
Sick or disabled	8.2	4.7	6.3	5.5	10.1
Total	100.0	100.0	100.0	100.0	100.0

Notes: Calculations are based on cases for which data on ethnicity, sex, and economic status are complete, i.e. were not refused by the tenant; $n = 55,368$. Columns may not sum to 100.0% exactly due to rounding.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Figure 6. Age profile of lone parents in CORE by ethnicity, %.



Notes: Calculations are based on cases for which data on sex, ethnicity, and age are complete, i.e. were not refused by the tenant; $n = 56,887$.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Table 16. Family characteristics of lone parents within CORE by ethnicity, %.

		White	Black	Asian	Mixed	Chinese/Other
Number of dependent children	One	56.4	49.0	43.8	56.0	51.2
	Two	28.5	29.7	32.8	28.6	31.4
	Three or more	15.1	21.3	23.4	15.4	17.4
	<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
Age of first child	0-2 years	33.3	24.6	24.3	32.1	24.4
	3-4 years	14.2	12.9	14.5	16.0	14.8
	5-10 years	29.8	32.6	35.8	30.2	33.4
	11-16 years	20.5	25.3	21.2	18.5	22.5
	17 years or over	3.5	4.5	4.2	3.3	4.9
	<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

Notes: Calculations are based on cases for which data on ethnicity and sex are complete, i.e. were not refused by the tenant; $n = 58,576$. Columns may not sum to 100.0% exactly due to rounding.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

To identify whether there is a statistically significant relationship between a lone parent tenant's ethnicity and employment status, we can again use Pearson's chi-square test. H_0 states that among the population of lone parents in new social lettings, ethnicity is *not* associated with economic status. H_1 states that a lone parent's ethnicity *is* associated with economic status. Running the chi-square test gave a test statistic of 515.349, $p = 0.000$. Because $\chi^2 > 20.0902$, the critical value for 8 degrees of freedom at the 1 per cent level, we can reject H_0 . Hence, a lone parent's ethnicity *is* associated with employment status.

Again, a multinomial regression analysis can tell us the likelihood that a single parent will be employed rather than unemployed, or employed rather than economically inactive, based on his or her ethnicity. The results (Table 17) tell us that:

- Black lone parents are less likely than White lone parents to be unemployed or in training rather than employed. The odds ratio indicates that as ethnicity changes from White to Black, the change in the odds of being unemployed compared to being employed is 0.87. In other words, the odds of a Black lone parent being employed compared to being unemployed is $1/0.87 = 1.15$ times greater than the odds of a White lone parent. In addition, the odds of a Black lone parent being employed rather than economically inactive are about double the odds for a White single parent. Similarly, Black single parents are about one-and-a-half times more likely than White lone parents to be registered as unemployed rather than as economically inactive.
- Asian lone parents are about twice as likely as White single parents to be unemployed rather than employed. Asian single parents are also less likely than White single tenants to be employed rather than economically inactive. The

odds ratio indicates that the odds of an Asian single parent being economically inactive rather than employed are $1/0.65 = 1.54$ times those of a White single parent. However, Asian single parents are 1.34 times more likely than White single parents to be looking for work rather than economically inactive.

- Whether a lone parent is of Mixed or White ethnic origin does not significantly predict his or her chances of being unemployed rather than employed, since $p > 0.05$ (Column 1). Still, the odds ratios indicate that Mixed lone parents are somewhat more likely than White lone parents to be employed or registered as unemployed rather than as economically inactive.
- Compared with White lone parents, Chinese/Other single parents are almost twice as likely to be unemployed rather than employed and one-and-a-half times as likely to be unemployed rather than economically inactive. Whether a lone parent is Chinese/Other or White does not significantly predict his or her chances of being employed rather than economically inactive, since $p > 0.05$.

Table 17. Results of the multinomial regression with White lone parent tenants as the baseline category.

		95% CI for Odds Ratio		
	B (SE)	Lower	Odds Ratio	Upper
	[1]	[2]	[3]	[4]
<i>Unemployed/in training rather than employed</i>				
Intercept	-1.01 (0.02)***			
Black lone parents	-0.14 (0.05)**	0.80	0.87	0.95
Asian lone parents	0.72 (0.07)***	1.79	2.05	2.36
Mixed lone parents	-0.02 (0.07)	0.86	0.98	1.12
Chinese/Other lone parents	0.60 (0.11)***	1.49	1.83	2.25
<i>Employed rather than economically inactive</i>				
Intercept	-0.46 (0.01)***			
Black lone parents	0.59 (0.03)***	1.69	1.80	1.92
Asian lone parents	-0.43 (0.05)***	0.59	0.65	0.73
Mixed lone parents	0.22 (0.05)***	1.13	1.24	1.36
Chinese/Other lone parents	-0.15 (0.08)	0.73	0.86	1.01
<i>Unemployed/in training rather than economically inactive</i>				
Intercept	-1.47 (0.02)***			
Black lone parents	0.45 (0.05)***	1.43	1.57	1.72
Asian lone parents	0.29 (0.06)***	1.19	1.34	1.51
Mixed lone parents	0.20 (0.07)**	1.07	1.22	1.39
Chinese/Other lone parents	0.45 (0.10)***	1.30	1.57	1.89

