

Middlesex University Research Repository

An open access repository of

Middlesex University research

<http://eprints.mdx.ac.uk>

Sirkeci, Ibrahim, Acik, Necla ORCID: <https://orcid.org/0000-0003-4801-1684>, Saunders, Bradley and Přívara, Andrej (2018) Barriers for highly qualified A8 immigrants in the UK labour market. *Work, Employment and Society*, 32 (5) . pp. 906-924. ISSN 0950-0170 [Article] (doi:10.1177/0950017017726912)

Final accepted version (with author's formatting)

This version is available at: <https://eprints.mdx.ac.uk/28572/>

Copyright:

Middlesex University Research Repository makes the University's research available electronically.

Copyright and moral rights to this work are retained by the author and/or other copyright owners unless otherwise stated. The work is supplied on the understanding that any use for commercial gain is strictly forbidden. A copy may be downloaded for personal, non-commercial, research or study without prior permission and without charge.

Works, including theses and research projects, may not be reproduced in any format or medium, or extensive quotations taken from them, or their content changed in any way, without first obtaining permission in writing from the copyright holder(s). They may not be sold or exploited commercially in any format or medium without the prior written permission of the copyright holder(s).

Full bibliographic details must be given when referring to, or quoting from full items including the author's name, the title of the work, publication details where relevant (place, publisher, date), pagination, and for theses or dissertations the awarding institution, the degree type awarded, and the date of the award.

If you believe that any material held in the repository infringes copyright law, please contact the Repository Team at Middlesex University via the following email address:

eprints@mdx.ac.uk

The item will be removed from the repository while any claim is being investigated.

See also repository copyright: re-use policy: <http://eprints.mdx.ac.uk/policies.html#copy>

Barriers for highly qualified A8 immigrants in the UK labour market

Ibrahim Sirkeci, Regent's Centre for Transnational Studies, Faculty of Business and Management, Regent's University London, UK

Necla Acik, Centre for Criminology and Criminal Justice (CCCJ), School of Law, University of Manchester, UK

Bradley Saunders, Prince Mohammad bin Fahd University, Kingdom of Saudi Arabia

Andrej Přivara, University of Economics in Bratislava, Slovakia

Abstract

The number of migrants arriving in the UK from the EU accession countries has been higher than projected. The evidence indicates that they have been over-represented in low-paid and low-skilled jobs. This is arguably transitory and there should be good prospects of upward mobility. Over-qualification among A8 migrants, measured using the APS data, is examined in this article. The findings show that A8 migrants have been subject to migration penalties at the high-end of the UK labour market. There are persistent labour market disadvantages for A8 migrants in the UK and their over-qualification may be a long-term concern.

Keywords: A8 migrants; over-qualification; discrimination; disadvantages; immigrants.

Corresponding author:

Ibrahim Sirkeci, Regent's Centre for Transnational Studies, Regent's University London, Regent's Park, Inner Circle, London, NW1 4NS, UK

E-mail: sirkecii@regents.ac.uk

Introduction

The EU enlargement in the 2000s had a profound effect on the labour market in the UK due to the arrival of migrants from the 2004 EU Accession countries in Eastern and Central Europe (hereafter, A8)¹. The numbers of those coming to the UK quickly surpassed the government forecasts. These migrants compete in the UK jobs market with the majority white British people, ethnic minorities in the UK and with citizens from the EU-15 (pre-2004 accession) countries. Whilst “most research on labour market participation and performance in the UK has focused on non-whites” (Johnston et al., 2014:196), significant ethnic differences have been demonstrated (Brynin and Guveli, 2012; Khattab et al., 2011; Johnston et al., 2010). The emerging literature on Eastern European movers (e.g. Eade, 2007; Cook et al., 2011; Johnston et al., 2015) suggests that the labour market experiences of A8 migrants differ in many ways from those of other groups (non-white people and those from other EU countries). They are concentrated in the secondary labour market, face discrimination by employers and receive lower pay, while “West European migrants have access to primary sector and better rewards” (Johnston et al., 2015:196). Possible differences regarding the labour market outcomes in terms of over-qualification are investigated in this study against demographic characteristics.

It is clear that non-white people in the UK labour market face ethnic penalties. The A8 migrants are predominantly white Europeans and hence it would be anticipated that they were less likely to face discrimination than non-European and non-white migrants (Johnston et al., 2015; Eade, 2007). They also represent a dynamic and well-educated work force that has been welcomed by many employers, which suggests that they might overcome initial hurdles of integration in the labour market within a reasonably short time

period (Chiswick and Miller, 2009). However, several studies point to the prevalence of over-qualification among these A8 migrants (Johnston et al. 2015; Saunders, 2015; Sirkeci et al., 2014), that has also been linked to ethnic penalties and discrimination in the UK labour market (Khattab et al., 2011; Johnston et al., 2010; Khattab and Johnston, 2013; Heath and McMahon, 2005; Phung, 2011). Along with the labour market outcomes (Drinkwater and Robinson, 2013, Cook et al., 2011; Clark and Drinkwater, 2008, Pollard et al., 2008), also the mismatch between educational and occupational attainment levels among ethnic groups were investigated (Brynin and Guveli, 2012; Rafferty, 2012; Lindley and Lenton, 2006; Phillimore and Goodson, 2008). Moreover, Johnston and colleagues (2015) compared the earnings of migrants from pre-2004 EU-15 member states with those from the new EU accession countries. However, very little attention has been paid to the persistence of over-qualification among A8 migrants working in the UK, which is the focus of the current article.

To what extent do A8 migrants encounter discrimination and disadvantages in the UK labour market, when compared to the majority group and the EU15 migrants as well as other minority ethnic groups in the UK? Using the Annual Population Survey (APS) data from 2005 to 2012, patterns of disadvantages experienced by A8 migrants in finding jobs commensurate with their qualifications in the UK labour market were found. Continuation of over-qualification patterns among these migrants in the conditional accession period (2004 to 2011) and after, when their countries' citizens gained full access to the EU labour markets, is investigated. This period was also marked by a global financial crisis and a recession from 2007 onwards in the UK. Earlier research has shown that the A8 migrants, as well as many other non-white people, were more likely to be over-qualified than the "UK-born white majority" ('white British' hereafter) (Rafferty, 2012:995). However, this disadvantage was faced only by A8 migrants and Black African men and women for all the

years examined, pointing to the prevalence of over-qualification among these two groups. Persistent labour market penalties were faced by A8 migrants in the UK labour market, which were also evident at the high-end of the UK labour market, irrespective of the impact of the financial crisis and the removal of restrictions on free-movement in 2011. In this article, patterns of over-qualification among the A8 migrants in the UK between 2005 and 2012 are examined. First over-qualification is explained and the A8 migrants in the UK labour market are discussed. Description of data and methods is followed by presentation of the findings of a regression model, where over-qualification of A8 migrants is compared and contrasted with other population groups. Finally, results are discussed.

