Labour Market Transition Differences between Natives and Immigrants in EU Economies

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Abstract: *The recent economic crisis has had an adverse effect on the labour markets of European economies and certain population groups have been disproportionally affected by it. Increased migration flows may very well have created further pressures on the labour markets of host countries. The focus of the analysis here is on differences in transitions from unemployment to employment and vice versa between native and immigrant populations in European economies during the 1998-2015 period. The analysis reveals different outcomes to transitions from unemployment to employment, where in certain countries and years, the unemployed natives find proportionally more jobs, while in other countries and years, it is the immigrants. In most of the countries, however, employed immigrants are more likely to lose a job than natives. In addition to identifying the immigrant-native gap, the characteristics of individuals as potential contributing factors to the gap have also been assessed. The results of this analysis show that similar individual characteristics exert a different influence on the immigrant-native gap in labour market outcomes in different countries. Thus, similar individual characteristics are rewarded differently in different countries, i.e., their labour markets.*

Keywords*: immigrant-native gap, labour market transitions, European cross-country differences, crisis.*

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Introduction

Recent migration flows have overwhelmed European economies and raised numerous political, economic, social and practical questions. Regardless of the origin of immigrants and their reasons for moving to a host country, a key measure of the relative success of the migration process addressed in economic discussions is based on the integration of immigrants into the local labour market (OECD/European Union, 2015). In view of the above, interactions between immigrants and the domicile workforce gain public attention. Although competition between natives and immigrants can be perceived as an important aspect in terms of access to welfare services and education (Senik et al., 2009), the fear of competing for jobs frequently becomes the dominate topic in public discussions. Hence, natives as incumbent workers on local labour market are more likely to oppose increased immigration for fear of losing their jobs or less opportunities for wage growth (Scheve and Slaughter, 2001; Ortega and Polavieja, 2012).

Even before the recent migration wave, similar issues have led to heated public discussions on EU enlargement, regardless of the fact that the underlying economic idea of the European Union project is the free movement of all resources (including human). Some studies advocate the macroeconomic benefits of increased mobility, such as an increase in the GDP per capita, increase in the employment/unemployment rate and decrease in inflationary pressures (Blanchflower and Shadforth, 2009; Kahanec et al, 2013; Del Boca and Venturini 2016; Elsner and Zimmermann 2016). Some studies argue that the welfare systems of host countries are not additionally burdened by the arrival of immigrants (Giulietti et al. 2013), predominately due to the fact that the migrant population is usually younger than the average host population and is of working age, and consequently are net contributors to social security systems if integrated successfully in the host country's labour market.

The recent recession has placed additional emphasis on the issue of labour market outcomes of immigrants. An important finding is that immigrants have been more affected by the economic crisis (Barrett and Kelly, 2012 for Ireland; Rodríguez-Planas and Nollenberger, 2016 for Spain; Bratsberg, Raaum and Røed, 2018 for Norway). Although relevant literature has identified this problem in individual countries, a comparative cross-country perspective has not as yet been fully explored. The present paper explores differences between transitions from unemployment to employment and vice versa between natives and immigrants in the European Union Old member states during the recent crisis. The emphasis is on transitions, since changes in labour market status reveal whether immigrants face relatively more adverse conditions than native populations. Even though the topic has been

addressed in the literature before, the main contribution of the paper is that it provides a comparative approach for European economies. Thus, the analysis reveals the immigrant-native gap and examines the contribution of different personal traits to the gap across analysed countries. Due to self-selection of immigrants into different countries, immigrants with different personal traits prevail in different European economies. An interesting investigation is the manner in which the personal characteristics of immigrants explain the immigrant-native gap across Europe. The main contribution of the paper is to provide a comparative analysis of labour market transitions between immigrant and native population during the latest economic crisis. Additionally, in acknowledging the self-selection of immigrants into different economies, the paper seeks to compare the personal traits that contribute to the immigrant-native gap in different European economies.

The paper adopts the following structure. The first section briefly reviews the most relevant findings from the literature. The next section discusses the methodology of the empirical analysis in the paper. Section 3 presents the results and provides a discussion, while the last section offers conclusions.

Literature Review

The population of immigrants in a country at any given point in time depends on a number of very different factors. Hatton and Williamson (2005) examine world migration in a historical perspective and propose that these include a variety of economic and demographic factors. Some of these factors relate to characteristics of home and host countries, such as distance, colonial relationship, trade relationship, differences in economic performance and language similarities.

Extant studies focus on the contribution of migration to the receiving country's economy. On the macroeconomic level, Ortega and Peri (2014) document long-run income per capita growth, driven by total factor productivity, reflecting increased diversity in productive skills and innovation. In that framework, migrants are depicted as workers desirable to local employers, enabling them to combine diversities of native and immigrant labour to increase production. Still, there is no consensus in the literature whether increased immigration will have a relatively small (Grossman, 1982) or diverse and non-negligible effect (Orrenius and Zavodny, 2007) on the natives' labour market outcomes.

The final results may depend on the ability of migrants to adjust to host country conditions. Chiswick (1978) suggested that migrants sometimes lack specific skills, which leads to migrant (self-)selection into low-skilled jobs and cohort effects.

Additionally, both migrants (Chiswick, Rebhun and Beider, 2016) and their families (Föbker and Imani, 2017) face language barriers in host countries. Another type of barrier relates to the national orientation of the educational systems, leading to the question of transferability of qualifications (Chapman and Iredale, 1993).These obstacles imply higher financial costs of integration, which mostly lead to an increased burden for the host country welfare system.

On the other hand, welfare systems in host countries may influence the skill composition of immigrants. Borjas (1999) suggested that welfare services may attract immigrants who otherwise would not have migrated, and then discourage them from leaving their country of destination, by acting as a safety net. In this model, the host country will receive positively self-selected migrants as long as the correlation between the return to skills in the two countries is high and the dispersion in the wage distribution is higher in the host country than in the source country.

The argument is additionally explained by Peri and Sparber (2009), who suggest that immigrants and natives specialize in different tasks. Consequently, they do not compete for the same job, but their work is considered complementary. However, the question remains whether immigrants voluntarily self-select themselves into manually intensive and relatively unskilled jobs or whether they are forced to seek employment below their qualifications level. The fact that relatively inexpensive labour is available could be desirable to employers, but not so welcomed by incumbent employees.

Some authors argue that in the classic insider-outsider labour market framework, immigrants are considered as outsiders, experiencing more difficulties in access to the market than the native population (Marino et al. 2015). For example, Krings (2009) documents that unions frequently campaign against immigration, because in their view this increased supply-side competition increases the bargaining power of employers and undermines incumbent employee rights. This leads to the incumbent worker's loss of market power and reduces the probability of negotiating a wage increase. Accordingly, some authors argue that anti-immigration campaigns originate for fear of social dumping (Meardi 2012). The question remains whether such actions are additionally aggravated in times of economic downturn and relaxed during phases of economic boom.

Aiyar et al. (2016) argue that gaps in activity, employment, unemployment rates and wages between immigrants and natives can be related to the relatively slow integration of immigrants into host country labour markets. The slow integration process is not only due to inadequate or underdeveloped policies in the host

countries, but also due to the heterogeneity of immigrants. For example, those who arrive on account of family reunification might not have job placement as their primary goal, while those arriving for humanitarian reasons might be prohibited from seeking work for the initial period due to host country regulations.

