

Differences in Labour Market Integration of Refugees in European Countries

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Abstract

There is insufficient research on the question: why are refugees better integrated in some countries than in others? In addition, there are few comparative studies describing differences in integration outcomes of refugees. This article investigates economic integration across eight European countries, in the year 2008, through the indicators of employment, quality of jobs and overqualification. None of the countries studied demonstrated a high level of economic integration of refugees. In Greece refugee employment opportunities were almost equal to those of natives, but the quality of employment and overqualification rates were much worse. On the contrary, in the UK, the chances of getting a "good job" and rates of skill mismatch are similar, but the probability of refugees finding employment is much lower. Other countries revealed moderate disadvantages for refugees in the labour market, with Norway as a positive outlier. The reasons for these disparities may lie in the variations between types of welfare states, but further research is needed.

Resumo

Diferenças na Integração de Refugiados no Mercado Laboral de Países Europeus

Não existe investigação suficiente sobre a questão: porque é que os refugiados são mais bem integrados nalguns países do que noutros? Além disso, existem poucos estudos comparativos que descrevam as diferenças dos resultados da integração dos migrantes humanitários. Este artigo investiga a integração económica em oito países europeus, em 2008, através de indicadores como o emprego, a qualidade dos trabalhos e a sobrequalificação. Nenhum país demonstrou um nível elevado de integração económica desses migrantes. Na Grécia, as suas oportunidades de emprego são quase iguais às dos nacionais, mas a qualidade do emprego e as taxas de sobrequalificação são muito piores. Pelo contrário, no Reino Unido, as probabilidades de se conseguir um "bom emprego" e de acordo com as suas competências são semelhantes, mas a probabilidade de encontrarem um trabalho é bastante menor. Outros países revelaram desvantagens moderadas no mercado de trabalho para os refugiados, com a Noruega a destacar-se pela positiva. As razões para estas disparidades podem residir nas variações entre os diferentes tipos de estados sociais, mas será necessária mais investigação para conformar esta hipótese.

Introduction

Whilst the current refugee crisis poses tremendous challenges for the first reception and recognition of asylum seekers, it is also important to think about the long-term future of these people and of the host countries. Forced migrants may settle in their countries of asylum for life. The issue of their integration is therefore critical for the governments of the receiving states, the native population, and of course for the refugees themselves. Wars and civil unrest are an ancient phenomena, and unfortunately people fleeing their homes under threat of violence is nothing new. We cannot predict what will happen in the future with the people who are currently claiming asylum in European countries, but we can look at what happened in the recent past with other refugees, namely those who arrived in the 1990s-early 2000s. In this article, the term “refugees” is used to describe individuals, who have changed their country of residence due to life and safety threatening reasons: war, unrest, famine, persecution of all kinds. This should not be confused with the term “recognized refugees”, which is a specific legal status, granted in the country of asylum. The legal statuses of these persons can change over time: from that of irregular migrant, to asylum seeker, to recognized refugee, to being a naturalized citizen – in the best-case scenario. In the worst case scenario, an asylum seeker may also be denied a refugee status, receive a subsidiary international protection or remain undocumented. The migration experiences of people seeking international protection and the regulations of the host countries set them aside from other migrants, who move for work or family reasons. Thus, it is important to study migrants, who came for humanitarian reasons, separately from other groups.

The literature on the integration of forced migrants, is a sub-group of the literature on immigrant integration. It is dominated by qualitative case-studies, based on national data, which makes it hard to compare the success of integration across countries and policy contexts. The lack of cross-national quantitative data on refugees complicates the assessment of their integration in European countries. However, the Eurostat has produced a data set (Eurostat, 2008), which up until now has not been fully utilised. This article aims to look at the outcomes of refugee economic integration in different European countries. Given that a comparative approach has been proven useful in migration research (Bloemraad, 2013) and other fields, it can also be helpful in investigating the topic of refugee integration.

The article is structured as following: the first section presents the theoretical framework as the basis of the article; the second part describes the methodology and its limitations; the third and final part is devoted to the results and discussion.

Theoretical Overview

A brief overview of the overarching concept of immigrant integration, within which lies a discussion of their economic inclusion, is due. In recent decades, this term has

acquired a lot of popularity among migration scientists and politicians. The concept has been widely used and interpreted in various ways (Castles, *et al.*, 2002). Not all controversies and debates have been resolved, but most of the scholars (Ager and Strang, 2004; Bakker, Dagevos and Engbersen, 2014; Phillimore, *et al.*, 2006) agree that integration can be described by the following statements: (1) integration is a two-way process that involves the receiving societies and immigrating individuals; (2) integration starts upon arrival of the newcomers; and (3) integration is complex and multidimensional.

The dimensions, or areas, of integration have been described with different degrees of detail. The most cited theoretical framework of immigrant integration was developed by Ager and Strang (2004, 2008). According to them, integration can be described by four domains ordered in the shape of an upside-down pyramid: (1) Foundation: rights and citizenship; (2) Facilitators: language, cultural knowledge, plus, safety and stability; (3) Social connections; (4) Markers and Means: employment, along with housing, education and health, is part of the fourth domain, which represents socio-economic indicators of the immigrants' position in society. Advancement in one of the areas can facilitate progress in other areas, this is why these elements are also called means of integration.

An alternative distinction of the dimensions was suggested by Esser (2004), who broke down the integration process into: (1) *Kulturation*; (2) *Plazierung* (socio-economic achievements); (3) *Interaktion* (social connections); (4) *Identifikation* (emotional link with the host country).

Another conceptual framework has been generated by Juzwaik and colleagues (2014), who on the basis of policy-oriented literature identified five main domains, within which integration is fulfilled: (1) social; (2) cultural and religious; (3) economic; (4) legal and (5) political.

Others, such as Da Lomba (2010), made it simpler, stating that integration can be divided into two main spheres: (1) social and legal (socio-economic status and legal framework); (2) private (personal perceptions of integration).

The economic aspect is never left out of these x-rays of immigrant integration, in fact it is one of the most researched ones (Ager and Strang, 2008), however, not in relation to forced migrants. Refugees are distinguished from labour migrants because their reasons for migration are not considered to be economic in the first place. Yet, once they arrive in the country of asylum, the need to secure a stable source of income becomes vitally important for them. That is why in this article the focus is specifically on the integration of refugees into the economic sphere. On the one hand, a job is a means to sustain oneself and ones' family, on the other hand, work is a part of an individual's identity – a component of self-definition.

Several researchers (Bloch, 2000; Coussey, 2000; Phillimore, *et al.*, 2006) claim that employment is a priority for refugees, since it helps them to achieve self-sufficiency

(Haines, 1988) and to become independent from the state's financial help (Juzwaik, McGregor and Siegel, 2014). Ager and Strang (2008), highlight that refugees can also advance in other spheres of the integration process through employment: learn the language, establish networks with the locals, regain self-confidence and a sense of stability. However, the relationships between these aspects of integration can also be reversed. Language, networks and cultural competencies have been proven to positively influence one's employability (Cheung and Phillimore, 2014).

