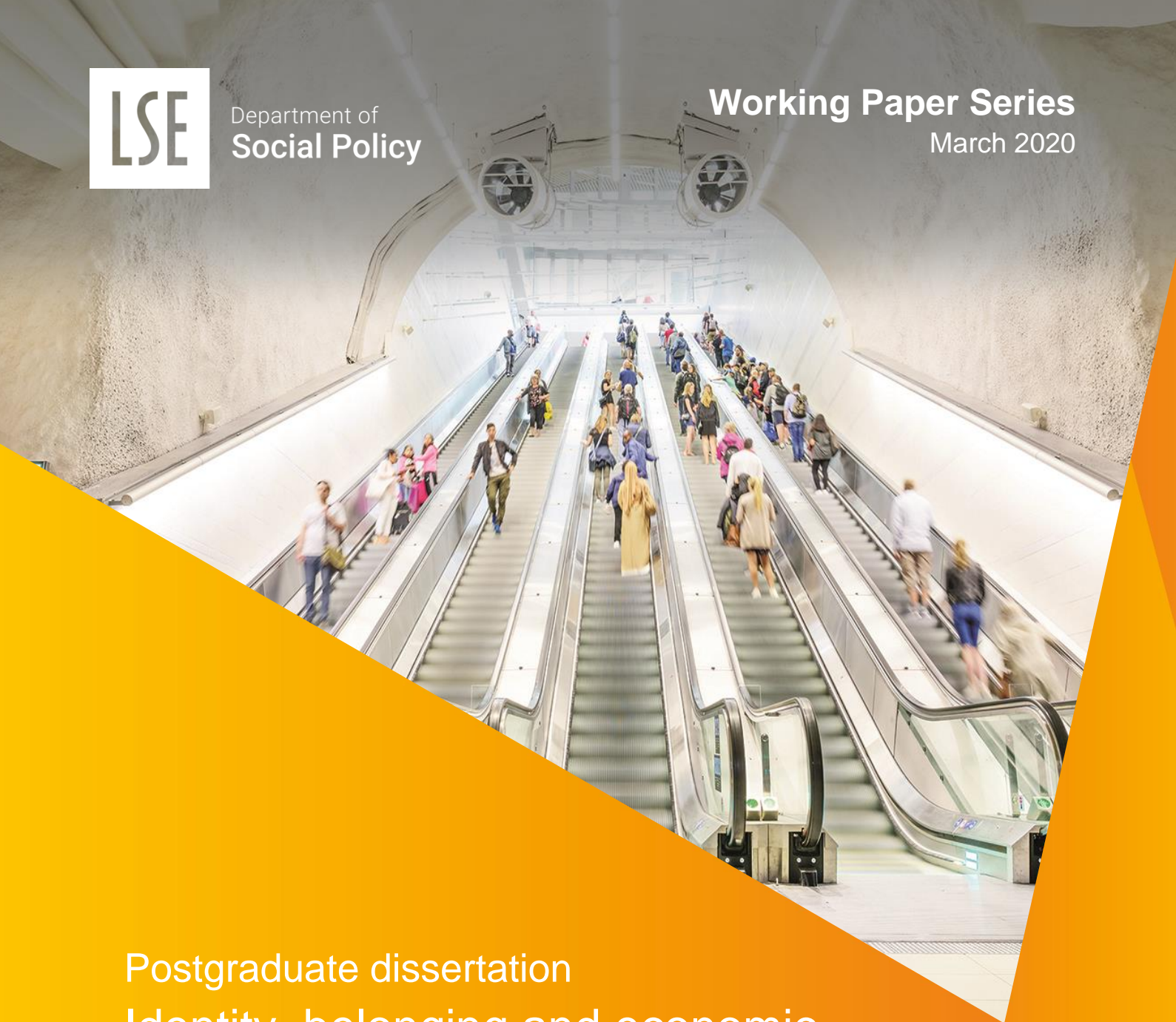




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Postgraduate dissertation
Identity, belonging and economic
outcomes in England and Wales

Working Paper 04-20

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Abstract

The United Kingdom's 2016 vote to leave the European Union revealed the ways in which issues of economic inequality were intertwined with those of national identity. However, research relating to the impact of national identity on labour market outcomes is mixed, while the relationship between national identity and progression at work has not yet been investigated. Drawing on Akerlof and Kranton's theory of identity economics, this paper explores whether having British identity impacts progression at work for sub-state national and migrant-origin groups in England and Wales.

Using the ONS Quarterly Labour Force Survey, I estimate logit models comparing the likelihood of career progression by three identity dimensions – British, sub-state national and migrant-origin, which is itself influenced by social class. The results suggest that identity-related power relations, in-group preferences and bias at work may limit career progression. The paper also provides quantitative evidence for differences in what British identity means in the first place. The novel approach sheds more light on the differential labour market behaviours of migrant-origin and sub-state national groups, and adds to a better understanding of Britishness.

Keywords: identity economics, sub-state national and ethnic diversity, progression at work

Author



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Introduction

In the 2016 referendum that resulted in a vote to leave the European Union (EU), those who feared that the EU membership is threatening their identity were more likely to vote to leave (NatCen, 2017). An unexpected outcome, this vote demonstrates how national identity can feed into making a fundamental collective decision with tremendous economic, political and social implications for the country and its international partners.

Yet almost two decades ago Prime Minister Tony Blair stressed how building a modernised and shared British identity is needed to sustain long-term growth, prosperity and stability for the four UK nations and migrant-origin groups (Blair, 2000). Indeed, a recent report warns policy makers that clearly articulated identities can either benefit society as a resource for social change, building social capital and promoting wellbeing, or harm it through social unrest and antisocial behaviour (Foresight Future Identities, 2013). Politicians engaging with the referendum did not appear to recognise the importance of shared identity and its relationship to economic equality and political stability. It is the aim to address this issue.

An equal chance to progress at work, the focus of a recent independent Review of race in the workplace (McGregor-Smith, 2017) and a subsequent government research commission (Department for Business, Energy & Industrial Strategy, 2018), is one measure of such economic equality. This paper poses the question: Does having British national identity impact the upward occupational mobility (OM) of sub-state national and migrant-origin groups in England and Wales in the short term?

The next section presents academic debate on labour market and identity patterns for migrant-origin and sub-state national groups from which are derived hypotheses for the analysis. The third section outlines the methods and data. The fourth section provides a discussion of results. The final section concludes.

Literature review

Identity economics and dimensions

Identity – a person's sense of self – develops in the context of social difference, in that different values are prescribed to different groups (Akerlof and Kranton, 2000). Akerlof and Kranton (2000) elaborate on the identity formation process: first, belonging to a group can result from the individual's action (personal sense of belonging). It can also be an externality of others' action if, for example, they form their own identity by assigning an individual a subordinate position based on class or ethnicity, which can result in exclusion, poverty and oppositional identity formation by those excluded. Further, identity might represent a specific choice at all, e.g. gender or ethnicity. In addition, categories, including those promoted in public policy, and behavioural prescriptions relating to specific categories can change, feeding evolution of identity-based preferences. Belonging to a group is associated with gains or losses that are incorporated in the individual's utility function; in line with neoclassical economics, the individual aims to maximise their utility and therefore – the pay-offs from their identity (ibid). Therefore, Akerlof and Kranton (2000) see the person's sense of self as an important economic decision.

Separately, the integration literature recognises the emergence of different patterns of inclusion and accommodation depending on the respective minority type¹ – autonomy and power-sharing for sub-state national groups such as Scots and Welsh in Britain, and multicultural citizenship for immigrant groups (Kymlicka, 2010). First, while most UK sub-state national groups (here referred to as national minorities for simplicity) report White-British ethnicity (Appendix 2a), Kymlicka's approach to split groups by minority types implies underlying processes defined by characteristics beyond ethnicity. Second, these patterns seem diverging – devolution vs inclusion. Therefore, Kymlicka's (2010) approach and Akerlof and Kranton's (2000) account of identity economics justify studying these minority types as different identity dimensions and exploring their labour market outcomes and patterns of British identity.² The rest of this section looks at what current research tells us about labour market and British identity patterns across minority types, and about the meaning of Britishness.