Studies on European economies corroborate findings that immigrants have lower labour force participation, higher rates of unemployment, and are frequently clustered in lower-paid jobs (Heath et al. 2008). Empirical studies investigating the differences in labour market outcomes between immigrants and natives are relatively abundant, but frequently focus on a single country (for example, Corluy and Verbist, 2014; Langevin et al, 2013), although there are estimates that cover employment probability differences across European economies (Dustmann and Frattini, 2011). Some authors argue that the relative outcomes of immigrants change during the different stages of business cycle (Dustmann, Glitz and Vogel, 2010). There is some evidence that the latest crisis exhibited previously undocumented features (de la Rica and Polonyankina, 2013). However, most of the studies emphasize that, regardless of the similarity in characteristics of the immigrant and native population, the differences in their labour market outcomes persist, even in the case of high-skilled immigrants (Grigoleti-Richter, 2017).

Since the heterogeneity of immigrants may be partly the answer, the present study focuses on the labour market transitions. The underlying reason is that this approach identifies those individuals who are employed and have documented attachment to a labour market. In similar way, those who are unemployed (the ILO definition assumes that they are actively seeking work) decide to participate in the host country labour market and the reason for the differences in labour market outcomes is not due to self-selection into participation.

Some studies show a strong impact of business cycles on immigrant labour market outcomes, due to the differences in sectoral composition of employment in comparison to the native population (Dustmann, Glitz and Vogel, 2010). Also, migrants arriving during a recession encounter difficulties upon arrival, which then persist, even when labour market conditions improve (Åslund and Rooth, 2007, McDonald and Worswick, 1998).In that respect, the literature also notes that immigrants are more likely than natives to end up not just in non-employment, but also in self-employment (for example, Blume, et al (2009) in Denmark). Recently, Garda (2016) analysed labour market transitions in OECD economies using European Community Household Panel data. Significant differences between countries have been found for the analysed period 2005-2012. For example, there are high-transition countries where workers move from employment to joblessness

(Austria, Finland, Portugal, Spain and Sweden) and low-frequency transition countries (Belgium, the Czech Republic, France, Luxembourg, Poland, the Slovak Republic and Slovenia). The rest of the paper is devoted to exploring the cross-country differences of labour market transitions across European economies in more detail.

Research Methodology

The analysis relies on the EU Labour Force Survey data for the period 1998-2015. This data source provides comparable data for analysed countries. The aim of the analysis was to include all the European economies for which the data was available. However, since the dataset contains individual answers to the Survey[1], in accordance with the confidentiality threshold, each case that has up to three answers to a specific question is considered as missing observations. Thus, the rest of the paper presents only the data for which sufficient observations were achievable.

To distinguish between natives and immigrants, a simple indicator has been utilized – if a person is citizen of a resident country, she is considered a native[2]. Otherwise, she is considered immigrant. This approach yields different treatment of individuals across countries, since each EU country has a separate regulation for acquiring citizenship (Ritzen and Kahanec, 20017). As Dustmann and Frattini (2011) clarify, there are in general two approaches regarding citizenship. The first refers to Anglo-Saxon countries which consider immigrants as those born outside their country of residence. The other concept is related to citizenship, when people are born in the country of residence, but are not entitled to citizenship based on the relevant legislation. Regardless of the definition used in a country, the analysis in the paper retains the same definition across the countries in order to maintain comparability.

To get additional insight, a different concept has also been applied. A person is considered a native if (s)he was born in the country, while immigrants have been divided into two categories – those born in other EU countries and other

[1]According to the European Commission (2016, p. 6) in the case of LFS data available for scientific purposes "In any reports, including all publications and unpublished papers, three cell size thresholds will be distinguished for LFS results: confidentiality threshold: up to 3 observations (unweighted sample), results must not be published".

[2]This definition is data-specific, since LFS does not contain data on a person's immigration history. The countries differ in their citizen acquisition policies, EU countries might have different policies towards intra-EU migrants and some changes occurred in the process during the Great Recession (Alarian, 2017). This should be kept in mind when interpreting the results in the present study.

immigrants[3]. According to the data, a person arriving from EU countries in the period until 2004 relates to individuals from EU-15 countries, in the period 2005-2006 refers to individuals from EU-25 countries, in the period 2007- 2013 from EU-27 countries, and after 2013 individual from EU-28 countries.

Since this paper focuses on labour market transitions, the sample is restricted to persons aged 15-64. Two labour market transitions are analysed – (i) from unemployment to employment and (ii) from employment to unemployment. In each case the current labour market status is compared to the labour market status of the same individual a year ago. Specifically, LFS contains a question on the current labour market status and the status an individual had a year ago. A transition variable is formed as a comparison between those two statuses. Due to the data source used, other important questions concerning labour market outcomes (such as duration of unemployment once the person losses a job or the frequency of unemployment spells) are not covered in the present research.

The descriptive analysis focuses on the last available year (2015) and the evolution of transitions in the period 1998-2015. In addition to the descriptive analysis, an empirical analysis of contributions to the existing gap is performed based on data for the year 2015. The empirical analysis focuses on countries where the descriptive analysis has established that immigrants are in the most disadvantageous position. The case of transitions from employment to unemployment involves those countries exhibiting greatest evidence that immigrants lose disproportionally more jobs than natives.

The empirical analysis rests on the well-established Fairlie (1999) methodology. The methodology identifies and decomposes the overall gap between the two subgroups into the contribution of each specific factor considered relevant. It is applied in cases when the outcome is binary, such as in our case when observing whether a person has made a transition or not. The significance of a specific factor for the outcome is estimated in the underlying probit model (Fairlie, 2005). Once the significant variables are identified, the methodology determines the degree to which the gap between the outcomes can be explained by that specific variable.

Given that we want to explore transitions between labour market states, many of the traditional variables used in analysing predictions of labour market outcomes are perfectly correlated with changing the labour market status. For example, occupation perfectly explains the transition from unemployment to employment. The same

[3] Due to the previously mentioned confidentiality threshold, the data could not be disclosed for a larger number of country-years.

argument applies for the economic activity a person worked in/starts working in. The choice of explanatory variables is governed by the data used, but their inclusion is justified by the existing literature. Motivation for the choice of explanatory variables is offered below:

• Sex of a person. Studies show that – even though on average women migrate as frequently as men - family reunification is the main cause of female migration to Australia, Canada, Europe, New Zealand, and the United States (Ghosh 2009). Additionally, push factors, such as escaping home country (formal and informal) discriminatory institutions can play an important role in a female's decision to move (Ferrant, et al 2014). The probability that females will be immediately integrated into the host country labour market is lower, even though gender equality in the workplace in the host country can be a strong pulling factor (Baudassé and Bazillier 2014). Even when participating in the labour market, women face difficulties. Studies have found that migrant women may face double discrimination – as migrants and as women (Ghosh, 2009). To address these issues, we included a dummy variable that equals one if a person is male. Even though studies show that migrant women are more vulnerable on the labour market, the recent crisis had adverse effects on male workers. Studies reveal that women were less affected (Farris, 2015) so our initial assumption is that they will be less likely to lose a job, but we cannot assume that they will be also more likely to gain employment. To the extent that the effect of the crisis had a greater impact on male-related jobs (and in particular in industries where the immigrant workforce is more strongly represented), we expect that the sex of a person will be significant positive factor in explaining the gap in immigrant-native transitions from employment to unemployment. To the extent that the crisis brought about an additional shift towards increased demand for traditional female occupations and thus contributed to the activation of the female labour force, we expect that the sex of a person will be significant negative factor contributing to the gap in immigrant-native transitions from unemployment to employment.

