



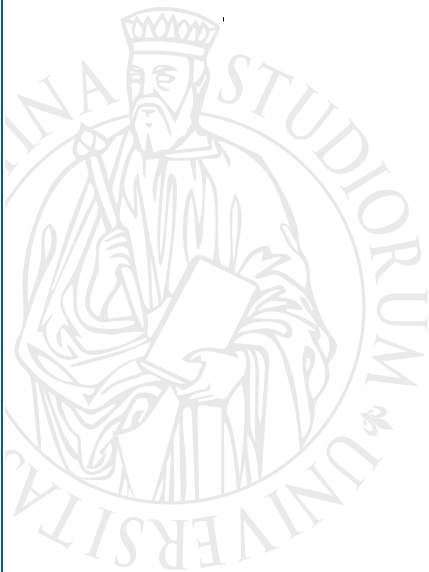
UNIVERSITÀ
DEGLI STUDI
FIRENZE

DISIA

DIPARTIMENTO DI STATISTICA,
INFORMATICA, APPLICAZIONI
"GIUSEPPE PARENTI"

**Legal Status and Immigrants' Labour
Market Outcomes: Comparative Evidence
from a Quasi-Experiment in Western
and Southern Europe**

Ivana Fellini, Raffaele Guetto



**DISIA WORKING PAPER
2019/11**

© Copyright is held by the author(s).

Legal Status and Immigrants' Labour Market Outcomes: Comparative Evidence from a Quasi-Experiment in Western and Southern Europe

Ivana Fellini

Università degli Studi di Milano-Bicocca

Raffaele Guetto

Università degli Studi di Firenze

Abstract (191 words)

Improved legal status has been found to be associated with better employment chances and higher wages for immigrants, although causal effects remain difficult to ascertain due to severe endogeneity issues. This article contributes to the debate on the “citizenship/legal status premium” in the labour market by providing quasi-experimental evidence based on the 2007 EU Eastern Enlargement, following which immigrants from Romania and Bulgaria, the new EU Member States, exogenously acquired the EU citizen status. The article also contributes to the literature on legal status effects, mainly focused on single-country studies, by comparing “older” destination countries of Western Europe with “newer” ones of Southern Europe. Results show that while improved legal status is associated to higher employment rates in Western European countries, the association is null or even negative in Southern European countries, where immigrants are more strongly urged to be employed. However, improved legal status is more strongly associated with better job quality in Southern Europe, where immigrants are usually segregated in low-skilled jobs. The article concludes that possible effects of improved legal status should be interpreted taking into account the different institutional contexts and models of immigrants' labour market incorporation.

Keywords: Legal Status; Ethnic penalty; EU enlargement; Labour market; Naturalisation; Southern Europe

1. Legal Status and Immigrants' Labour Market Outcomes in a European Comparative Perspective

Studies on the relation between immigrants' legal status and their labour market outcomes mostly focus on the acquisition of host-country citizenship, i.e. naturalisation.

Notwithstanding the variety of situations across developed countries in terms of legal frameworks and naturalisation rates (Huddleston et al., 2015), immigrants who naturalise are found to perform better in the labour market than those who do not (OECD, 2010; 2011). Labour market outcomes usually considered are employment chances (see e.g. Fougère and Safi, 2011; Corluy, Marx, and Verbist, 2011), wages (see e.g. Chiswick, 1978; Bratsberg, Ragan, and Nasir, 2002; Pendakur and Bevelander, 2014), and, more rarely, job quality, i.e. skill level, employment stability and access to jobs in the public sector (see e.g. Bratsberg, Ragan, and Nasir, 2002; Kogan, 2003; Mazzolari, 2009; Gathmann and Keller, 2017). A second major area of study on the effects of legal status on immigrants' labour market outcomes focuses on legalisation, i.e. the transition from an irregular to a regular residence condition. Findings are largely consistent with the literature on naturalisation: regular and stable residence status in the host country is generally associated with better outcomes in the labour market (Fasani, 2015; Ci, Hou, and Morrisette, 2018).

Several are the channels through which citizenship and other forms of improved legal status may positively affect immigrants' labour market outcomes. As regards citizenship, naturalisation is usually obtained through a selective and voluntary procedure, so that employers may use it as a signal to reduce uncertainty about immigrants' productivity. That is, employers may infer naturalised immigrants' prospective behaviour (long-term expected stay, investment in country-specific human capital, etc.) and interpret citizenship acquisition as a proxy for other unobserved characteristics (motivation, ambition, commitment to the receiving country, socio-cultural integration). Beyond this "signalling" function, citizenship also provides some objective advantages for immigrants' labour market incorporation, also when obtained "automatically" (e.g. via

marriage or due to an exogenous normative change). Being citizens of the receiving country reduces many of the barriers usually faced by non-naturalised immigrants: it reduces firms' administrative burden linked to immigrants' need to obtain and renew their stay and work permits, it grants easier mobility (through fewer travel restrictions) and access to otherwise unavailable jobs, notably in the public sector (Bratsberg, Ragan, and Nasir, 2002). Moreover, naturalised immigrants may face lower barriers to self-employment through reduced credit constraints (OECD, 2011).

