

# **BARNETT PAPERS IN SOCIAL RESEARCH**

# Dimensions of labour market integration among young EU migrant citizens in the UK

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WORKING PAPER 16-01

February 2016

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#### Abstract

Youth migrants are at a double-disadvantage in the labour market, as they face young peoples' education to employment transition challenges as well as difficulties of foreign labour market entrants. This paper investigates the labour market integration of recent young EU migrant citizens, a *legally* homogenous group. They are ideal for investigating the degree of integration, the relationship with migrants' country of origin and the potential effect of the post-2008 economic crisis. Using UK Quarterly Labour Force survey data from 2004-2014, the paper finds a high degree of integration in terms of employment, contrasted by integration into poor quality jobs. Marked country-of-origin associations exist in terms of qualification-occupation mismatches and wages. By contrast no substantial differences pre-/post-crisis seem to exist. Finally, EU youth migrant citizens have a lower probability of claiming welfare benefits. Overall, the stratification of EU youth migrant citizens mirrors their region-of-origin's relative economic position in Europe.

Keywords: Employment, migration, EU, outsiders, Benefits, country of origin

### Acknowledgement

This paper presents results from the project Strategic Transitions of Youth Labour in Europe (STYLE), Workpackage 6.4: Labour market outcomes and integration of youth migrants: comparative view (http://www.style-research.eu/project/work-packages/wp6-mismatch-migration/). The project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no. 613256.

We like to thank the University of Kent's Q-Step team, Maura Sheehan (National University of Ireland), and participants of the Department of Social Policy and Intervention's research colloquium for feedback on earlier versions of this paper.

#### Introduction

In light of youth unemployment rates exceeding 50% in Spain and Greece as well as high youth unemployment rates in many other Member States (Eurostat 2014), the European Union (EU) initiated a number of employment programs targeted specifically at young people (e.g. Youth Employment Initiative - European Council 2013). Irrespective of these initiatives, the right to freedom of movement within the EU perhaps offers young EU citizens, including jobseekers, more opportunities than the various explicit youth policies. However, increasing migration of mostly European citizens within the EU has not only become politically controversial but also poses questions regarding the ability of EU migrant citizens to integrate in the labour market of the destination country. In light of increasing youth labour market outsiderness across Europe, political debates on the right to freedom of movement within the EU, and the aftermath of the 2008 economic crisis, we see it as important to investigate the

*extent to which young European migrant citizens*<sup>1</sup> integrate into the UK labour market and whether this might have been affected by the economic crisis.

Youth migrants face the risks and challenges with regard to labour market integration faced by young people in general as well as those specific to migrants. Labour market outsiderness – inactivity, unemployment, low-income and low employment protection – is increasingly a problem of young people across Europe (Seeleib-Kaiser & Spreckelsen 2016) leading to a "new generation with higher exposure to systematic labour market risks" (Chung et al. 2012, p.301). This particular vulnerability of labour market outsiderness is due in part to the transition from education to employment, that is youth's labour market entry in face of no or very limited work experience (Brzinsky-Fay 2007; Schmelzer 2008). These challenges are of particular importance in light of potential life-long scaring effects from lack of labour market integration at the beginning of a working life (Schmillen & Umkehrer 2013).

<sup>&</sup>lt;sup>1</sup> At times the EU uses the term of EU mobile citizens in juxtaposition to TCNs. But this conceptualisation can also be confusing itself, as there are specific categories of mobile citizens, such as posted workers (workers that are posted by their company to work in another Member State for the maximum duration of 2 years) or frontier workers (someone who lives in one Member State and works in another, returning home at least once a week) that differ from workers who have relocated to another Member State. Posted or frontier workers have normally not shifted their 'habitual residence' to another Member State. Also students who have moved to another Member State for the sole purpose of pursuing their studies are not in all cases considered to have changed their 'habitual residence'. Pensioners who spend part of the year in another Member State will also not have changed their residency status. Following the UN definition international migration statistics normally define someone who has moved for more than one year to another country as a 'migrant'. We define non-national EU citizens habitually resident in another Member State as "EU migrant citizens" and thereby clearly differentiate this group from the group of other EU mobile citizens. This differentiation is also important regarding the potential cost and benefits for national welfare systems, as EU mobile citizens do not have the same access rights to social benefits in another Member State as nationals or EU migrant citizens (who are entitled to these rights after a maximum of five years of residence) or EU workers (whose entitlement starts from the first day of their employment). Jobseekers are normally not entitled to social assistance in the country of destination during the first three months of their residence, but 'export' their unemployment benefits from their country of origin for a minimum duration of three months (Bruzelius/Seeleib-Kaiser 2016).

Past research on the UK has found lower wages amongst migrant citizens from Central and Eastern Europe (CEE A8) compared to their European counter parts (Longhi & Rokicka 2012), concurring with particularly large occupation-skill mismatches (Drinkwater et al. 2009; Clark et al. 2014), but advantages in finding and staying in employment prior to 2008 (Demireva & Kesler 2011). With regard to the effects of the economic crisis following 2008 some research indicated a reduction in new migrants from A8 countries by 2011 (McCollum & Findlay 2011) as well as substantial changes in migrants' wages in the UK (Clark et al. 2014). Little research to date looks at the labour market integration across youth migrants from CEE, Southern Europe, Bulgaria and Romania, and the rest of the EU. – Past research has often focused on single groups of origin, the contrast with non-EU migrants (Demireva 2011), or specific ethnic groups (e.g. Dustmann et al. 2005).

Theoretically, migrants' challenges to labour market integration potentially result from their (in-)ability to and lack of opportunity for '*assimilation*' or from *discrimination* (Nielsen et al. 2004). In addition, the dualization literature (Emmenegger et al. 2012) has highlighted the risks of migrants becoming labour market outsiders, exposed to precarious employment and low wages, whilst insiders are protected through legislation and favourable collective bargaining arrangements. Challenges to labour market integration in terms of income, employment, overqualification and occupational status are well documented for recent immigrants (Altorjai 2013; Demireva 2011; Clark & Lindley 2009; Andrews et al. 2007; Kogan 2006) and even children of immigrants (Heath et al. 2008)<sup>2</sup>. Explanations point to effects from human capital specificity in the country of destination (Chiswick 1978), with migrants unable to 'export' their skills (Chiswick & Miller 2009) and employers unwilling to

<sup>&</sup>lt;sup>2</sup> However note also empirical literature on the "assimilation hypothesis" finding improvements of migrants labour market situation over time (e.g. Chiswick et al. 2005; Gagliardi & Lemos 2015).

invest into migrants' skills (Dustmann 1999), and selection effects increasing the number of low-skilled migrants (Borjas 1987). Migrant youth are faced with a double challenge of youth labour market entry and problems associated with assimilation and discrimination.<sup>3</sup> In Hoijer's and Picot's (2015) words "*migrants are by definition labour market entrants*" (p. 5 also see Kogan 2006).

This paper analyses the differences in youth labour market outsiderness between UK youth, young EU migrant citizens and young third country national (TCN) migrants. More specifically, we ask: How well are youth migrants integrated into the UK labour market in comparison to their UK peers? Does the degree of integration reflect structural differences between the regions of origin and macroeconomics changes due to the economics crisis after 2008? Overall, the paper will contribute to the discussion on the effects of intra-EU migration and the labour market challenges for young people.

#### Contextual factors of youth migration: the UK, EU-origins and the recession

The above challenges for youth migrants are general in nature. However, youth migrants' labour market integration will be affected by their specific country of origin and country of destination (van Tubergen et al. 2004). Research has identified the UK labour market to offer comparatively easy access to employment (Algan et al. 2010), which, however, is more likely to be atypical (Ballarino & Panichella 2015). This is often attributed to the more flexible UK labour market (Kogan 2006; Kogan 2007) and the overall characterization of the UK as a liberal market economy (Guzi et al. 2015). Particularly relevant in the context of youth is in addition the focus of the economy on *general skills* (Gangl 2003; Brzinsky-Fay 2007), which

<sup>&</sup>lt;sup>3</sup> This question falls into a broader research agenda on connectedness of life course events and migration (cf. Kogan et al. 2011, p.75).

is said to be beneficial for migrants, and should benefit youth migrants in particular. Overall, the UK seems to attract labour migrants mainly into either high-skill/high-pay or low-skill/low-pay jobs (Reyneri & Fullin 2011). However, post-2009 recession increases of unemployment in the UK were particularly concentrated among the youth (Bell & Blanchflower 2010), thus potentially adding an additional burden for young migrants to integrate into the labour market.