Labour market outcomes

Migrant-origin minorities

The research evidence on the impacts of national identity on labour market outcomes is currently mixed. One study on migrant-origin groups in Germany shows, for example, weak evidence for differential impacts on wages, participation, employment and unemployment between adopting the majority identity or retaining the ethnic minority one, with some significant differences by gender (Casey and Dustmann, 2010).

Two points about this study deserve attention. First, in Germany the nation came before the state, resulting in the formation of exclusive ethnic belonging (Castles et al., 2014, p265). By contrast, in Britain political integration is seen as arising before national identity formation and was characterised by the need to tolerate difference and civic belonging (ibid). Germany has been slowly shifting towards a more inclusive approach of recognising communalities across communities (Brubaker, 2001), while Britain is gradually moving to a "civic only" concept of identity that tolerates diversity (Heath and Tilley, 2005). However, historic differences in the starting points of these processes might still mean that migrant-origin minorities in Germany and Britain perceptions of and access to the respective majority identities, resulting in differential impacts of identity on economic outcomes.

Second, differences across ethnic group may be relevant to the specific cases. Migrant-origin groups in Britain show heterogeneous education and labour market patterns: for example, Indian and Chinese outperform their White British counterparts in education and slightly underperform in earnings, employment, unemployment and access to salariat. By contrast, Pakistanis and Bangladeshis fare substantially worse in labour market outcomes and have also historically had lower educational outcomes (Algan et al., 2010; Blackwell and Guinea-Martin, 2005; Cheung and Heath, 2007; Heath et al., 2008).

¹ Minority types and groups: the two minority types are migrant-origin and national, each of them containing groups such as Indians and Scots. The English are by far a majority, but in their capacity of a sub-state national group are referred to a national minority for consistency and simplicity.

² The second/third generations of immigrant groups might not identify as immigrants yet their family migration background might impact their life chances. Immigrant groups will be referred to as migrant-origin minorities.

It has been argued that oppositional identity formation depends on the social context, and that migrant-origin minority groups who form oppositional identities are less likely to be employed in Britain (Battu and Zenou, 2010). This argument aligns with Akerlof and Kranton's (2000) theoretical reasoning that oppositional identities are linked to economic exclusion. The results suggest that not identifying as British – through the lens of oppositional identity formation might constitute an economic penalty for migrant-origin groups.

While there is an extensive literature on the factors associated with differential labour market outcomes across ethnic groups, the impacts of ethnicity and national identity on progression at work have not to-date been studied, leaving the question of the relationship between identity and occupational mobility an open one.

Research on ethnic penalties typically uses the white majority as a reference group, presenting their national identity as representing a dominant culture. While it is a feature of analysis that a reference group is typically required, considering a category dominant by default may imply that others are subordinate. In an attempt to avoid such an implicit assumption, I explore dynamics at two separate identity dimensions – migrant-origin and national.

National minorities

Less attention has been paid to differences between the four UK nations in identity and labour market penalties, and there is no research on the economic impact of British identity for national minorities. Yet existing research suggests that in the 1990s Scots experienced better upward occupational mobility in the South East than the local labour force (Findlay et al., 2009). While narrowly focused on the performance of one particular national group in a part of England, this study does provide some indicative evidence for differential outcomes between the UK national groups. Further, Heitmueller (2004) shows that similar characteristics in England and Scotland translate differently into job mobility. This indicates that it is fruitful to consider the role of identity and economic outcomes for national minorities.

Understanding British identity

Research on the UK shows that migrant-origin minorities; identification with the majority increases in the second generation, showing a pattern of assimilation in terms of British (Heath and Demireva, 2014; Manning and Roy, 2010; Platt, 2014). Further drivers of feeling (more) British among immigrants include age at migration, longer residence, and feeling respected and tolerated (Georgiadis and Manning, 2013; Manning and Roy, 2010). Conversely, those who feel discriminated against are less likely to identify with Britain (Heath and Demireva, 2014). These results illustrate how time and positive social experiences feed into the sense of belonging, while the lack of the latter results in an oppositional identity, an identity which Battu and Zenou (2010) have associated with employment penalties.

A more detailed look at identification with Britain reveals that migrant-origin minorities are more likely to feel British than the four sub-state national groups (Nandi and Platt, 2015). Indeed, such a comparison illustrates the paradox that the 'target' national identity for migrant-origin communities,

according to political discourse is one that national minorities do not strongly identify with in the first place. We can see here at work the accommodation patterns that Kymlicka (2010) talks about: inclusion for the migrant-origin groups who move into a direction of a stronger association with Britain, and autonomy for the sub-state national groups who feel less British.

Nandi and Platt (2015) also show that lower educational qualifications and lower socio-economic status make it more likely for migrant-origin minorities to feel British, and South Asians and African Christians are more likely to feel British than Arab, White and Chinese.³ Since those who identify most strongly as British, such as Pakistanis and Bangladeshis, tend to be those who are most economically marginalised (Algan et al. 2010 Blackwell and Guinea-Martin 2005, Cheung and Heath 2007, Heath et al. 2008) it is possible that such groups perceive Britishness as representing power and inclusion.

By contrast, Nandi and Platt (2015) show that for the sub-state national groups, lower educational qualifications and lower socio-economic status translate into higher likelihood to identify with one of the four UK nations rather than with being British. These contrasting dynamics behind the existence of different meanings of Britishness are worth exploring further.

Such dynamics and paradoxes in identity formation are effectively captured in an anecdote into the different meanings of Britishness (Hirsch, 2018). Hirsch – a woman of mixed heritage born to a White British father and Ghanaian mother,⁴ dedicates her first chapter to “*The Question*”⁵ (Hirsch, 2018, p33): Where are you from?, that she has been confronted with throughout her life. The Question leaves her confused: “I can’t be British, can I, if British people keep asking where I’m from?” (Hirsch, 2018, p33), it takes away the British dimension from her own identity. It did so to such extent, that aged twenty-one, she left for Africa in the hope that her “broken sense of identity could become whole” (Hirsch, 2018, p169). Later, she shares a conversation with Tommy Robinson, the original founder of the English Defence League – a far-right anti-Islam organisation. Robinson says “Blacks are all right. [...] A lot of them act like white people, they are becoming more and more like us. You know, we have Sikh members too. They love this country. It’s Muslims that are the problem.” (Hirsch, 2018, p151). In her own words, Hirsch admits “There are so many layers in the daily texture of feeling othered in Britain [...] It operates powerfully against a sense of belonging in this country” (Hirsch, 2018, p114).

Such experience reveals discrepancies behind the very interpretation of Britishness as a sense of belonging. It reveals the deep insecurity that Hirsch feels due to the exclusion of Blacks from history, the confusion that the feeling of belonging to Britain of people of colour is still challenged (Hirsch, 2018, Chapter 2). Robinson’s claim that Blacks are “all right” because many of them “act like white people” reveals underlying assimilationist attitude built on the belief in white superiority: whites are the benchmark for a right behaviour and – respectively, belonging. In the contexts of Oxford and legal London, Hirsch admits her “awkwardness and unease in the face of a version of

³ Nandi and Platt (2015) look at the impacts of belonging to ethno-religious groups – e.g., Indian and African Muslim are more likely to feel British than the non-Muslim members in their ethnic groups, indicating that religion matters for feeling British. Religion is not available in the dataset I use and therefore is not discussed further, even though this is a potential limitation to the analysis.

⁴ Note that, Mixed ethnic groups are excluded from my analysis. However, Hirsch tells her story of belonging and otherness through the lens of her Blackness, which makes it relevant to my discussion.