With appropriate caveats and specificities, the signalling function, the practical advantages and the reduced barriers to work also apply to other forms of improved legal status (i.e. regular vs irregular and permanent vs temporary residence). Differently from studies on naturalisation, however, which generally find a "citizenship premium", legalisation studies show that an improved legal status may even lower immigrants' employment probabilities: by providing greater access to welfare provisions, improved legal status may increase the "reservation wages" of immigrants previously working illegally, i.e. make them less prone to accept whatever work conditions they are offered (Barcellos, 2010; Amuedo-Dorantes and Bansak, 2011); or it can make migrants with long-term perspectives of staying more selective in accepting job opportunities as they are no more in need of taking up whatever job to renew their short-term stay permits.

The analysis of the effects of immigrants' legal status on their labour market outcomes is affected by important methodological and theoretical shortcomings. First, and most important, the identification of a causal link from improved legal status to better labour market performance is hampered by severe endogeneity issues, in the form of unobserved heterogeneity and reverse causality, which only the availability of adequate longitudinal data can overcome. Second, the available empirical evidence is mainly based on single-

country studies focusing on “old” destinations of international migration such as Anglo-Saxon and Central/Northern European countries. From a more theoretical standpoint, consequently, a comparative framework on how institutional and structural differences across receiving countries can affect the possible effects of immigrants’ legal status on their labour market outcomes is lacking. Third, different forms of legal status have emerged in the EU space, such as the EU citizen status, which enables freedom of movement for workers across EU Member States, although not entitling full citizenship rights (Ruhs, 2017). The legal statuses migrants hold may thus entail different situations, ranging from unauthorised presence to full citizenship.

In this article, we address the above-mentioned methodological shortcomings by exploiting the 2007 EU Eastern enlargement (EUEE) as a quasi-experiment which exogenously improved the legal status of non-citizen immigrants from Romania and Bulgaria, who became EU citizens upon the accession of the two new Member States. By studying the labour market outcomes of Romanians and Bulgarians already living in a selection of EU destination countries upon enlargement – relative to those of comparable national groups – before and after 2007, we can causally assess the impact of this peculiar form of legal status.

Our study compares the effects of immigrants’ improved legal status in Western and Southern Europe, “old” and “new” immigration countries, respectively. Indeed, scarce evidence on Southern European immigration countries is available, and their inclusion in the comparison can be especially important to understand whether previous findings hold under different structural and institutional conditions. To this purpose, two dimensions of immigrants’ economic incorporation are analysed: employment probability and the qualification of their jobs (conditional on being employed).

The article is organised as follows. The theoretical section discusses the association between legal status and immigrants' labour market outcomes, with a special focus on naturalisation, being the EU citizen status a condition similar to that of naturalisation as regards labour market access. In the subsequent paragraphs, relevant structural and institutional differences between Western and Southern European countries are discussed and research hypotheses derived. The data and methods section presents the design of the quasi-experiment. The empirical section follows and the article concludes with the implications of the results for the research on citizenship effects and the European patterns of immigrant disadvantage.

2. Theoretical Background

2.1 Citizenship "Effects" on Immigrants' Labour Market Outcomes

Empirical studies almost unanimously find a positive robust association between immigrants' improved legal status and their labour market outcomes. Particular attention has been devoted to naturalisation, whose effects are usually found to be stronger for the worse performing migrant groups (OECD, 2010). However, establishing a causal link between a change in the legal status of immigrants and their labour market outcomes is made difficult by several endogeneity issues (OECD, 2010, 2011). First, naturalisation is a selective process as not all immigrants *can*, or *opt to*, naturalise. A first source of *selectivity* is induced by the institutional eligibility criteria which, although differing across countries (Huddleston et al., 2015), generally require a (more or less) long period of residence in the destination country, language proficiency, and income means tests. On top of the institutional selection, immigrants usually *self-select* into naturalisation. Naturalised immigrants tend to be not only more educated and better settled in the host

country, but are also likely to be selected in terms of non-observed and non-observables characteristics such as motivation and commitment.

Reverse causality is an additional issue. Immigrants with better labour market outcomes in the destination country are more likely to respect the eligibility criteria for naturalisation, which typically include minimum length of stay and economic requirements.