Empirical research suggests country of origin effects can be more important to labour market integration than the nature and characteristics of the destination labour market (Fleischmann & Dronkers 2010). Young EU migrant citizens in the UK constitute a 'homogenous' analytical category from a legal perspective from the situation relating TCNs, as Member States cannot limit their number, require certain (minimum) skills or discriminate against EU workers with regards to social rights. After five years of residence all EU citizens have the same social rights as British nationals. As EU job seekers can 'export' their unemployment benefits from the Member State of origin for a minimum duration of three months (Bruzelius & Seeleib-Kaiser 2016), we would expect a higher reservation wage (Kogan et al. 2011) and, ceteris paribus, a better integration into the labour market, compared to TCNs. However, amongst EU migrant citizens we would expect considerable variation of the reservation wages, given the significant differences between unemployment systems and wage levels (Clasen & Clegg 2011). An indication of this is given by the considerable variation in average reservation wages of youth across the major regions of the EU (See Appendix Table 1). Therefore, we would expect lower wages and lower quality jobs among youth migrant citizens from CEE countries in contrast to youth from the EU-Rest. Overall our expectation is to find a clear stratification of labour market integration by migrant's region of origin. Finally, we would expect a decrease in labour market integration of youth migrants since the beginning of the 2008 economic crisis.

### Methods

#### **Definitions and measurement**

This article analyses youth migrants and their labour market integration. Youth in this context are defined as *young people* aged 20-34. Migrants are identified by having a different country of birth than the UK, no UK citizenship, being resident in the UK for one year or more, after which one can by and large assume the person is habitually resident, and having arrived in the last 5 years.<sup>456</sup> The focus on recent migrants provides a better opportunity to investigate region-of-origin effects, as these would be less relevant for established migrants who potentially already experienced a catch-up or assimilation with their UK peers; moreover, after five years of residence an EU citizen is entitled to the same social rights as a British national.

The research focuses on six different groups of young people in the UK. Recent youth migrants from: *central and eastern Europe* (CEE, A8 excluding Croatia: Czech republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia.), *Bulgaria and* 

<sup>&</sup>lt;sup>4</sup> The respective variables identifying these in the UK labour force survey are: "Country of origin" CRYO and after 2007 CRYO7 and CRYOX7; "Year of last arrival" CAMEYR2.

<sup>&</sup>lt;sup>5</sup> This has become standard practice and respondents thus identified are called *recent migrants* (Rienzo 2013). However past work on labour market integration has defined migrants such as on basis of ethnicity and country of birth only.

<sup>&</sup>lt;sup>6</sup> This migrant definition does not distinguish between legal status, e.g. for asylum seekers, those granted asylum, international students; it as been argued that the dataset (QLFS see below) does contain members of these groups as households are sample and despite the exclusion of communal dwellings (Ker et al. 2009).

*Romania, Southern European countries* (EU-South: Cyprus, Greece, Italy, Malta, Portugal, Spain), *remaining European Union countries* (EU-Rest: Austria, Benelux, Denmark, Finland, France, Germany, Ireland,<sup>7</sup> Sweden), and finally migrants from the *third countries*. These country groupings are theoretically driven: the CEE (A8) countries as well as Bulgaria and Romania (A2) have long been seen as *the* European migration countries of origin, whilst this has recently also been publically asserted for Southern Europe.<sup>8</sup> Moreover, the "EU-South" can be identified as a distinct country group in terms of its labour market, economy and welfare system (Ferrera 1996; Ferragina et al. 2015). These migrant groups are compared with *UK youth* and TCNs (aged 20-34).

Our comparisons focus on two time periods: the years between 2004-2009 and 2010-2014. The reasons for this are first the need to achieve a sufficiently large number of observations through pool data; and second more importantly unemployment in the EU significantly increased since the second half of 2008, surpassing the level of 2004, the initial year citizens of CEE countries were granted the freedom of movement to the UK, in 2010 (Eurostat 2015). Thus intra-EU migration in the post-2009 period occurred in a considerably different economic context.

For the purpose of this study labour market integration is defined through a number of indicators: First labour market status according to the ILO definition in terms of employment,

<sup>&</sup>lt;sup>7</sup> Young Irish migrants might integrate easier into the UK labour market than other EU-Rest citizens, however amongst this EU-Rest group they are (given the criteria for recent migrant status) only approximately 8% of the of the sample of EU-Rest citizen.

<sup>&</sup>lt;sup>8</sup> Particularly after 2012 media stories on e.g. Spanish youth migration made headlines in UK media, e.g. the Telegraph 2013 "The new Spanish armada is on its way Driven from home in search of work, the number of highly qualified young economic refugees taking menial jobs in Britain is growing" or The Guardian 2013 "Spain's lost generation of graduates join wave of migrants in search of jobs". Systematic assessments of these claims have to the authors' knowledge not been undertaken.

unemployment and inactivity;<sup>9</sup> second in terms of average time worked per week; third average gross hourly wages; fourth whether an employee has a permanent contract and works part- or full-time, and finally the degree of skills-occupation mismatch. As the receipt of welfare benefits among recent EU migrant citizens has been politicized and as social benefits can have a significant effect on the reservation wage, we also assess the uptake of employment-related benefits, such as unemployment benefits. During the first five years of residence EU citizens have only limited access to unemployment or social assistance benefits in the destination Member State.

#### The "Average migrant"

In the following section we present *average proportions* or *numbers* for *average young EU migrant citizens*. We do not adjust these numbers for differences in demographic make-up or educational attainment. We deliberately analyse young EU migrant citizens and their UK peers in this way as it reflects the political and public debate, which does distinguish by country of origin, but not by demographic characteristics. More theoretically, this paper is not interested in a migration effect net of other explanations, but rather the situation of a specific demographic group in UK society.

For robustness regarding findings on levels of part-time employment but also wages, we investigate gender differences within and across EU migrant citizen groups. Thereby we take account of the well-known gender differences in these labour market characteristics (for

<sup>&</sup>lt;sup>9</sup> According to this definition employed is anyone paid employment, self-employed, family worker or on a government scheme. Unemployed is anyone not employed who is looking for work and available to work. Anyone over the age of 16 not in these categories is classified as inactive cf. (Office for National Statistics 2012).

example Machin & Puhani 2003). Given the smaller sample sizes these analyses should be treated with caution.

#### **Data and statistical analyses**

The following analyses use data from the United Kingdom Quarterly Labour Force Survey (QLFS) (Office for National Statistics. Social Survey Division and Northern Ireland Statistics and Research Agency. Central Survey Unit 2015). The QLFS is the largest social survey in the UK, each quarter all adult members from 41,000 randomly selected<sup>10</sup> private households are interviewed in a rotating design. Each household stays in the survey for 5 consecutive quarters. The resulting large samples allow for an analyses of recent youth migrants in a robust and representative way (but note Martí & Ródenas 2007) and is the best dataset available to analyse recent migrants' labour market situation<sup>11</sup> (for a review on UK data on immigration see Cangiano 2010). We examine respondents from the first wave only to avoid double counting and since these have the highest response rates.<sup>12</sup>

A key challenge is the precision of estimates, as youth migrants are a small proportion of the overall number of respondents. In addition comparison across time and groups make the cell sizes small for simple year-on-year comparisons. Therefore the pre-/post-crisis period data for the years 2004-2009 and 2010-2014 are pooled (Appendix Table 2). The data are analysed

<sup>&</sup>lt;sup>10</sup> Note, since 2010 there is random selection of households in multiple occupancy, i.e. addresses with several households present, this results in a lower sampling probability of such households which is addressed through a change in survey weighting (cf. Office for National Statistics 2011, p.17). Readers should keep this in mind since it might affect the sampling of migrant households and result in underreporting.

<sup>&</sup>lt;sup>11</sup> Alternatively the Annual Population Survey provides even large sample size, however, with less detail on the respondents characteristics (cf. Ker et al. 2009).

<sup>&</sup>lt;sup>12</sup> This has become standard practice (see e.g. Dustmann et al. 2005; Drinkwater et al. 2009; Demireva 2011).

accounting for sample design (one-stage cluster sample with households as primary sampling units) and weighting<sup>13</sup>. In the subsequent analyses the confidence intervals give an indication of the sampling variability.

The occupation-qualification mismatch is measured in terms of a young person either having a higher, same or lower qualification,<sup>14</sup> compared to the median in her/his occupation group (3-digit SOC) for youth (20-34).<sup>15</sup>

The majority of analyses are estimations of proportions for the respective comparison groups. For comparison of the hourly wages these are reported as change from a base (UK youth between 2004-2009) and estimated as log-hourly wages (cf. with approach taken by Chiswick et al. 2005), adjusted for inflation using CPI (Office for National Statistics 2015)<sup>16</sup>. Usual hours worked per week are estimated using a zero-inflated poisson regression accounting for absence from work and illness (Clegg 2012). Finally, probabilities for claiming employment related benefits are estimated using a logit model controlling for respondents (ILO-defined) employment status.<sup>17</sup>

<sup>&</sup>lt;sup>13</sup> Note however, Dustmann (2010) cautions that the LFS's non-response weighting might bias results for migrants since they tend to have different non-response patterns.