• Age of a person. This is a standard predictor for labour market outcomes. Literature provides evidence that European youth have been hit more by the recent economic crisis (Bruno, Marelli, Signorelli, 2014). Even in boom periods, youths frequently change careers (in some countries more frequently than others), meaning that they may have been "in-between jobs" at the time of Survey more so than the mature working-age population. At the same time, older population groups might begin to consider retirement options and in turn employers may be more willing to part with older employees given that they consider them to be less a productive option for future business endeavours. Thus, both population subgroups are at a

greater risk of losing their jobs, while older persons are also less likely to find a job upon becoming unemployed. Although the same is true for both the immigrant and native population, the question is whether their age structure of immigrant and native can contribute to the explanation of the gap. Given that young persons are more likely to migrate (as recently discussed by Bernard, Bell and Charles-Edwards, 2016) and immigrants from some countries are more likely to have larger families than the host country population, the case may very well be that the immigrant population is disproportionally young. We operationalize this by including dummy variables for each cohort starting from 15-24 to 55-64, with the most working active age cohort 35-44 serving as a reference. Youth have been more adversely affected by the crisis (O'Higgins, 2012). Therefore, the expectation is that migrant youth will face twice as many difficulties – the probability of losing a job will be higher for the migrant youth while the probability of finding a job will be lower. To the extent that the immigrant population belongs disproportionally to the age cohort most adversely affected by the crisis in the host labour market, we assume that this variable will have a significantly positive contribution in explaining the immigrant-native gap in transitions from employment to unemployment and a significantly negative contribution in explaining the gap in transitions from unemployment to employment.

• Degree of urbanisation of the area in which a person lives. The labour market is more vibrant in densely populated areas and provides more job opportunities, which in turn is more likely to affect the successful economic integration of immigrants into a host country (Pischke and Velling, 1997; Borjas 2001, Jaeger 2008). Recently, Verdugo (2016) also emphasized the role of public housing (in densely populated areas) as an important factor for immigrants choosing a location within a host country. Hence, the assumption is that immigrants are more likely to choose densely populated areas and are more likely to live in immigration hubs (regardless of whether it is their own choice or by necessity). This may also create additional job prospects, for example, through social network effect and thus ease the transition from unemployment to employment. Similarly, it may also create low job areas with vicious circles of unemployment and poverty, contributing to job loss transitions. We operationalize this situation by including three dummy variables – sparsely, densely and intermediately populated areas, where the dense area is the reference in probit equations. To the extent that immigrants are more concentrated than the native population in densely populated areas, we expect that our explanatory variables will have a significant negative contribution to explaining the gap in the transition from unemployment to employment (due to lower overall labour market demand in less densely populated areas) and a significantly positive contribution in explaining the gap formation in transitions from employment to unemployment

(due to relatively more adverse labour market conditions for immigrant workers in less densely populated areas).

• A person's education is an important predictor of labour market outcome. Immigrants frequently face obstacles in obtaining recognition of their qualifications in host countries and subsequently end-up taking jobs that are below comparable levels of the native population. This, however, implies that the immigrant population may have lower reservation wages than the native population. Employers may exploit this situation by acquiring more productive workers for lower wages. However, the relationship is not straightforward. The educational attainment may not be easily transferred to work activities in host countries due to numerous obstacles (including language or cultural barriers). Studies have also found that there are important educational attainment differences with respect to second-generation immigrants (Borjas 1992). Hence, the expected role of education is crucial, but the direction of this variable's contribution remains unclear at first. We included educational attainment using 3 dummy variables – low, medium and high levels of education, where medium is the reference value. To the extent that a country is able to attract immigrants with higher levels of education than the native population and with relatively good labour market integration policies, we expect that the higher education variable is a significant negative contributor of the gap in transitions from unemployment to employment. To the extent that a country is attracting immigrants with lower levels of education than the native population, and immigrants are faced with additional adverse conditions on the local labour market, we expect that the lower education variable is a significant positive predictor of the gap in transitions from employment to unemployment.

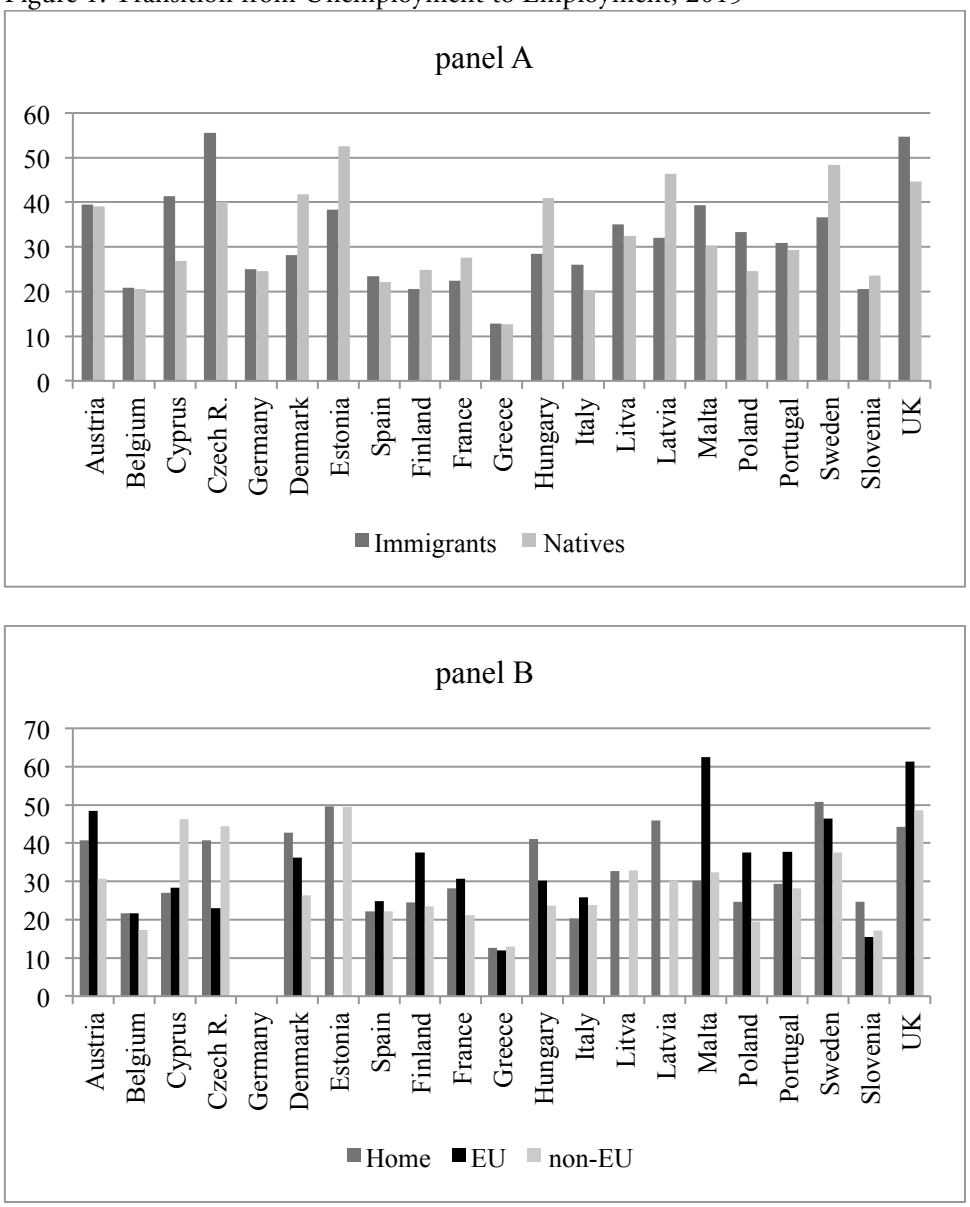
Results and Discussion

Transitions from Unemployment to Employment

First, focus is placed on the differences in transitions from unemployment to employment. Specifically, these transitions include persons who were unemployed a year ago but are employed at the time of the Survey. To make comparisons across countries, the data show transitions as percentage of those who are unemployed during the current year in the respective population. The differences between immigrants and the native population for all European Union countries with a sufficient number of observations in the year 2015 are presented in Figure 1, panel A. The transitions are also illustrated for the same countries following country of birth as a distinction between immigrant and native population, with those born in

the country described as "home", and the other labels are self-explanatory (Figure 1, panel B).