It is generally claimed that integration is finished (and seen as successful), when the integrating groups achieve an equal socio-economic position with the wider host communities (Ager and Strang, 2004; Phillimore and Goodson, 2006). Besides, many integration programmes in the EU guide immigrants (especially poor ones) towards cultural assimilation (Carrera, 2006). In this article, the focus is on the economic side of the integration process, not forgetting that these outcomes may be mediated by other dimensions too.

The concepts of economic integration and labour market integration are usually used as synonyms in the literature. They are conceptualized in terms of (un)employment rates (Colic-Peisker, 2008), log earnings (Edin, Fredriksson and Aslund, 2004), labour market participation (Bevelander and Lundh, 2007) and skills mismatch, which can also be called underemployment (Krahn, *et al.*, 2000) or overqualification (Capps and Newland, 2015; Cheung and Phillimore, 2014; Haines, 1988). Overqualification is regarded as waste of human capital by some researchers (Krahn, *et al.*, 2000). Other aspects of economic integration described in the literature are levels of idleness (Edin, Fredriksson and Aslund, 2004) and number of people receiving welfare benefits (Hohm, Sargent and Moser, 1999). In the studies on integration of labour immigrants, these indicators are compared with those of the natives, but such a comparison has rarely been made in the studies on refugees. In this article, integration success is measured in terms of differences between the economic indicators of natives and of refugees. If this comparison is absent, we are not talking about integration, but rather about labour market performance.

Theories and empirical studies on this topic emphasise that the integration process is shaped by both individual and institutional factors. The personal characteristics influencing economic success and the integration of refugees are: (1) motivation, aspirations and personal character (Mestheneos and Ioannidi, 2002); (2) gender and cultural norms related to it (Allen, 2009); (3) education level and qualifications (Bloch, 2008); (4) host country's language proficiency (Bloch, 2000); (5) ethnic and cultural visibility (Colic-Peisker, 2008); and (6) psychological health (Bakker, Dagevos and Engbersen, 2014).

Besides individual characteristics, there are structural factors shaping the economic integration of refugees. These are the features of the host societies or of the policy environment. Individuals find themselves in circumstances that they cannot

change, and these circumstances can impact favourably or unfavourably their life and work trajectories. They are: (1) racism and institutionalized racism (Mestheneos and Ioannidi, 2002); (2) length of stay on asylum residences (Bakker, Dagevos and Engbersen, 2014); (3) access to official labour market (Bhattacharjee, 2013); (4) access to secure residence status (*i.e.* refugee status, citizenship); (5) recognition of pre-migration qualifications and degrees (Bloch, 2000); (6) settlement policy of the state (Wright and McKay, 2008); (7) labour market structure and strength of economy (OECD, 2015); and (8) generosity of welfare benefits and welfare state structure (Rosholm and Vejlin, 2010; Tress, 1998).

The impact of individual factors on labour market integration of refugees, has been researched in more detail than the impact of structural factors (Mulvey, 2015). Although it is acknowledged that both of these levels jointly shape the integration process, it is difficult to trace and test these complex interaction patterns on the available data, due to the variety of policy and economic conditions, as well as diversity of migrant populations across societies. Hence, a good comparative account of the economic integration of refugees is lacking, because the research in this field largely consists of single-country case studies that are not comparable either across time, or across countries. This lack of knowledge is one of the reasons that members of the public and of populist right-wing parties, are able to claim that refugees do not integrate, or integrate badly, due to their individual characteristics. In this article, the outcomes of economic integration of refugees in several European countries in 2008 are presented, with the aim of determining if there are any institutional driving forces behind the differences in level of integration.

The first reason for the different economic integration outcomes may concern the nature of welfare systems (Esping-Andersen, 1990). It is suggested that in a liberal welfare system “characterized by high labour market flexibility, weak industrial relations and market-based social insurance”, immigrants are less prone to unemployment, than in the countries with socio-democratic welfare systems and “more rigid labour markets with high labour costs and either employer-based or universal social insurance” (Reyneri and Fullin, 2011, pp. 38-39).

The availability of informal employment opportunities in the lower occupational sector, is also considered a facilitator of employment for refugees. It must be noted however, that although the informal economy may provide jobs for immigrants, it does not offer good and stable jobs (Ballarino and Panichella, 2015).

Several European countries with different types of welfare system are analysed (see Table 1): Scandinavian, Continental European Socio-Democratic, Liberal Anglo-Saxon and Southern-European. The expectation is that greater equality between the natives and refugees will be observed in an Anglo-Saxon welfare state model. In the Scandinavian and Continental welfare models the employment gap will be higher, because with the high level of welfare support people can afford not to work. But it

is expected that less difference will be found in the skill mismatch: highly skilled refugees have less pressure to find any job, and they try to find jobs suitable to their qualifications, even if it requires more time.

Table 1 – List of countries and welfare systems

Country	Welfare State Type
Sweden	Scandinavian
Norway	
Netherlands	Socio-democratic (corporatist)
Switzerland	
Germany	
Austria	
Greece	Southern European with informal labour market
United Kingdom	Liberal

The second institutional factor that it is considered is the policy ‘attitude’ towards immigrants. Studies highlight that institutional racism and public xenophobia influence the employment integration of all immigrants negatively (Colic-Peisker, 2008). The policy direction taken by a government may fall in line with public opinion (Facchini and Mayda, 2010) or even shape it (Mulvey, 2015). Thus, with a more restrictive policy change, the growing suspicion towards immigrants undermines equal treatment and negatively affects their labour market integration outcomes. So, the hypothesis is that if the policy changes have been restrictive for some years this may have undermined the integration of refugees. On the contrary, in the countries where the policy has become less restrictive, the refugees are better integrated and their economic outcomes are more equal with the locals.

Data and Methodology

The data set of the European Union Labour Force Survey (EU-LFS), Ad-hoc module on migration 2008¹ is used in this paper. This is a unique cross-country survey that includes both natives and migrants, and allows for a distinction to be made between types of immigration. Another advantage of using this dataset, is that the impact of the economic crisis on employment rates had not yet been felt at the time of the survey. According to Eurostat (2016), the strongest impact on the labour market took place in 2009.

1 This survey was conducted in 33 countries of Europe with translated questionnaires, covering individuals in private households. Various methods of data collection were used: face-to-face interviews, self-administrated survey and telephone interviews. In most of the countries multi-staged stratified random sample design was used. The data has been fully available since 2013.

Below, the operationalization of the outcomes of economic integration and the application of the logistic regression, is presented. Then the three categories of migration are defined, and the differences between them are explored. At the end of this section, the descriptive statistics of the data and its limitations are shown.

As was mentioned earlier, the concept of economic integration is usually operationalized in terms of equal employment opportunities, quality of jobs, underemployment and independence from state financial support. To provide a good basis for both intergroup and intercountry comparison, economic integration was operationalised through the indicators of relative difference: (1) gap in probabilities of employment; (2) gap in probabilities of having a higher skilled job; and (3) gap in probabilities of being overqualified for the occupation.

If the differences between refugees and natives are small, then there is more equality, so the integration can be claimed to be more successful in this case. The employment rates for the natives (as well as their quality of jobs) vary from country to country, but if we take the native employment levels as an average mainstream level that the newcomers are expected to achieve, then we can compare the differences between these key groups, in order to estimate in which countries those differences are smaller and where they are larger.