Over-qualification

Over-qualification or over-education “occurs when people hold qualifications in excess of those required for their job” (Rafferty, 2012:989) and it is interpreted as a disadvantage (Battu and Sloane, 2004; Nielsen, 2011; Alpin et al., 1998). Over-qualification can lower the level of job satisfaction (Green and Zhu, 2010) as well as resulting in wage penalties (Mavromaras and McGuinness, 2012) and underutilisation of skills/talent (Johnston et al., 2015:197; Rafferty, 2012:989). There is an established body of literature explaining over-education (McGuinness, 2006; Becker, 1964; Sattinger, 1993; Thurow, 1975). However, debates of ethnic disadvantages and penalties in over-qualification are relatively new (Johnston et al., 2015; Johnston et al., 2010; Rafferty, 2012).

Human capital, or the “productive wealth embodied in labour, skills and knowledge” (OECD, 2001), is context specific. That is, migrants’ home country qualifications and work experience might often not be fully transferable to another country. Knowledge of how the host country labour market works, language skills, skills

that are specific to particular occupations, differences in technology, legal or licensing barriers and cultural differences all hinder smooth transferability of human capital between countries (Chiswick and Miller, 2009; Kramer *et al.*, 2013).

Human capital theory also suggests that labour migration is directed towards countries in which the work experience that is gained is most valued in the home country (Tassinopoulos and Werner, 1999). Migrants' acceptance of a job below their levels of education might be looked upon as a temporary solution to enable them to gain experience, learn English language skills and save up financial capital to invest in properties or a business upon their return to the home country. Over-qualification is argued to be a transitory phenomenon that dissipates once migrants improve their ability in the host language, gain local experience and become familiar with local opportunities and regulations (Chiswick and Miller, 2009; Sanroma *et al.*, 2008; Clarke and Drinkwater, 2008). It is expected to fall as workers improve their positions within a firm or move into higher skilled occupations (McGuinness, 2006) and thus, can be perceived as a temporary trade-off until relevant experience is acquired (Frei and Sousa-Poza, 2012). However, this is contested by Dalton and Siles (2003), who argue that being overeducated in first employment (after graduation) tends to constrain graduates permanently to low-level occupations. Consequently, there is pressure on migrants to find paid employment quickly, as the difficulty of and delay in having their qualifications recognised and the vicious circle of needing local experience in order to gain employment, could make overeducation a long-term, rather than transitory experience, for highly-skilled migrants (Saunders, 2015).

A8 migrants in the UK labour market

Unlike their fellow Western European EU citizens, A8 migrants “appear to be penalised in the UK labour market relative to their human capital” (Johnston et al., 2015:200). Moreover, over-qualification points to disadvantages and discrimination in the labour market, aggravating the inequalities between migrants and the white UK born category (Khattab and Johnston, 2013; Khattab et al., 2011; Battu and Sloane, 2004). About 15 percent of all those born overseas in England and Wales were from the A8 countries, according to the 2011 UK Census. Polish migrants were the largest group, comprising 579,121 out of a total of 1,114,368, as compared to the 2001 census, where their numbers were just 58,106. The majority, 84%, of A8 immigrants are of working age with a relatively young age profile. They are concentrated mainly in the South East and London (650,000; 58%), whereas the remainder are dispersed around other regions of England, with the smallest proportion living in the North West (1.5%), Wales (2.6%) and Scotland (1.5%).²

Compared to others who require a visa and work permit to enter the UK, A8 migrants have benefited from the conditional accession to the EU. Between 2004 and 2011, they could enter the UK without a visa, but they had to register with the Workers Registration Scheme (WRS) within a month of taking up employment and re-register if they changed employer. Their right to claim any social security assistance was only granted upon continuous employment for 12 months in the UK (Home Office, 2016). Whilst this lowered the barriers of travelling to and entering, the labour market in the UK, it also meant that they had to take up the jobs that were most readily available. Not surprisingly, the employment rate of A8 migrants in the UK has been one of the highest compared to white British and other ethnic groups, as their right to remain in the UK has

been dependent on their ability to find work (Blanchflower and Shadforth, 2009; Clark and Drinkwater, 2008). It has also had an effect on the type of jobs and the sectors in which A8 migrants work. According to the APS data, between 2005 and 2012, the majority of A8 migrants were employed in manufacturing (about 30%) along with distribution, hotels and restaurants (about 25%).

Hence, it is not surprising that, according to a Home Office (2007) report, the occupations most frequently entered into by A8 migrants in the UK between July 2004 and June 2007 were: process operative (other factory worker), packer, kitchen and catering assistants, warehouse operative, cleaner, domestic staff, farm worker/ farm hand, waiter/waitress, maid / room attendant (hotel), care assistants and home carers, and labourer in construction. Most of these jobs are of a temporary nature, and tend to offer weaker social security cover, low wages, and limited career prospects (Booth et al., 2002:17). Many A8 migrants settled down in areas where there was a labour shortage, which could not be filled locally. Such areas had traditionally attracted fewer immigrants (Pollard et al., 2008) and the jobs available there were typically in the agricultural and food-processing sectors in which work tends to be seasonal (Findlay et al., 2013).

Despite relatively easy access to the UK labour market, research suggests that A8 migrants face barriers in improving their human capital. French (2012) found that local employers in East Staffordshire and Derby were reluctant to train A8 migrants. Moreover, the opportunity for these migrants to pursue further qualifications independently was hampered by the demands of full-time employment and family commitments, combined with a lack of information about training and education. One key constraint on A8 migrants is their relatively low English proficiency (Clark and Drinkwater, 2008). However, ESOL (English for Speakers of Other Languages) classes are often run at times

and locations that are difficult for migrant workers to fit in around their working hours (Cook et al., 2011). Qualitative research on A8 migrants has shown that those who have better English skills are likely to negotiate better employment conditions and move into higher skilled jobs (Cook et al., 2011; Eade, 2007).

Data and Methods

As aforementioned, our analyses are based on the Annual Population Survey (APS) data for the years 2005 to 2012 (ONS, 2013). The APS combines data from the Labour Force Survey (LFS) and national boosts of the English *Local Labour Force Survey* (LLFS), *The Welsh Labour Force Survey* (WLFS), and the *Scottish Labour Force Survey* (SLFS). It is an annual cross-sectional sample survey of households and individuals living at private addresses in the UK. It contains 12 months of data and covers the same topics as the LFS, including education, employment, health and ethnicity. Due to the national boost, the sample size of the APS is much larger than that of the quarterly LFS, thereby enabling us to have more confidence in analysing smaller sub-groups of the population. As the article is focused on labour market performance, the analyses are restricted to the working age population (men aged 16 to 64 and women aged 16 to 59), who are in employment (excluding the self-employed). This provided sample sizes for each year between about 78,000 (2011) and 179,000 (2008).³