Figure 1: Transition from Unemployment to Employment, 2015



Source: author's calculations based on EU-LFS data.

The data clearly reveal differences among European countries. Regardless of the overall transition rate (which also depends on the characteristics of the local labour market), there are:

• Countries where transitions from unemployment to employment are similar for the native and immigrant population: Austria, Belgium, Germany, Spain, Greece;

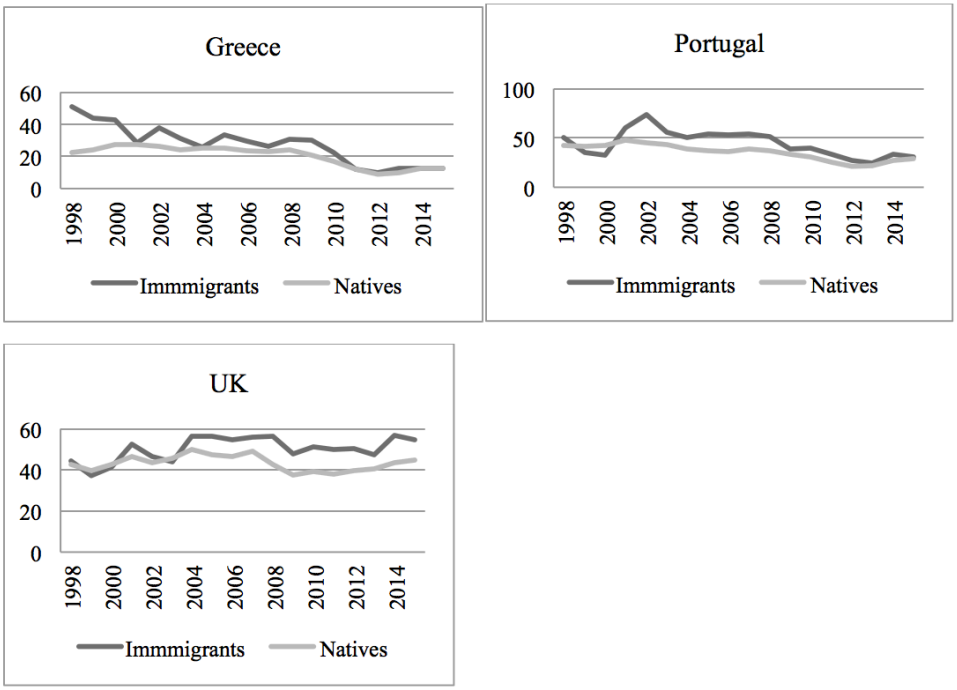
• Countries where unemployed immigrants were more likely to find a job than natives: Cyprus, Czech Republic, Italy, Malta, Poland and UK;

• Countries where unemployed natives were more likely to find a job than immigrants: Denmark, Estonia, Finland, France, Hungary, Latvia, Sweden.

These differences might not be the same over time, since countries can adopt different policies and/or experience additional immigration flows influencing the ability of local labour market to absorb them. To explore this further, we turn our focus on the evolution of the transition rates from unemployment to employment in the 1998-2015 period. The data presented below refer to the initial definition of immigrants and natives based on citizenship[4]. Initial analysis captured all European countries, but the data presented in Figure 2 are only for the countries that had enough observations throughout the analysed period. Figure 2 contains separate panels for Belgium, the Czech Republic, Germany, Denmark, Estonia, Finland, Greece, Portugal and the United Kingdom.

[4]The data based on country of birth can be obtained from the author upon request. It has to be emphasized that the evolution of "native" and "country-born" population is virtually the same, since the correlation for the two datasets (for all the countries and all available years) in the case of transition from unemployment to employment is 0.997788. The same comparison for the "immigrant" population is not appropriate, because disaggregating the overall immigrant into EU-born and non-EU-born leads to a larger number of cases where the data cannot be disclosed due to publication threshold restrictions imposed by Eurostat. Additionally, in a number of countries at the beginning of the sample, there was a large proportion of cases with "no-answer" for the country of birth variable. Indeed, as can be noticed from the comparison presented in Figure 1, this "no-answer" issue was carried out throughout the analysed period in the case of Germany.

Figure 2: Transition from Unemployment to Employment, 1998-2015



Source: author's calculations based on EU-LFS data.

The data reveal different patterns of transitions from unemployment to employment, clearly connected with overall labour market developments. For example, what is noticeable are the deteriorating conditions in the Greek economy which exerted a negative effect on transitions to employment for both immigrant and natives, while the decline for the immigrants was particularly steep at the beginning of analysed period and again in the 2009-2011 period. In some economies – Finland and the Czech Republic - the crisis period (around the year 2008) was associated with increased transitions of immigrant population towards employment, while no similar patterns were recorded for native population.

The data presented in the figure also show countries with (almost) continuously different transitions of immigrants and natives. On one side of the spectrum is Denmark, where natives were more likely to make the transition from unemployment to employment throughout the analysed period. On the other side are Portugal and United Kingdom, where since the early 2000s, immigrant transitions from unemployment to employment are higher than for natives.

For the countries with the largest identified gap, we explore whether the differences in characteristics of native and immigrant population can explain the existing hap. The results of the estimates based on the Fairile methodology are presented in Table 1.

Table 1: Contributions to the Gap in Transition from Unemployment to Employment, 2015

	Denmark	**Estonia**	**Finland**	**France**	**Hungary**	**Latvia**	**Sweden**	**Slovenia**
Native	0.42	0.53	0.25	0.28	0.41	0.46	0.48	0.24
Immigrant	0.28	0.38	0.21	0.22	0.28	0.32	0.37	0.21
Gap	0.14	0.14	0.04	0.05	0.13	0.14	0.12	0.03
% gap explained	-3.61	17.11	-45.16	56.34	-15.10	43.74	12.98	63.25
Contributions to the gap (as percentage of the estimated gap)								
Male	0.54	0.53	-4.41	1.38*	-1.87	0.07	-1.16	29.05*
Age 15-24	2.70	24.22*	-6.33	8.05*	1.27	16.07*	3.88*	-2.91
Age 25-34	-3.70	6.51*	-24.99*	-0.75*	0.14	10.93*	-4.02*	1.89
Age 45-54	-1.03	-1.30	-1.02	0.91*	-2.73*	1.69	-0.08	-16.97*
Age 55-64	-7.34*	4.76	-75.38*	-10.59*	17.28*	8.20*	-19.69*	-0.05*
Inter-urban	0.00	-0.14	-4.88	-0.81*	8.66*	3.53*	-0.02	-8.89
Sparse-urb	3.84*	-19.31*	25.23*	5.56*	-26.59*	1.64	0.01*	30.71*
Edu-low	-3.30*	-1.22	43.35*	46.80*	-6.69*	-0.11	0.49*	41.82*
Edu-high	-1.51	3.21*	4.51	5.87*	-4.27*	1.44*	-3.50*	39.55*
N	2580	751	1135	33154	13332	2452	6136	4037

Source: author's estimates based on EU-LFS data.

The important point to notice is that, although the size of the gap differs, in all analysed countries the natives are more likely to make a transition from unemployment to employment than the immigrant population. The transition was most frequent in the case of Sweden, and least frequent for Slovenia – indeed, most countries had higher transition rates for the immigrant population than Slovenia had

for the native population. This suggests that labour market in Slovenia was rather sluggish[5].