To evaluate the differences while controlling for the individual characteristics, binary logistic regression models are used. Country binary variables are included in each model as interaction terms with the migrant's category. Conceptually, that means that the difference in the effects of being a humanitarian migrant (or a migrant) in each country is estimated, using the indicator of economic integration. Thus, it is possible to evaluate whether those differences are statistically significant for each migrant category and across the countries.

The dependent variables are listed below:

- (1) *Employment* is operationalized using the standard International Labour Organization definition. The inactive population is not included in the analysis.
- (2) *Quality of jobs* is evaluated according to the International Standard Classification of Occupations (International Labour Organization, 2012). Higher skilled jobs are defined as those below the score 500, lower skilled jobs – 500 and above.
- (3) *Overqualification* is defined as occupation-education mismatch, when an individual has a higher level of education than the employees on the same position typically have in a given country.

The individual characteristics influencing labour market integration have been listed in the theoretical part of the article. The following control variables were included in the logistic regression models: level of education, gender, age, language proficiency and length of residence in the host country. If the gaps in employment indicators are only due to the differences between the individual characteristics of the migrant and native groups, the effects of belonging to a certain migrant category should not be statistically significant.

The population categories are defined on the basis of the region of birth and the reason for migration²:

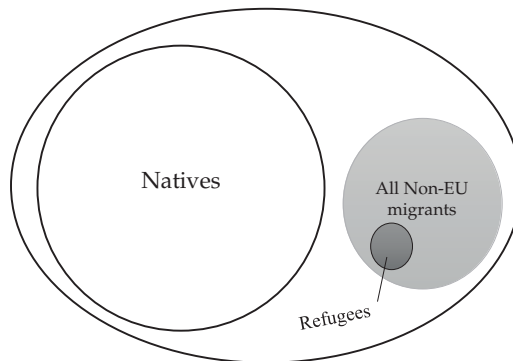
- (1) *Natives* are operationalized as individuals, who are born in the country of analysis and have not migrated.
- (2) *Non-EU migrants* are those, who are born in other countries (not in the European Union (EU) nor in the countries of European Free Trade Association (EFTA)³) and migrate for various reasons.
- (3) *Refugees* are those, who are born in other countries, not in the EU or EFTA, and whose main reason for migration is international protection⁴.

Individuals, whose country of birth is missing, are coded as “stateless/unknown”. They are put in one of the two migrant categories on the basis of their main reason for migration. EU migrants are not included in the analysis.

Due to very uneven samples of different migrant categories in the data set, it was decided to split the analysis into two stages: stage 1 – native population is compared with all non-EU migrants; and stage 2 – refugees are compared with all other types of migrants.

Visually, the comparison is presented in Figure 1.

Figure 1 – Visualization of migration categories



Since the EU-LFS Survey is not specifically designed to sample refugees, not all the countries have enough observations in this category. Only those countries where at least 100 individuals were surveyed have been selected: Austria (AT), Germany

2 Except for Germany, see Annex for further explanation.

3 The European Free Trade Association (EFTA) is an intergovernmental organisation set up for the promotion of free trade and economic integration to the benefit of its four Member States: Iceland, Liechtenstein, Norway, and Switzerland. Available at <http://www.efta.int/>.

4 In the data set there is no information on the type of residence permits and legal statuses the individuals have or had before.

(DE), Greece (GR), Netherlands (NL), Norway (NO), Switzerland (CH), Sweden (SE) and the United Kingdom (UK).

Due to the small samples of refugees, it is not possible to control for the differences caused by the ethnic origin of migrants. However, it is acknowledged that the difference in integration success across countries may be caused by cultural (dis)similarity of refugees with the natives. Many individuals who are categorized as migrants, by 2008 have acquired citizenship of the country of residence. The effect of citizenship status on migrant economic integration, has not been shown to be significant, and was therefore excluded from further models. In addition, the cross-sectional data does not provide the full picture of integration. Longitudinal data is needed to better explore the process of economic adaptation of refugees. Unfortunately, such studies are extremely rare. The migrant categories in my analysis are defined on the basis of the reasons for migration. The information about the type of residence permits, if available, would have been very helpful to distinguish refugees from other types of migrants more accurately.

Description of the Data Set

Table 2 below, shows that in all the countries of analysis the employment rates of non-EU migrants are lower than those of the natives (91% against 96%), the percentage of individuals employed in ‘good’ jobs is also lower (39% against 56%), moreover, the percentage of overqualified people is larger (26% against 19%). Regarding individual characteristics, the average age of non-EU migrants in the sample is around 38,5 years, while the natives are slightly older – 40,5 years. The migrants sub-sample contains 2% fewer female respondents than that of the natives. In terms of education level, migrants have a larger percentage of individuals with a lower secondary education and a smaller proportion of individuals with a tertiary level of education.

Table 2 – Data overview for the stage 1 of the analysis

Stage 1	Variables	Natives		All non-EU Migrants	
		N	Mean	N	Mean
Dependent	Employed	232.888	0,96	21.532	0,91
	Good jobs	223.633	0,56	19.601	0,39
	Overeducated	182.840	0,19	16.089	0,26
Control variable	Age	232.888	40,48 (12,67)	21.532	38,48 (11,05)
	Female (sex)	232.888	0,47	21.532	0,45
	Education				
	Lower secondary education	232.364	0,22	21.410	0,34
	Upper secondary education	232.364	0,49	21.410	0,40
	Third level education	232.364	0,29	21.410	0,26

In the second stage of comparison a regression was run on the sub-samples of refugees and all other types of migrants. In Table 3, it can be seen that refugees have lower employment rates (87%) than other migrants (91%). Less are employed in “better jobs” (27%) compared to (40%) among other migrant categories A higher number of refugees are employed below their level of educational attainment (30% compared to 26%). This group of migrants is a bit older than the rest; the average age is between 41-42 years, while for other migrants it is 38 years. There are significantly less females among refugees (34%), other migrants’ categories have more balanced gender distribution (47%). Interestingly, the educational level of the two groups is very similar, there are just 2% fewer refugees with university degrees than the others.

Table 3 – Data overview for stage 2 of the analysis

Stage 2	Variables	Refugees		Other Migrants	
		N	Mean	N	Mean
Dependent	Employed	2.131	0,87	19.401	0,91
	Good jobs	1.858	0,27	17.743	0,40
	Overeducated	1.590	0,30	14.499	0,26
Control variable	Age	2.131	41,76 (9,19)	19.401	38,12 (11,19)
	Female (sex)	2.131	0,34	19.401	0,47
	Education				
	Lower secondary education	2.115	0,34	19.295	0,34
	Upper secondary education	2.115	0,41	19.295	0,40
	Third level education	2.115	0,25	19.295	0,27
	Language proficiency (LP)				
	No need to improve LP	2.131	0,63	19.401	0,61
	Need to improve LP	2.131	0,31	19.401	0,23
	N/A language	2.131	0,05	19.401	0,16
Years of residence	2.131	14,17 (6,89)	19.286	17,09 (12,14)	

Results and Discussion

This section presents the results for the three indicators of economic integration: employment, quality of jobs and overqualification. Reporting the findings for each indicator. It starts with a description of the differences between the natives and all the non-EU migrants (stage 1), then continues presenting the comparison between the refugees and all other migrants (stage 2), finally these differences are summarised and conclusions are drawn based on the gaps observed between the natives and refugees in the countries of study. The discussion section summarizes the inter-country differences between the levels of economic integration and investigates the linkages with the institutional causes: type of welfare system and immigration policy change.