⁵ Formatting is original.

elite, privileged, traditional Britishness” (Hirsch, 2018, p185) and feeling as an “impostor” (Hirsch, 2018, p219). It seems that – while the most natural underlying understanding of Britishness for her is one of acknowledged contribution and inclusion, her understanding is challenged by contradictory versions of Britishness as assimilationist or exclusive. Such othering reveals an unconscious, or conscious, bias that those who look and/or behave differently do not belong. Hirsch openly talks about the emotional cost of feeling othered, of being denied her sense of belonging to Britain, and how a coping mechanism was to deny it herself and search for a substitute identity. Despite being a single story, it accords with the discussion of identity formation and its pay-offs as theorised by Akerlof and Kranton (2000). It also exemplifies contradictory understandings of belonging to Britain and the need to look at the British identity dimension from various perspectives to be able to understand how it relates to migrant-origin and national minority identities.

In the end, the paradox that Nandi and Platt (2015) suggest that there might actually be no overarching consensus of what belonging to Britain means, and these discrepancies are defined by educational and socio-economic divisions between and within the minority types. The association between national identity and socio-economic status indicates that identity and economics are empirically linked. But Nandi and Platt’s (2015) analysis challenges Akerlof and Kranton’s (2000) theory in terms of the causal direction of that association. Since the relationship is theoretically derived from different propositions, this paper therefore aims to tackle both sides of the question and also to explore whether success at the labour market feeds into belonging to Britain.

Hypotheses

The research question that drives this paper is: Does having British national identity impact the progression at work for national and migrant-origin minorities in England and Wales?

My first hypothesis is that, within the same type of minority – migrant-origin or national, people who hold a British national identity that can thus be shared with others would have better chances for progression at work, compared to those who do not identify as British. My second hypothesis is that the impacts of national identity are mediated by the type of minority group, in that migrant-origin minorities perform worse than national minorities, whether they identify as British or not. This leads me to posit (hypothesis 3) a hierarchy based on the interactions of national identity and minority type, in descending order: national minority – British identity, national minority – non-British identity, migrant-origin minority – British identity, migrant-origin minority – non-British identity.

Taking the converse perspective on the causality of the relationship, I also hypothesise (hypothesis 4) that it is also possible for progression at work to increase the likelihood of identifying as British.

Data and methods

Data

I use the ONS Labour Force Survey Five-Quarter Longitudinal Dataset: Secure Access (UK Data Service, 2018). Respondents to the quarterly Labour Force Survey participate for five quarters, allowing me to observe changes in the individual circumstances over time. Each quarter, 20% of the respondents exit the survey and are replaced by new participants. The Five-Quarter Longitudinal Dataset contains labour market outcomes, socio-demographic characteristics and migration-related aspects of identity, which renders it most suitable for this analysis. Due to the sensitivity of some of the variables, I needed to access the secure version of the data and the research was carried under the ONS Secure Research Service (SRS) conditions.

A total of 23 waves for the period July 2011 – March 2018 were combined to achieve the highest number of observations while avoiding discontinuity in the data collection methodology. Each dataset contains 4,670 observations on average. The replies “No answer” and “Does not apply” to the questions on occupation (used to derive OM), ethnicity, belonging to UK nations, and British identity were recoded as missing, reducing the initial sample size by more than half, due to the fact that measures relating to the occupation are not recorded for those not in work. Ethnicity data is available for England and Wales only. Heterogeneous ethnicity categories (four Mixed categories, Other Black, Other Asian, and Other ethnic group) and those with less than 10 observations (White Gypsy) were dropped. The remaining ethnic groups are white British, white Irish, white Other, Indian, Pakistani, Bangladeshi, Chinese, Black African, Black Caribbean and Arab. For consistency, observations for mixed national identity (e.g. English-Scottish) were dropped, providing me with single sub-British national belonging for English, Scottish, Welsh and Northern Irish. The final sample contains a total of 44,548 observations. Appendix 5 provides further details on sample construction.

Variables

Key dependent and independent variables are OM, British identity, belonging to a migrant-origin minority or to a national minority.

OM is defined as progression at work measured through moving up the one-digit ONS Standard Occupational Classification (SOC) 2010 hierarchy. The difference in occupation between the fifth and first quarter is taken to construct a binary OM variable (upward for success, demotion/none for failure). The longitudinal nature of the data allow me to construct measures of change, in this case specifically upwards mobility, increasing the confidence with which I can make inferences about the association between OM and identity. There is no OM from the managerial occupations, these cases predict failure perfectly and were excluded. At the one-digit level SOC is mostly hierarchical, yet this approach doesn't capture moves within these broadly defined occupations, e.g. from a researcher to a senior researcher. The granular four-digit SOC does capture such moves but is less hierarchical. For example, changing from a business/media occupation (codes 24xx) to a health occupation (codes 22xx) (ONS, 2010) suggests job mobility – and possibly a change in profession – that might not correspond to a promotion. Therefore, the one-digit SOC was preferred.

A binary variable for belonging to a migrant-origin minority type was constructed, assigning success to those who identify with an ethnic group different from White British and failure – to those who identify as White British. Through the lens of international migration, ethnicity can encompass both settled communities and migrants and is often used in the literature as a mark for non-white-British origin (Heath et al., 2008). Respectively, White British can be considered a proxy for a group without a recent migration background.

National identity responses were collected through a multiple-response question, allowing respondents to choose more than one from English, Scottish, Welsh, Northern Irish, British and Other, where applicable; national identity variables were then derived (ONS, 2017, 2018b). This means that there are overlaps between these categories and that they do not add up to 100% (Appendix 3).

British identity is derived from this question and studied as an identity dimension, separate from a sense of belonging to one of the UK nations. The derived variable is used as a measure of belonging to Britain. The identity question is, though, clearly limited and cannot measure the different values that respondents ascribe to feeling British or the strength of the attachment.

A second measure was constructed indicating belonging to a national minority for those identifying as English, Scottish, Welsh, or Northern Irish only (1), with those choosing none of these or a combination coded as 0.

Migrant related controls: Country of birth, years since migration and age at migration were controlled for.

Economic controls. Occupation dummies control for the fact that a start from a higher occupation might result in lower chances for progression at work. Industry dummies control for the concentration of certain occupations within specific industries which in turn might impact the structure of the occupational hierarchy and, indirectly, OM probabilities. Industry change is controlled for. Other economic controls include gross hourly pay above the minimum apprenticeship rate (centred to reduce multicollinearity, and log-transformed to smooth outliers on the upper end), total usual hours in main job (centred to reduce multicollinearity), length of time with current employer, being employed in the private sector, part-time, permanently, having supervising responsibilities, or looking for a different or additional paid job or business. Two variables which are often included in analysis of occupational outcome, age when full-time education was concluded and length of professional experience could not be constructed from the data.

Other controls. Highest educational qualification is controlled for. A dummy for working in Greater London or the South East controls for the overrepresentation of migrant-origin minorities and the different occupational opportunities in these two regions, compared to the rest of England and Wales. Socio-demographic and household characteristics include gender, age (squared after regression diagnostics), marital status, change in marital status and accommodation, being the head of the household, and number of dependent children in household under 19. Region and accommodation change occurred in less than ten cases and were not controlled for. Wave

dummies control for wave-specific differences. Finally, perceived discrimination, religion and English as a second language are not available in the dataset.

Initial circumstances might induce the subsequent OM, and controls – except those that capture change, are for the first participation quarter. Means and standard deviations are presented in Appendix 3.

Methods

After constructing a measures of stability or change utilising the longitudinal nature of the data, I estimate a series of logistic regressions of the association between national identity, measured at the first time point, and upward occupational mobility (OM), measured as change between the first and fifth quarters, to test the first hypotheses. In a further logistic regression, I estimate the association of OM with feeling British to test the fourth hypothesis. For the first two hypotheses, the approach is to condition on one dimension to test the relationship within that sample. For example, the fixed dimension in the first half of the first hypothesis is belonging to a national minority (H1.1) and the models estimate the impact of having British identity on OM, compared to not having it (Table 1). To test the third hypothesis, dummies were coded to exhaust all possible combinations across the dimensions (Table 2). The fourth hypothesis was tested similarly to the first one, except that the dependent variable was now British identity and OM was the key independent variable.