The analysis reveals that the explanatory variables have various contributions in explaining the existing gap in transitions from unemployment to employment between native and immigrants across countries. The variables jointly provide an explanation for most of the gap in transition from unemployment to employment in Slovenia (63 percent of the gap), France (56 percent of the gap) and Latvia (43 percent). However, the results imply that had the immigrants and natives the same characteristics based on analysed variables, the gap in transitions from unemployment to employment would be even larger in three analysed countries – Finland, Hungary and Denmark. Based on these results the probable assumption is that in these three countries the immigrant population fulfils in specific section of labour market demand.

Not a single personal characteristic has been found significant in all of the analysed countries. This implies that each country attracts different types of immigrants and depending on specific labour market integration policies, immigrants with similar characteristics have different outcomes in comparison to native populations. This finding is in line with previous literature, but the results enable us to explore these differences. Even when significant, the same variable does not have the same sign of contribution to the gap. For example, low education contributes to the explanation of the gap for France, Finland and Slovenia. It seems that in these countries, immigrants are on average relatively less educated (or their qualifications are not recognized by the home country education system), thus decreasing their chances of finding a job. However, in case of Slovenia, higher education among immigrants also contributes to a relatively unfavourable outcome for immigrants. Thus, the argument may very well be that, at least in Slovenia, there are important differences in the structure of educational attainment (formal or not) between immigrants and natives that influence respective labour market transitions.

Another important example in some countries is age. In the case of Finland, had immigrants been represented in the age cohort 55-64 as much as natives, the gap in the average transition from unemployment to employment would be even larger. Similar results are also valid for Sweden, France and Denmark. However, the differences in this age cohort between immigrants and natives provide an explanation of the existing gap in Hungary, Latvia and Estonia. This also shows that the age

[5]For an overview of labour market indicators in EU economies in 2015 please consult European Union (2016).

structure of immigrants in comparison to the native population differs among the analysed countries.

The overall conclusion is that not only does the gap in transitions differs, but the path of the gap also differs, and the contributions of the variables in explaining the gap differ across European economies. Transitions seem to be idiosyncratic to host country labour markets. To illustrate this, we analyse in which economic activities immigrants and natives found a job. The data in Table 2 are presented as percentages of the respective population that has made the transition from employment to unemployment.

Table 2: Percentage of Previously Unemployed Natives in Immigrants According to the Economic Activity of Their Employment, 2015

	Denmark		Estonia		France		Hungary		Latvia		Sweden		Slovenia	
NACE	I	N	I	N	I	N	I	N	I	N	I	N	I	N
A	3.4	0.5		4.8	4.3	1.8	29.6	6.9	5.2	11.7		1.1		2.5
B								0.1		0.8		0.2		
C	14.4	14.0	29.5	20.6	5.7	10.7		16.3	16.4	17.0	4.0	7.4	49.1	23.1
D		0.5			0.4	0.4		0.3		1.1		0.4		
E		0.7			0.5	0.6		2.5		0.4		0.4		0.8
F	3.4	5.7	23.0	15.1	12.2	7.4		7.2	25.9	12.4	4.0	5.0	15.1	9.1
G	9.6	17.3	6.6	19.0	10.1	12.8		7.0	15.5	15.4	11.2	12.2		12.2
H	7.5	4.6	8.2	4.2	4.2	4.8		3.4	11.2	7.1	7.2	5.0		4.7
I	15.8	5.0	6.6	6.4	7.6	6.5		4.3	0.0	4.4	11.6	5.9		8.0
J	6.2	2.2		1.9	1.3	2.0		0.6	0.0	1.8	3.2	2.8		2.1
K		1.4			1.0	1.5		0.5	0.0	1.1	1.6	0.8		1.7
L		1.4	3.3		1.5	0.9		0.3	7.8	2.4	4.0	1.1		
M	3.4	2.9		3.5	2.6	4.4		0.7		1.7	10.8	5.9		5.9
N	10.3	4.8	4.9	3.9	9.7	6.5		5.1	6.9	5.2	2.0	11.1	11.3	3.1
O		6.3		2.6	2.3	6.4	40.7	33.8		3.9	14.8	4.4		3.9
P	4.8	10.3		8.0	5.5	8.0		3.1		5.6	18.8	11.9		8.1
Q	12.3	16.6	8.2	3.5	12.7	13.4		3.2		3.6		15.4	7.5	5.8
R	2.1	3.0		1.6	1.1	2.5		1.5		1.9	2.4	4.1		3.6
S	2.7	2.2		2.9	3.2	4.1		1.1	3.4	1.7		3.1		3.0
T					7.2	2.0		0.2		0.6				

Source: author's calculations based on EU-LFS data.

Note: NACE activities are: A – Agriculture, forestry and fishing; B- Mining and Quarrying; C – Manufacturing; D – Electricity; Gas, Steam, and Air Conditioning Supply; E – Water Supply, Sewerage, Waste Management and Remediation Activities; F – Construction; G – Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles; H – Transportation and Storage; I – Accommodation and Food Service Activities; J – Information and Communication; K – Financial and Insurance Activities; L – Real Estate Activities; M – Professional, Scientific and Technical Activities; N –Administrative and Support Services; O – Public Administration and Defence, Compulsory Social Security; P – Education; Q – Human Health and Social Work Activities; R – Arts, Entertainment and Recreation; S – Other Service Activities; T – Activities of Households as Employers; U – Activities of Extraterritorial Organisations and Bodies.

Based on the data in Table 2, we notice that in Denmark immigrants are most likely to find a job in accommodation and support services. This is also the activity where the difference between immigrant and native transition to employment is the highest. Sweden is another example where immigrants are more likely to find work in this activity than natives. However, for Sweden, it seems that in 2015 most immigrants found employment in education. This is not the case in other economies. Indeed, in most countries education activity employed the native population. The dominant sector for immigrants in Slovenia was manufacturing and public administration in Hungary. In both these countries the number of immigrants that made a transition was rather low. France, a country with a high share of immigrant transition, mostly employed them in construction, and human health and social work.

The data in Table 3 explore differences in working conditions between immigrant and native population for the case where they made the transition from unemployment to employment. The questions were related to the quality of job. The data in Table 3 show: percentage of the respective population employed on a permanent contract, percentage of the respective population that declared that their jobs do not involve working in shifts, working during the evening, working during nights, Saturday or Sunday work.

Table 3: Working Conditions of Immigrants and Natives Who Made the Transition from Unemployment to Employment, 2015

Country		Permanency	No Shift	No Evening	No Night	No Saturday	No Sunday
Denmark	I	20.5	87.7	62.3	90.4	67.8	100.0
	N	26.1	93.4	65.4	91.9	69.1	74.9

Table 3 (Continued)

Estonia	I	27.9	72.1	60.7	88.5	67.2	73.8
	N	13.5	75.6	61.4	93.2	64.6	76.8
Finland	I	50.0	71.4	78.6	92.9	92.9	85.7
	N	51.3	77.7	68.7	93.2	78.5	80.8
France	I	66.2	73.9	32.8	36.2	26.5	32.0
	N	65.1	76.3	28.7	33.0	22.5	29.3
Hungary	I	77.8	96.3	88.9	92.6	74.1	77.8
	N	63.4	81.4	78.2	87.7	71.4	85.2
Latvia	I	20.7	71.6	66.4	92.2	62.9	75.9
	N	13.2	68.1	69.1	89.2	64.5	74.1
Sweden	I	66.8	76.8	70.0	88.0	67.6	68.8
	N	60.3	74.0	66.8	85.5	65.0	68.1
Slovenia	I	62.3	49.1	58.5	71.7	43.4	64.2
	N	71.7	56.3	58.4	84.0	43.3	71.1