Employment

Stage 1: All migrants compared to natives

A significant level of influence is observed in all of the control variables. Lower levels of education correlate with a decrease in probability of employment by 103% for individuals with lower secondary education, and by 50% for those with upper secondary education. Women's probability of being employed is 23% lower than that of men. With age the employment chances increase by 4% each 5 years (Table 4).

Compared to the natives, migrants experience an employment penalty⁵ in all of the countries except Greece. In six countries, the decrease in the probability of employment for migrants is statistically significant, and only in the UK it is not. The statistically significant decrease ranges from 83% in Austria, up to 150% in Sweden. The differences between the countries are not always significant. Whilst in Greece and the UK the chances of employment are more equal for the natives and all migrants, in Austria, Germany, the Netherlands, Norway and Switzerland the gaps are larger, and in Sweden the gap is statistically the largest of all the countries (Table 5).

Table 4 – Stage 1 (employment)

Control Variables	Coefficient B	
Lower secondary education	-1,03	***
Upper secondary education	-0,52	***
Female	-0,23	***
Age	0,04	***
*** significant at 0,01 confidence level		

Table 5 – Stage 1 (difference in probability of employment)

Natives vs All Migrants		
Countries	Coefficient B	
Austria	-0,83	***
Switzerland	-1,11	***
Germany	-0,87	***
Greece	0,24	
Netherlands	-1,00	***
Norway	-1,01	***
Sweden	-1,51	***
United Kingdom	-0,53	
*** significant at 0,01 confidence level; ** significant 0,05; * significant 0,1		

⁵ Decrease in the probability of being employed.

Stage 2: Refugees compared to other migrants

For the second stage of the analysis, only migrant populations are compared. Refugees are contrasted with other types of non-EU migrants. Here too the control variables for personal characteristics indicate a statistically significant effect (Table 6). In the same way as in the first stage of analysis, lower levels of education decrease the chances of being employed (65% for lower secondary education, 29% for upper secondary education). Migrant women have a 30% lower chance of being employed than migrant men, which is higher than in the sample overall. The effect of age is less pronounced: an increase of 5 years gives a 1% of increase in employment chances. Refugees have lower chances of being employed than other types of migrants (Table 7). Only in Norway do the results show a 30% increase in the probability of employment, but this increase is not statistically significant. In Sweden, Switzerland and Austria, the likelihood of refugees being employed is similar to that of other migrants: although the gaps are negative, they are not statistically significant. A more pronounced decrease in employment chances for refugees is observed in the Netherlands, Greece and Germany (between 45%-57%). The largest disparity is found in the UK, where the chance of refugees being employed is 100% lower than the chances of other migrants being employed.

Table 6 – Stage 2 (Employment)

Control Variables	Coefficient B	
Lower secondary education	-0,65	***
Upper secondary education	-0,29	***
Female	-0,30	***
Age	0,01	***
Need to improve language	-0,60	***
N/A language	-0,50	***
Years of residence	0,02	***
*** significant at 0,01 confidence level		

Table 7 – Stage 2 (difference in probability of employment)

Refugees vs Other Migrants		
Countries	Coefficient B	
Austria	-0,21	
Switzerland	-0,19	
Germany	-0,57	***
Greece	-0,46	*
Netherlands	-0,45	**
Norway	0,30	
Sweden	-0,03	
United Kingdom	-1,09	***
*** significant at 0,01 confidence level; ** significant 0,05; * significant 0,1		

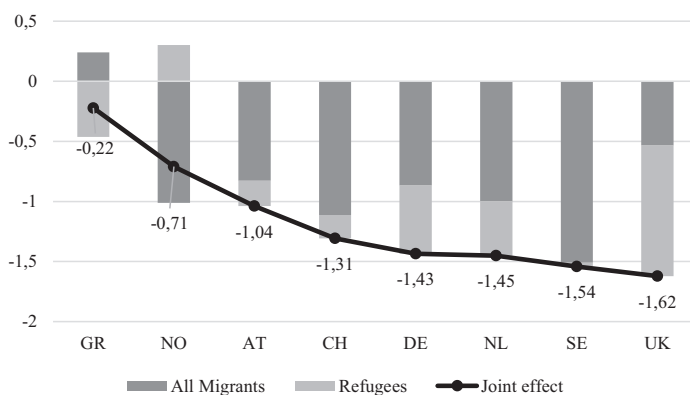
Final Estimation

Figure 2, presents the concluding estimates of the likelihood of being employed for refugees, compared to natives. The black line shows the joint decrease and the shades of the bars show how much of the decrease is produced by the first or the second stage of comparison.

In Greece, the chances of employment are the most equal between refugees and natives. This is followed by Norway and Austria, where the chances are somewhat lower. In all other countries the chances of refugees being employed, are much lower than of the natives. In both Sweden and the UK refugees have very low chances of employment, but whilst in Sweden their chances are similar to those of other migrants, in the UK they do much worse than other migrants. These differences might be the product of different policy conditions in these two countries, or of some unobserved personal characteristics. A similar trend is found in Germany and the Netherlands, where the negative effect adds up for the humanitarian subcategory of migrants.

On the contrary, in Norway refugees have better chances of being employed than other migrants. This could be due to preferential treatment of refugees by state policy.

Figure 2 – Accumulated decrease in probabilities to be employed for Humanitarian migrants compared to Natives

*Quality of Jobs**Stage 1: All migrants compared to natives*

This model was run on the sample of employed population. All the control variables of the model are significant (Table 8). Individuals with secondary education are 312% – 208% less likely to be employed in better jobs. Females are 74% more likely

to be employed in highly skilled occupations than men. With age, the probability of having a better job increases by 2%. Those working part-time are 56% less likely to have good quality jobs.

Overall, migrants show the tendency to have lower chances of employment in good quality jobs than natives (Table 9). This decrease is more pronounced in Austria (-134%) and Greece (-212%), while in the UK the chances are only 16% lower. A larger gap is observed in the Netherlands and Norway, followed by Sweden, Germany and Switzerland. The estimates of the probability decrease in those countries vary by around 95%.

Table 8 – Stage 1 (quality of jobs)

Control variables	Coefficient B	
Lower secondary education	-3,12	***
Upper secondary education	-2,08	***
Female	0,74	***
Age	0,02	***
Part-time	-0,56	***
*** significant at 0,01 confidence level		

Table 9 – Stage 1 (difference in probability to have a quality job)

Natives vs All Migrants		
Countries	Coefficient B	
Austria	-1,34	***
Switzerland	-0,98	***
Germany	-0,94	***
Greece	-2,12	***
Netherlands	-0,63	***
Norway	-0,69	***
Sweden	-0,91	***
United Kingdom	-0,16	***
*** significant at 0,01 confidence level		

Stage 2: Refugees compared to other migrants

All of the control variables are also significant for the stage 2 analysis (Table 10). The less educated migrants tend to have much lower chances of ending up in good quality jobs, than the highly educated migrants. Contrary to the population in the stage 1 analysis (where the sample is dominated by natives), older migrants tend to have less chance of being employed in higher skilled jobs than younger ones do.