Table 1: Modelling approach by hypotheses

Hypothesis	Outcomes	Impacts to be estimated	Fixed dimension
H1.1	OM	Feeling British increases the odds of upward OM, compared to not feeling British	Minority type: national minority
H1.2	OM	Feeling British increases the odds of upward OM, compared to not feeling British	Minority type: migrant-origin minority
H2.1	OM	Migrant-origin minorities have lower chances of upward OM, compared to national minorities	British identity: yes
H2.2	OM	Migrant-origin minorities have lower chances of upward OM, compared to national minorities	British identity: no
H2.3	OM	Exploring the existence of an hierarchy 1. national minority – British identity 2. national minority – non-British identity 3. migrant-origin minority – British identity 4. migrant-origin minority – non-British identity	None
H4.1	British identity	Upward OM increases the odds of feeling British, compared to no/downward OM	Minority type: national minority
H4.2	British identity	Upward OM increases the odds of feeling British, compared to no/downward OM	Minority type: migrant-origin minority

Table 2: Three-dimensional identity combinations

	National minority	Migrant-origin minority	British identity
National minority – British identity	x		X
National minority – non-British identity	x		
Migrant-origin minority – British identity		x	X
Migrant-origin minority – non-British identity		x	
National minority - migrant-origin minority	x	x	
Triple	x	x	x
British only			x
Neither			

Notes: x denotes that a respondent reported having that identity layer, - denotes that a respondent reported not having that identity layer. Source: own elaboration.

For each part of each hypothesis, three partial models (occupation, industry, pay/employment) were estimated to account for endogeneity between employment circumstances – often associated with ethnic and national minority concentration patterns and the outcome (Appendices 1c, 1d, 2b), controlling for minority type, migration-related variables, education, socio-demographics characteristics and region.

The models can be summarised as:

$$\text{logit}\{Y = 1|I, OIP, X\} = \text{logit}(p) = \log(p/(1 - p)) = Y = \alpha + \beta_1 I + \beta_2 OIP + \beta_3 X,$$

where Y is the outcome under consideration (British identity or OM), I – variable of interest (interest or OM respectively), OIP – the economic controls alternating in the partial models, X – other controls β_1, β_2 and β_3 – the estimates for the respective log of odds α – the constant, p – the probability of success ($Y = 1$), and $1 - p$ – the probability of failure ($Y = 0$).

Parsimonious models were preferred, based on the AIC/BIC. The models are correctly specified (link test), and most are statistically significant at the 0.001% level.

I report odds ratios (ORs) – defined as the ratio of the probability of success over the probability of failure for the key measures of interest. These are calculated by exponentiating the estimates. Odds range from 0 to positive infinity. Odds higher than 1 indicate that the characteristic under consideration is associated with higher odds for success, compared to not having that characteristic and all else being equal.

Results

HI: conditioning on minority type

National minorities

I start by considering the effect of Britishness on OM, conditioning on minority type. Table 3 shows that for national minorities, the ORs for British identity are in the expected direction. That is, having British identity is associated with higher odds of progression at work, compared to not having it. However, they are rather small in magnitude and not significant at the 10% level. Therefore, for this minority type we cannot say that British identity is associated with greater OM.

Table 3: HI: conditioning on minority type

	H1.1: National minorities			H1.2: Migrant-origin minorities		
	(1)	(2)	(3)	(1)	(2)	(3)
British identity	1.089 (0.081)	1.031 (0.076)	1.046 (0.084)	1.289 (0.272)	1.419* (0.282)	1.496* (0.350)
Migrant-origin minority type	x	x	X			
National minority type				x	x	x
Occupation	x			x		
Industry		x			x	
Pay and employment			X			x
Migration related	x	x	X	x	x	x
Education	x	x	X	x	x	x
Demographics/household/region	x	x	X	x	x	x
N	11,692	11,676	9,725	1,905	1,897	1,523
Pseudo R2	0.0874	0.0545	0.0302	0.1247	0.0546	0.0817
Prob > chi2	0.0000	0.0000	0.0000	0.0000	0.0082	0.0046

Notes: partial models: (1) occupation, (2) industry, (3) pay/employment; odds ratios (OR) reported; standard errors in parentheses; * denotes statistical significance at the 10% level, ** at the 5% level and *** at the 1% level; x denotes controls included. Source: ONS QLFS 2011-2018.

There might be several explanations for the lack of significance. For example, it is possible that identifying with one of the UK nations creates a strong feeling of belonging and complementing it with the British identity does not matter much. Identity is seen as a proxy for a sense of belonging, and it is possible that identifying with one of the UK nations provides that sense of belonging sufficient to build social capital and networks, rendering the need to invest in a further identity unnecessary.

Second, a position of power might be underlying in the national minority identity. Descriptive data shows that 10% of national minorities are at managerial occupations – compared to only 7% for the migrant-origin type, in contrast to elementary occupations – with 14% for national minorities and only 11% for the national ones (Appendix 1c). If higher occupational attainment is considered a position of power at the labour market, the data speaks of an advantage for national minorities.

Further, 64% of national minorities report White British ethnicity (Appendix 2a). While these are descriptive statistics only, Algan et al. (2010), Blackwell and Guinea-Martin (2005), Cheung and Heath (2007) and Heath et al. (2008) showed that the White British ethnic group tends to experience a premium in the labour market. Therefore, such position of power and the existing ethnic premium might further render British identity irrelevant.

Third, the lack of significance might come down to the very meaning of Britishness. The goodness of fit for the identity partial models for the national minorities is very low (Table 5), revealing that the included characteristics do little to explain what British means for national minorities. Finally, the sub-state national groups might be too heterogeneous. Nandi and Platt (2015) showed that differences in education and socio-economic status feed into diverging patterns of identification with Britain, which similarly might render the estimates insignificant.

Migrant-origin minorities

The ORs are again in the expected direction and are much higher in magnitude in comparison to the ORs for the national minorities (Table 3). However, they are not consistently significant at the 10 per cent level. While not conclusive, therefore, these results suggest that Britishness may have some impact on the promotion chances for migrant-origin minorities. The comparatively high goodness of fit of the H4 identity models for migrant-origin minorities (Table 5) additionally indicates that the individual labour market performance and socio-demographic characteristics help explain such overarching meaning of Britishness for them.

It was seen that national minorities are predominantly White British and enjoy a labour market premium. Therefore, despite White British being a measure of ethnicity – considered a different dimension in my analysis, it might be that existing labour market ethnic penalties induce migrant-origin minorities to perceive Britishness as a position of power. Moreover, migrant-origin minorities might lack the strong sense of belonging attributed to being a national minority, and the lower occupational attainment of minority ethnic groups at high level occupations as in Cheung and Heath (2007) might not provide a sufficient pool of people for a shared sense of belonging. Migrant-origin minorities may therefore invest more in an overarching belonging to Britain, compared to national minorities. Indeed, this is in line with the evidence from descriptive data (Appendix 1a, 1b) and consistent with Nandi and Platt (2015).

H2: conditioning on Britishness

Those identifying as British

The size and direction of the ORs suggest that, conditioning on feeling British, migrant-origin minorities have better odds of OM, compared to national minorities. However, the estimates are not significant for the first two partial models and significant only at the 10% level for the third one. Therefore, the interpretation is not conclusive. Further, the sign is in the opposite direction to the one expected in H2: national minorities have better chances for progression at work, being British and all else being equal. Therefore, this part of H2 is rejected.