Notes: $R^2 = 0.009$ (Cox & Snell), 0.011 (Nagelkerke). Model $\chi^2(8) = 513.734$ $p < 0.001$. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Sources: 2016/17 Continuous Recording of Social Housing Lettings and Sales data; own calculations.

In summary, Table 17 tells us that Black single parents are more likely than their White counterparts to be in employment and be economically active. However, lone parents from Asian and Chinese/Other BME backgrounds are more likely than White lone parents to be unemployed rather than in paid work. At the same time, BME lone parents are less likely than White single parents to be economically inactive. The exception is the Asian group, who are more likely to be economically inactive; around half of Asian lone parents are not seeking paid employment.

Two-Adult Households (Under 60)

Two-adult households in which both adults are under sixty years of age comprise 18.0 per cent of all households contained in CORE. Of these, more than two-thirds also contain children. The majority of two-adult households are White (81.9 per cent).⁶

As for households with one adult only, economic status among two-adult households seems to vary by ethnicity (Table 18). Those with a Chinese/Other head appear least likely to contain any earners, since 41.9 per cent of such households have no one in employment. In addition, lower proportions of two-adult households with a BME head comprise two full-time earners or one full-time and one part-time earner than two-adult households with a White head; however, minority ethnic households are more likely than White households to contain a part-time earner.

Table 18. Economic status of two-adult households with dependent children within CORE by ethnicity, %.

	White	Black	Asian	Mixed	Chinese/Other
Sole full-time earner	27.2	32.6	32.5	29.9	23.2
No earners	31.0	27.9	27.3	25.3	41.5
One-and-a-half full-time earners	13.1	9.9	5.0	10.8	4.6
Dual full-time earners	18.1	12.2	5.3	15.8	6.9
Sole part-time earner	8.6	15.3	27.0	15.2	21.8
Dual part-time earners	1.9	2.3	2.9	3.0	1.9
Total	100.0	100.0	100.0	100.0	100.0

Notes: Calculations are based on cases for which data on ethnicity, sex of person 1, age of person 1 and of person 2, and economic status of person 1 and person 2 are complete, i.e. were not refused by the tenant; $n = 50,627$. Columns may not sum to 100.0% exactly due to rounding.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

⁶ Data on the ethnicity of the second adult are not available through CORE.

Using Pearson's chi-square test, H_0 states that among two-adult households, ethnicity is *not* associated with economic status, while H_1 states that ethnicity *is* associated with economic status for such households. Running the analysis gave a test statistic of 2162.736, $p = 0.000$. The critical value at 20 degrees of freedom⁷ is 37.57. Because $\chi^2 > 37.57$, we can reject H_0 . Hence, ethnicity *is* associated with employment status among two adult households.

Building on this, the results of a multinomial regression analysis (Table 19) tell us that:

- Two-adult households with a Black head of household are less likely than those with a White head of household to have two full-time earners or one-and-a-half full-time earners, i.e., one full-time earner and one part-time earner, rather than no earners. The odds ratios indicate that the Black ethnic group is $1/0.75 = 1.33$ times more likely than the White ethnic group to have no earners rather than two earners, and $1/0.84 = 1.19$ times more likely to have no earners rather than one-and-a-half full-time earners. However, couples with a Black head of household are 1.34 times more likely to have one full-time earner and 1.33 times more likely to have one part-time earner, and almost twice as likely to have a part-time earner rather than no earner at all.
- The odds of a two-adult household with an Asian head having two full-time earners instead of no earners are one-third of those of a couple with a White head. The Asian group is also less than half as likely to have one-and-a-half full-time earners than no earners. Yet, two-adult households with an Asian head are 1.36 times as likely as those with a White head to have one full-time earner rather than no earner. They are also 1.71 more likely to have two part-time earners and three-and-a-half times more likely to have one part-time earner rather than no earners.
- Whether a head of household in a two-adult family is Mixed rather than White does not significantly predict the likelihood of having two or one-and-a-half rather than no earners, since $p > 0.05$. Still, the odds ratios indicate that the Mixed group is 1.35 times more likely to have one full-time earner and around twice as likely to have at least one part-time earner rather than no one in employment.
- The odds of a two-adult household with a Chinese/Other minority ethnic head of household having two full-time earners or one-and-a-half full-time earners rather than none are about one-quarter the odds for a two-adult household with a White head. In addition, couple households with a Chinese/Other head are $1/0.64 = 1.56$ times more likely than their White counterparts to have no earners rather than one full-time earner; nevertheless, they are almost twice as likely to have one part-

⁷ As per Table 10, the number of economic statuses is six, while the number of ethnic groups is five. Therefore, the number of degrees of freedom is: $(6-1) * (5-1) = 20$.

time earner rather than no earners. However, whether the head of a couple household is Chinese/Other or White does not significantly predict the odds that the household contains two part-time workers rather than no workers.