The probability decreases by 1% for each 5 years of age. However, the years of residence have a positive effect on the probability of having a good job, this effect is even stronger than the one for age. For each year of residence there is 3% increase in the chances of employment. Migrants who stated that they needed to improve their knowledge of the language, were 58% less likely to be employed in a higher skilled job.

In the Netherlands, refugees experience the most pronounced decrease in the probability of having quality employment, their chances are 62% lower than those of all other non-EU migrants (Table 11). Also in Sweden and Switzerland, the chances of refugees being employed in better jobs are around 40% lower than those of other non-EU migrants. In other countries the gap between these groups is not statistically significant, meaning that refugees are on the same level as other types of migrants (given the equal individual characteristics).

Table 10 – Stage 2 (quality of jobs)

Control Variables	Coefficient B	
Lower secondary education	-2,91	***
Upper secondary education	-1,87	***
Female	0,34	***
Age	-0,01	***
Need to improve language	-0,58	***
N/A language	-0,22	***
Years of residence	0,03	***
*** significant at 0,01 confidence level		

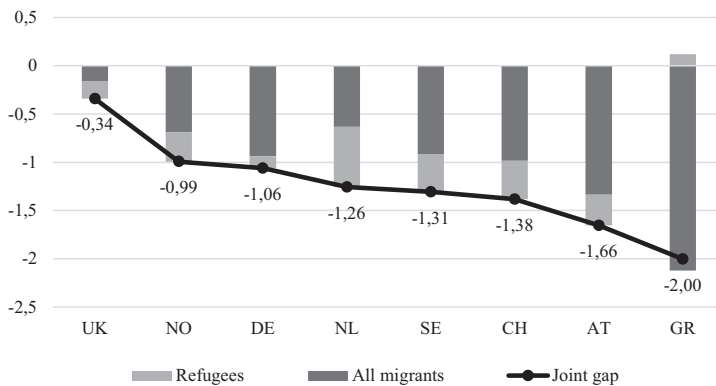
Table 11 – Stage 2 (difference in probability to have a quality job)

Refugees <i>vs</i> Other Migrants		
Countries	Coefficient B	
Austria	-0,32	
Switzerland	-0,40	**
Germany	-0,12	
Greece	0,12	
Netherlands	-0,62	***
Norway	-0,30	
Sweden	-0,39	**
United Kingdom	-0,19	
*** significant at 0,01 confidence level; ** significant 0,05; * significant 0,1		

Final Estimation

The UK has the smallest gap between the probabilities of refugees having a higher skilled occupation, when compared to natives (Figure 3). Norway, Germany, the Netherlands and Sweden are approximately on the same level (100% – 138% probability decrease). In Austria and Greece, the gap between the chances of the natives and the refugees having a good quality job is the largest of all the countries (-166% and -200% respectively).

Figure 3 – Accumulated decrease in probabilities to have a good job for refugees compared to natives



Overqualification

Stage 1: All migrants compared to natives

There are only two control variables left for this model (Table 12), since the education variable was the basis for the dependant variable. Women tend to have 12% less probability of being overqualified for their jobs. With age the tendency decreases but just 0,3%.

The largest gap in overqualification probabilities between natives and all migrants is observed in Sweden (103%) and Norway (92%). In Greece and the Netherlands the chances of being overqualified are more equal; the likelihood of migrants working in jobs below their qualification level is around 23-26% higher than for the natives (Table 13).

Table 12 – Stage 1 (overqualification)

Control variables	Coefficient B	
Female	-0,12	***
Age	-0,003	***
*** significant at 0,01 confidence level		

Table 13 – Stage 1 (difference in probability to be overqualified)

Natives vs All Migrants		
Countries	Coefficient B	
Austria	0,41	***
Switzerland	0,34	***
Germany	0,50	***
Greece	0,23	***
Netherlands	0,26	***
Norway	1,03	***
Sweden	0,36	***
United Kingdom	0,92	***
*** significant at 0,01 confidence level		

Stage 2: Refugees compared to other migrants

For the second stage of comparison, the chances of being overqualified for refugees were only found to be significantly higher than for other migrants (62%) in Germany. This means that more highly skilled refugees are employed in jobs that require lower levels of qualifications than those that they have (Table 15).

In other countries, the differences still exist but they are not statistically significant. Most of the difference is explained by gender, age, years of residence in the country and knowledge of the language (Table 14). Individuals, who stated that their language proficiency needs to be improved, are 21% more likely to be overqualified for their jobs. In addition, women are 17% more likely than men to be overqualified for their occupations.

Table 14 – Stage 2 (overqualification)

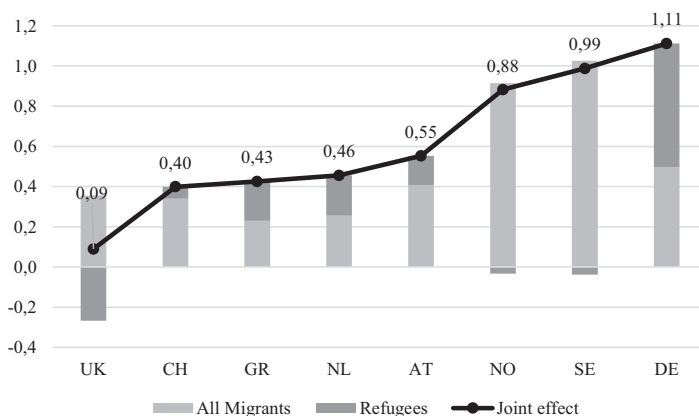
Control Variables	Coefficient B	
Female	0,17	***
Age	0,03	***
Need to improve lang	0,21	***
N/A language	0,28	***
Years of residence	-0,03	***
*** significant at 0,01 confidence level.		

Table 15 – Stage 2 (difference in probabilities to be overqualified)

Refugees <i>vs</i> Other Migrants		
Countries	Coefficient B	
Austria	0,15	
Switzerland	0,06	
Germany	0,62	**
Greece	0,20	
Netherlands	0,20	
Norway	-0,04	
Sweden	-0,27	
United Kingdom	-0,03	
*** significant at 0,01 confidence level; ** at 0,05 confidence level		

Final Estimation

In Figure 4, the summed gaps in probabilities for overqualification and the differences across countries can be seen. In the UK, the gap in the chance of being overqualified between refugees and natives is the smallest. In Switzerland, Greece, the Netherlands and Austria this gap is higher, with chances of overqualification between 40%-55%. The largest gap is observed in Norway, Sweden and Germany. While in Norway and Sweden the gap is mostly due to the fact that individuals were non-EU migrants, in Germany approximately half of the penalty is produced by the fact that the migrants were humanitarian, they tend to be overqualified for their jobs more often than others.