Table 4: H2: conditioning on identifying as British or not

	H2.1: British identity			H2.2: Not British identity		
	(1)	(2)	(3)	(1)	(2)	(3)
Migrant-origin minorities	1.110 (0.195)	1.171 (0.199)	1.371* (0.250)	0.462** (0.140)	0.430*** (0.122)	0.406*** (0.124)
British only, Triple identity	x	x	X			
National minority - migrant-origin minority, Neither identity				x	x	x
Occupation	x			x		
Industry		x			x	
Pay and employment			X			x
Migration related	x	x	X	x	x	x
Education	x	x	X	x	x	x
Demographics/household/region	x	x	X	x	x	x
N	9,989	9,978	8,581	9,970	9,955	8,181
Pseudo R2	0.0918	0.0527	0.0373	0.0901	0.0491	0.0303
Prob > chi2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Notes: conditioned on Britishness, the models use the corresponding four dummies (Table 2) to compare the clear-cut identities, with reference categories national minority-British identity (H2.1) and national minority-non-British identity (H2.2); partial models: (1) occupation, (2) industry, (3) pay/employment; odds ratios (OR) reported; standard errors in parentheses; * denotes statistical significance at the 10% level, ** at the 5% level and *** at the 1% level; x denotes controls included. Source: ONS QLFS 2011-2018.

The conclusion from the analysis performed to test the first hypothesis is that Britishness doesn't matter much for the progression at work for national minorities, yet might have some positive – and inconclusive, impact on the OM for migrant-origin minorities. This implies that being British is comparatively more important for migrant-origin than for national minorities, which is consistent with the finding here that migrants who feel British experience greater progression than their national minority counterparts.

In table 3 we saw that national minorities do not get any advantage in terms of progression from feeling British. For national minorities, the results here (H2.1) indicate that once one feels British, belonging to a national minority, compared to a migrant-origin minority, is not an advantage.

Those not identifying as British

The results for H2.2 are striking (Table 4) in that, among those who do not feel British, there is a strong and significant penalty for migrant-origin minorities compared to national minorities. These results are statistically significant at least the 5% level across all three specifications, and are in line with the second hypothesis.

The results in Table 3 suggested that migrant-origin minorities might experience some premium to OM from feeling British, compared to not feeling British, but the results were inconclusive. Here, the results suggest that when they do not identify as British, minorities face a distinct penalty in OM compared to otherwise similar national minorities. This might operate through lack of shared sense of belonging on which to build, through lack of identification with the more powerful group, or

through an indirect link to discrimination at work. The direct link between discrimination and lack of promotion seems intuitive. Yet Heath and Demireva (2014) presented evidence that having felt discriminated decreases the likelihood for ethnic minorities to feel British. Therefore, an indirect link to discrimination might operate through loss of feeling of belonging – those who felt discriminated may disengage both from identification with Britishness and from the workplace where they have negative experiences.

H3: hierarchy based on identity combinations

The results were statistically insignificant and showed no evidence for the existence of a hierarchy as hypothesised. For reasons of parsimony therefore they are not discussed here, but are included in Appendix 4.

H4: identity as a dependent variable

So far we have considered the ways in which identity might be implicated in progression at work. We now turn to consider the opposite relationship: that progression at work leads to a strong identification as British. The results in Table 4 suggest that, for national minorities, progression at work is not relevant for feeling British – the ORs are small and not statistically significant. For migrant-origin minorities, similarly to the findings in Table 3, the results suggest that OM is marginally associated with increased chances of feeling British, at least for two out of the three specifications.

Table 5: H4: identity as dependent

	H4.1: National minorities			H4.2: Migrant-origin minorities		
	(1)	(2)	(3)	(1)	(2)	(3)
Occupational mobility	1.083 (0.081)	1.041 (0.077)	1.048 (0.084)	1.353 (0.275)	1.423* (0.279)	1.512* (0.345)
Ethnic minority	x	x	X			
National minority				x	x	x
Occupation	x			x		
Industry		x			x	
Pay and employment			X			x
Migration related	x	x	X	x	x	x
Education	x	x	X	x	x	x
Demographics/household/region	x	x	X	x	x	x
N	11,692	11,676	9,725	1,905.0	1,902.0	1,553.0
Pseudo R2	0.0162	0.0158	0.0184	0.2710	0.2644	0.2685
Prob > chi2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Notes: partial models: (1) occupation, (2) industry, (3) pay/employment; odds ratios (OR) reported; standard errors in parentheses; * denotes statistical significance at the 10% level, ** at the 5% level and *** at the 1% level; x denotes controls included. Source: ONS QLFS 2011-2018.

The results provide indicative evidence for the existence of different meanings of Britishness in that the models for the different minority types have strikingly different explanatory power. The characteristics included in the model account for only a very small share of the variance in Britishness for national minorities. This might be due to underlying power relations between and within the four UK nations that pull the meaning of Britishness in different directions and prevent an overarching understanding of what 'British' means. By contrast, the comparatively high explanatory power for migrant-origin minorities suggest that there tends to be a more homogenous meaning of Britishness for them.

For migrant-origin minorities, OM seems more important, yet this is inconclusive. Two processes might be working in opposite directions. First, Georgiadis and Manning (2013) and Manning and Roy (2010) show that identity formation takes time – OM here is observed within five quarters and such short timeframe might not be sufficient for an individual to build a strong sense of belonging to Britain in response to experiencing occupational progression. It is therefore possible for long-term progression at work may have a significant impact on feeling British, which unfortunately is not captured in the data.

Summary

The results indicate that feeling British does not matter for progression at work for national minorities, however it might have some impact on the OM of migrant-origin minorities (H1). Second, minority type doesn't impact OM as long as one feels British, yet for those who do not feel British – belonging to a migrant-origin minority presents an OM penalty compared to belonging to the national minority type (H2). Third, there is no clear linear hierarchy between interactions of national identity and minority type (H3). Fourth, OM doesn't impact feeling British for national minorities, but there is some indication that it may do for migrant-origin minorities (H4). Finally, the characteristics included in the model seem to explain Britishness for migrant-origin minorities much better than for national ones.

In short, the results suggest that feeling belonging to Britain when one already identifies with one of the four nations does not provide an advantage for progression at work. Belonging to Britain when from a migrant-origin group seems to matter somewhat more for occupational progression, yet the evidence is neither strong nor conclusive. However, minorities who do not feel British suffer a clear and significant disadvantage in progression at work compared to national minorities.

Various explanations are possible. First, there are contradictory meanings of Britishness between and possibly within minority types – from a powerful sense of belonging to access to power, from an overarching and inclusive identity to assimilationist identification or to exclusive privilege. Education, socio-economic status and power inequalities between and within the four UK nations might feed into different perceptions of what British means, in turn explaining the lack of overarching explanatory power in the model of Britishness, and accounting for why Britishness has no significant impact on progression at work for these groups. However, despite some similar inequalities between migrant-origin groups, they seem to share a more overarching understanding of Britishness; and belonging to Britain, or rather the lack of it, seems to matter for their progression at work.

This leads to a possible explanation in terms of Britishness facilitating access to power. National minorities, who are predominantly white majority populations, already enjoy advantages in the labour market compared to other ethnic groups. Therefore, belonging to a UK nation might already provide such access to power, rendering additional adherence to Britishness unnecessary. However, if migrant-origin minorities perceive belonging to Britain as access to power, they might see more value in investing in such identity.

A strong sense of belonging might also feed into strong social capital and networks, the latter clearly being a two-way interactive process. Belonging to a UK nation may already offer a strong sense of shared belonging. By contrast, for migrant-origin minorities group-level identification may not offer such benefits, due to discrimination and a weaker position within society and they may feel a strong incentive to invest in British identity.

Overall, by focusing on occupational progression and by using longitudinal data to get close to identity as a driver of such progression, the results tell a single story that complements existing academic evidence, suggesting robustness.