Table 19. Results of the multinomial regression with two-adult households (aged under 60) with a White head of household as the baseline category.

		95% CI for Odds Ratio		
	<i>B</i> (SE)	Lower	Odds Ratio	Upper
<i>Two full-time earners rather than no earners</i>				
Intercept	-0.54 (0.01)***			
Black head of household	-0.29 (0.07)***	0.66	0.75	0.85
Asian head of household	-1.10 (0.08)***	0.29	0.33	0.39
Mixed head of household	0.07 (0.11)	0.89	1.07	1.29
Chinese/Other head of household	-1.26 (0.11)***	0.23	0.28	0.35
<i>One-and-a-half earners rather than no earners</i>				
Intercept	-0.86 (0.02)***			
Black head of household	-0.18 (0.07)*	0.73	0.84	0.96
Asian head of household	-0.85 (0.08)***	0.36	0.43	0.51
Mixed head of household	0.00 (0.11)	0.81	1.00	1.24
Chinese/Other head of household	-1.34 (0.13)***	0.20	0.26	0.34
<i>One full-time earner rather than no earners</i>				
Intercept	-0.13 (0.01)***			
Black head of household	0.29 (0.05)***	1.21	1.34	1.47
Asian head of household	0.31 (0.05)***	1.24	1.36	1.49
Mixed head of household	0.30 (0.08)***	1.15	1.35	1.58
Chinese/Other head of household	-0.45 (0.07)***	0.56	0.64	0.73
<i>Two part-time earners rather than no earners</i>				
Intercept	-2.79 (0.04)***			
Black head of household	0.28 (0.13)*	1.02	1.33	1.72
Asian head of household	0.54 (0.11)***	1.38	1.71	2.13
Mixed head of household	0.65 (0.19)***	1.33	1.91	2.75
Chinese/Other head of household	-0.28 (0.20)	0.52	0.76	1.12
<i>One part-time earner rather than no earners</i>				
Intercept	-1.28 (0.02)***			
Black head of household	0.68 (0.06)***	1.75	1.98	2.23
Asian head of household	1.27 (0.05)***	3.23	3.57	3.93
Mixed head of household	0.77 (0.10)***	1.79	2.16	2.62
Chinese/Other head of household	0.64 (0.07)***	1.64	1.89	2.18

Notes: $R^2 = 0.040$ (Cox & Snell), 0.041 (Nagelkerke). Model $\chi^2(20) = 2052.906$ $p < 0.001$. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Sources: 2016/17 Continuous Recording of Social Housing Lettings and Sales data; own calculations.

Overall, Table 19 tells us that, excluding the Mixed group, two-adult households with a BME head are less likely than those with a White head to have two-full time earners or one-and-a-half full-time earners than no earners at all. At the same time, couple households with a BME head (excluding the Chinese/Other group) are more likely than those with a White head to contain one full-time earner or two part-time earners rather than no earners at all. The single breadwinner model is particularly prevalent among the Mixed: Other group (36.4 per cent), Pakistani group (35.8 per cent), African group (35.2 per cent), and Indian group (34.9 per cent). In addition, two-adult households with a minority ethnic head are more likely than the White group to have one part-time earner rather than no earners. This model is common among the Bangladeshi group (35.0 per cent).

So, while the dual full-time earner and one-and-a-half full-time earner models of employment are more common among two-adult households with a White head of household, the sole-earner and part-time models of employment are more prevalent among two-adult households with a BME head of household.

Understanding These Patterns

On the whole, BME tenants in new social lettings are more likely to be economically active than White tenants. However, with certain exceptions, they are also more likely to be unemployed rather than in employment. Based on the findings of the literature review (Chapter 2), as well as descriptive statistics generated from the 2016/17 CORE dataset, it is possible to identify certain household characteristics which might contribute to explaining why employment status varies by ethnicity among social housing tenants. These characteristics, which are explored in turn in the following, are: (1) location; (2) nationality; and (3) age and health.

Location

It is plausible that inter-ethnic variations in the odds of being employed are at least partly a function of differences in the health of the local labour markets. In other words, BME tenants may be concentrated in areas with fewer available labour market opportunities, which in turn underpins the lower odds of employment among economically active BME tenants.