<sup>&</sup>lt;sup>14</sup> Measures of skills amongst migrants are limited as the QLFS does not collect detailed information on "foreign qualifications", which is the relevant measure for *recent* migrants who have not yet acquired UK qualifications. However, the QLFS has a set of measures on the origin of a person qualification: school or university/college etc. (QULCH11, QUALCH9). From 2009 these are sufficiently detailed and available for migrants for the mismatch analysis. We regard this as a better measure than alternatives, such as "years since left school" (cf. Drinkwater et al. 2009).

<sup>&</sup>lt;sup>15</sup> For an alternative empirical approach see Altorjai (2013), however she uses a different dataset with limitations on sample size and duration.

<sup>&</sup>lt;sup>16</sup> Since we used pooled data to estimate wages for five-year periods we could not use a year-dummy approach to adjust for inflation, as suggested by (Wooldridge 2012).

<sup>&</sup>lt;sup>17</sup> Since employment benefits are legally dependent on specific employment status it necessary to control for these.

The data was analyzed in Stata 14.0 (StataCorp, College Station, TX, USA) using the survey analysis suite (svy), subpopulation estimates were calculated following West et al. (2008).

### Results

Over the two periods investigated, 2004-2009 and 2010-2014, EU migrant citizens have increased their share amongst all recent migrants, with as expected relative increases amongst migrant citizens from A8 and A2 countries (Figure 1). Notably and despite the economic crisis no *relative* increase can be observed for migrant citizens from the EU-South compared to the pre-crisis period. To express the uncertainty of the estimates, particularly given the small sample sizes of young migrants subgroups, all results are presented with confidence intervals.<sup>18</sup>

<sup>&</sup>lt;sup>18</sup>Note confidence intervals for proportions are calculated using logit transformations, and are therefore not symmetric.

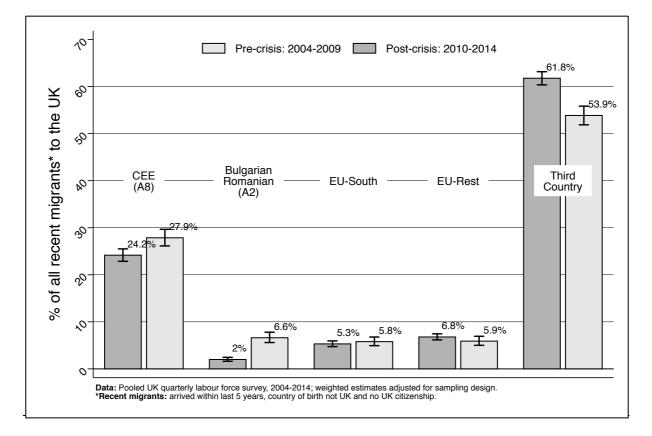
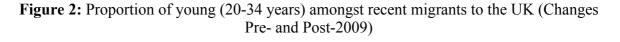
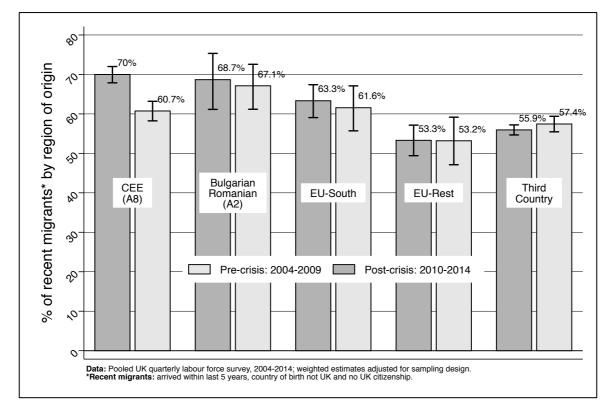


Figure 1: Distribution of recent migrants by region of origin (Proportions Pre-/Post-2009)

Youth migrants dominate amongst recent migrants irrespective of region of origin. On average about 60% of all migrants who arrived in the last 5 years and have lived at least 1 year in the UK are in the age-range of 20-34 years. Notably, in the pre-crisis years this proportion was about 70% amongst recent migrants from CEE, and has dropped in the crisis years after 2009. The overall proportion stands in contrast to UK youth in the same age bracket. They make up about 15.6% of the UK population between 16-75 years, down from 18.7% prior to 2009 (see Figure 2 below).





**Table 1**: Proportions of female and male youth amongst recent EU migrant citizens by region of origin.

	2004-2009			
Region of Origin	Male % (95% CI	) Female %(95% CI)	Male (95% CI)	Female (95% CI)
UK incl. Channel				
Islands	50.5 (50.2-50.8	3) 49.5 (49.2-49.8)	) 51.4 (51-51.8)	48.6 (48.2-49)
CEE (A8)	53.8 (52.1-55.5	5) 46.2 (44.5-47.9)	48.7 (46.6-50.8)	) 51.3 (49.2-53.4
Bulgaria & Romania				
(A2)	46.6 (40.2-53.2	2) 53.4 (46.8-59.8)	56 (50.7-61.1)	) 44 (38.91-49.
EU-South	49.9 (45.41-54	50.1 (45.5-54.6)	48.9 (42.8-55.1)	51.1 (44.91-57.
EU-Rest	49.6 (45.7-53.5	5) 50.4 (46.5-54.3)	) 44.2 (36.8-51.9	55.8 (48.1-63.2
Third Country	50.6 (49.3-51.9	49.4 (48.1-50.7)	49.7 (47.5-51.8	50.3 (48.2-52.5

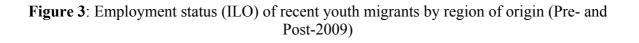
The gender composition of young EU migrant citizens appears to be similar or statistically indistinguishable from their UK peers. One exception pose youth from CEE, who prior to the

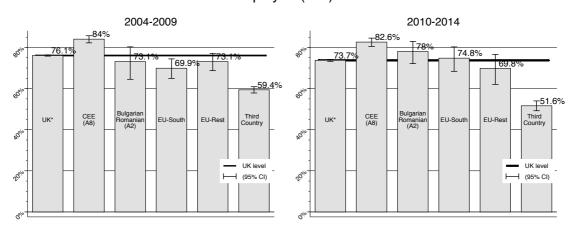
2010 were proportionally more male, whilst post-2010 the ratio has reversed and there appear to be more female youth from CEE (see Table 1).

In the following figures the vertical line expresses the confidence intervals for UK youth, for easier comparison. The line-width corresponds to the width of the respective confidence interval.

In terms of employment status no significant differences can be found between young people born in the UK and youth migrants from EU-South countries as well as Bulgarian and Romania (see Figure 3). This contrasts strongly with the situation of migrants from CEE countries, who have on average, higher levels of employment and lower levels of both inactivity and unemployment than their UK peers. By contrast their TCN peers have lower employment and higher inactivity levels. In addition, there seems to be a clear change of these levels in the years after 2009; the differences to UK youth have become more pronounced. Young people from the EU-Rest have statistically significantly higher levels of inactivity with simultaneously lower levels of unemployment than UK youth. Given the ILO classification of employment status this might be attributed to a high number of University students amongst this group.

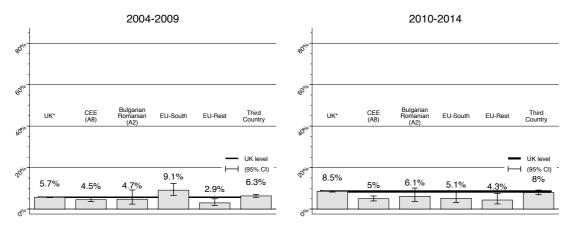
These crude indicators seem to suggest that young EU migrant citizens in Britain are similarly integrated into the labour market as their UK peers, with CEE migrants showing much higher employment rates.