Figure 4 – Accumulated increase in probabilities to be overqualified for refugees compared to natives

Discussion

The labour market situation of refugees compared to natives is not equal in all of the countries studied (Table 16 and Figure 5). In Greece, the employment gap is the smallest, which corresponds to my initial expectation that welfare systems with few protections and a big share of informal labour market, facilitate the employment of refugees. This result is also confirmed in other Southern European countries (Ambrosini, 2011). The quality of this employment, however, is not so good. In comparison to natives, refugees are employed in the lower skilled sector. In contrast to expectations, in a liberal welfare model (the UK) refugees were at a much higher risk of unemployment when compared to natives. However, those who worked, were less disadvantaged than in other countries in terms of quality of jobs and risk of overqualification.

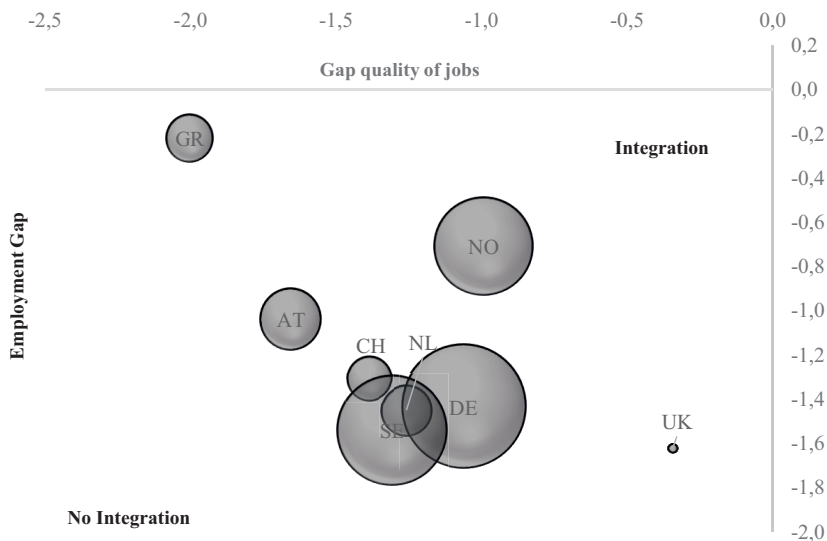
Table 16 – Indicators of economic integration and welfare systems

Country	Type of Welfare State	Gap EMPL	Gap QJ	Gap OVERQ
Austria	Southern European	○ -0,22	● -2,00	● 0,43
Switzerland	Socio-democratic	● -1,04	● -1,66	● 0,55
Germany	Socio-democratic	● -1,31	● -1,38	● 0,40
Greece	Socio-democratic	● -1,45	● -1,26	● 0,46
Netherlands	Socio-democratic	● -1,43	● -1,06	● 1,11
Norway	Scandinavian	● -1,54	● -1,31	● 0,99
Sweden	Scandinavian	● -0,71	● -0,99	● 0,88
United Kingdom	Liberal	● -1,62	○ -0,34	○ 0,09

Note: white circles represent the smallest gap, black - the highest gap, grey - the medium gap

The countries with a socio-democratic welfare model have similar integration results. Refugees who live in Switzerland, Netherlands, Germany and Austria tend to be at a higher risk of unemployment than the natives. Only in Austria are the differences in employment probabilities relatively lower. However, the chances of the refugees being employed in worse jobs than the natives is higher in Austria than in the other countries of this group. In Switzerland and the Netherlands, the economic integration of refugees is very similar: the gaps for having a quality job and being overqualified are moderately large. In Germany, refugees experience a much higher risk of being underemployed.

Figure 5 – Map of economic integration of refugees



Source: Own calculations, summary of the Figures 2, 3 and 4. Size of the bubbles is the gap in overqualification chances – the smaller is the bubble the less is the gap, the better it is for integration.

Norway and Sweden turn out to be more different in their integration outcomes than expected. The employment gap between the natives and refugees is smaller in Norway, and their chances of being employed in quality jobs is less unequal than in Sweden. However, both countries have a very large difference in the chances of being overqualified for the occupation, meaning that far fewer natives hold qualifications above the level required in their jobs, than refugees. The expectation that in coordinated welfare systems refugees will have a larger gap in probabilities of employment than in a liberal welfare system is not confirmed.

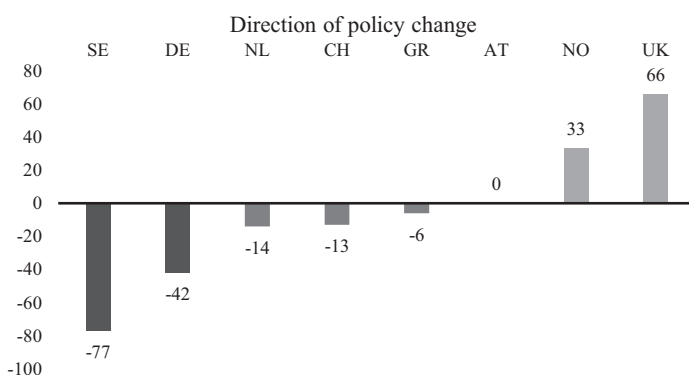
The Policy Change

The populations of refugees observed in the sample immigrated between 1960 and 2008. Using the DEMIG POLICY (2015) data base, an estimation⁶ was made of

6 The DEMIG POLICY data base contains all the policy changes observed in the countries under analysis. There are variable on the direction of change: (-1 less restrictive; 0 – no change in restrictiveness; +1 more restrictive); variable on the level of change (1. fine-tuning; 2. minor change; 3. mid-level change; 4. major change). It was created an indicator combining the direction of change and the level of change. Summing up this values, it was obtained an estimation of how much and to which direction the policy of each country has changed since 1960. The

the policy changes that occurred in the countries of study during that time period. The data base contains the policy changes targeted at all migrants and specifically at refugees. Those changes are assessed by their scale (minor – medium – large) and direction (more restrictive/less restrictive). Summing up all of the changes weighted on the scale, the estimation of the policy changes displayed in Figure 7 was calculated. It is visible on the chart that the UK and Norwegian policy became more restrictive throughout the years. Swedish and German policy, on the contrary, became less restrictive. The policy of the other countries showed little change.

Figure 6 – Policy change in the countries in the period from 1960 – till 2008 (above 0 – more restrictive, below 0 less restrictive)



Source: DEMIG POLICY data base, author's calculations.

Looking at Table 17, it can be concluded that the hypothesised link between the direction of policy change and the economic integration of refugees, is non-existent. In some cases the results indicate a relationship opposite from the one expected. Sweden experienced a shift towards less restrictive integration policy, however, the employment gap in this country is large, meanwhile in Norway, where the policy became more restrictive, the gap is moderate and less than in Sweden. The trend in the UK goes in line with the expectation, the policies of the country became more restrictive and the employment gap between refugees and the natives is the highest of all the countries.

less is the value of this indicator – the less restrictive has its policy became, if the value is more positive – the policy has become more restrictive in that period of time.