We can use Pearson's correlation coefficient to test whether there is an association between a tenant's location and employment status. Pearson's correlation coefficient is a summary statistic that captures the association or strength of relationship between the

values of two continuous variables.⁸ Pearson's correlation coefficient can take any value between -1 and +1. A value of zero indicates that there is no linear relationship between the two variables. Meanwhile, a value of -1 indicates a perfect negative (linear) relationship; i.e., as one variable increases in value, the other variable decreases in value. A value of +1 suggests that there is a perfect positive (linear) relationship; that is, as the value of one variable goes up, the value of the other variable goes down.⁹ However, in the social sciences, correlation coefficients rarely approach -1 or +1, since we are using data that were not obtained under perfect, laboratory-type conditions. Hence a lot of noise or random error inevitably attenuates the correlations. Accordingly, we can consider a correlation coefficient greater than ± 0.5 as signifying a fairly strong association, and a value greater than ± 0.3 as indicating a moderate correlation (Fiske, 2010). The formula for Pearson's correlation coefficient, r , is given by:

$$r = \frac{\sum[(X_i - \bar{X})(Y_i - \bar{Y})]}{\sqrt{[\sum(X_i - \bar{X})^2 \sum(Y_i - \bar{Y})^2]}}$$

The two variables included in the correlation analysis are: (1) share of tenants from BME backgrounds within a local authority area; and (2) unemployment rates across 324 local authorities in England.¹⁰ Running the correlation analysis gave a value of 0.44 significant at the $p = 0.00$ level. The value of the correlation coefficient indicates a moderate, positive (linear) relationship between the share of BME social housing tenants within a local authority and the local authority's overall unemployment rate.

Table 20 contrasts the share of BME tenants in local authorities with the highest and lowest unemployment rates and levels of deprivation. Notably, five of the ten local authorities with the highest unemployment rates (Column 2) have above-average shares of BME households in new social lettings (Column 1). These are Tower Hamlets, Birmingham, Nottingham, Sandwell, and Newcastle upon Tyne. These local authorities, with the exception of Newcastle upon Tyne, are also within the top 4 per cent most deprived local authorities (Column 3). In contrast, across the ten local authorities with the lowest unemployment rates, around 4 per cent of all households within CORE are BME. Five of these local authorities – Uttlesford, South Cambridgeshire, West Oxfordshire, Waverley, and Hart - are in the 10 per cent of least deprived local authorities.

⁸ A continuous variable is one that can be measured to any level of precision. Thus, the percentage of people registered as unemployed is a continuous variable, since it can take on any value between 0 and 100 and can, in principle, be measured at an infinite level of decimal places and precision (Field, 2009).

⁹ Note that neither a value of -1 nor +1 indicates *why* the two variables are associated.

¹⁰ Unemployment data were unavailable for the Isles of Scilly or City of London.

Table 20. Share of single tenants (new lettings and re-lets) from minority ethnic backgrounds within local authorities with highest and lowest unemployment rates, 2016/17.

Local Authority	All households in CORE within LA who are BME, % [1]	LA unemployment rate, % [2]	Ranking by Multiple Deprivation Index ¹ [3]
<i>Ten Local Authorities with Highest Unemployment Rates</i>			
Hartlepool	2.2	10.1	32
Tower Hamlets	69.4	9.1	6
Middlesbrough	7.4	8.9	16
South Tyneside	2.7	8.9	31
Birmingham	48.3	8.5	11
Sunderland	2.5	8.4	38
Sandwell	29.8	8.1	12
Redcar and Cleveland	2.4	7.9	78
Newcastle upon Tyne	18.1	7.8	92
Nottingham	28.4	7.7	10
<i>Average</i>	<i>21.1</i>	<i>8.5</i>	<i>33</i>
<i>Ten Local Authorities with Lowest Unemployment Rates</i>			
Uttlesford	5.5	2.1	297
South Cambridgeshire	6.9	2.2	314
Eden	1.9	2.2	182
South Lakeland	2.6	2.2	251
Ribble Valley	1.4	2.3	290
West Oxfordshire	4.2	2.3	316
Waverley	5.0	2.3	323
Derbyshire Dales	3.7	2.4	258
North Dorset	1.2	2.4	210
Hart	6.3	2.4	326
<i>Average</i>	<i>3.9</i>	<i>2.3</i>	<i>277</i>
Average for all LAs	10.6	4.4	N/A

Notes: ¹The Multiple Deprivation Index (IMD) is a relative measure based on seven different domains of deprivation. The IMD covers Lower-layer Super Output Areas; hence, the rank provided in the table is a higher-level geography summary measure. A rank of 1 indicates that the LA has the highest average level of deprivation across all its smaller areas; a rank of 326 indicates that the LA has the lowest level of deprivation across all its smaller areas. In other words, a lower ranking indicates higher levels of deprivation.