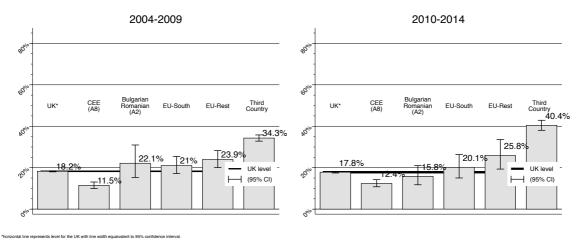


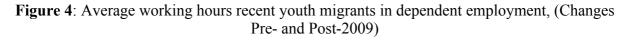
Employed (ILO)

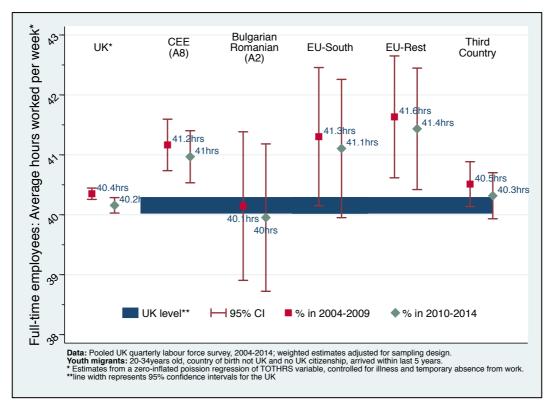
#### Unemployed (ILO)



Inactive (ILO)







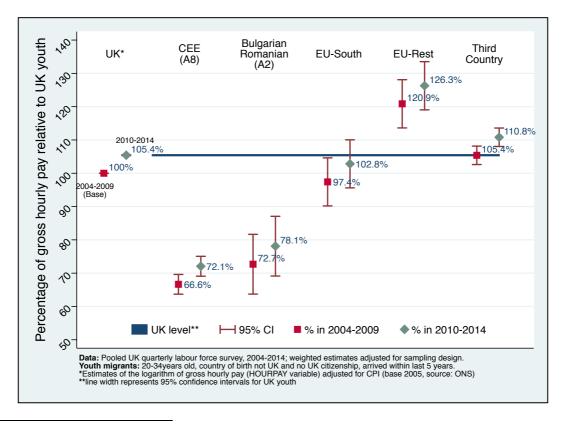
A striking finding is that young EU migrant citizens from CEE and the EU-Rest on average work significantly *longer* than their UK peers.<sup>19</sup> This finding holds both in case of full-time (Figure 4) and part-time employed youth (Appendix Figures 1). These numbers pertain to employed youth only and are thus in their magnitude not affected by the different levels of employment in the respective groups.

When we compare gross hourly wages for young migrants in the UK (Figure 5) stark differences by region of origin are immediately obvious. Young migrant citizens from CEE as well as Bulgaria and Romania have on average lower gross hourly wages than their UK peers

<sup>&</sup>lt;sup>19</sup> The confidence intervals for all EU migrant groups overlap across regions of origin and over time.

(about 20% less). However, Bulgarian and Romanian EU migrant citizens have higher hourly wages than the CEE peers. This might be due transition arrangements restricting the freedom of movement largely to high-skilled workers and the self-employed from Bulgaria and Romania until the end of 2013. Migrant citizens from the EU-South have an hourly pay comparable to UK youths, whilst the EU-Rest and to a lesser extent TCNs have higher hourly wages. Adjusted for inflation hourly pay for UK youths has increased in the post-2009 period; however, a similar trend for the respective migrants cannot be observed.<sup>20</sup> – It is worth noting, that income differences also exist for *part-time* employed, here again young EU migrant citizens from the CEE region have significantly lower wages, together with TCN youth (see Appendix Figure 2).

Figure 5: Differences in gross hourly pay for recent, full-time employed youth migrants and UK youth, (Changes Pre- and Post-2009)



<sup>&</sup>lt;sup>20</sup> We could also not find significant difference in the changes between the youth groups as separate interaction effects were not significant, see Appendix Table 3.

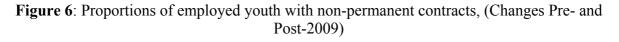
When looking at the gross hourly wages *by gender* (Table 2) for full-time employed youth, we only find significant gender pay gaps for UK and CEE youth. Notably, when not distinguishing full- and part-time employees, the expected gender pay gaps exist with one clear exception, i.e. youth from Bulgaria and Romania. They seem not to exhibit gender differentials in their (low) wages. Strictly speaking the same applies for youth from the rest of the world, albeit in a much less clear-cut way (See Appendix Figure 2).

Table 2: Gross hourly pay differences amongst young EU migrant citizens by gender

Gender differences in gross hourly pay for recent, full-time employed youth migrants and UK youth							d UK youth,	
(Changes Pre- and Post-2009)relative to pre-crisis base (male).								
	2004-	-2009			2010-2014			
Region of Origin	Male	(95% CI)	Female	e (95% CI)	Male	(95% CI)	Female	(95% CI)
UK incl. Channel								
Islands	100	(100-100)	93.4	(92.61-94.11	105.4	(105.3-105.	598.8	(98-99.61)
CEE (A8)	67.4	(63.91-70.8)	59	(55.7-62.3)	72.8	(69.3-76.3)	64.4	(61.1-67.7)
Bulgaria & Romania								
(A2)	71.2	(60.6-81.81)	67.7	(53.5-81.81)	76.7	(66.11-87.2)	73.1	(59-87.2)
EU-South	101.2	(91.31-111.2)	86.7	(77.5-95.91)	106.7	(96.7-116.6)	92.1	(82.91-101.3
EU-Rest	125.8	(114.7-136.9)	109.8	(102.3-117.4	131.2	(120.2-142.)	3115.3	(107.7-122.8
Third Country	105	(101.5-108.5)	99.2	(95.2-103.2)	110.4	(107-113.9)	104.6	(100.6-108.6

Data: Pooled UK quarterly labour force survey, 2004-2014; weighted estimates adjusted for sampling design.

The following analyses examine whether a job is permanent. Amongst youth in employment, Figure 6 shows significantly higher levels of temporary contracts among all migrant groups, except for A2 migrants, compared to UK youth, which again might be a consequence of the transition arrangements in place until January 2014.



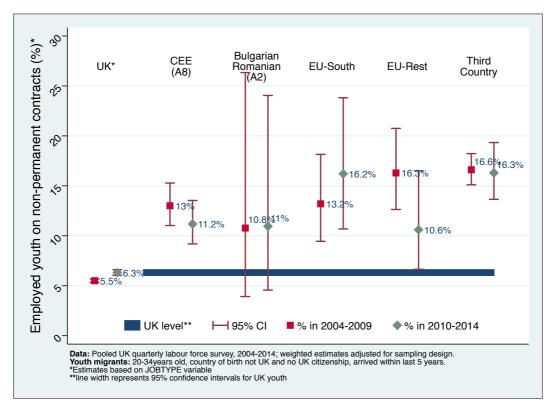
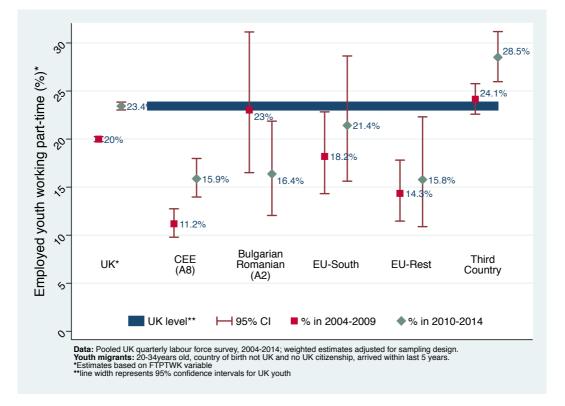


Figure 7: Proportions of employed youth working part-time, (Changes Pre- and Post-2009).



In keeping with the number of hours worked, EU migrant citizens from CEE, Southern Europe as well as the rest of the EU have lower rates of part-time work than their UK counterparts (Figure 7). This same conclusion for migrants from Bulgaria and Romania is only warranted for the post-2009 cohort. Again, migrants from the rest of the world defined the overall pattern and experience *higher* levels of part-time work.

**Table 3**: Part-time employment amongst young EU migrant citizens by gender, (Changes Preand Post-2009)

	2004-2009	2010-2014				
Region of Origin	Male % (95% CI) Fe	emale %(95% CI)Ma	ale % (95% CI)	Female %(95% CI)		
UK incl. Channel						
Islands	8.2 (7.9-8.4)	32.6 (32.2-33.1	12.2 (11.7-12.7)	35.7 (35-36.3)		
CEE (A8)	4.2 (3.1-5.8)	19.6 (17-22.4)	7.4 (5.6-9.8)	24.6 (21.4-28.1)		
Bulgaria & Romania						
(A2)	10.2 (4.7-20.7)	36.1 (25.6-48.2	6.2 (3.3-11.5)	30.3 (22.8-38.9)		
EU-South	10.8 (7.101-16.3	26.1 (19.8-33.6	17.6 (10.5-28)	25.5 (17.8-34.9)		
EU-Rest	7.6 (4.7-12)	21.4 (16.6-27)	9.7 (3.8-22.6)	20.9 (14.5-29.2)		
Third Country	21 (19-23.2)	28 (25.8-30.2	27.1 (23.6-30.9)	30.2 (26.8-33.9)		

Data: Pooled UK quarterly labour force survey, 2004-2014; weighted estimates adjusted for sampling design. Youth migrants: 20-34 years old, country of birth not UK and no UK citizenship, arrived within last 5 years. Estimates based on FTPTWK variable.