Table 17 – Policy change and the indicators of economic integration

Countries	Policy Change	Gap EMPL	Gap QJ	Gap OVERQ
Sweden	-77	● -1,54	● -1,31	● 0,99
Germany	-42	● -1,43	● -1,06	● 1,11
Netherlands	-14	● -1,45	● -1,26	● 0,46
Switzerland	-13	● -1,31	● -1,38	● 0,40
Greece	-6	○ -0,22	● -2,00	● 0,43
Austria	0	● -1,04	● -1,66	● 0,55
Norway	33	● -0,71	● -0,99	● 0,88
United Kingdom	66	● -1,62	○ -0,34	○ 0,09

Note: white circles represent the smallest gap, black - the highest gap, grey - the medium gap

Source: Final estimates of probability gaps from the Figures 2, 3 and 4 above.

Conclusion

In this article, the differences in the economic integration of refugees in eight European countries were investigated, on the basis of the EU-LFS dataset from 2008. The study re-confirmed previous findings that individual characteristics, such as age, gender, level of education, years of residence in the country and knowledge of the host country's language, influence economic integration for all types of migrants, including those coming for humanitarian reasons.

Women have lower employment chances than men in both samples, but among the migrants this gap is more pronounced. They are also at greater risk of being over-qualified for their occupations. This might be due to the traditional values that are widely spread in non-European societies that prescribe to males the role of breadwinner, and females the role of caring for the home and children. However, women have higher chances than men of working in higher skilled jobs. Lower levels of education contribute to disadvantages in the labour market. Individuals with secondary education are more at risk of unemployment and have higher chances of being employed in lower skilled jobs. Language proficiency and length of settlement are also crucial factors for migrants to achieve greater equality in the labour market.

In the country level comparison, the study revealed that refugees integrate into the labour market differently in the eight European countries. Full economic integration across all three indicators is not observed in any of the countries, nor is there a country in which the refugees are especially strongly disadvantaged in all three dimensions. Greece and the United Kingdom represent cases with opposite integration outcomes, with Norway and Austria in between the poles. Refugees in the UK have a large employment gap with the natives, but equal chances of having a "good job" that fits their education level. In Greece it is the opposite, the

employment gap between natives and refugees is small, however, the quality of jobs is much lower, with a medium overqualification risk. In Norway, the difference in employment chances between natives and refugees is the second smallest after Greece, the quality of economic integration is hindered by the large overqualification risks and moderate gap in chances of having a good job. In Austria, the labour market disadvantage of refugees is larger than in Norway in terms of both employment opportunities and quality of work, but less difference is observed in the overqualification probabilities. Other countries – Sweden, the Netherlands, Germany and Switzerland – reveal very similar outcomes of economic integration for refugees. All of them demonstrate pronounced employment gaps and moderate gaps in the quality of jobs. Switzerland and the Netherlands have smaller overqualification gaps than Germany and Sweden.

The measure of the restrictiveness of change in the countries' immigration policy, did not provide meaningful explanation for the differences in economic integration. A partial explanation can be drawn from the differences in welfare systems and labour market structure. The UK (liberal welfare system) and Greece (informal labour market, Southern European welfare system) stand out among other countries with more rigid socio-democratic welfare types. A liberal welfare state does not seem to facilitate the employment chances of refugees, but it does offer a higher quality of employment based on the recognition of skills. The informal economy works better to bring refugees to work, but it pushes them to the lower edge of the occupational ladder. The initial expectation that the economic integration of refugees will be similar in the two Scandinavian countries, has been proven wrong. The economic integration of refugees is more successful in Norway than in Sweden.

More research is needed to understand the reasons behind these differences. Maybe the integration policies in some countries were more effective in facilitating economic inclusion of asylum seekers and refugees. It may also be helpful to estimate the restrictiveness of immigration policies across the countries, and find a pattern comparing more and less restrictive countries. Migration scholars need more refined cross-national samples, with higher shares of refugees surveyed. Having a data set with information on the type of residence permits and precise countries of origin, would improve the accuracy of inter-group comparisons within the countries and between them.

References

- Ager, A. and Strang, A., 2004. *Indicators of integration: Final report*. Home Office Development and Practice Report n.º 28. London: Home Office.
- Ager, A. and Strang, A., 2008. Understanding Integration: A Conceptual Framework. *Journal of Refugee Studies*, 21(2), pp. 166-191.

- Allen, R., 2009. Benefit or Burden? Social Capital, Gender, and the Economic Adaptation of Refugees. *International Migration Review*, 43(2), pp. 332-365.
- Ambrosini, M., 2011. Immigration in Italy: Between Economic Acceptance and Political Rejection. *Journal of International Migration and Integration*, 14 (1), pp. 175-194.
- Bakker, L.; Dagevos, J. and Engbersen, G., 2014. The Importance of Resources and Security in the Socio-Economic Integration of Refugees: A Study on the Impact of Length of Stay in Asylum Accommodation and Residence Status on Socio-Economic Integration for the Four Largest Refugee Groups in the Netherlands. *Journal of International Migration and Integration*, 15(3), pp. 431-448.
- Ballarino, G. and Panichella, N., 2015. The Occupational Integration of Male Migrants in Western European Countries: Assimilation or Persistent Disadvantage? *International Migration*, 53(2), pp. 338-352.
- Bevelander, P. and Lundh, C., 2007. *Employment Integration of Refugees: The Influence of Local Factors on Refugee Job Opportunities in Sweden*. Discussion Paper n.º 2551.
- Bhattacharjee, S., 2013. Situating the right to work in international human rights law: An agenda for the protection of refugees and asylum-seekers. *NUJS L. Rev.*, 6, p. 41.
- Bloch, A., 2000. Refugee settlement in Britain: The impact of policy on participation. *Journal of Ethnic and Migration Studies*, 26(1), pp. 75-88.
- Bloch, A., 2008. Refugees in the UK labour market: The conflict between economic integration and policy-led labour market restriction. *Journal of Social Policy*, 37(01), pp. 21-36.
- Bloemraad, I., 2013. The promise and pitfalls of comparative research design in the study of migration. *Migration Studies*, 1(1), pp. 27-46.
- Capps, R. and Newland, K., 2015. *The Integration Outcomes of U.S. Refugees: Successes and Challenges*. Washington D.C.: Migration Policy Institute.
- Carrera, S., 2006. *A Comparison of Integration Programmes in EU: Trends and Weaknesses*. Brussels: Centre for European Policy Studies, Challenge Papers 1. Available at http://aei.pitt.edu/6773/1/1310_01.pdf [Accessed: 17 June 2017].
- Castles, S. et al., 2002. *Integration: Mapping the field*. Report of project at University of Oxford Center for Migration and Policy Research. London: Research Development and Statistics Directorate, Home Office.
- Cheung, S.Y. and Phillimore, J., 2014. Refugees, Social Capital, and Labour Market Integration in the UK. *Sociology*, 48(3), pp. 518-536.
- Colic-Peisker, V., 2008. "The 'Visibly Different' Refugees in the Australian Labour Market: Settlement Policies and Employment Realities". In: S. McKay, ed., *Refugees, Recent Migrants and Employment: Challenging Barriers and Exploring Pathways*. New York: Routledge, Taylor & Francis, pp. 67-83.
- Coussey, M., 2000. *Framework of integration policies*. Strasbourg: Council of Europe Publishing.