Over-qualification (measured by Qualification Level Distance: QLD), defined as “educational-occupational mismatch” (Johnston et al., 2015:202), is derived by extracting the respondent’s highest educational qualification (International Labour Organisation’s two-digit standard classification of occupations) from the modal qualification level for all individuals in that occupation within the APS data. Using the Office of National Statistics’ classification (2013b), the qualification level (LQ), according to the highest qualification

acquired through formal education, and the corresponding required qualification for the occupation (QO), as provided by ISCED-97 (UNESCO, 2006), are measured. To measure over-qualification, an equation used in similar studies (Johnston et al., 2015; Khattab et al., 2011; Johnston et al., 2010; Chevalier, 2003) is adopted here: To obtain a qualification level distance score (QLD_{*i*}) for each individual *i*, the individual's qualification score (LQ_{*i*}) is subtracted from their occupational qualification level (QO_{*i*}):

$$\text{Qualification Level Distance (QLD}_i\text{)} = \text{QO}_i - \text{LQ}_i$$

A seven-point scale ranging from +3 (highly over-qualified) to -3 (highly under-qualified) is generated. Analyses here are restricted to the higher-end of the scale to focus on disadvantages among individuals with high-level qualifications (GCE A Level or equivalent, or Higher Education degree or equivalent), who are in occupations with modal qualification level 1 (i.e. elementary occupations) or level 2 (administrative and secretarial occupations, skilled trades occupations, personal service occupations, sales and customer service occupation, and process, plant and machine operatives). A person who is over-qualified will be working in an occupation that is below his/her obtained level of education, such as those with higher degrees working in elementary occupations. Occupational skill and formal qualification levels are considered a match when a person works in a job where the two are commensurate. Under-qualification occurs when a person is employed in an occupation for which he/she does not have the required formal educational qualification. It should also be noted that this measure is an approximation and that there are also jobs that may require a particular qualification, while other similar jobs do not. Finally, the qualification level differences are transformed into a dichotomous variable using logit analysis to estimate the likelihood of being over-qualified (or

“substantially over-qualified”, as labelled by Johnston et al., 2015) compared to having the correct match or being under-qualified.

To compare and contrast the A8 migrants with other population groups, ethnicity and nationality variables in the APS were used to identify groups in this study. A8 migrants and EU15 migrants have identified themselves predominantly as belonging to the white ethnic group. Using the variable nationality and ethnicity, two additional ethnic categories were created for the purpose of this analysis: white EU group, which includes EU migrants from the 15 old EU countries (excluding UK nationals); and A8 migrants identifying themselves as white.⁴

Control variables in the models included⁵ age group, marital status, sex, having dependent children, religion, age that full time education was completed, industry sector, UK citizenship, year of arrival in the UK, public or private sector employment, part time or full time employment, temporary or permanent employment, duration with the current employer and region.

Findings: A8 migrants in the UK labour market

As Table 1 shows, the APS offers reasonable sample sizes for minority ethnic groups, although this varies considerably. Bangladeshis have the smallest number of observations for 2005, with 299 cases, and Indian people have the largest, registering 3,576 cases in 2008. In 2012, Indian people represented the biggest ethnic minority group with 2.5 percent of the sample population, closely followed by white A8 migrants at 2.2 percent. While the sample size of Indian people has remained fairly stable between 2005 and 2012, that of A8 migrants increased from 636 cases in 2005 (0.5 percent) to over 2,000 cases from 2008 onwards. Overall, there was a substantial number of cases in each ethnic

minority group for carrying out the analyses. All the models include the LFS population weights, and these weights are formed using a population weighting procedure that involves weighting data to sub-regional population estimates and then adjusting for the estimated age and sex composition by region.

<< **Table 1.** Frequency of ethnic groups APS 2005, 2008, 2012 >>

Table 2 shows the percentage of the working age population with the highest qualification by ethnicity in 2012. Level 4 represents the highest qualification and includes degrees, higher education or equivalent, with about 40 percent of the working age population in Britain falling into this category. This figure is much higher, around 60 percent, for white European, Indian, and the Black African as well as other black categories. The white A8 migrants, on the other hand, are least represented in this group, with only around one third of them having a degree or equivalent. Nearly half of the A8 migrants are grouped into level 2 qualifications, which include GCSE grades A-C or equivalent and other qualifications. This might be because, as new migrants, they are not familiar with the education system in the UK and hence, less confident in mapping their home qualifications onto comparable UK educational levels, as suggested by a study carried out among 900 A8 migrants working in Scotland (Fife Research Coordination Group, 2008). The same survey also found that 30 percent of the respondents had a degree, thus reflecting our findings.

<< **Table 2.** Qualification levels by ethnicity, 2012 >>

Table 3 shows the occupational groups for the white British, white A8 migrants and the averages for all ethnic groups for each year covered. On average, for all years, the percentage of people working in elementary occupations is around 10 percent for the white British, decreasing slightly from 2005 to 2012. In contrast, the percentage of A8 migrants

working in such occupations was the highest in 2006 at 45 percent and, at the lowest level in 2008, at 35 percent. Compared to other ethnic groups, this rate is by far the highest, with, for example, the proportion of Bangladeshi, Black African and other black categories exhibiting half of that figure, at around 18 percent. Moreover, as Table 3 shows, the proportion of the white British category working at the top occupational level is relatively high and stable, at around 30 percent. White A8 migrants, on the other hand, again, are the group with the lowest rate at around 8 percent of managers, senior officials and professional occupations. Similarly, for associate professional and technical occupations (level 3) their rates are again low compared to other ethnic groups at around 5 percent on average for all years, whereas the average for all ethnic groups is three times higher. White A8 migrants are largely concentrated in occupational skill levels 1 and 2, while being thinly represented in levels 3 and 4. It should be noted that those immigrants with a time restriction on finding employment might have felt forced to take any jobs that were available regardless of their qualifications.

<< **Table 3.** Occupational levels for white British, A8 migrants, and groups, 2005-2012 >>

In Table 4, the share of those over-qualified by gender is shown by category of each variable included in our models. An interesting finding here is that the share of those over-qualified among women is higher than men in almost all categories, except in those not married, Black African people, those aged 50 to 64, those based in Scotland, those in temporary or part-time jobs as well as those in the agriculture or construction sectors. Over-qualification is more common among women than men in all ethnic and religious categories, except for black women, while women aged 50 to 64 are also less likely to be over-qualified. The last two columns in the table show the share of the group within the

over-qualified and their share within the over-qualified A8 migrants, respectively.

Regarding which, while 39.1% of the over-qualified are aged 35-49, 61% of the over-qualified A8 migrants are 25-34 year olds.