As expected, female youth are more likely than male youth to be employed on part-time than full-time contracts (Table 3). Interestingly, this gender gap is statistically no longer distinguishable amongst EU-South, third country youth as well as EU-Rest in the post-crisis period. We do find the same regional stratification of these employment patterns as for the overall results replicated in both gender groups, with for example both male and female CEE youth working less often part-time than their UK male and female peers.

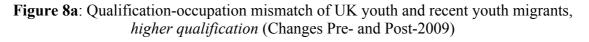
The following analyses regarding qualification are rather rough due to the lack of detailed data for the respective occupation-qualification-migrant-subgroups. Data is only available

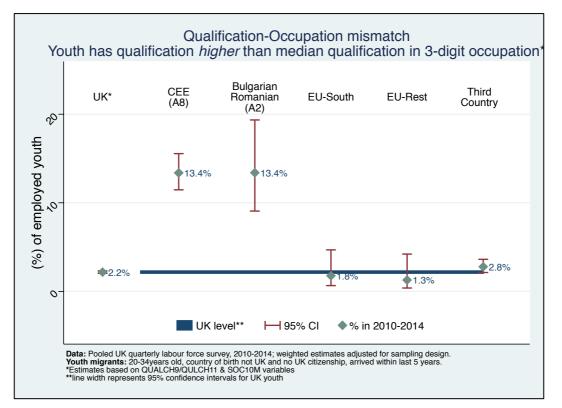
from the fourth quarter 2009, and the analyses presented here focus on post-2009 years. Figure 8a shows the proportions of youth migrants who have a *higher* qualification than the median qualification in their occupation group for youth, Figure 8b shows the opposite youth working in occupations with *lower* qualification than those expected from the occupations median, thus for example the median qualification is a college or university qualification but a young person only holds a school certificate.<sup>21</sup>

Based on these results there seems to be a *negative* qualification-occupation mismatch for youth migrants from CEE and Bulgaria/Romania. In line with the expectation of a stratification by region, there is some evidence for EU-Rest migrants to having obtained *better* occupations than expected given their qualification, surprisingly this seems also to hold for TCN youth and those from the EU-South.

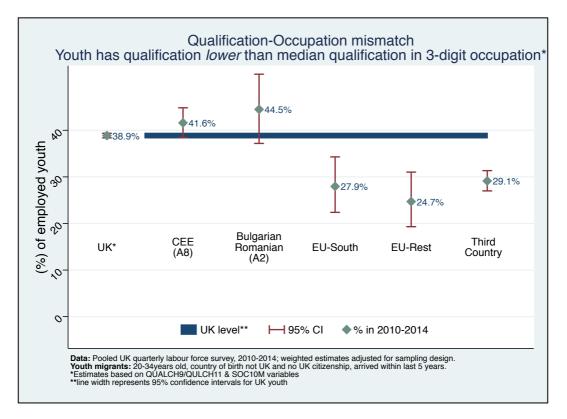
Some of these differences could be attributed to the sectoral distribution of recent young migrant workers (Appendix Figures 3). Recent young CEE migrant citizens are much more likely than UK nationals to work in manufacturing, whilst young EU migrant citizens from A2 countries are more likely to work in construction, than any other group. Interesting in this context is the large proportion of A2 nationals who work in financial services. This suggests a u-shaped distribution of this EU migrant citizen group over high- and low-pay sectors, which might indicate an effect of the UK transition regime, allowing self-employed (construction workers) and high-skilled EU migrant citizen from A2 countries to work in the UK before full freedom of movement was implemented in January 2014.

<sup>&</sup>lt;sup>21</sup> This measure is problematic in many ways, as it does not account for qualitative differences in university and college qualifications and does not reflect actual skills. Following Demireva (2011), we could have used ISCED97 educational qualifications however, the UK LFS currently does not provide a more detailed measure of foreign qualifications (see Office for National Statistics 2009, p.251f.) and a majority of recent migrants by our definition only holds a foreign qualification.





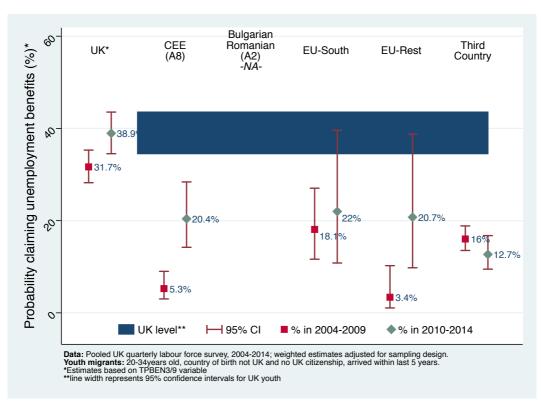
**Figure 8b**: Qualification-occupation mismatch of UK youth and recent youth migrants, *lower qualification* (Changes Pre- and Post-2009)



The following section briefly investigates unemployment benefit receipt. Figure 9 depicts for unemployed youth the probability of *actual* unemployment benefit uptake. There appears to be a substantially higher probability for claiming unemployment benefits amongst UK youth compared to migrant youth from CEE and TCNs. The probability of benefit uptake for youth from EU-South and EU-Rest was significantly lower pre-2009, however post-2009 the probability is no longer statistically distinguishable. In addition there seems to be a higher probability of claiming unemployment benefits by A8 youth migrants in the post-2009 period.

The reader should note the considerable uncertainty surrounding these findings as most strongly highlighted by the thick blue line expressing the estimate of the probability of a UK youth claiming unemployment benefits. The width of the line indicates this uncertainty in terms of a 95% confidence interval.

Figure 9: Probability of unemployed youth migrant claiming unemployment benefit, (Changes Pre- and Post-2009)



### Discussion

#### **Summary**

Our data show a shift in the composition of migration from the 'rest of the world' towards relative more EU migrant citizens in the UK. Sixty per cent of these recent migrants are between 20 and 34 years. Young EU migrant citizens appear well integrated in terms of employment, with migrants from CEE/Rest of Europe having *higher* employment rates than their UK peers. Youth migrants work – on average – longer hours than their UK peers, are less likely to work in permanent contracts, with CEE/Rest of Europe also being less likely to have part-time contracts. These variables suggest that migrants are less well integrated into employment in terms of job security and quality. This seems to be a general pattern for EU migrant citizens, in line with past research (Reyneri & Fullin 2011).

By contrast, there seems to be a clear *country of origin* stratification when it comes to the match of qualifications and occupations as well as pay equality. EU migrant citizens from the Rest of the EU are paid *more* than their UK peers, and tend to have a better occupation to qualification fit. The opposite appears to be the case for youth migrant citizens from CEE and A2 countries. Interestingly, only a small difference and no qualifications-occupation mismatch seem to exist for Southern Europeans. Although this needs further scrutiny, we speculate that the labour market stratification of EU migrant citizens is very likely the outcome of institutional arrangements within the EU. As Member States can exclude migrant EU jobseekers from the receipt of means-tested social assistance during the first three months of residence and the jobseekers can export unemployment benefits from the country of origin for a minimum duration of three months, the reservation wage of EU migrant jobseekers will differ based on the generosity of the unemployment insurance systems and the wage level in

the country of origin. Based on the much lower wage levels and less generous unemployment schemes in CEE countries, young migrant job seekers from these countries can only export an unemployment benefit, which is very likely to provide them with a reservation wage below the subsistence level. Subsequently, this extremely low reservation wage very likely forces jobseekers arriving from CEE countries without a job offer to take the next best job irrespective of conditions and pay in order to survive, if they cannot rely on other support (Bruzelius & Seeleib-Kaiser 2016).

Our brief analysis with regard to receipt of employment-related benefits seems to suggest that, unemployed youth migrants, more or less irrespective of their region of origin within the EU or globally, have a lower probability of claiming unemployment benefits than UK nationals. This is very much in line with our expectations based on the restrictiveness of means-tested benefits for EU migrant citizens during their first five years of residence.

Finally, across our analyses there seems to be little change other than the compositional change, between the pre-/post- crisis labour market integration of youth migrants.

#### **Limitations**

There are three key limitations in the present study: A) The sample sizes of the migrant groups studied, a problem that has perpetually hampered research on migrants in the UK (cf. Martí & Ródenas 2007). B) There is likely to be some bias from migrant specific non-response patterns, which will impact on the comparison between migrants and natives. C) Our measure of occupation-qualification mismatch is rather imprecise and crucially does not map *skill*-mismatches, which arguably are more relevant.

However, the pooling of data has provided us with a reasonably large number of observations even in subpopulations of the respective migrant groups. Furthermore to date little research exists to the authors' knowledge investigating migrants' response patterns, and providing alternative weights for non-response. Finally, compared to existing literature our qualifications-mismatch measure has the advantage to be readily applicable and more precise for recent immigrants than measures of qualifications and skills obtained in the UK, moreover the findings are consistent with previous literature (Altorjai 2013).