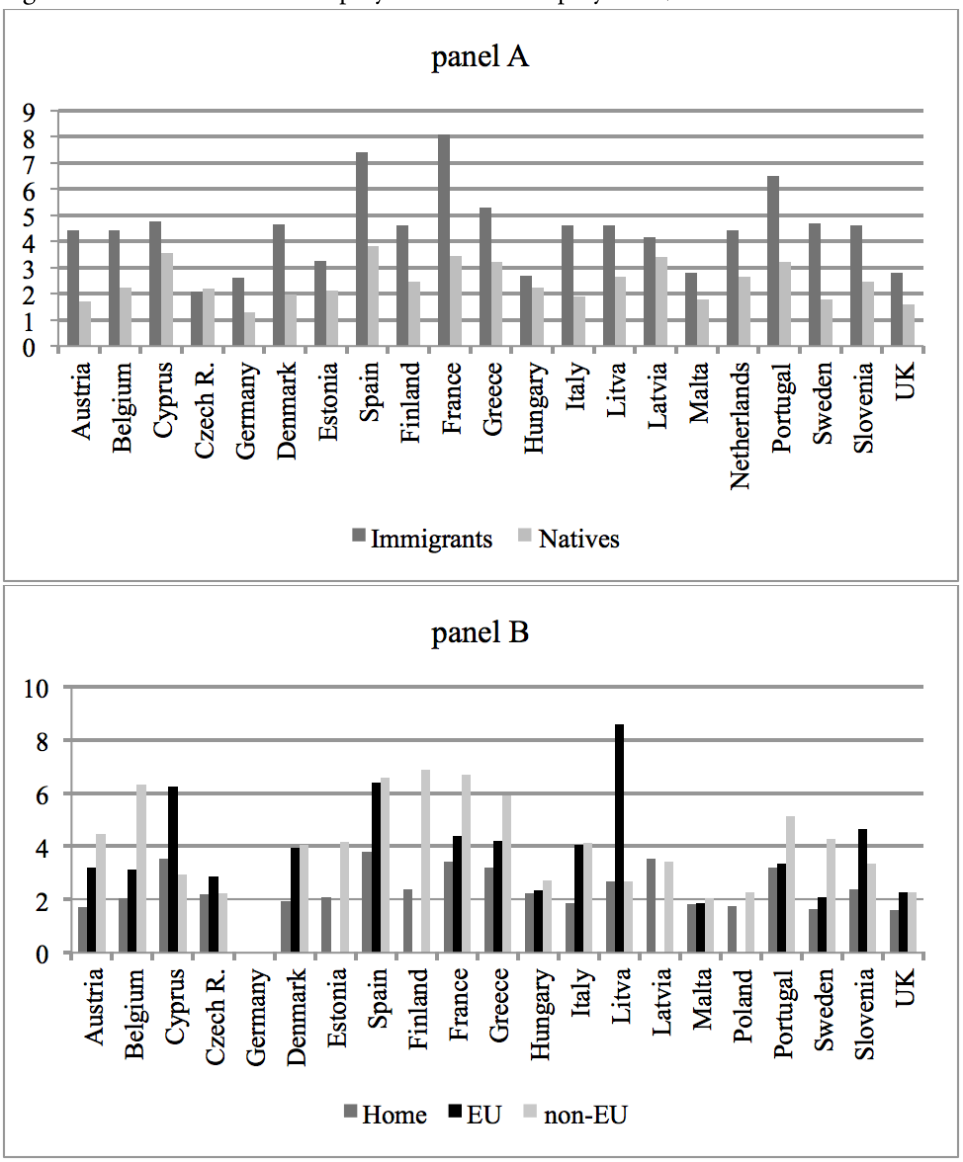
Source: author's calculations based on EU-LFS data.

Contrary to initial expectations, the immigrant population on average does not always end up in jobs associated with more adverse working conditions. For example, a higher percentage of immigrants made the transition to permanent jobs in Sweden, Latvia, Hungary and Estonia. A higher percentage of immigrants found employment not involving shift work in Hungary, Latvia and Sweden. Moreover, a higher percentage of immigrants found employment not involving Sunday work in Denmark, Finland, France and Latvia.

Transitions from Employment to Unemployment

Next we turn our attention to analysing differences in transitions from employment to unemployment. We define the transition as occurring if a person who has been employed a year ago is currently unemployed. The differences between immigrants and the native population for all European Union countries with a sufficient number of observations for the year 2015 are presented in Figure 3, panel A. The Figure 3 in panel B also contains information on the transition from employment to unemployment by country of birth – home country, EU country and non-EU country.

Figure 3: Transition from Employment to Unemployment, 2015



Source: author's calculations based on EU-LFS data

When comparing these results with those presented in Figure 1, it becomes evident that transition rates from employment to unemployment are lower than those from unemployment to employment. This is as expected. The most obvious explanation is

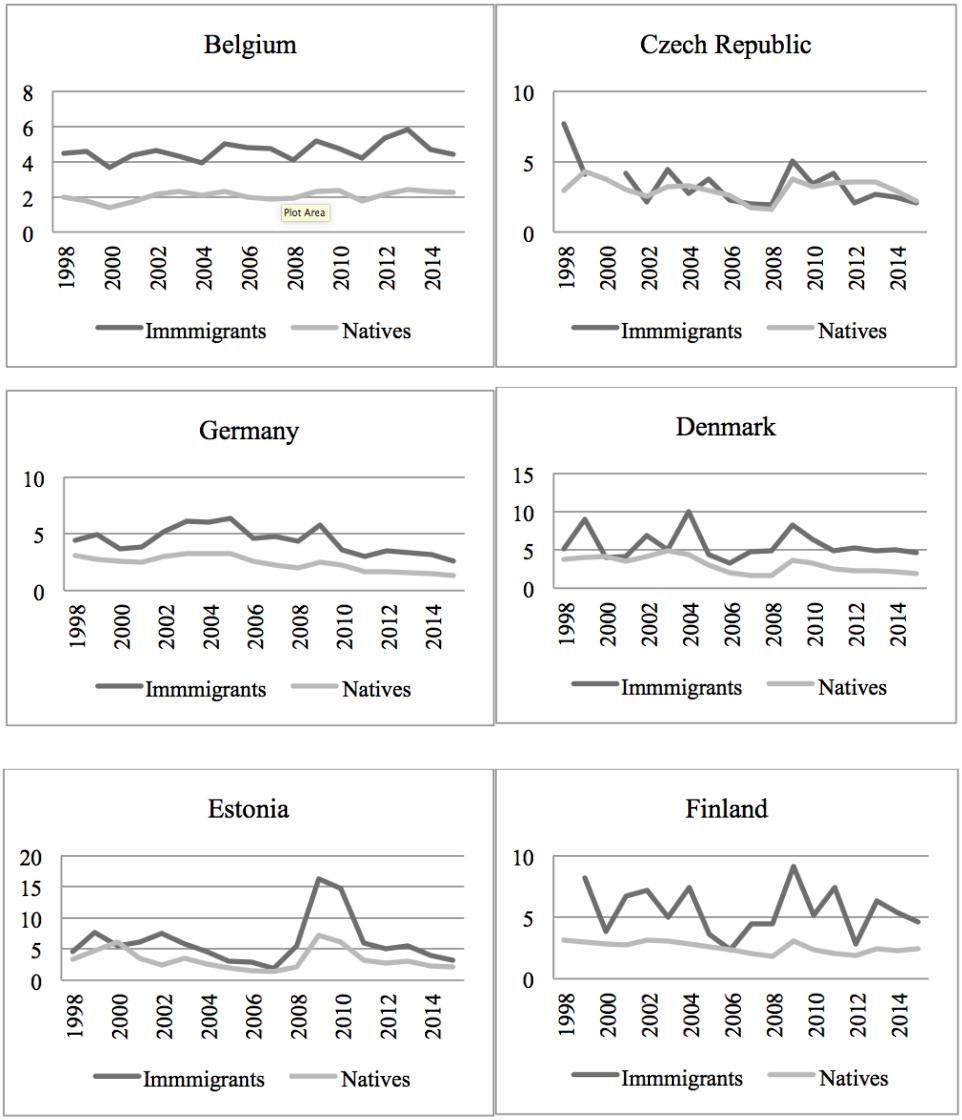
that the number of employed is always larger than the number of unemployed, hence the base of the second transition rate is larger, yielding a smaller percentage. A more substantial explanation is that rigidity of labour market institutions influence both hiring and firing procedures. Thus, the more rigid is the labour market, the costlier it will be for employers to fire employees, and thus they are more likely to sustain an above-optimal employment level even during times of crisis. Bassanini and Garnero (2013) found that the more restrictive the regulation, the smaller is the rate of within-industry job-to-job transitions, in particular towards permanent jobs. However, regulations are not the only explanation. Employers may want to retain for workers an above-optimal employment level during the bust phase given that human capital is scarce and employers are generally aware of the cyclical nature of an economy. In that case, relative attitudes towards immigrant workforce might become more evident.