<< **Table 4.** Over-qualified by gender and demographic and employment characteristics, 2012 >>

Table 5 displays the results of the final logistic regression analysis modelling over-qualification. The results show that the A8 migrants and the Black African and other black groups were more likely to be over-qualified across all years compared to the white British and this relationship is highly significant at the 0.001 level. For the Black Caribbean people, the coefficients are only positively significant for 2012, 2010, 2009, and 2005 at the 0.05 level. Pakistani and the Bangladeshi men and women were also more likely to be over-qualified compared to the white British people, yet this was only the case in 2011 and 2012 for men and in 2007 and 2012 for women. The coefficients for the Mixed, Indian and other categories were not significant for any years. Finally, across all years, the white EU15 category was less likely to be over-qualified than the white British population, apart from 2012 and 2008, where this relationship is significant at 0.05 level, taking into account socio-demographic and employment variables. Compared to the white British majority, Eastern and Central European migrants (i.e. from the A8 countries) were significantly more likely to be over-qualified for the occupations they hold for all the focal years (Table 5). Clearly, the A8 migrants suffered greater disadvantages overall than other minority groups in 2012, only surpassed by black people in previous years.

<< **Table 5.** Logistic regression contrasting over-qualification with educational match and under-qualification, 2005 - 2012 >>

Given the emphasis on religious differences in the literature (e.g. Johnson et al., 2010), our models also included religious affiliation as a control variable. Compared to the largest category (i.e. Christian), Muslim minority members were significantly less likely to be over-qualified in 2005, 2007 and 2008, but not in later years. The coefficients for Sikhs, Buddhists and other religions were not significant for most years, although Hindus in 2009 and 2010, Sikhs in 2005 and Buddhists in 2006 were significantly more likely to be over-qualified than Christians. Jews were the only group less likely to be over-qualified, but only in 2006-2008 and 2011-2012. Also, those with no religion were less likely to be over-qualified in 2005, 2006, 2009 and 2010.

Our findings show that over-qualification was less likely among more mature migrants. 16-24 year olds and 25-34 year olds were more likely to be over-qualified compared to those aged 35 to 49 (Table 5). However, those aged 50 and over were less likely to be over-qualified. Further studies may help shed light on this particular pattern, which may be due to length of service or other period-specific or regulatory reasons.

Compared to men, women were significantly less likely to be over-qualified in 2005-2006 and more likely from 2009 onwards, which is in line with the findings of Johnston and colleagues (2015: 209). Non-married people were significantly more likely to be over-qualified across all years compared to their counterparts. People with dependent children were less likely to be over-qualified across all years. Again, it has to be kept in mind that the sample includes only working age people who were employed and does not cover women who looked after children or those who were economically inactive. Holding British citizenship, overall, was not significantly associated with over-qualification. Over-qualification was significantly less likely in London, possibly because of the highly multicultural nature of the labour market (Johnston et al., 2015: 209; see also Rafferty et

al., 2013). Moreover, Scotland and Wales were where A8 migrants faced most disadvantage compared to those of their cohort in England (excluding London), despite a declining trend in this difference from 2005 to 2012.

Several employment-related variables have also been included to account for over-qualification. Over-qualification was significantly high in the public sector compared to the private sector, up until 2010 but reversed in 2011 and 2012. The Equality Act, which came into force in October 2010, was probably a driver of this shift. The change of direction of this variable might also be related to the changes in the coding of occupations in SOC2010. These findings may also suggest that people were holding on to their jobs, given the economic recession and were less likely to change for employment with better prospects. Those working in the agriculture, construction, manufacturing, transport and energy sectors were significantly more likely to be over-qualified than those in services such as distribution, hotels and restaurants. This reflects other studies, which have demonstrated that A8 migrants tend to settle in areas where there are labour shortages, usually doing seasonal work in the agricultural and food-processing sectors (Findlay et al., 2013; Pollard et al., 2008).⁶

Those who were employed on a temporary contract, as opposed to a permanent one, were about 1.5 times more likely to be over-qualified for all the focal years. Working part-time, as opposed to being employed full-time, was highly significant and increased the odds of being over-qualified by 50 percent across all these years. Our findings also suggest that over time, over-qualification as a disadvantage may decline, since, measured in months, the longer the continuous employment, the less likely that it exists (odd ratios of 0.99). This is also in line with what Chiswick and Miller (2009) suggest.

Conclusions

This article has shown the disadvantages in terms of the over-qualification experienced by the A8 migrants in the UK labour market relative to other ethnic groups and the white British population in the country. Controlling for demographic characteristics other than ethnicity, Eastern and Central European movers have been consistently over-qualified for the jobs they have obtained compared to the white British majority and other migrant and minority groups in the UK during the selected period from 2005 to 2012. These findings warrant further investigation into the causes of these disadvantages as well as into the possibility of discrimination by employers. Whilst it is difficult to infer from statistics, there are studies offering evidence of ethnic and religious discrimination (see Rubinstein and Brenner, 2013; Khattab and Johnston, 2013; Booth et al., 2012).

The analysis presented here provides clear evidence of over-qualification being experienced by A8 migrants. This pattern is persistent over almost a decade following the accession in 2004, throughout the economic recession and even after the recovery period that started when the conditional accession to the EU labour market was lifted in 2011. Equally as revealing, perhaps, is the fact that over-qualification has been a constant feature over time and persisted over the period from 2005 until 2012, particularly for A8 migrants.

Other European migrants, who have been enjoying free movement throughout the EU for much longer, were faring better and there was no evidence for their over-qualification compared to the white British majority in any of the years analysed. In 2008 and 2012, the likelihood of over-education among those from the EU15 countries was even lower than for the white British majority. For other ethnic groups, the results reflect the relatively disadvantaged position of Black African men and women, which is consistent

across all years. An equally important finding in this study is that women overall seemingly faced more migration penalties in the labour market, for over-qualification was more prevalent among them than for men in almost all demographic categories, irrespective of ethnic or religious group.

As Chiswick and Miller (2009) suggest, migrants experience a devaluation of their human capital gained at home as they seek to establish themselves in a new country. As a limitation of the current study, the effect of human capital development and firm-specific human capital cannot be measured. EU15 migrants fare better in the labour market than most other ethnic groups, which may be related to macro-level factors, as the literature suggests (Kalfa and Piracha, 2013). Nevertheless, our analysis with the APS data does not allow for further interpretation. Further studies should look into the processes of integration, convergence and recognition of qualifications acquired in other countries as well as the role of proficiency in the English language and familiarity with the UK jobs market.

As the APS is cross-sectional data, it was not possible to assess whether this consistent trend of over-qualification is due to predominantly new cohorts of A8 migrants arriving, replacing previous ones. Hence, there are only limited data to determine whether there is upward mobility for these migrants once they have overcome the initial problems of recent migration, such as lack of English language fluency, lack of familiarity with the local employment market and the non-recognition of home country qualifications. The evidence shows that A8 migrants have been subjected to migration penalties at the high-end of the labour market. Moreover, the literature suggests that over-qualification is neither exclusive to migrants (see Brynin, 2002) nor to the UK (see examples from other countries: Griesshaber and Seibel, 2015; Ortiz, 2010).

These findings provide flag up to policy makers the need to investigate employment practices as a means of establishing procedures to facilitate and support labour mobility. Such studies could also help alleviate disadvantages and discrimination towards A8 migrants in the UK and across Europe, since over-qualification also signals a waste of resources and human capital (OECD, 2011). The OECD (2011), in their global skills strategy, states that migrants' skills are underutilised, often because of the lack of recognition of foreign qualifications, and they advise that policies to challenge this are urgently required, if countries want to make full use of the human capital available to them (Tijdens and van Klaveren, 2011).