Analytically the study is limited in two ways; on the one hand the pooling of years has led to a loss of overtime changes. On the other hand the study is predominately univariate and descriptive of the average migrants. Whilst the former is a practical necessity, with a theoretical reason for the year cut-off, the latter has the advantage to reflect the actual demographic group in the UK, rather than narrowly, for example, investigating a "migration effect".

### Conclusion

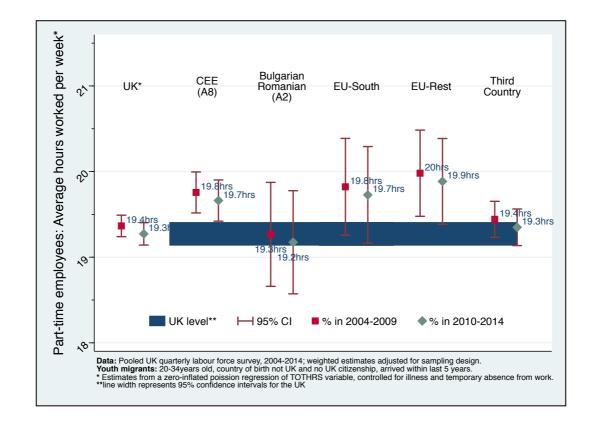
We set out to investigate the extent to which young EU migrant citizens are integrated into the UK labour market. In short, they are well integrated in terms of employment, but not in terms of job quality job and even less in terms to social protection in case of unemployment.

Furthermore, we wanted to assess whether youth labour market integration was related to the macro-economic changes following the post-2008 crisis and migrants' country of origin. We did not find compelling evidence for a crisis effect. However, the country of origin, and therefore possibly different welfare regimes with varying degrees of effective 'exportability' of unemployment benefits, labour markets and economic situations in countries of origin, seem to be related to the quality of jobs EU youth migrant citizens take or are able to find in

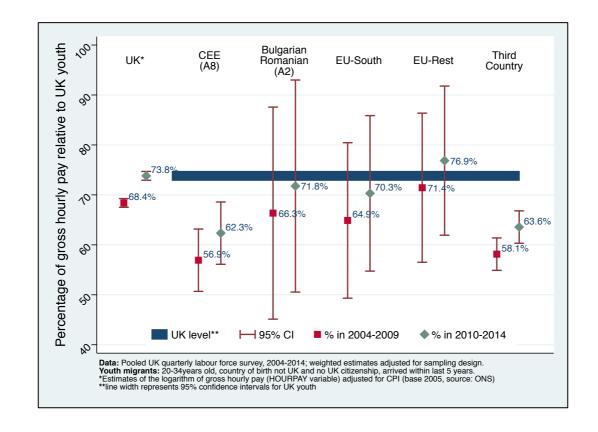
the country of destination. We do find a stratification of young EU migrant citizens' labour market outcomes by region of origin.

The analyses open up at least two broad and politically relevant questions: First, how do EU migrant citizens deal with the lack of labour market integration or spells of unemployment. A second more cross-national comparative question relates to the country hierarchies in terms of labour market outcomes of young EU migrant citizens in the UK, which raises the question about the stratification of EU citizenship more generally.

# Appendix

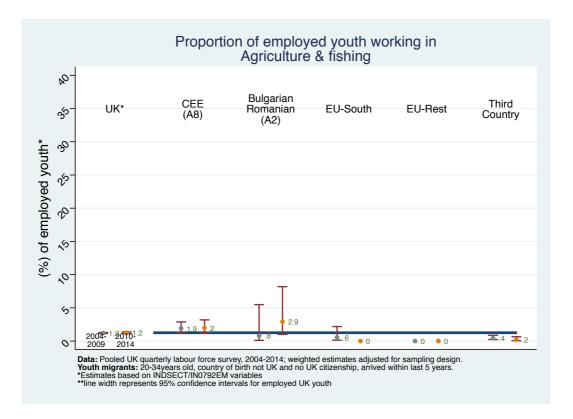


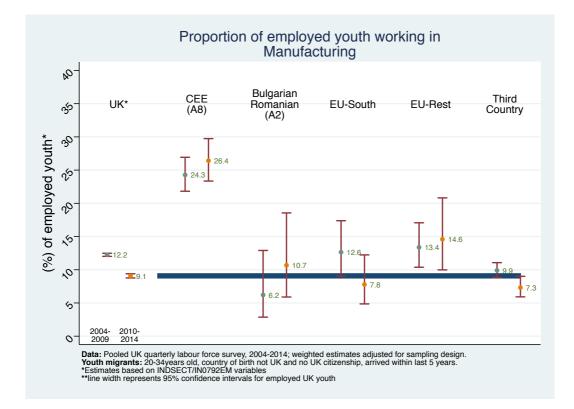
#### Appendix 1 – Average weekly working hours amongst part-time employed youth.

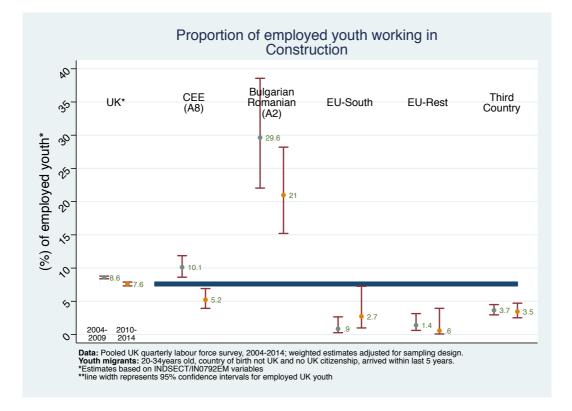


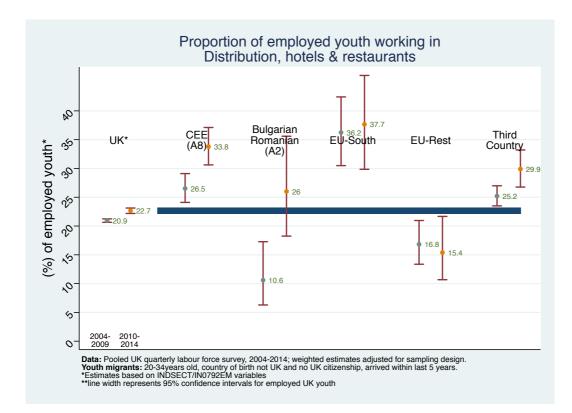
#### Appendix 2 – Average hourly wages amongst part-time employed youth.