Conclusion

This paper has provided an account of the interplay between three dimensions of identity – migrant-origin, national and British, and how this interplay impacts progression at work. The results enhance a mixed empirical literature on the economics of identity and suggest the specific penalties that may be associated with those migrant origin minorities who do not identify with – or are not included in – the national story. At the same time, national minorities are both opting out of identification with Britishness and appear to derive no economic benefits from such identification – at least when occupational progression is considered. These results cannot speak to other forms of occupational attainment, such as access to jobs or risks of unemployment, and are also limited to the extent that only those with room to move up can progress, limiting the potential to reveal benefits among those already high up in the hierarchy. The analysis was also unable to explore the specific ways identity might play out for women compared to men, and could not examine the role of religion or language in contributing to the findings presented here. Nevertheless, this paper offers the first insight into the relationship between identity and occupational progression for both national and migrant-origin minorities in the UK, revealing the different meanings of Britishness for these different populations. Policy makers might do well to foster an embracing, empowering and accessible British identity that can be shared by all through a constructive public narrative. The analysis suggests that this could bring returns in terms of shared understandings and reciprocal relations at work, and possibly beyond. Recent political developments show that such actions are long due.

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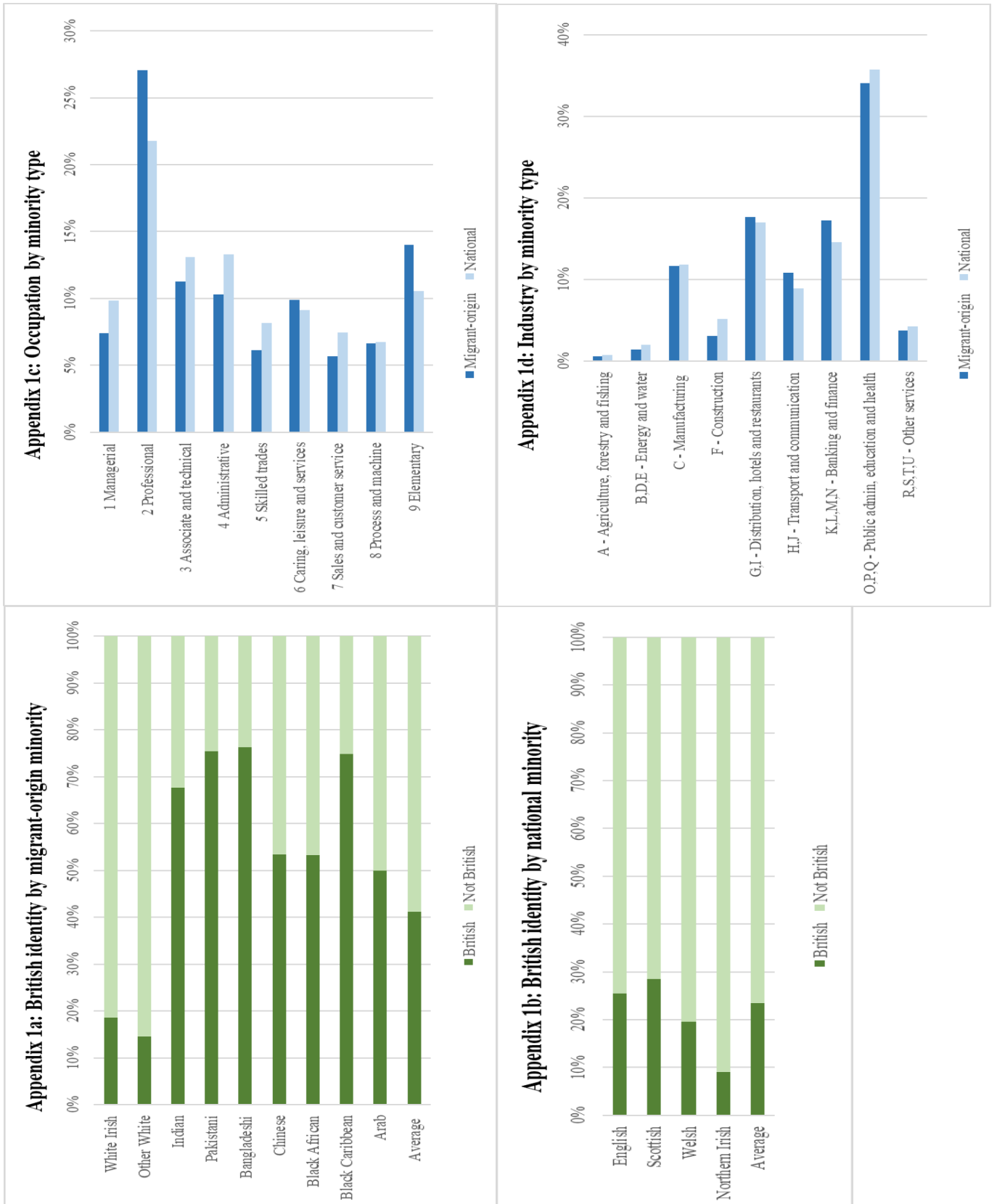
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Appendix 1: Frequency charts



Notes: Appendix 1a: average for migrant-origin type is 41%; Appendix 1b: average for national minority type is 23%; Appendix 1c, 1d: % show share of all employed from the respective minority type. Source: ONS QLFS 2011 – 2018.

Appendix 2a: Frequency table (minority types and OM)

Migrant-origin minority	National minority			OM		
	Yes	No	Total	Yes	No	Total
White British	25,514	14,632	40,146	3,342	36,811	40,153
White Irish	44	264	308	21	287	308
Other White	32	1,822	1,854	146	1,712	1,858
Indian	55	800	855	72	783	855
Pakistani	28	294	322	33	290	323
Bangladeshi	-	111	-	13	101	114
Chinese	11	152	163	-	156	-
Black African	-	359	-	34	332	366
Black Caribbean	57	285	342	26	316	342
Arab	-	66	-	-	62	-

National minority	Migrant-origin minority			OM		
	Yes	No	Total	Yes	No	Total
English	213	23,227	23,440	1,948	21,492	23,440
Scottish	-	-	467	35	432	467
Welsh	-	-	1,726	145	1,581	1,726
Northern Irish	2,618	492	3,110	253	2,857	3,110

Notes: - denotes suppressed if number < 10; suppressed values impede the creation of frequency charts and calculation of shares; totals differ because of different missing values for different variables. Source: ONS QLFS 2011-2018.

Appendix 2b: Frequency table (industry and occupation)

Industry	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Total
A - Agriculture, forestry and fishing	37	19	13	34	58	15	-	25	93	-
B,D,E - Energy and water	93	149	128	78	98	-	46	139	76	-
C - Manufacturing	633	770	748	469	983	-	106	948	380	-
F - Construction	311	343	203	265	605	-	34	159	121	-
G,I - Distribution, hotels and restaurants	871	259	511	601	712	64	2,328	450	1,425	7,221
H,J - Transport and communication	422	994	549	352	164	107	147	711	517	3,963
K,L,M,N - Banking and finance	946	1,575	1,432	1,325	209	206	333	103	537	6,666
O,P,Q - Public admin, education and health	1,004	6,188	2,300	2,442	300	3,217	188	82	853	16,574
R,S,T,U - Other services	211	314	279	335	135	349	54	31	188	1,896
Total	4,528	10,611	6,163	5,901	3,264	3,969	-	2,648	4,190	44,517

Notes: SOC codes: (1) Managerial, (2) Professional, (3) Associate and technical, (4) Administrative, (5) Skilled trades, (6) Caring, leisure and services, (7) Sales and customer service, (8) Process and machine, (9) Elementary; - denotes suppressed if number < 10; suppressed values impede the creation of frequency charts and calculation of shares; totals differ because of different missing values for different variables. Source: ONS QLFS 2011-2018.