References

- Alpin C, Shackleton JR and Walsh S (1998) Over- and undereducation in the UK graduate labour market. *Studies in Higher Education* 23 (1): 17–34.
- Battu H and Sloane PJ (2004) Over-education and ethnic minorities in Britain. *Manchester School* 72(4): 535-559.
- Becker G (1964) *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. New York: Columbia University Press.
- Blanchflower DG and Shadforth C (2009) Fear, unemployment and migration. *The Economic Journal* 119(535): F136-F182.
- Booth, A. L., Francesconi, M., & Frank, J. (2002). Temporary jobs: stepping stones or dead ends? *The Economic Journal*, 112(480), F189-F213.

- Booth AL, Leigh A and Varganova E (2012) Does ethnic discrimination vary across minority groups? Evidence from a field experiment. *Oxford Bulletin of Economics and Statistics* 74(4): 547-573.
- Brynin M and Guveli A (2012) Understanding the ethnic pay gap in Britain. *Work, Employment and Society* 26(4): 574 - 587.
- Brynin M (2002) Overqualification in employment, *Work, Employment and Society* 16(4): 637-654.
- Chevalier A (2003) Measuring over-education. *Economica* 70(279): 509–531.
- Chiswick BR and Miller PW (2009) The international transferability of immigrants' human capital. *Economics of Education Review* 28(2): 162–169.
- Clark K and Drinkwater S (2008) The labour-market performance of recent migrants. *Oxford Review of Economic Policy* 24(3): 495-516.
- Cook J, Dwyer P and Waite L (2011) The experiences of accession 8 migrants in England: motivations, work and agency. *International Migration* 49(2): 54-79.
- Drinkwater S and Robinson C (2013) Welfare participation by immigrants in the UK. *International Journal of Manpower* 34(2): 100-112.
- Eade J (2007) *Class and Ethnicity: Polish Migrant Workers in London: Full Research Report. ESRC End of Award Report, RES-000-22-1294*. Swindon: ESRC
- Fife Research Coordination Group (2008) *Migrant Workers in Fife Survey 2007*. Available at:
http://admin.1fife.org.uk/uploadfiles/publications/c64_MigrantWorkersSurveyKnowFifeFindingsV1_2.pdf. Accessed: 12/05/2011.
- Findlay A, McCollum D, Shubin S, Apsite E and Krisjane Z (2013) The role of recruitment agencies in imagining and producing the 'good' migrant. *Social & Cultural Geography* 14(2): 145-167.

- French S (2012) Beyond ESOL? Assessing the propensity of east European migrant workers to undertake further and higher education. *Research in Post-Compulsory Education* 17(1): 125-142.
- Green F and Zhu Y (2010) Overqualification, job dissatisfaction, and increasing dispersion in the returns to graduate education. *Oxford Economic Papers* 62(4): 740-763.
- Griesshaber N and Seibel V (2015) Over-education among Immigrants in Europe: The Value of Civic Involvement. *Journal of Ethnic and Migration Studies* 41(3): 374-398.
- Heath A and McMahon D (2005) Social mobility of ethnic minorities. In: Loury GC, Modood N, Teles SM (eds) *Ethnicity, Social Mobility and Public Policy*. Cambridge: Cambridge University Press, 393-413.
- Home Office (2007) Accession Monitoring Report A8 Countries, May 2004-June 2007. Available at: <http://www.newport.gov.uk/stellent/groups/public/documents/report/cont311225.pdf>.
- Home Office (2016) CCM20110 - A8 Migrant Workers: Workers Registration Scheme. Available at: <http://www.hmrc.gov.uk/manuals/ccmmanual/ccm20110.htm>.
- Johnston R, Khattab N and Manley DJ (2015) 'East versus West? Over-qualification and earnings among the UK's European migrants'. *Journal of Ethnic and Migration Studies* 41(2): 196-218.
- Johnston R, Sirkeci I, Khattab, N and Modood T (2010) Ethno-religious categories and measuring occupational attainment in relation to Education in England and Wales: a multi-level analysis. *Environment and Planning A*, 42(3): 578-591.
- Kalfa E and Piracha M (2013) Immigrants' Educational Mismatch and the Penalty of Over-Education. *IZA DP No. 7721*.

- Khattab N, Sirkeci I, Johnston R, and Modood T (2011) Ethnicity, religion, residential segregation and life chances. In: Modood T, Salt J (eds.) *Global Migration, Ethnicity and Britishness*. Basingstoke: Palgrave Macmillan, 153-176.
- Khattab N and Johnston R (2013) Ethnic and religious penalties in a changing British labour market from 2002 to 2010. *Environment and Planning A*, 45(6): 1358-1371.
- Kramer A, Basilio L and Bauer T K (2013) Transferability of Human Capital and Immigrant Assimilation: An Analysis for Germany, Beiträge zur Jahrestagung des Vereins für Socialpolitik 2013: Wettbewerbspolitik und Regulierung in einerglobalen Wirtschaftsordnung - Session: Human Capital, No. B11-V2 Available at: <http://hdl.handle.net/10419/79964>.
- Lindley J and Lenton P (2006) *The Over-education of UK Immigrants: Evidence from the Labour Force Survey*. Working Paper. Department of Economics, University of Sheffield. SERP no: 2006001.
- Mavromaras K and McGuinness S (2012) Overskilling dynamics and education pathways. *Economics of Education Review* 31(5): 619-628.
- McGuinness S (2006) Overeducation in the labour market. *Journal of Economic Surveys* 20(3): 337-418.
- Nielsen, C.P. (2011) Immigrant over-education: Evidence from Denmark. *Journal of Population Economics*, 24(2): 499-520.
- OECD (2011) *Towards and OECD Skills Strategy*. Available at: <https://www.oecd.org/edu/47769000.pdf>.
- ONS (Office for National Statistics) (2013) *Annual Population Surveys, 2005 to 2012*. Available at: <https://discover.ukdataservice.ac.uk/series/?sn=200002>.
- Ortiz L (2010) Not the right job, but a secure one: over-education and temporary employment in France, Italy and Spain. *Work, Employment & Society* 24(1): 47-64.