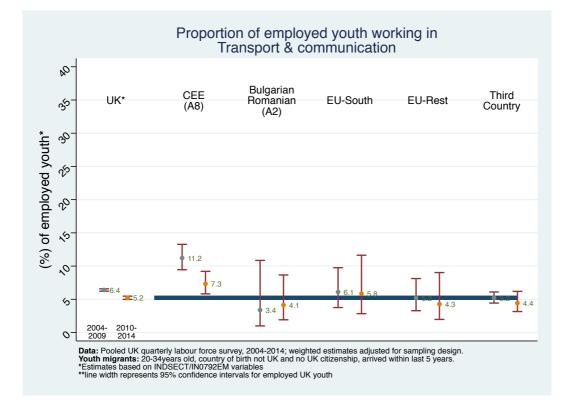
### Appendix 3 – Sector of Employment

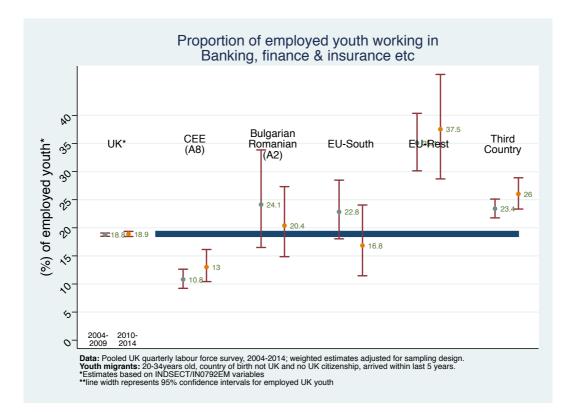


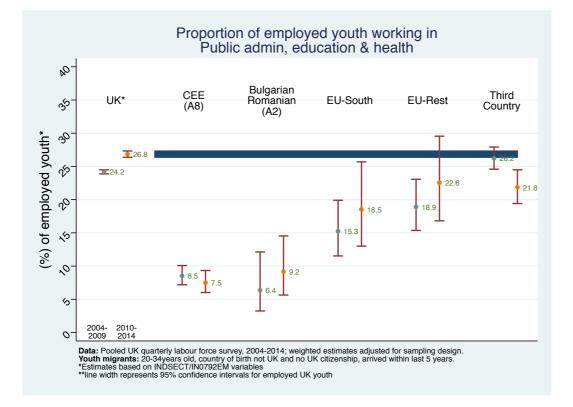


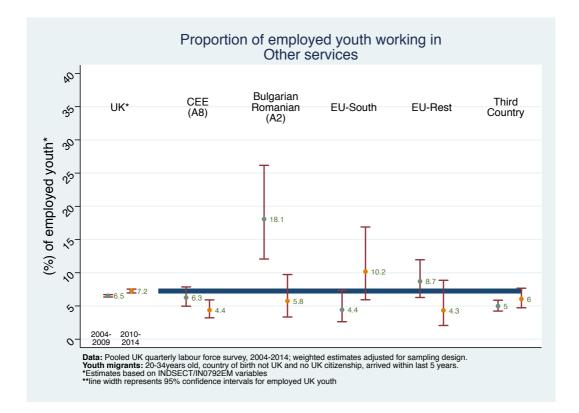












## **Appendix – Tables**

### Appendix Table 1

Average rese	ervation wages of	f average wages f	or youth across the
10.		Net	
	Average Net	Replacement	
	Annual Wage,	Rate, single, 67	Weekly Net
	67% AW	AW, no	<b>Reservation Wage</b>
	(Euro)*	children (%)**	(Euro)
Austria	20103	55.0	212.6
Belgium	19812	89.6	341.5
Denmark	22429	83.9	361.7
Finland	21712	59.2	247.2
France	18147	69.1	241.1
Germany	19618	58.8	221.8
Ireland	19308	49.8	184.7
Netherlands	23927	75.8	348.6
Sweden	23496	62.9	284.4
United Kingd	l 22295	19.8	85.0
EU-REST			252.9
Greece	11162	38.7	83.1
Italy	14649	72.0	202.9
Malta	12232	39.0	91.8
Portugal	9481	75.0	136.8
Spain	14220	77.6	212.2
EU-SOUTH			145.4
Czech Repub		65.0	
Estonia	6448	54.8	68.0
Hungary	4287	67.6	55.7
Latvia	4407	85.0	72.0
Lithuania	4098	55.1	43.4
Poland	5016	50.8	49.0
Slovak Repul		61.9	64.4
Slovenia	8455	85.6	139.3
A8 CEE			71.2
Dulessia	2642	76 -	20.4
Bulgaria	2612	76.5	38.4
Romania	2833	48.1	26.2
A2			32.3

#### Source:

\*Eurostat: Annual net earnings 67%AW, no children, 2013; Table [earn\_nt\_net] Update: 18-12-2015; last accessed 2016 Jan. 28.

Benefit Models: Version 18-12-2015, http://www.oecd.org/els/benefits-and-wages-statistics.htm; last accessed 2016 Jan 28.

### Appendix Table 2

Observations in the pooled QLFS				
	2004-		2010-	
	2009		2014	
Group of recent (last 5 years) youth (20-34) migrants				
(Country birth & citizenship)	Obs.	%	Obs.	%
UK incl. Canal Islands	122318	92.8	65159	86.7
<b>CEE (A8)</b>	2210	1.7	1699	2.3
Bulgaria & Romania (A2)	163	0.1	366	0.5
EU-South	472	0.4	333	0.4
EU-Rest	575	0.4	301	0.4
Third Country	5608	4.3	2949	3.9
Missing	402	0.3	4335	5.8
Total:	131748	100	75142	100

### Appendix Table 3

	Same changes between pre-/post crisis			Changes pre-/post-crisis varying by group			
	Coeff.	p-value	95% CI	Coeff.	p-value	95% CI	
Post-2009 dummy	0.047	0.000	(0.042 - 0.051)	0.213	0.000	(0.183 - 0.244)	
Migrant groups							
CEE (A8)	-0.354	0.000	(-0.3840.324)	-0.374	0.000	(-0.4040.344)	
Bulgaria & Romania (A2)	-0.274	0.000	(-0.3570.190)	-0.257	0.016	(-0.4670.047)	
EU-South	-0.087	0.012	(-0.1540.019)	-0.109	0.007	(-0.1870.030)	
EU-Rest	0.143	0.000	(0.072 - 0.214)	0.086	0.049	(0.001 - 0.171)	
Third Country	-0.070	0.000	(-0.0990.042)	-0.082	0.000	(-0.1160.048)	
Year*Migrant group interacti	ons						
2009#CEE				0.044	0.175	(-0.020 - 0.108)	
2009#Bulgaria & Romania				-0.015	0.899	(-0.242 - 0.212)	
2009#EU-South				0.047	0.508	(-0.091 - 0.184)	
2009#EU-Rest				0.147	0.051	(-0.000 - 0.295)	
2009#Third Country				0.026	0.403	(-0.034 - 0.086)	
Constant	-90.925	0.000	(-100.36981.480)	2.296	0.000	(2.277 - 2.315)	
N (subpopulation)	13395			13395			
R2	0.04			0.095			

### **Bibliography**

- Algan, Y. et al., 2010. The Economic Situation of First and Second Generation Immigrants in France, Germany and the United Kingdom. *Economic Journal*, 120(542), pp.F4–F30. Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0297.2009.02338.x/full.
- Altorjai, S., 2013. Over-qualification of immigrants in the UK. *Institute for Social and Economic Research Working Papers*, 2013-11.
- Andrews, M., Clark, K. & Whittaker, W., 2007. *The Employment and Earnings of Migrants in Great Britain*, Bonn. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1026245.
- Ballarino, G. & Panichella, N., 2015. The Occupational Integration of Male Migrants in Western European Countries: Assimilation or Persistent Disadvantage? *International Migration*, 53(2), pp.338–352. Available at: http://doi.wiley.com/10.1111/imig.12105.
- Bell, D.N.F. & Blanchflower, D.G., 2010. UK Unemployment in the Great Recessionblanch. National Institute Economic Review, 214(1), pp.R3–R25. Available at: http://ner.sagepub.com/content/214/1/R3.short [Accessed February 5, 2016].
- Borjas, G.J., 1987. Self-selection and the earnings of immigrants. *The American Economic Review*, 77, pp.531–553.
- Bruzelius, C. & Seeleib-Kaiser, M., 2016. European citizenship and social rights. In P. Kennett & N. Lendvai, eds. *A handbook of European social policy*. Cheltenham: Edward Elgar, p. forthcoming.
- Brzinsky-Fay, C., 2007. Lost in transition? Labour market entry sequences of school leavers in Europe. *European Sociological Review*, 23(4), pp.409–422.
- Cangiano, A., 2010. UK Data Sources on International Migration and the Migrant Population : A Review and Appraisal, Oxford.
- Chiswick, B.R., 1978. The effect of Americanisation on the earnings of foreign-born men. *Journal of Political Economy*, 86(5), pp.897–921.
- Chiswick, B.R., Lee, Y.L. & Miller, P.W., 2005. Immigrant Earnings: a Longitudinal Analysis. *Review of Income and Wealth*, 51(4), pp.485–503. Available at: http://doi.wiley.com/10.1111/j.1475-4991.2005.00165.x.
- Chiswick, B.R. & Miller, P.W., 2009. The international transferability of immigrants' human capital. *Economics* of *Education Review*, 28(2), pp.162–169. Available at:

http://www.sciencedirect.com/science/article/pii/S027277570800099X [Accessed September 9, 2015].

- Chung, H., Bekker, S. & Houwing, H., 2012. Young people and the post-recession labour market in the context of Europe 2020. *Transfer: European Review of Labour and Research*, 18(3), pp.301–317. Available at: http://trs.sagepub.com/cgi/doi/10.1177/1024258912448590.
- Clark, K. & Lindley, J., 2009. Immigrant assimilation pre and post labour market entry: Evidence from the UK Labour Force Survey. *Journal of Population Economics*, 22(1), pp.175–198.
- Clark, K., Robinson, C. & Drinkwater, S., 2014. Migration, Economic Crisis and Adjustment in the UK Migration, Economic Crisis and Adjustment in the UK. *IZA Discussion Paper Series*, (8410).
- Clasen, J. & Clegg, D., 2011. Regulating the risk of unemployment National adaptions to post-industrial labour markets in Europe., Oxford: Oxford University Press.
- Clegg, R., 2012. Guide to Hours worked. *Office for National Statistics A Guide to Labour Market Statistics*. Available at: http://www.ons.gov.uk/ons/rel/lms/labour-market-guidance/guide-to-labour-market-statistics/guide-to-lm-statistics.html#tab-Hours-of-Work.
- Demireva, N., 2011. New Migrants in the UK: Employment Patterns and Occupational Attainment. *Journal of Ethnic and Migration Studies*, 37(4), pp.637–655.
- Demireva, N. & Kesler, C., 2011. The curse of inopportune transitions: The labour market behaviour of immigrants and natives in the UK. *International Journal of Comparative Sociology*, 52(4), pp.306–326. Available at: http://cos.sagepub.com/cgi/doi/10.1177/0020715211412116.
- Drinkwater, S., Eade, J. & Garapich, M., 2009. Poles Apart? EU Enlargement and the Labour Market Outcomes of Immigrants in the United Kingdom. *International Migration*, 47(1), pp.161–190. Available at: http://doi.wiley.com/10.1111/j.1468-2435.2008.00500.x.
- Dustmann, C., 1999. Temporary Migration, Human Capital, and Language Fluency of Migrants. *Scandinavian Journal of Economics*, 101(2), pp.297–314. Available at: http://doi.wiley.com/10.1111/1467-9442.00158 [Accessed October 4, 2015].
- Dustmann, C., Fabbri, F. & Preston, I., 2005. The impact of immigration on the British labour market. *Economic Journal*, 115(1991), pp.324–341.
- Emmenegger, P. et al., 2012. The Age of Dualization, New York, Oxford: Oxford University Press.