Sources: 2016/17 Continuous Recording of Social Housing Lettings and Sales data; 2016/17 Local labour market indicators by unitary and local authority July 2017, available from the Office for National Statistics; English Indices of Deprivation 2015, available from the Office for National Statistics.

The reasons why BME tenants are clustered in areas with higher unemployment and deprivation are undoubtedly numerous and complex. Nevertheless, this observation suggests that more perhaps should be done to ensure people from BME backgrounds are allocated social housing in less deprived areas and in areas in which there are more labour market opportunities. There is a danger that placing economically inactive BME new social tenants in high unemployment areas will only compound their marginalisation. Of course, such a policy initiative is limited by the concentration of social housing properties in deprived areas. Hence, tackling the wider problem of unemployment in the most deprived areas is arguably equally important for improving BME social tenants' employment odds.

Nationality

BME tenants are disproportionately likely to be non-UK nationals, especially those in the Chinese/Other group (Table 21). Hence, an additional factor which might help to explain the different employment profiles of White and BME tenants is nationality. This is because non-UK nationals¹¹ face more stringent conditions in accessing social housing and are typically required to be a registered worker or jobseeker unless they have passed a 'habitual residence' test.

Table 21. Table 13. Nationality of head of household among CORE households by ethnicity, %.

	White	Black	Asian	Mixed	Chinese/Other
UK national	95.6	70.2	75.3	82.2	45.9
European Economic Area national	3.8	6.1	4.5	10.7	12.6
Any other nationality	0.6	23.7	20.2	7.0	41.5
Total	100.0	100.0	100.0	100.0	100.0

Notes: Calculations are based on cases for which data on ethnicity and nationality of head of household are complete, i.e., were not refused by the tenant; $n = 298,701$. Columns may not sum to 100.0% exactly due to rounding.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Thus, as Table 22 shows, a far larger proportion of non-UK national single tenants compared with UK national single tenants are either in employment or registered jobseekers. Tenants from the European Economic Area, who can work in the UK without restriction, are most likely to be employed. Non-UK tenants from outside of Europe, who face greater restrictions in accessing employment, are most likely to be looking for employment. Accordingly, we can surmise that because BME tenants are

¹¹ This excludes refugees; yet, refugees are a minority, comprising 0.7 per cent of CORE households.

more likely to be foreign nationals than White tenants, this partly explains higher rates of economic activity among BME tenants.

Table 22. Employment status of heads of households within CORE by nationality, %.

	UK national	European Economic Area national	Any other nationality
Employed	28.1	67.6	31.2
Unemployed/in training	14.9	7.9	30.3
Economically inactive	57.0	24.6	38.5
Total	100.0	100.0	100.0

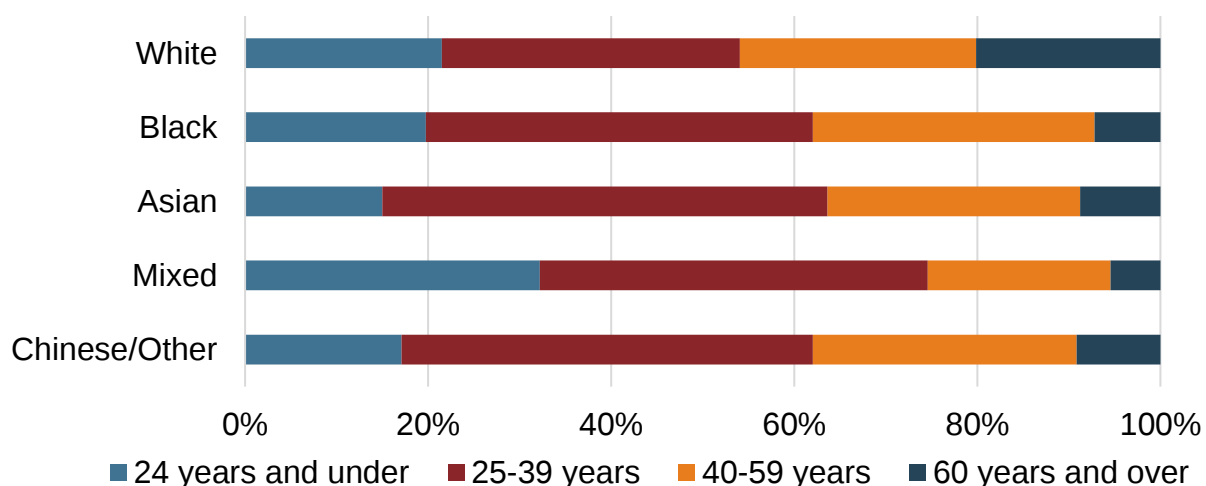
Notes: Calculations are based on cases for which data on sex, employment status, and nationality are complete, i.e. were not refused by the tenant; $n = 162,201$.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Age and Health

Another potentially important factor conditioning the relationship between ethnicity and employment status is the older age profile of White households within CORE compared with BME households. Figure 7 shows that while 27.5 per cent of White heads of household within CORE are aged sixty years and over, between 7.2 per cent (Mixed) and 9.2 per cent (Chinese/Other) of BME heads of household fall into this age bracket.