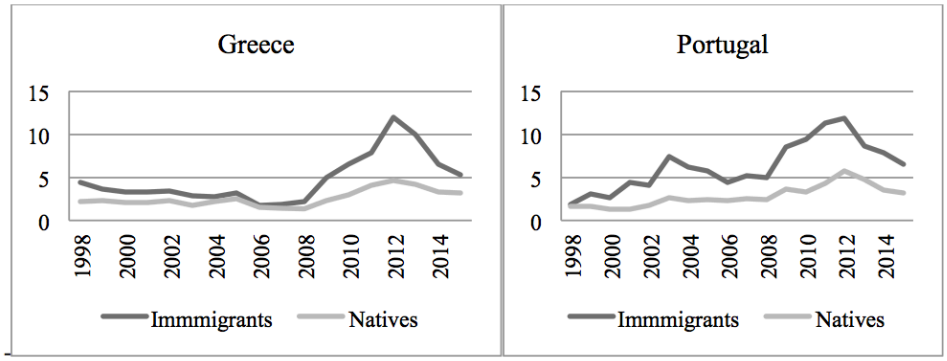
The data clearly suggest that in almost all the countries (with exception of the Czech Republic) transition rates from employment to unemployment in 2015 were higher for immigrants than for natives. This indicates that immigrants are more likely to lose their job and the relative likelihood is highest in France, Spain and Portugal. Other countries also have significant differences – for example, Austria, and Denmark.

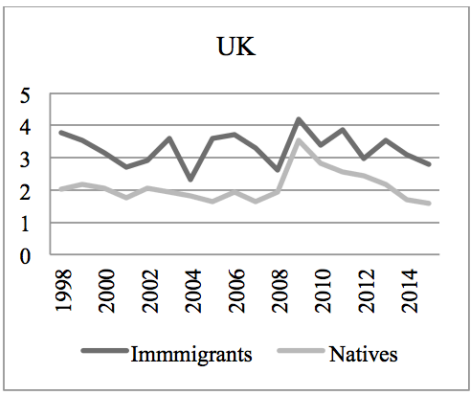
Again, we explored this issue within a dynamic perspective, to reveal whether these patterns persist in countries. The data presented below refer to the initial definition of immigrant and natives based on citizenship[6]. The data are again presented only for those countries for which transitions were observable throughout the 1998-2015 period (Figure 4). Figure 4 contains separate panels for Belgium, the Czech Republic, Germany, Denmark, Estonia, Finland, Greece, Portugal and the United Kingdom.

[6]The data based on country of birth can be obtained from the author upon request. It has to be emphasized that the pathway for "native" and "country-born" population is virtually the same, since the correlation for the two datasets (for all the countries and all available years) in the case of transition from employment to unemployment is 0.995794. Given that the number of transitions in this case is lower, there are more cases when the data cannot be publicly disclosed due to the threshold imposed by Eurostat.

Figure no. 4: Transition from Employment to Unemployment, 1998-2015







Source: author's calculations based on EU-LFS data.

Evidence shows that for most of the countries (again with the exception of the Czech Republic), immigrants are more likely to lose employment than natives during the analysed period. It may be that immigrants are more likely to be employed in the economic sectors more adversely affected by economic crises (Kogan, 2004). For some countries, – for example, Greece – there is additional effect of the crisis adverse impact on immigrants. For other countries – for example, United Kingdom – the crisis had the effect of the narrowing the gap between immigrants and natives losing their jobs, hence the assumption may be that it had a more adverse effect on the native population.

Both transitions reveal that the pathway for the immigrant population is more erratic than for natives. The pathways for transitions of native populations are generally smoother, usually exhibiting spikes during the steepest economic downturns. Thus, it seems that while natives are more likely to lose their jobs in times of crises, the

immigrant population has more difficulties in predicting their chances of retaining jobs even during favourable economic times.

To analyse contributions to the gap, our focus is directed to countries where immigrants have the highest probabilities of losing jobs in comparison to the native population. The analysis again relies on the Fairlie methodology including the same set of initial predictors (Table 4).

Table 4: Contributions to the Gap in Transition from Employment to Unemployment, 2015

	Austria	**Denmark**	**France**	**Italy**	**Portugal**	**Sweden**
Native	0.02	0.02	0.03	0.02	0.03	0.02
Immigrant	0.04	0.05	0.08	0.05	0.06	0.05
Gap	-0.03	-0.03	-0.05	-0.03	-0.03	-0.03
% gap explained	22.10	4.07	17.87	26.84	12.40	3.89
Contributions to the gap (as percentage of the estimated gap)						
Male	0.08	0.31*	0.74*	0.20*	0.31	0.79*
Age 15-24	0.87*	1.34*	-3.11*	2.96*	5.03*	-0.61*
Age 25-34	2.65*	2.58	1.55*	7.16*	4.20*	2.65*
Age 45-54	1.95*	-0.71	2.61*	3.84*	2.38*	-0.14
Age 55-64	2.47*	0.82	2.35*	5.65*	3.17*	-3.42*
Inter-urban	0.00*	0.89*	-0.17*	0.90*	-0.06	0.59
Sparse-urb	10.44*	3.06*	4.27*	0.89*	2.04*	1.17*
Edu-low	1.80*	-1.14*	7.68*	3.46*	-4.81*	5.51*
Edu-high	-2.40*	-3.10*	1.97*	1.78*	0.15	-2.68*
N	79223	49864	193469	192701	63242	76236

Source: author's estimations based on EU-LFS data.

The data in Table 4 show that in all analysed countries, immigrants had higher transition rates from employment to unemployment than the native population. The chosen variables explain the relatively small percentage of the gap in transition from employment to unemployment between the immigrant and native population – the

highest in Italy (26 percent of the gap), Austria (22 percent) and France (17 percent). For the case of transitions in the opposite direction, the level of significance and the sign of specific predictors differ across the analysed countries. Regardless of the fact that there are no common features, individual analysis at the country level is noteworthy. It is interesting to note that in sparsely populated areas of Austria, immigrants are more likely to lose jobs. Another interesting fact is that in Italy, younger age cohorts of immigrants (25-34) are more likely than natives to lose jobs. In the case of France, a low education is an important predictor for the disproportional job loss among immigrants. Specifically for this country, a comparative analysis of both transitions indicates that educational attainment plays an important role in relative labour market integration of immigrants.