- Phillimore J, and Goodson L (2008) Making a place in the global city: The relevance of indicators of integration. *Journal of Refugee Studies* 21(3): 305-325.
- Phung VH (2011) Ethnicity, migration and employment disadvantage under New Labour: reviewing the evidence from the United Kingdom. *Policy Studies* 32(5): 497-513.
- Pollard N, Latorre M, and Sriskandarajah D (2008) *Floodgates or turnstiles. Post-EU Enlargement Migration Flows to (and from) the UK*. Available at: http://www.ippr.org/files/images/media/files/publication/2011/05/floodgates_or_turnstiles_1637.pdf?noredirect=1.
- Rafferty A (2012) Ethnic penalties in graduate level over-education, unemployment and wages: evidence from Britain. *Work Employment and Society* 26(6): 987-1006.
- Rafferty A, Rees J, Sensier M, and Harding A (2013) Growth and recession: Underemployment and the labour market in the North of England. *Applied Spatial Analysis and Policy* 6(2): 143-163.
- Rubinstein Y and Brenner D (2013) Pride and prejudice: using ethnicsounding names and inter-ethnic marriages to identify labor market discrimination. *Review of Economic Studies* 81(1): 389-425.
- Sanroma E, Ramos R and Simon H (2008) The portability of human capital and immigration assimilation, *IZA Discussion Paper* No 3649.
- Sattinger M (1993) Assignment models of the distribution of earnings. *Journal of Economic Literature* 31(2): 831-880.
- Saunders B (2015) *Overeducated and Over Here: Skilled EU Migrants in Britain*. London: Transnational Press London.
- Sirkeci I, Acik N and Saunders B (2014) Discriminatory labour market experiences of A8 national high skilled workers in the UK. *Border Crossing*, 4(1-2): 17-31.

- Sloane P, Battu H and Seaman P (1999) Overeducation, undereducation and the British Labour market. *Applied Economics* 31(11): 1437–1453.
- Tassinopoulos A, and Werner H (1999) To move or not to move: migration of labour in the European Union. *IAB Labour Market Research Topics No. 35*, Institut für Arbeitsmarkt-und Berufsforschung der Bundesanstalt für Arbeit.
- Thurow LC (1975) *Generating Inequality*. New York: Basic Books.
- Tijdens KG and van Klaveren M (2011) Over- and underqualification of migrant workers. Evidence from Wage Indicator survey data. *AIAS Working Paper 11-110*, Amsterdam: University of Amsterdam.
- UNESCO (2006) *International Standard Classification of Education 1997*. Available at: <http://www.uis.unesco.org/Library/Documents/isced97-en.pdf>.

Author Biographies

Ibrahim Sirkeci is Professor of Transnational Studies and the Director of Regent's Centre for Transnational Studies at Regent's University London. Prof Sirkeci is a graduate of the University of Sheffield, University College London and Bilkent University. He worked at the University of Bristol prior to joining Regent's in 2005. His research focuses on human mobility, labour markets, development, conflict. He is author of several books including the prize winning title "Cultures of Migration, the Global Nature of Contemporary Mobility" (University of Texas Press, 2011). He is the chief editor of *Migration Letters* and *Remittances Review* journals. Professor Sirkeci chairs the Migration Conference series.

Necla Acik is a Research and Teaching Fellow at the University of Manchester. Her research interests are in migration, research methods, youth and mobilisation, counter-terrorism, civic engagement, ethnicity, and Kurdish women's movement.

Bradley Saunders received his PhD from Loughborough University and currently is an Assistant Professor at Prince Mohammad bin Fahd University, KSA. He previously worked at the University of Northampton, University of Derby Online and Regent's University London. Dr Saunders' academic interests include international management, globalization, overeducation, EU migrant workers, self-initiated expatriates, job transitions, corporate expatriation and repatriation.

Andrej Přivara is currently Assistant Professor in the Department of Social Development and Labour, Faculty of National Economy, University of Economics in Bratislava, Slovak Republic. He has a PhD in Labour Economics. He was a postdoctoral fellow at Wirtschaftsuniversität Wien and at Sorbonne Nouvelle-Paris 3. His research interests included research projects on international migration. Andrej is also a member of PGV Network. He has authored over 50 research papers published in journals and edited volumes. Andrej speaks French, Spanish and English.

TABLES:

Table 1. Frequency of ethnic groups in the APS 2005, 2008, 2012

Ethnic group	2005		2008		2012	
	N	%	N	%	N	%
White British	160,689	90.5	153,058	85.4	91,657	86.4
White EU	1,808	1.0	1,626	0.9	1,097	1.0
White A8	636	0.4	2,095	1.2	2,059	1.9
Mixed	790	0.4	1101	0.6	749	0.7
Black Caribbean	996	0.6	1453	0.8	800	0.8
Indian	2,448	1.4	3,576	2.0	2,514	2.4
Pakistani	927	0.5	2,452	1.4	1,010	1.0
Bangladeshi	299	0.2	837	0.5	398	0.4
Black African & other black	1,070	0.6	1,871	1.0	1,344	1.3
Other	7,868	4.4	11,223	6.3	4,494	4.2
<i>Total</i>	<i>177,531</i>	<i>100</i>	<i>179,292</i>	<i>100</i>	<i>106,122</i>	<i>100</i>

Table 2. Qualification levels by ethnicity (%), 2012

	L4: Degree, higher education or eq.	L3: GCE A Level or equivalent	L2: GCSE grades A-C or equivalent, other	L1: No qualification	Total N
White British	39.7	24.9	30.7	5.0	90,292
White EU	64.9	10.8	17.7	7.0	1,092
White A8	32.9	12.2	45.1	10.0	2,043
Mixed	53.8	19.8	23.3	3.0	741
Black Caribbean	38.9	23.4	33.2	5.0	786
Indian	61.6	11.1	21.6	6.0	2,490
Pakistani	48.8	15.4	24.8	11.0	991
Bangladeshi	43.4	14.9	32.4	9.3	392
Black African & other blacks	59.2	12.9	22.3	5.5	1,328
Other	61.4	10.2	22.0	6.4	4,468
Column Total	42.1	23.0	29.9	5.0	104,623

Notes: Percentages are weighted with actual sample size for each sub-group.

Table 3. Occupational skill levels for white British, A8 migrants, and other groups, 2005-2012

	2005	2006	2007	2008	2009	2010	2011	2012
White British								
Level 1:	10.7	10.63	10.51	9.66	9.57	9.43	9.92	9.65
Level 2:	46.54	45.56	45.07	45.23	44.53	44.2	45.26	44.97
Level 3:	14.55	14.89	15.04	15.17	15.39	15.35	14.71	15.06
Level 4:	28.21	28.91	29.39	29.94	30.5	31.02	30.1	30.31
<i>Sub-total N</i>	<i>160,516</i>	<i>111,562</i>	<i>107,993</i>	<i>118,886</i>	<i>110,768</i>	<i>108,733</i>	<i>67,691</i>	<i>91,561</i>
White A8								
Level 1:	39.61	44.48	41.49	34.48	36.32	37.26	36.25	37.6
Level 2:	50.27	47.33	48.35	54.48	51.07	49.61	51.59	48.38
Level 3:	4.66	2.94	4.08	4.47	4.63	4.02	4.74	6.04
Level 4:	5.46	5.25	6.08	6.57	7.98	9.11	7.41	7.98
<i>Sub-total N</i>	<i>635</i>	<i>903</i>	<i>1,394</i>	<i>1,754</i>	<i>1,749</i>	<i>1,995</i>	<i>1,669</i>	<i>2,051</i>
All other groups								
Level 1:	13.34	13.62	13.23	12.94	12.55	12.30	13.11	12.70
Level 2:	44.09	45.47	43.36	42.85	42.06	41.05	41.62	42.65
Level 3:	15.63	14.33	15.07	14.25	14.36	15.48	13.92	13.67
Level 4:	26.94	26.58	28.34	29.96	31.02	31.17	31.35	30.98
<i>Sub-total N</i>	<i>16,171</i>	<i>14,046</i>	<i>14,164</i>	<i>16,859</i>	<i>15,994</i>	<i>15,928</i>	<i>8,928</i>	<i>12,374</i>
Total N	177,322	126,511	123,551	137,499	128,511	126,656	78,288	105,986

Notes: Weighted row percentages. Level 1: Elementary Occupation, Level 2: Administrative and secretarial, skilled trades occupations, personal service occupations, sales and customer service occupations, process, plant and machine operatives, Level 3: Associate professional and technical occupations, Level 4: Managers, senior officials and professional occupations.