- Da Lomba, S., 2010. Legal Status and Refugee Integration: A UK Perspective. *Journal of Refugee Studies*, 23(4), pp. 415-436.
- Edin, P.-A.; Fredriksson, P. and Aslund, O., 2004. Settlement policies and the economic success of immigrants. *Journal of Population Economics*, 17(1), pp. 133-155.
- Esping-Andersen, G., 1990. *The Three Worlds of Welfare Capitalism*. Princeton, N.J.: Princeton University Press.
- Esser, H., 2004. Does the “New” Immigration Require a “New” Theory of Intergenerational Integration? 1. *International Migration Review*, 38(3), pp. 1126-1159.
- Eurostat, 2008. Labour Force Survey, Ad-hoc Module 2008 Labour market situation of migrants. Released in 2013.
- Eurostat, 2016. *Unemployment statistics – Statistics Explained*. Available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment_statistics [Accessed: 4 October 2016].
- Facchini, G. and Mayda, A. M., 2010. “What Drives Immigration Policy? Evidence Based on a Survey of Governments’ Officials”. In: I. N. Gang and G. S. Epstein, eds., *Migration and culture*. (Frontiers of Economics and Globalization – Vol. 8). Bingley, U.K.: Emerald, pp. 605-648.
- Haines, D. W., 1988. The Pursuit of English and Self-sufficiency: Dilemmas in Assessing Refugee Programme Effects. *Journal of Refugee Studies*, 1(3-4), pp. 195-213.
- Hohm, C. F.; Sargent, P. and Moser, R., 1999. A Quantitative Comparison of the Effectiveness of Public and Private Refugee Resettlement Programs: An Evaluation of the San Diego Wilson Fish Demonstration Project. *Sociological Perspectives*, 42(4), pp. 755-763.
- International Labour Organization, 2012. *International Standard Classification of Occupation: ISCO-08*. Geneva: International Labour Office, International standard classification of occupations. Available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_172572.pdf [Accessed: 12 June 2017].
- Juzwaik, T.; McGregor, E. and Siegel M., 2014. *Migrant and Refugee Integration in Global Cities: The role of Cities and Businesses*. The Hague Process on Refugees and Migration. Available at: <http://thehagueprocess.org/wordpress/wp-content/uploads/2014/04/MigrantRefugeeIntegrationGlobalCities.pdf> [Accessed: 29 August 2015].
- Krahn, H.; Derwing, T.; Mulder, M. and Wilkinson, L., 2000. Educated and underemployed: Refugee integration into the Canadian labour market. *Journal of International Migration and Integration/Revue de L’integration et de la Migration Internationale*, 1(1), pp. 59-84.
- Mestheneos, E. and Ioannidi, E., 2002. Obstacles to Refugee Integration in the European Union Member States. *Journal of Refugee Studies*, 15(3), pp. 304-320.
- Mulvey, G., 2015. Refugee Integration Policy: The Effects of UK Policy-Making on Refugees in Scotland. *Journal of Social Policy*, 44(02), pp. 357-375.
- OECD, 2015. *Is this humanitarian migration crisis different?* Migration Policy Debates n.º 7, pp. 1-15.

- Phillimore, J. et al., 2006. *Employability initiatives for refugees in Europe: looking at, and learning from, good practice*. Report for EQUAL and the Home Office.
- Phillimore, J. and Goodson, L., 2006. Problem or opportunity? Asylum seekers, refugees, employment and social exclusion in deprived urban areas. *Urban Studies*, 43(10), pp. 1715-1736.
- Reyneri, E. and Fullin, G., 2011. Labour market penalties of new immigrants in new and old receiving West European countries. *International Migration*, 49(1), pp. 31-57.
- Rosholm, M. and Vejlin, R., 2010. Reducing income transfers to refugee immigrants: Does start-help help you start? *Labour Economics*, 17(1), pp. 258-275.
- Tress, M., 1998. Welfare state type, labour markets and refugees: A comparison of Jews from the former Soviet Union in the United States and the Federal Republic of Germany. *Ethnic and Racial Studies*, 21(1), pp. 116-137.
- Wright, T. and McKay, S., 2008. "Legal Frameworks Regulating Employment of Refugees and Recent Migrants". In: S. McKay, ed., *Refugees, Recent Migrants and Employment: Challenging Barriers and Exploring Pathways*. New York: Routledge, pp. 53-66.

Annex

Table I – Definition of migration categories in all countries (except for Germany)

Respondent's country of birth/ Old category	New category	
National/Native of own country	Native	1) Re-categorisation of the country of birth (table I)
European Union 15	EU	2) Definition of Groups: Natives, Refugees and Other non-EU migrants • Natives: Born in country + Not Migrated • Refugees: reason for migration International Protection + Non-EU (region of birth)
NMS10 (10 new Member States of 2004)		
NMS3 (3 new Member States of 2007)		
EFTA		
Other Europe	Non-EU	OR Reason for migration International Protection + Stateless/Unknown (region of birth) • Other Non-EU Migrants: reason for migration not International Protection + Non-EU (region of birth)
North Africa		
Other Africa		
Near and Middle East		
East Asia		
South and South East Asia		
North America		
Central America (and Caribbean)		
South America		
Australia and Oceania		
Missing	Stateless/ Unknown	OR • Reason for migration not International Protection + Stateless/Unknown (region of birth)

Table II – Definition of migration categories in Germany

Country of birth of father/mother	New Category “Region of birth”
National/Native of own country	Native
European Union 15	EU
NMS10 (10 new Member States of 2004)	
NMS2 (2 new Member States of 2007)	
EFTA	Non-EU
Other Europe	
North Africa	
Other Africa	
Near and Middle East	
East Asia	
South and South East Asia	
North America	
Central America (and Caribbean)	
South America	
Australia and Oceania	
Missing	Stateless/Unknown

1) Variable “Country of birth” contains information only about “National/Native of own Country”, all others are missing. German born = 1, Missing = 0 (not German born)

For those not born in Germany, region of origin is defined approximately on the basis of country of birth of their both parents (table II).

Variable origin for not German born defined following the algorithm:

EU*EU → EU

nonEU*nonEU → nonEU

If region of both parents is unknown → origin is Unknown

If both parents are Native (but respondent’s country of birth is not Germany) → origin is Unknown

When regions do NOT match:

If EU*non-EU → EU is chosen as origin

Unknown is denied in favour of EU or Non-EU of the known parent’s country of birth

Native is denied in favour of EU or Non-EU of the other parent’s country of birth (see table III)

Table III – Respondent’s estimated origin

Respondent’s estimated origin (cross-section)		Father’s region of birth			
		Native	EU	Non-EU	Stateless/Unknown
Mother’s region of birth	Native	Unknown	EU	Non-EU	Unknown
	EU	EU	EU	EU	EU
	Non-EU	Non-EU	EU	Non-EU	Non-EU
	Stateless/Unknown	Unknown	EU	Non-EU	Unknown

1) Observations with origin = EU are deleted

2) Definition of Natives, Refugees, Other non-EU migrants in Germany

- Natives: born in Germany + Not Migrated
- Refugees: Reason for migration International Protection + origin non-EU

OR

Reason for migration International Protection + Origin Stateless/Unknown

Other Non-EU Migrants: reason for migration not International Protection + origin non-EU

OR

Reason for migration not International Protection + origin Stateless/Unknown