Figure 7. Age profile of heads of household by ethnicity, %.



Notes: Calculations are based on cases for which data on ethnicity and age of household head are complete, i.e., were not refused by the tenant; $n = 301,785$.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Accordingly, it is plausible that a greater proportion of White tenants are economically inactive due to sickness or disability or retirement because of their older age profile. Table

23 suggests that this is the case, as around half of White heads of household are sick/disabled or retired.

Table 23. Heads of household registered as sick/disabled or retired as a percentage of ethnic group, %.

	White	Black	Asian	Mixed	Chinese/Other
Registered as sick/disabled	20.3	11.5	14.1	14.8	13.3
Retired	15.7	5.0	6.2	3.7	6.4
Total	36.0	16.5	20.3	18.5	19.7

Notes: Calculations are based on cases for which data on ethnicity and economic status of head of household are complete, i.e., were not refused by the tenant; $n = 288,418$. Columns may not sum to 100.0% exactly due to rounding.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Additional Factors

Of course, factors other than location, nationality, age, and health and which are beyond the scope of the CORE data contribute to explaining BME tenants' lower odds of employment. For example, labour market discrimination, ethnic group differences in such socio-demographic indicators as educational levels or time of entry into the UK for those born overseas, the effects of ethnic group preferences, traditions, and 'norms', and employer discrimination (see e.g., Catney and Sabater, 2015).

Additional potential factors that explain inter-ethnic variations in rates of employment and economic activity within the population of CORE are propensity and ability to make use of childcare (e.g., Datta et al., 2007; Huskinson et al., 2016). Research finds that BME parents are less likely to use childcare than White families, partly because of less awareness of such facilities, and partly because of costs, inadequate supply of local childcare, a deficit of BME staff in childcare, and language barriers (e.g., Box et al., 2001; Daycare Trust, 2004). An additional barrier to employment for BME households may be a mismatch between work schedules and the operational hours of childcare facilities. For instance, a study conducted by Barnardo's found that long and atypical working hours were a factor in the childcare choices of the Chinese community in Northern Ireland (Webb et al., 2014). Similarly, a report by the Daycare Trust (2004) mentions the difficulties faced by some Muslim parents whose children go to the mosque after school. Indeed, the prevalence of sole-earner and part-time models of employment among two-adult households with a BME head of household may reflect the use of alternate shift patterns between parents so that children can be cared for by one while the other works (Datta et al., 2007). Furthermore, BME parents may be less likely to make use of informal childcare networks, since migration to the UK may split up childcare support networks, making it harder for BME parents to rely on their families for childcare

provision. Indeed, just over half of Chinese/Other lone parents in CORE 2016/17 are from outside the UK.

Yet, the multinomial regression analyses revealed that not all BME households are at greater risk of unemployment than their White counterparts. Notably, Black lone parents have higher odds of being in employment than White lone parents. In explaining this, cultural factors are likely important. As Peach (1998) highlights, there is a strongly developed tradition of female independence within the Afro-Caribbean and Caribbean populations in Britain. In addition, Black lone mothers are more likely to consider employment as an important form of provision and way of enacting care for their children (Box et al., 2001). In addition, unlike other BME groups, Black Caribbean families exhibit similar levels of childcare usage to White families, with 74 per cent of Black Caribbean children in childcare compared with 73 per cent of White British children (Huskinson et al., 2016). Even so, Black lone parents' higher employment odds do not necessarily translate into higher incomes or welfare. There is evidence that despite their higher employment rates, Black Caribbean women are underrepresented in senior level jobs (e.g., Buckner et al., 2007).

Still, on the whole, economically active BME households in new social lettings last year were less likely to be in employment than their White counterparts. This unemployment rate gap reflects the 'ethnic penalty' in employment observed in the UK population at large; in the period from July to September 2017, the unemployment rate among BME groups was 7.8 per cent compared with 4.0 per cent for the White ethnic group (Office for National Statistics, 2017). BME tenants' lower odds of employment suggest that the shift towards prioritising working households in social housing allocation across many councils could shut many BME people out of the social rented sector.

6. Conclusion

This report has sought to explore the composition of households in new social lettings across England. This reflects the background of a growing BME population in the UK, a dwindling supply of social housing, and research evidence suggesting that BME households are disadvantaged in accessing social housing, despite their low average incomes. Accordingly, identifying who is taking up new social lettings and how they get there, as well as how these factors potentially vary across ethnic groups, can inform the direction of future policies towards helping BME groups to access social housing on equal terms. To this aim, the report made use of the Continuous REcording of Lettings and Sales in Social Housing in England (CORE) dataset to reveal the structure of the population in new social housing lettings through a cluster analysis and other statistical and descriptive analyses. This chapter summarises the key findings of the report, their policy implications, and suggestions for future research.