Appendix 3: Means and standard deviations

Variable	Mean	Std. Dev.	Description
IDBritain	0.5055	0.5000	1 if British identity only
IDNational	0.5782	0.4939	1 if Minority type: National
EthnicMin	0.0987	0.2982	1 if Minority type: Migrant-origin
MOB_UP	0.0830	0.2759	1 if Upward occupational mobility (1-digit SOC)
National minorities			
IDEngland	0.5263	0.4993	1 if National minority: English
IDScotland	0.0105	0.1019	1 if National minority: Scottish
IDWales	0.0388	0.1930	1 if National minority: Welsh
IDNI	0.0026	0.0514	1 if National minority: Northern Irish
IDOther	0.0672	0.2503	1 if National minority: Other
IDBritEng	0.1340	0.3407	1 if Identity: British & National minority: English
IDNonBritEng	0.3923	0.4883	1 if Identity: not British & National minority: English
IDBritScot	0.0030	0.0546	1 if Identity: British & National minority: Scottish
IDNonBritScot	0.0075	0.0863	1 if Identity: not British & National minority: Scottish
IDBritWal	0.0076	0.0868	1 if Identity: British & National minority: Welsh
IDNonBritWal	0.0312	0.1738	1 if Identity: not British & National minority: Welsh
IDBritNI	0.0007	0.0264	1 if Identity: British & National minority: Northern Irish
IDNonBritNI	0.0020	0.0442	1 if Identity: not British & National minority: Northern Irish
IDBritOther	0.0056	0.0747	1 if Identity: British & National minority: Other
IDNonBritOther	0.0616	0.2404	1 if Identity: not British & National minority: Other
Ethnicity (White British & Migrant-origin minorities)			
WhiteBrit	0.9013	0.2982	1 if Ethnicity: White British
WhiteIrish	0.0069	0.0829	1 if Ethnicity: White Irish
WhiteOther	0.0417	0.1999	1 if Ethnicity: White Other
Indian	0.0192	0.1372	1 if Ethnicity: Indian
Pakistani	0.0073	0.0848	1 if Ethnicity: Pakistani
Bangladeshi	0.0026	0.0505	1 if Ethnicity: Bangladeshi
Chinese	0.0037	0.0604	1 if Ethnicity: Chinese
BlackAfrican	0.0082	0.0903	1 if Ethnicity: Black African
BlackCaribbean	0.0077	0.0873	1 if Ethnicity: Black Caribbean
Arab	0.0015	0.0385	1 if Ethnicity: Arab
IDBritWBrit	0.4649	0.4988	1 if Identity: British & Ethnicity: White British
IDNonBritWBrit	0.4363	0.4959	1 if Identity: not British & Ethnicity: White British
IDBritWIrish	0.0013	0.0357	1 if Identity: British & Ethnicity: White Irish
IDNonBritWIrish	0.0056	0.0749	1 if Identity: not British & Ethnicity: White Irish
IDBritWOTH	0.0060	0.0775	1 if Identity: British & Ethnicity: White Other
IDNonBritWOTH	0.0356	0.1852	1 if Identity: not British & Ethnicity: White Other
IDBritInd	0.0130	0.1132	1 if Identity: British & Ethnicity: Indian
IDNonBritInd	0.0062	0.0786	1 if Identity: not British & Ethnicity: Indian
IDBritPak	0.0055	0.0737	1 if Identity: British & Ethnicity: Pakistani
IDNonBritPak	0.0018	0.0421	1 if Identity: not British & Ethnicity: Pakistani
IDBritBangl	0.0020	0.0441	1 if Identity: British & Ethnicity: Bangladeshi
IDNonBritBangl	0.0006	0.0246	1 if Identity: not British & Ethnicity: Bangladeshi
IDBritChin	0.0020	0.0441	1 if Identity: British & Ethnicity: Chinese
IDNonBritChin	0.0017	0.0413	1 if Identity: not British & Ethnicity: Chinese
IDBritBAfri	0.0044	0.0660	1 if Identity: British & Ethnicity: Black African
IDNonBritBAfri	0.0038	0.0618	1 if Identity: not British & Ethnicity: Black African
IDBritBCar	0.0057	0.0756	1 if Identity: British & Ethnicity: Black Caribbean
IDNonBritBCar	0.0019	0.0439	1 if Identity: not British & Ethnicity: Black Caribbean
IDBritArab	0.0007	0.0272	1 if Identity: British & Ethnicity: Arab
IDNonBritArab	0.0007	0.0272	1 if Identity: not British & Ethnicity: Arab

Appendix 3: Means and standard deviations (cont.)

Three-dimensional identities			
IDBritNat	0.1437	0.3508	1 if National minority – British identity
IDNatOnly	0.4292	0.4950	1 if National minority – non-British identity
IDBritEth	0.0389	0.1934	1 if Migrant-origin minority – British identity
IDEthOnly	0.0543	0.2267	1 if Migrant-origin minority – non-British identity
IDNatEth	0.0037	0.0608	1 if National minority - migrant-origin minority
IDBritOnly	0.3213	0.4670	1 if British identity only
IDTriple	0.0016	0.0402	1 if Tripple
IDNeither	0.0072	0.0847	1 if Neither
Occupation			
SOC_Manag1	0.1017	0.3022	1 if Occupation: 1 Managers, Directors and Senior Officials
SOC_Prof1	0.2383	0.4260	1 if Occupation: 2 Professional Occupations
SOC_Assoc1	0.1385	0.3454	1 if Occupation: 3 Associate Professional and Technical Occupations
SOC_Admin1	0.1326	0.3391	1 if Occupation: 4 Administrative and Secretarial Occupations
SOC_Trades1	0.0733	0.2607	1 if Occupation: 5 Skilled Trades Occupations
SOC_Caring1	0.0892	0.2850	1 if Occupation: 6 Caring, Leisure and Other Service Occupations
SOC_Sales1	0.0728	0.2599	1 if Occupation: 7 Sales and Customer Service Occupation
SOC_Plant1	0.0595	0.2365	1 if Occupation: 8 Process, Plant and Machine Operatives
SOC_Elem1	0.0941	0.2920	1 if Occupation: 9 Elementary Occupations
Industry			
IndChange	0.0498	0.2175	1 if Industry: Change between first and fifth quarter
Agri1	0.0068	0.0820	1 if Industry: A - Agriculture, forestry and fishing
Energy1	0.0182	0.1336	1 if Industry: B,D,E - Energy and water
Manuf1	0.1132	0.3169	1 if Industry: C - Manufacturing
Constr1	0.0460	0.2094	1 if Industry: F - Construction
Distrib1	0.1622	0.3686	1 if Industry: G,I - Distribution, hotels and restaurants
Transp1	0.0890	0.2848	1 if Industry: H,J - Transport and communication
Bank1	0.1497	0.3568	1 if Industry: K,L,M,N - Banking and finance
Admin1	0.3723	0.4834	1 if Industry: O,P,Q - Public admin, education and health
OtherServ1	0.0426	0.2019	1 if Industry: R,S,T,U - Other services
Pay and other employment controls			
HOURLPAY1ap	14.7835	14.7195	Gross hourly pay above the min apprenticeship rate
Private	0.6885	0.4631	1 if Employed in the private sector
TTUSHR1_cl	36.1148	12.9147	Total usual hours in main job
DIFJOB1_cl	0.0710	0.2568	1 if Looking for a different or additional paid job or business
EMPLEN1_cl	5.7592	1.7928	Length of time with current employer
Parttime	0.2857	0.4518	1 if Employed part-time
Permanent	0.9564	0.2043	1 if Employed permanently
Supervising	0.3858	0.4868	1 if Responsible for supervising
Migration related			
BornUK	0.8997	0.3004	1 if Country of birth: UK
BornEU14_EFTA	0.0234	0.1512	1 if Region of birth: EU14/EFTA
BornEU13	0.0194	0.1378	1 if Region of birth: v
BornEuropeR	0.0008	0.0288	1 if Region of birth: Rest of Europe
BornSovUn	0.0015	0.0393	1 if Region of birth: Former republics of the Soviet Union
BornMENA	0.0028	0.0531	1 if Region of birth: MENA
BornAngloS	0.0082	0.0902	1 if Region of birth: AUS, NZ, CA, USA
BornAfricaCW	0.0133	0.1145	1 if Region of birth: Africa Commonwealth
BornAfricaO	0.0037	0.0611	1 if Region of birth: Africa Other
BornAsiaCW	0.0194	0.1378	1 if Region of birth: Asia Commonwealth
BornAsiaO	0.0022	0.0466	1 if Region of birth: Asia Other
BornAmerCW	0.0030	0.0550	1 if Region of birth: Americas Commonwealth
BornAmerO	0.0018	0.0423	1 if Region of birth: America Other
BornPacifCW	0.0001	0.0095	1 if Region of birth: Pacific Commonwealth
BornPacifO	0.0000	0.0047	1 if Region of birth: Pacific Other
BornAirSea	0.0000	0.0047	1 if Region of birth: Air/Sea

Appendix 3: Means and standard deviations (cont.)