Table 4. Over-qualified by gender and demographic and employment characteristics, 2012

	Categories	% over-qualified within category (weighted)			% over-qualified	
		Female	Male	Total	% in total	% in A8
	Married	39.5	35.1	37.1	68.4	72.6
	Not-married	46.2	47.0	46.6	31.6	27.4
	No dependent children	41.0	40.9	40.9	60.6	49.4
	One or more dependent children	42.7	35.1	38.9	39.4	50.6
Ethnic group	White British	40.5	38.0	39.2	83.8	
	White EU	38.3	35.7	37.0	1.3	
	White A8	64.3	51.5	57.8	2.3	100.0
	Mixed	44.5	40.2	42.3	0.9	
	Black Caribbean	43.1	41.6	42.4	0.9	
	Indian	42.2	37.6	39.6	2.6	
	Pakistani	53.9	43.3	46.9	1.1	
	Bangladeshi	59.8	46.9	50.7	0.5	
	Black African and other black	48.8	52.8	50.8	1.5	
Other	46.6	38.6	42.3	5.2		
Religion	Christian	40.3	38.6	39.5	59.2	87.1
	Muslim	50.4	42.3	45.0	2.7	0.2
	Hindu	46.3	36.2	40.2	1.6	0.0
	Sikh	43.7	40.8	42.2	0.6	0.0
	Jewish	33.5	23.5	28.0	0.4	0.1
	Buddhist	49.6	41.9	45.6	0.5	0.3
	Other religion	41.0	40.6	40.8	1.2	0.8
No religion	43.8	38.6	40.9	33.8	11.6	
Age groups	16-24	60.7	56.0	58.2	11.4	10.4
	25-34	48.3	43.6	45.8	25.4	61.0
	35-49	37.5	33.0	35.2	39.1	24.5
	50-64	32.8	34.2	33.6	24.1	4.1
Year of arrival in the UK	Never migrated	40.8	38.2	39.4	85.6	0.0
	Before 1990	38.8	34.2	36.4	3.7	0.4
	1990-2003	44.8	38.4	41.4	4.6	9.0
	Since 2004	55.8	47.8	51.3	6.1	90.6
Country (UK)	England (excluding London)	41.1	38.0	39.5	73.5	70.7
	Wales	40.9	40.5	40.7	4.6	2.2
	Scotland	43.9	45.0	44.5	8.8	8.3
	London	44.2	37.6	40.6	13.1	18.8
Sectors and employment	Private sector	45.5	39.8	42.2	72.1	92.9
	Public sector	35.3	33.7	34.7	27.9	7.1
	Permanent job	41.3	38.0	39.6	94.5	91.1
	Temporary job	48.9	50.3	49.6	5.5	8.9
	Full time	39.0	37.4	38.0	77.4	85.0
	Part time	46.2	52.1	47.3	22.6	15.0
Industry Sector - main job	Agriculture, forestry and fishing	52.1	57.5	56.0	0.6	2.0
	Energy and water	45.6	40.0	41.2	2.1	2.0
	Manufacturing	40.2	37.5	38.1	11.3	24.9
	Construction	41.0	42.3	42.1	5.2	3.6
	Distribution, hotels and restaurants	46.4	46.4	46.4	18.0	29.5
	Transport and communication	45.9	36.8	39.0	9.1	11.2
	Banking and finance	44.5	37.9	40.9	16.0	11.7
	Public admin, education and health	37.9	31.4	35.9	33.5	11.5
Other services	49.9	40.9	45.5	4.3	3.6	

Table 5. Logistic regression contrasting over-qualification with educational match and under-qualification, 2005 - 2012