Key Findings

The analysis confirmed the uneven geographical spread of new social lettings to BME households. According to the 2016-17 CORE data, Black and most Mixed, Chinese and 'Other' BME groups are overrepresented in new social lettings. The overrepresentation of some BME groups in social housing is at least partly explained by the geographical concentration of BME communities in regions in which social renting is more common, namely London and the West Midlands. What is more, BME social tenants within these regions tend to cluster into a small number of local authorities only (e.g., Birmingham, Hackney, Leeds, Manchester). Yet, even though Asian ethnic groups also cluster into local authorities with high levels of social housing compared with the national average, Asian households remain underrepresented in new social lettings. Existing literature suggests that this is potentially because of cultural perceptions of social housing as a less desirable tenure, especially compared with owner occupation, as well as the greater prevalence of properties that can accommodate multi-family households in the private rented sector. Indeed, while rates of owner occupation among Asian groups have declined over time, rates of private renting have increased significantly since the early-1990s.

The cluster analysis revealed eighteen groups or 'types' of typical households in the CORE 2016/17 data. Ethnicity emerged as an important dimension of the cluster analysis, in that organising households by ethnicity, employment status, and household type revealed a meaningful structure to the data, i.e., maximised between-group differences while minimising within-group differences. This suggests that BME tenants in new social lettings may have unique needs compared with the ethnic

majority. More specifically, through dissecting and comparing the characteristics of the clusters further, the report highlighted that:

- While BME households in new social lettings are, on the whole, more likely to be economically active than White households, they are also less likely to be in employment rather than unemployed. Higher rates of economic inactivity among White households in new social lettings are partly explained by the older age structure of the White group and corresponding higher rates of sickness/disability and retirement. BME households' lower odds of employment are potentially linked to the geographical concentration of BME households in areas with higher unemployment rates, as well as more stringent employment-related conditions on access to social housing for migrants, who are disproportionately BME. Prior research also suggests that BME households with children are, on average, less likely to make use of formal childcare services than White households with children.
- BME groups in new social lettings experience higher rates of prior homelessness. The problem is especially acute among BME single males, of which around half were previously homeless. This is in keeping with evidence that BME groups are disproportionately at risk of homelessness.
- Rates of lone parenthood are high among the Black and Mixed ethnic groups within new social lettings, which may contribute to explaining their overrepresentation in new social lettings.
- BME tenants are less likely to have acquired their current social tenancy through the choice-based letting system. This fits with evidence suggesting that migrants, who are overwhelmingly from BME backgrounds, may be less likely to have knowledge of their social rights or be able to access them due to language barriers. The lower use of choice-based lettings among BME households is also potentially associated with higher rates of homelessness and temporary accommodation among BME groups.
- BME groups are slightly more likely to have been given reasonable preference.
- Single female tenants with or without children from BME backgrounds are more likely to have left their previous settled home because of domestic violence than White female tenants. The ethnic group in new social lettings that is most likely to have previously experienced domestic violence is the South Asian group.

Policy Implications

Geographical Dispersion of Lettings to BME Groups. Research suggests a waning preference among younger BME groups for living in ethnic enclaves, with the quality of housing, schools, and neighbourhood taking greater priority. At the same time, focus group research suggests that fears over racial harassment continue to dictate many

BME groups' housing choices, with many actively choosing to avoid certain areas perceived as racist (Markkanen, 2008). Hence, the concentration of new lettings to BME groups in areas with high BME populations may be less a consequence of real choice, and more out of a lack of adequate properties in different areas or concerns about harassment. Accordingly, policies to support BME households that wish to enter into more ethnically diverse areas to do so alongside policies that address racial harassment in certain areas may contribute to enabling more BME households to take up social lettings in a wider diversity of areas. In turn, this can contribute to lessening ethnic residential segregation.

Employment. Close attention must be paid to the impact of the current policy trend towards strengthening the relationship between priority for social housing and employment status. Given higher unemployment among BME communities, such a policy change has the potential to impede BME households' access to social housing. In turn, any move towards requiring current tenants to find work as a condition of keeping their tenancy could impact disproportionately negatively on BME tenants.