A large segment of the gap remains unexplained due to the differences in characteristics between natives and immigrants. This suggests that there are many other factors as to why the immigrants are more likely to lose jobs than natives, more factors than we were able to analyse with the existing dataset. To contribute to a discussion on the potential factors, Table 5 presents the structure of immigrants and natives in the analysed countries based on the economic activity they previously worked in. The data consider only of those individuals who made the transition from employment to unemployment.

Table 5: The Structure of Immigrants and Natives Based on the Economic Activity of Their Previous Job, 2015

	Austria		Denmark		France		Italy		Portugal		Sweden	
	I	N	I	N	I	N	I	N	I	N	I	N
A		0.8	5.2	1.5	1.9	1.9	4.9	3.2		2.9	4.0	1.1
B						0.2		0.5				
C	16.2	18.2	11.1	13.8	8.3	13.2	13.0	16.5	5.4	14.3	7.2	8.4
D		0.7		0.4	0.8	0.5		0.5				0.3
E		0.5		0.5	1.6	0.9	0.6	1.1		0.5		0.5
F	17.4	12.0	5.2	7.9	21.8	10.1	17.6	14.4	15.2	10.9	7.2	7.9
G	13.4	18.2	13.3	15.2	10.1	14.9	5.8	17.7	9.8	18.6	11.2	11.1
H	4.2	4.8	4.4	5.6	4.5	4.2	2.3	5.1	5.4	3.5	3.2	4.9
I	16.4	11.2	22.2	5.2	8.3	6.7	11.3	12.0	30.4	12.3	16.0	6.2
J	1.2	2.7	3.7	3.6	1.8	2.6		1.6		2.7		4.6
K	1.0	2.1		2.0		1.8		1.0		1.4		1.3
L		1.2		1.4	0.5	1.1		0.5		0.6		1.2
M	3.7	4.1	3.7	4.1	3.4	3.9	1.0	4.2		3.4	4.0	7.8

Table 5 (Continued)

N	9.7	5.9	14.8	5.2	9.2	4.7	4.1	5.4	4.3	4.5	12.0	9.4
O	1.2	3.2		3.6	1.7	4.7		1.4		4.9	3.2	4.9
P	1.7	3.0	5.9	7.8	4.3	5.6		3.1	4.3	6.7	12.8	9.8
Q	5.2	5.6	6.7	15.5	7.0	10.2	3.4	3.6	5.4	6.1	9.6	9.9
R	3.5	2.2		2.1	1.7	2.6	0.6	2.0		1.6		3.3
S	2.2	2.8		2.3	1.6	3.3	2.5	2.4		2.5		3.2
T					1.4	0.5	31.6	2.3	6.5	2.3		
U								0.1				

Source: author's calculations based on EU-LFS data.

Note: NACE activities are: A – Agriculture, forestry and fishing; B- Mining and Quarrying; C – Manufacturing; D – Electricity; Gas, Steam, and Air Conditioning Supply; E – Water Supply, Sewerage, Waste Management and Remediation Activities; F – Construction; G – Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles; H – Transportation and Storage; I – Accommodation and Food Service Activities; J – Information and Communication; K – Financial and Insurance Activities; L – Real Estate Activities; M – Professional, Scientific and Technical Activities; N – Administrative and Support Services; O – Public Administration and Defence, Compulsory Social Security; P – Education; Q – Human Health and Social Work Activities; R – Arts, Entertainment and Recreation; S – Other Service Activities; T – Activities of Households as Employers; U – Activities of Extraterritorial Organisations and Bodies.

The data in Table 5 show that in Austria most immigrants had previously worked in construction, followed by accommodation and food services and manufacturing. For natives, manufacturing is also an economic activity that sheds a large labour force. This clearly indicates that manufacturing is undergoing restructuring and immigrants are not the ones who are particularly vulnerable in this economic activity. Construction is another segment heavily affected by the latest economic crisis and it is evident that in most of the analysed economies this has had a more severe impact on the immigrant population (Austria, France, Portugal and Italy). Accommodation and food services is one of the activities where immigrants also experienced higher percentage job losses in Portugal, Sweden and Denmark. It is interesting to note that in Italy the highest percentage of immigrants who lost jobs come from activities of households as employers. These findings once again confirm that immigrants frequently find jobs in economic sectors that are more prone to labour shedding during economic downturns.

Once losing their jobs, immigrants may find it more difficult to find a new job, which is reflected in the different durations of job searching. Table 6 presents the structure of the immigrant and native population based on the duration of search, and only for those who have made the transition from employment to unemployment.

Table 6: The Percentage of Immigrants and Natives Who Made the Transition from Employment to Unemployment According to the Duration of Unemployment, 2015

Country		less than 6 months	6-11 months	1 year and longer
Austria	I	68.2	29.4	2.5
	N	68.0	27.3	4.7
Denmark	I	63.7	27.4	8.9
	N	69.4	25.0	5.6
France	I	45.1	25.3	26.4
	N	46.5	29.4	18.4
Italy	I	51.3	36.0	12.7
	N	53.4	29.8	15.6
Portugal	I	58.7	25.0	16.3
	N	54.5	31.8	13.7
Sweden	I	57.6	27.2	5.6
	N	64.1	25.3	3.8

Source: author's calculations based on EU-LFS data.

The data in Table 6 reveal that natives are more likely to have shorter unemployment spells (Denmark, France, Italy and Sweden). France has the largest share of immigrants with long spells of unemployment, but the indicator for the native population is also the highest. Hence, although immigrants do encounter adverse labour market conditions, they do so along with the native population.

Conclusions

The recent economic crisis has had an adverse effect on the labour markets of European economies. Additionally, Europe has recently faced increased immigration flows. Both immigration and the crisis have exerted additional pressures on labour markets. The studies frequently indicate that, even without such pressures, immigrants fare worse on the labour markets of host countries than natives. This study re-examines this question for the period covering the most recent European history.

The analysis in this paper focuses on differences in transitions from unemployment to employment, and employment to unemployment between native and immigrant populations in European economies during the 1998-2015 period. Transitions,

rather than outcomes, have been chosen for the analysis to avoid a discussion on different labour market participation motivation for subgroups of immigrant populations. Thus, the focus of the analysis is both on immigrants and natives who were participating in the labour market – either through employment or actively seeking employment.

The analysis reveals that outcomes differ when it comes to transitions from unemployment to employment – in some countries/years the natives find proportionally more employment, while in others it is the immigrants. In most of the countries, however, immigrants are more likely to lose a job than natives. Similarly, in most countries, a connection can be made between crisis and increased job loss for natives. Immigrants are also more likely to experience adverse effects of the crisis, but the probability that they will lose a job is also higher in other periods.

In addition to identifying the immigrant-native gap, the characteristics of individuals as potential contributors to the gap have been assessed. The results of this segment of the analysis show that similar characteristics exert a different influence on the differences in immigrant-native labour market transitions in the analysed countries. This finding supports previous claims in the literature that there is certain self-selection of immigrants into different host countries, according to different socio-economic factors. While this has been previously established, we address this issue here in regard to the labour market. Since the heterogeneity of immigrants has been documented once more, this time focusing on a narrow segment of labour market transitions, it seems that calls for a unified approach to policy discussions that have been heard during the recent migrant wave in Europe might be displaced. The policies should also consider path dependency and adjust measures so as to be best suited for the population on their particular territory. The results do not claim that this is important for all segments of migration integration policies, but they do suggest that it is important for labour market integration, even for cases where migrants are already active on the host country labour market.

The paper has documented the increased vulnerability of immigrants on the host markets of European countries. Yet, due to the period analysed, it has not fully captured the effect of the most recent increased immigration flows arriving into territories of the European economies. Future research efforts should be devoted to the importance of integrating these immigrants and a comparative analysis of the policy approaches undertaken by different countries in dealing with increased migratory pressures.

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