	2005		2006		2007		2008		2009		2010		2011		2012	
	Odds ratio	SD Error														
Women (men)	0.94	0.02	0.95	0.02	0.99	0.02	1.02	0.02	1.05	0.02	1.06	0.02	1.01	0.02	1.07	0.02
Age full time education completed	1.04	0.00	1.03	0.00	1.03	0.00	1.03	0.00	1.02	0.00	1.02	0.00	1.03	0.00	1.03	0.00
Not-married (married)	1.16	0.02	1.13	0.02	1.13	0.02	1.14	0.02	1.16	0.02	1.17	0.02	1.17	0.03	1.15	0.02
Children (none)	0.91	0.02	0.89	0.02	0.90	0.02	0.90	0.02	0.88	0.02	0.91	0.02	0.89	0.02	0.90	0.02
Non-UK nationals (UK nat.)	0.94	0.07	0.83	0.05	0.79	0.05	0.99	0.06	0.98	0.06	0.95	0.06	0.99	0.07	1.00	0.06
Ethnic group (White British)																
White EU	0.83	0.08	0.95	0.08	0.93	0.09	0.78	0.07	0.95	0.09	0.86	0.08	0.91	0.10	0.80	0.07
White A8	1.78	0.25	1.86	0.19	1.74	0.16	1.29	0.10	1.45	0.12	1.35	0.11	1.22	0.11	1.51	0.12
Mixed	1.01	0.11	1.11	0.11	1.01	0.10	1.21	0.11	1.06	0.10	0.94	0.09	1.00	0.10	0.98	0.09
Black Caribbean	1.25	0.12	1.14	0.09	1.14	0.09	1.17	0.09	1.29	0.11	1.34	0.11	1.09	0.10	1.21	0.11
Indian	0.95	0.10	1.02	0.10	1.04	0.10	1.03	0.09	1.07	0.10	1.18	0.10	0.89	0.10	0.89	0.08
Pakistani	1.08	0.15	0.97	0.12	1.21	0.14	1.14	0.13	1.08	0.12	1.11	0.12	1.21	0.16	1.36	0.15
Bangladeshi	1.30	0.24	1.12	0.19	1.90	0.31	1.20	0.18	1.18	0.18	1.18	0.18	1.25	0.21	1.41	0.20
Black African and other black	1.85	0.17	2.13	0.17	2.00	0.16	1.92	0.15	1.87	0.15	2.35	0.19	1.68	0.14	1.53	0.12
Other	1.05	0.05	1.02	0.04	1.08	0.04	1.03	0.04	1.09	0.04	1.11	0.05	0.97	0.07	1.06	0.06
Religion (Christian)																
Muslim	0.76	0.08	0.88	0.08	0.74	0.06	0.78	0.06	0.93	0.07	0.89	0.07	1.07	0.10	0.90	0.07
Hindu	1.02	0.12	0.95	0.10	0.82	0.09	0.93	0.09	0.79	0.08	0.75	0.07	1.10	0.14	1.00	0.09
Sikh	1.32	0.19	1.04	0.14	1.12	0.15	0.96	0.12	1.03	0.13	1.02	0.12	1.28	0.18	1.22	0.15
Jewish	0.80	0.13	0.67	0.09	0.64	0.09	0.71	0.09	0.86	0.12	0.87	0.12	0.65	0.11	0.54	0.08
Buddhist	1.18	0.19	1.33	0.18	1.16	0.16	1.26	0.15	1.13	0.15	1.13	0.15	1.09	0.18	1.11	0.14
Other religion	1.17	0.11	1.25	0.11	1.25	0.10	1.17	0.09	1.01	0.08	1.03	0.08	1.11	0.10	1.00	0.07
No religion	0.95	0.02	0.96	0.02	0.97	0.02	0.98	0.02	0.95	0.02	0.95	0.02	1.00	0.02	0.97	0.02
Age groups (35-49)																
16-24	1.75	0.05	1.85	0.05	1.92	0.05	1.85	0.05	1.95	0.06	2.06	0.06	1.86	0.07	1.92	0.06
25-34	1.29	0.03	1.39	0.03	1.38	0.03	1.33	0.03	1.38	0.03	1.41	0.03	1.36	0.03	1.35	0.03
50-64	0.94	0.02	0.95	0.02	0.95	0.02	0.92	0.02	0.97	0.02	0.96	0.02	0.98	0.02	0.98	0.02
Year of arrival in the UK (Since 2004)																
Never migrated	0.97	0.05	0.98	0.04	1.01	0.04	1.02	0.04	0.98	0.04	1.01	0.05	0.99	0.06	1.01	0.05
Before 1990	0.76	0.06	0.78	0.05	0.82	0.05	0.83	0.05	0.81	0.05	0.83	0.05	0.98	0.07	0.95	0.05
1990-2003	0.65	0.08	0.66	0.06	0.71	0.06	0.70	0.05	0.74	0.06	0.84	0.06	1.24	0.10	1.11	0.08
Country UK (England)																
Wales	1.13	0.03	1.10	0.02	1.09	0.02	1.16	0.03	1.20	0.03	1.16	0.03	1.13	0.03	1.10	0.03
Scotland	1.52	0.03	1.43	0.03	1.39	0.03	1.46	0.03	1.43	0.03	1.40	0.03	1.38	0.04	1.26	0.03
London	0.91	0.03	0.96	0.03	0.96	0.03	0.96	0.02	0.91	0.02	0.90	0.02	0.89	0.03	0.94	0.03

Table 5. continued.

	2005		2006		2007		2008		2009		2010		2011		2012	
	Odds ratio	SD Error														
<i>Public sector (private)</i>	1.15	0.03	1.21	0.03	1.18	0.03	1.17	0.03	1.26	0.03	1.17	0.03	0.93	0.03	0.89	0.02
<i>Temporary job (permanent)</i>	1.45	0.03	1.58	0.03	1.55	0.03	1.57	0.03	1.61	0.03	1.66	0.03	1.53	0.04	1.53	0.03
<i>Part-time (full-time)</i>	1.13	0.04	1.16	0.04	1.20	0.04	1.06	0.04	1.11	0.04	1.24	0.04	1.06	0.04	1.10	0.04
<i>Length of continuous employment (in months)</i>	0.99	0.00														
Industry Sector main job (distribution, hotels and restaurants)																
<i>Agriculture, forestry and fishing</i>	1.54	0.14	1.60	0.14	1.36	0.12	1.50	0.13	2.02	0.21	1.80	0.19	1.60	0.20	1.84	0.20
<i>Energy and water</i>	1.08	0.08	1.21	0.08	1.17	0.07	1.05	0.07	1.30	0.07	1.13	0.06	1.06	0.07	1.11	0.06
<i>Manufacturing</i>	1.17	0.03	1.17	0.03	1.10	0.03	1.13	0.03	1.14	0.03	1.04	0.03	0.98	0.03	0.98	0.03
<i>Construction</i>	1.50	0.06	1.45	0.05	1.35	0.05	1.32	0.05	1.29	0.05	1.17	0.04	1.10	0.05	1.13	0.05
<i>Transport and communication</i>	1.41	0.05	1.43	0.05	1.40	0.05	1.40	0.05	1.16	0.04	1.08	0.04	0.98	0.04	0.95	0.03
<i>Banking and finance</i>	0.88	0.03	0.84	0.02	0.89	0.02	0.89	0.02	1.01	0.03	0.94	0.03	0.92	0.03	0.93	0.03
<i>Public admin, education and health</i>	1.09	0.03	1.06	0.03	1.12	0.03	1.12	0.03	1.11	0.03	1.08	0.03	0.81	0.03	0.82	0.02
<i>Other services</i>	1.26	0.05	1.22	0.04	1.25	0.05	1.22	0.05	1.07	0.04	1.09	0.04	1.06	0.05	1.03	0.04
N		103868		123699		120592		117002		108758		106661		75866		102489
Wald chi2(27)		2665.41		3395.02		3458.74		3199.59		3082.14		3299.04		2341.58		3222.98
Prob > chi2		0		0		0		0		0		0		0		0
Pseudo R2		0.0286		0.0304		0.0313		0.0295		0.0306		0.0345		0.0346		0.0365
Log pseudolikelihood		-8575886		-1.4E+07		-1E+07		-1.4E+07								

Note: Odds ratios in bold indicate significance levels at $p < 0.05$

Notes:

¹ The Accession countries are Poland, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Slovakia and Slovenia.

² All Census data used in this article have been obtained from the ONS (<http://www.nomisweb.co.uk/>) and the Scottish census website www.scotlandscensus.gov.uk.

³ Northern Ireland (NI) is excluded from the analysis because of very small numbers of A8 migrants living in NI and differences in ethnic group classification.

⁴ The nationality variable is chosen over the country of birth (COB) to identify A8 migrants, as the 2007 dataset did not have all the value labels for the COB, thus making identification of the individuals investigated impossible.

⁵ Covariates to enable comparison over eight years were limited and some relevant variables, such as English language ability, which were only asked for in one dataset, cannot be included in the models.

⁶ Several models were run to observe the effects of the predictor variables on the dependent variable, yet due to space limitations these are not reported here. Including the employment sector variable, for example, has improved the models overall and has reduced the likelihood of A8 migrants being classified as over-qualified, yet as demonstrated in the final model, they still remain over-qualified for the years analysed in this article.