European Council, 2013. Youth Employment Initiative. Available at:

- http://ec.europa.eu/social/main.jsp?catId=1176&langId=en [Accessed September 28, 2015]. Eurostat, 2015. Total Unemployment Rate (tsdec450). *Data table*. Available at:
- http://ec.europa.eu/eurostat/web/lfs/data/main-tables [Accessed December 29, 2015].
- Eurostat, 2014. Unemployment rates by sex, age and nationality (%) [lfsa\_urgan] [Online]. Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfsa\_ergan&lang=en [Accessed October 29, 2014].
- Ferragina, E., Seeleib-Kaiser, M. & Spreckelsen, T., 2015. The Four Worlds of "Welfare Reality" Social Risks and Outcomes in Europe. *Social Policy and Society*, 14(02), pp.287–307. Available at: http://www.journals.cambridge.org/abstract\_S1474746414000530.
- Ferrera, M., 1996. The "Southern Model" of Welfare in Social Europe. *Journal of European Social Policy*, 6, pp.17–37.
- Fleischmann, F. & Dronkers, J., 2010. Unemployment among immigrants in European labour markets: an analysis of origin and destination effects. *Work, Employment & Society*, 24(2), pp.337–354. Available at: http://wes.sagepub.com/content/24/2/337.abstract [Accessed June 10, 2015].
- Gagliardi, L. & Lemos, S., 2015. Evidence on immigrants' assimilation into recipient labour markets using UK longitudinal data between 1981 and 2006. *Journal of Economic Geography*, pp.1–37. Available at: http://joeg.oxfordjournals.org/cgi/doi/10.1093/jeg/lbv009.
- Gangl, M., 2003. The structure of labour market entry in Europe: a typological analysis. In W. Müller & M. Gangl, eds. *Transitions from Education to Work in Europe: The Integration of Youth into EU Labour Markets*. Oxford: Oxford University Press, pp. 108–129.
- Guzi, M., Kahanec, M. & Kureková, L.M., 2015. What Explains Immigrant-Native Gaps in European Labor Markets: The Role of Institutions. *IZA Discussion Paper Series*, (8847). Available at: http://ftp.iza.org/dp8847.pdf.
- Heath, A.F., Rothon, C. & Kilpi, E., 2008. The Second Generation in Western Europe: Education, Unemployment, and Occupational Attainment. *Annual Review of Sociology*, 34(1), pp.211–235. Available at: http://www.annualreviews.org.chain.kent.ac.uk/doi/abs/10.1146/annurev.soc.34.040507.134728 [Accessed October 4, 2015].
- Hooijer, G. & Picot, G., 2015. European Welfare States and Migrant Poverty : The Institutional Determinants of Disadvantage. *Comparative Political Studies*, electronic, pp.1–26.
- Ker, D., Zumpe, J. & Blake, A., 2009. Estimating International Migration: An exploration of the definitional differences between the Labour Force Survey, Annual Population Survey, International Passenger Survey and Long-Term International Migration, Available at: www.ons.gov.uk/ons/rel/migration1/population-bycountry-of-birth-and-nationality/sources-of-international-migration-data/differences-between-sources-ofinternational-migration-data.pdf.
- Kogan, I. et al., 2011. Individual Resources and Structural Constraints in Immigrants' Labour Market Integration. In M. Wingens et al., eds. A Life-Course Perspective on Migration and Integration. Dordrecht, Heidelberg, London, New York: Springer Netherlands, pp. 75–100.
- Kogan, I., 2006. Labour Markets and Economic Incorporation among Recent Immigrants in Europe. *Social Forces*, 85(2), pp.697–721.
- Kogan, I., 2007. Working Through Barriers. Host Countries Institutions and Immi- grant Labour Market Performance in Europe, Dordrecht: Springer.
- Longhi, S. & Rokicka, M., 2012. Eastern European Immigrants in the UK Before and After the 2004 European Enlargement \*. DNORFACE migration discussion paper, 30, pp.1–26. Available at: ?www.norface-migration.org.
- Machin, S. & Puhani, P.A., 2003. Subject of degree and the gender wage differential: evidence from the UK and Germany. *Economics Letters*, 79(3), pp.393–400. Available at:
- http://www.sciencedirect.com/science/article/pii/S0165176503000272 [Accessed February 4, 2016].
- Martí, M. & Ródenas, C., 2007. Migration Estimation Based on the Labour Force Survey : An EU-15 Perspective. *International Migration Review*, 41(1), pp.101–126.
- McCollum, D. & Findlay, A., 2011. Trends in A8 migration to the UK during the recession. *Population trends*, (145), pp.73–85. Available at: http://www.ncbi.nlm.nih.gov/pubmed/21987014.
- Nielsen, H.S. et al., 2004. Qualifications, discrimination, or assimilation? An extended framework for analysing immigrant wage gaps. *Empirical Economics*, 29(4), pp.855–883. Available at: http://link.springer.com/10.1007/s00181-004-0221-9.
- Office for National Statistics, 2011. Background and methodology 2011. User Guide LFS, Vol. 1(August), pp.1–55.

- Office for National Statistics, 2015. Consumer Price Index 1988-2015 (2005 prices), Available at: http://www.ons.gov.uk/ons/datasets-and-tables/data-selector.html?cdid=D7BT&dataset=mm23&tableid=1.1.
- Office for National Statistics, 2009. Details of LFS variables. *User Guide LFS*, 3, pp.1–379. Available at: http://www.ons.gov.uk/ons/guide-method/method-quality/specific/labour-market/labour-market-statistics/index.html.

Office for National Statistics, 2012. LFS Standard Derived Variables (v.1). User Guide - LFS, 4, pp.1-419.

- Office for National Statistics. Social Survey Division and Northern Ireland Statistics and Research Agency. Central Survey Unit, 2015. Quarterly Labour Force Survey: Special Licence Access [computer file]. In Colchester, Essex: UK Data Archive [distributor], p. Files from 2004 q1–2014 q4.
- Reyneri, E. & Fullin, G., 2011. Labour Market Penalties of New Immigrants in New and Old Receiving West European Countries. *International Migration*, 49(1), pp.31–57. Available at: http://doi.wiley.com/10.1111/j.1468-2435.2009.00593.x [Accessed October 5, 2015].
- Rienzo, C., 2013. Migrants in the UK Labour Market : An Overview. Migration Observatory briefing, COMPAS, University of Oxford, UK, 3.
- Schmelzer, P., 2008. Increasing employment instability among young people? Labor market entries and early careers in Great Britain since the 1980s. In K. Bukodi, E., Blossfeld, H. P., Buchholz, S. & Kurz, ed. *Young workers, globalization and the labour market: comparing early working life in eleven countries*. Cheltenham: Edward Elgar, pp. 77–102.
- Schmillen, A. & Umkehrer, M., 2013. The scars of youth : effects of early-career unemployment on future unemployment experience, Nürnberg.
- Seeleib-Kaiser, M. & Spreckelsen, T.F., 2016. Youth labour market outsiderness: The "Nordic model" compared with Britain and Germany. In R. Halvorsen & B. Hvinden, eds. *Youth diversity and employment: Comparative perspective on labour market policies*. Cheltenham: Edward Elgar, p. forthcoming.
- Van Tubergen, F., Maas, I. & Flap, H., 2004. The Economic Incorporation of Immigrants in 18 Western Societies: Origin, Destination, and Community Effects. *American Sociological Review*, 69(5), pp.704–727. Available at: http://asr.sagepub.com/content/69/5/704.abstract [Accessed June 10, 2015].
- West, B.T., Berglund, P. & Heeringa, S.G., 2008. A closer examination of subpopulation analysis of complexsample survey data. *Stata Journal*, 8(4), pp.520–531.
- Wooldridge, J.M., 2012. Introduction to Econometrics A modern approach 5th ed., Mason: South Western College.