The higher prevalence of unemployment among certain BME groups within CORE also suggests that policies that use housing providers as an access point for reducing unemployment among social housing tenants could be fruitful in reducing ethnic inequalities in labour market participation. For example, the Kush Housing Association's Akaba project in Hackney, which helps vulnerable African Caribbean people with mental health problems, helped over fifty participants gain employment and job placements over two years (Shelter, 2008). Similarly, childcare initiatives could help more social tenants to enter into employment. Integrating employment and housing policies may be especially beneficial for migrant and refugee households in new social lettings, since they are less likely to have the social connections for finding work, knowledge of the support available to unemployed people, or the language skills to access such support.

Homelessness. It is well known that BME households are more likely to become statutorily homeless than White households, and the CORE data revealed that a higher proportion of BME households in new social lettings were previously homeless compared with White households. Therefore, preventative measures aimed at reducing homelessness among BME populations by addressing their specific needs (e.g., 'hidden' homelessness and overcrowding) are important for managing future demand on the social housing sector and reducing the share of the population with unmet housing needs. This also requires more research on the causes of BME homelessness, which remains inadequate.

Choice-Based Lettings. BME households in new social lettings are less likely to have acquired their current tenancy through the choice-based lettings system. This is

potentially due to higher rates of homelessness and temporary accommodation among the BME community, which can inhibit participation in choice-based lettings because of the pressing nature of the housing need or disadvantaged access to the means of bidding for properties. Therefore, reducing ethnic inequalities in access to and the quality of social housing arguably requires action to ensure that households which are homeless or in temporary accommodation do not face undue barriers in accessing choice-based lettings.

Domestic violence. Social housing has an important role to play in the autonomy and survival of women who are experiencing domestic abuse. While domestic violence affects all ethnic groups, the CORE data suggest that social housing is especially important for certain South Asian women, as one-quarter of South Asian women in new social lettings last year were forced out of their previous home because of domestic abuse. BME victims of domestic violence can face additional disadvantages in accessing social housing if English is not their first language, their immigration status presents a barrier to accessing welfare services, or services are not adequately responsive to BME women's needs and circumstances (e.g., Burman and Chantler, 2005). Therefore, ensuring that women from South Asian and other Minority Ethnic groups can access social housing on equal terms as White women, such as through services that are sensitive to language and culture or via exceptions to immigration stipulations, should be a priority.

Suggestions for Future Research

Quality of Housing and Choice. The higher rates of homelessness and concentration in temporary accommodation among BME groups, coupled with the lower usage of the choice-based lettings system, suggest that BME groups may be less well-placed than White households to hold out for the best properties. However, this cannot be tested using the CORE dataset in its current form. Hence, future research could benefit from the inclusion of variables which capture a property's quality (e.g., dampness), as well as the quality of the local area (e.g., pollution levels). Additional potential ways of operationalising choice within CORE could involve variables that capture length of time on the waiting list for social housing or the number of properties refused after being invited to view that property. These variables could be useful for assessing whether BME households are potentially pushed into taking up properties quickly. Alternatively, the English Housing Survey provides data on housing quality.

Comparing Tenures. Fully understanding the relationship between ethnicity and access to social housing requires comparing BME households' representation within and mobility between other tenures. This could involve predicting the probability of a

household entering into the social rented sector, as opposed to the private rented sector or owner occupation, by ethnicity while controlling for other characteristics.

Focus Groups and Qualitative Research. To really disentangle the relationship between ethnicity and social housing access and quality, qualitative research that engages end-users and gives voice to vulnerable BME households is imperative. Previous literature suggests that culture and agency are important for understanding the relationship between ethnicity and housing. Yet, statistical analyses of quantitative data are not well-suited to analysing the role of culture and choice in conditioning BME households' housing outcomes, as well as how much agency these households feel they are able to exercise. Rather, data drawn from the subjective experiences of individuals are necessary.

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Appendix 1

Table 24. Economic status of male single tenants, %.

	White	Black	Asian	Mixed	Chinese/Other
Employed	18.6	26.3	23.2	22.9	22.0
Unemployed/in training	21.1	36.6	30.0	30.9	38.5
Economically inactive	60.3	37.0	46.9	46.2	39.6
Total	100.0	100.0	100.0	100.0	100.0

Notes: Calculations are based on cases for which data on ethnicity, sex, and economic status are complete, i.e. were not refused by the tenant; $n = 89,904$. Columns may not sum to 100.0% exactly due to rounding.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.

Table 25. Economic status of female single tenants, %.

	White	Black	Asian	Mixed	Chinese/Other
Employed	20.2	33.7	16.6	26.5	25.6
Unemployed/in training	12.5	23.2	29.6	23.4	23.3
Economically inactive	67.3	43.1	53.8	50.1	51.1
Total	100.0	100.0	100.0	100.0	100.0

Notes: Calculations are based on cases for which data on ethnicity, sex, and economic status are complete, i.e. were not refused by the tenant; $n = 73,290$. Columns may not sum to 100.0% exactly due to rounding.

Source: 2016/17 Continuous Recording of Social Housing Lettings and Sales data.