BornEU11	0.0175	0.1310	1 if Region of birth: EU13 excluding Malta, Cyprus
BornCW	0.0358	0.1857	1 if Region of birth: Commonwealth
BornOther	0.0130	0.1132	1 if Region of birth: Other than EU, EFTA, USA, Commonwealth
CAMEYR	21.0227	16.0839	Years since first arrival to UK as in first quarter
CAMEAGE	21.5253	12.6017	Age at first arrival to the UK as in first quarter
Education			
HighDegree	0.4404	0.4964	1 if Education: Higher education, degree or equivalent
ALevel	0.2374	0.4255	2 if Education: HGCE, A-level or equivalent
GCSE	0.2077	0.4057	3 if Education: GCSE grades A*-C or equivalent
OtherQual	0.0812	0.2732	4 if Education: Other qualifications
NoQual	0.0333	0.1793	5 if Education: No qualification
Demographics/household/region			
LondonSE	0.3269	0.4691	1 if Region: Greater London/South East (NUTS 1)
FEMALE	0.5106	0.4999	1 if Female
AGE1	44.9895	12.0872	Age of respondent
Single	0.2647	0.4412	1 if Marital status: Single, never married
MariedPart	0.6056	0.4887	1 if Marital status: Married, in civil partnership, living with spouse
SepDivWid	0.1297	0.3360	1 if Marital status: Divorced, separated, widowed
MARSTA_ch	0.0138	0.1167	1 if Marital status: Change between first and fifth quarter
FamHead	0.5575	0.4967	1 if Head of family unit
FamPart	0.3600	0.4800	1 if Wife or partner of head of family unit
FamChild	0.0825	0.2751	1 if Child of head of family unit
HDPCH191_cl	0.7322	0.9886	Number of dependent children in household under 19
Owned	0.2618	0.4396	1 if Accommodation: Owned outright
Mortgage	0.5511	0.4974	1 if Accommodation: Being bought with mortgage or loan
Partrent	0.0070	0.0835	1 if Accommodation: Partly rent
Rented	0.1734	0.3786	1 if Accommodation: Rented
Rentfree	0.0066	0.0810	1 if Accommodation: Rent free
Squatting	0.0000	0.0067	1 if Accommodation: Squatting
cohort	11.5519	6.5634	Cohort number in merged dataset

Note: N=44548. Mixed national minorities (e.g. English and Scottish) and mixed migrant-origin minorities (e.g. White and Asian) excluded; managerial occupations used as a reference category for participation checks and cases included in descriptive statistics; without managerial occupations: MOB_UP mean is 0.0924, Std. Dev is 0.2896; White Gypsy or Irish Traveller excluded from White Other; mixed minorities excluded. Source: ONS QLFS 2011-2018.

Appendix 4: hierarchy based on identity interactions

Regression results		H3: Pooled		
		(1)	(2)	(3)
National minority – non-British identity		0.925 (0.069)	0.974 (0.072)	0.958 (0.077)
Migrant-origin minority – British identity		0.956 (0.176)	0.981 (0.179)	1.100 (0.219)
Migrant-origin minority – non-British identity		0.749 (0.183)	0.698 (0.161)	0.679 (0.175)
Occupation		x		
Industry			x	
Pay and employment				x
Migration related		x	x	x
Education		x	x	x
Demographics/household/region		x	x	x
N		13,401	13,382	11,126
Pseudo R2		0.0872	0.0502	0.0300
Prob > chi2		0.0000	0.0000	0.0000
Ranking	Expected	Estimated		
		(1)	(2)	(3)
National minority – British identity	1	1	1	2
National minority – non-British identity	2	3	3	3
Migrant-origin minority – British identity	3	2	2	1
Migrant-origin minority – non-British identity	4	4	4	4

Notes: reference categories national minority-British identity; four remaining combinations not tested in the models (Table 2) are excluded from the sample; partial models: (1) occupation, (2) industry, (3) pay/employment; odds ratios (OR) reported; standard errors in parentheses; * denotes statistical significance at the 10% level, ** at the 5% level and *** at the 1% level; x denotes controls included.

Source: ONS QLFS 2011-2018

Appendix 5: Sample construction

Self-employed were excluded from the sample because they have the freedom to choose their own occupation level and their OM might not be comparable to those of employed individuals. Moreover, pay is not available for self-employed and such cases are dropped from the models controlling for pay, yet kept in models that control for occupation and industry. This results in the fact that these models are run for populations with different characteristics, with the occupation/industry models including the self-employed, and the pay models – excluding them. Excluding self-employed from the sample makes such models more comparable. Finally, self-employment might be associated with different social dynamics at the work place, for example defined by recruiter/line manager attitudes, implicit bias and (perceived) discrimination. Despite the fact that these are unfortunately not controlled for in the analysis, evidence suggests that the latter might result in lower chance to feel British (Heath and Demireva, 2014). Therefore, excluding self-employed from the sample helped to keep the interpretation related to the social dynamics at the work more straightforward. However, it is due to mention that migrant-origin minorities in the UK tend to be overrepresented in entrepreneurship – for example running small shops, and hence – in self-employment (Castles et al., 2014, p.246), and a disadvantage is that the analysis doesn't account for that.

Gross hourly pay for the employed contained values approaching zeros that are clearly below the legal rates. This might be due to errors in the data reporting. To account for that, cases with values below the lowest legal rates – the apprenticeship rates for the respective response quarters, were dropped from the sample. Unfortunately, the apprenticeship rate applies universally without an age requirement, and age can't be used to narrow down whether a respondent is in apprenticeship or not. These rates used are as follows: £2.50 (wave 1), £2.60 (waves 2-5); £2.65 (waves 6-9), £2.68 (waves 10-13), £2.73 (waves 14-17), £3.30 (waves 18-21), £3.40 (waves 22-23) (GOV.UK, 2018, 2017).

Additionally, the Secure Access data allowed to control for country of birth, years since migration and age at migration. A dummy for being born in the UK was created, and the remaining cases were allocated to 15 dummies for region of birth, depending on continent and (previously) being part of the Commonwealth. However, disproportionately high number of cases for the foreign-born population were dropped because of small/zero cells. To account for that, all foreign-born cases were recoded into five main categories – EU15 plus EFTA except UK, EU13 except Malta and Cyprus, Commonwealth except Australia and New Zealand, Anglo-Saxon, and Other. Finally, persistently small cells and regression diagnostics indicated that using the single dummy for being born in the UK is the best approach, which was adopted.

Questions for years since migration and age at migration are applicable to foreign-born only, contained missing values for those born in the UK, and adding them to the models made the sample collapse. However, the literature indicates that both are strongly associated with the feeling

of belonging to the country of destination (Battu and Zenou, 2010; Casey and Dustmann, 2010; Manning and Roy, 2010). To be able to keep that information in the analysis, the missing values for those born in the UK were replaced with a fixed logical value. For years since migration, the missing values were replaced with 70 – the maximum age in the sample, as if a UK-born person had migrated in the beginning of their life. For age at migration, the missing values were replaced 0 – as if a UK-born person had been brought in as a baby. These choices allowed to keep the natural behavior of these variables (e.g. more years since migration/earlier age at migration are associated with higher probabilities to feel British). At the same time, the variation in these variables came from the original values only (as all recorded cases have the same value).