Selectivity and reverse causality make it hard to answer the question of whether naturalisation “causes” better labour market outcomes or, conversely, whether naturalisation is the effect of labour market success and other immigrants’ “favourable” characteristics. Only longitudinal data including the time of citizenship acquisition and employment histories, as well as detailed information on migratory background, would allow researchers to adequately tackle this issue. Given the scarcity of such data, researchers have often been forced to either ignore the problem or to adopt an instrumental variable approach, using as instruments the number of years immigrants have been eligible for citizenship (Bevelander and Pendakur, 2012, 2014) or family reunification (Kaya and Kayaoğlu, 2011).

Another possible way to study the direction of the causal chain is to exploit sudden, exogenous changes in the legal status of certain types of immigrants, and to compare the “evolution” of their labour market behaviour to that of other immigrants, whose legal status remained unchanged. The progressive EU enlargement to Eastern European countries provided scholars with opportunities for quasi-experimental analyses of this kind (Ruhs, 2017; Ruhs and Wadsworth, 2018), even outside the specific field of immigrant economic incorporation (Azzolini and Guetto, 2017). In particular, the 2007

EUEE – the exogenous policy change considered in this paper – granted the EU citizen status to Romanians and Bulgarians. Transitional arrangements allowed Member States to limit work migration across EU member states for a maximum of seven years (Ruhs and Wadsworth, 2018). However, Romanians and Bulgarians already legally residing in a EU country as of January 1st 2007 had immediate free access to the labour market of the destination country under the status of EU citizens.

The EU citizenship grants citizens the right to settle and look for almost any job in any country within the EU, and to receive the same assistance from national employment offices as nationals of the host country, with possible limitations in the access to the public sector.

2.2 Do Labour Market and Institutional Characteristics Matter?

The literature has paid little attention to the possible role of the different models of immigrants' labour market incorporation on the effects of their legal status. Partly due to data limitations and partly due to the still scarce relevance of naturalisations in new destination countries of Southern Europe, the literature has mostly focused on “old” immigration countries with high rates of naturalised immigrants such as the U.S., Australia, and Western Europe, usually adopting a single-country approach, or, sometimes, two-country comparisons. The empirical evidence for other countries is instead poor, and no studies for the “new” immigrant destinations of Southern Europe are yet available: more commonly, in these countries the effects of frequent mass amnesties have been studied (Fasani, 2015).

In the European context, many of the available studies concern Scandinavian countries where data from administrative registers are available. Research on Sweden (Scott, 2008;

Engdahl, 2011) showed that even after controlling for selectivity, by means of random and/or fixed effects panel models, citizenship acquisition grants some immediate pay-offs in terms of both employment probability and earnings, although the effects tend to be small and mainly limited to the most disadvantaged ethnic groups. In their comparative study of Sweden and Denmark, Helgertz, Bevelander, and Tegunimataka (2014) found a consistent premium only for immigrants of Asian and African descent.

In the above-mentioned longitudinal studies, earnings have been found to increase more in the years immediately before naturalisation than afterwards, a result which could be interpreted as evidence against the existence of a citizenship premium. In other Western European countries, Peters, Vink, and Schmeets (2018) found similar results for immigrants' employment probability in the Netherlands using register data, arguing, however, that such effect is part of the naturalisation process and could be explained by immigrants' investments in country-specific human capital in anticipation of the rewards of naturalisation. As for Germany, Steinhardt (2012) detected a wage growth in the years following citizenship acquisition only for immigrant men. For France, Fougère and Safi (2011), using panel census data, found that naturalisation had a significant positive relationship with immigrants' subsequent employability, especially for those with lower probability of employment in the host country. Evidence for Belgium, exploiting the low selectivity of naturalisation due to the easy access to the Belgian citizenship (Corluy, Marx, and Verbist, 2011), found that for non-Western immigrants, naturalisation contributes positively to employment chances, independently of the years of residence since migration.

The citizenship premium found by nearly all the above-mentioned studies¹ overlooks possible institutional and labour market effects due, first, to the lack of a comparative framework and, second, to the similar pattern of immigrants' labour market incorporation shared by Northern and Western European countries. Indeed, across European countries two main models of immigrants' labour market incorporation have been outlined (Reyneri and Fullin, 2011a, 2011b). In Northern and Western European countries, immigrants are found to be penalised, relative to natives, in the probability of being employed. On the contrary, in Southern European countries immigrants have employment rates in line with, or even higher than, those of natives. However, immigrants in Southern Europe have very low chances to access skilled occupations and their disadvantage, in this respect, is higher than that of their counterparts in Northern and Western Europe. European countries are thus characterised by a trade-off between immigrants' employment opportunities and the quality of their jobs (Reyneri and Fullin, 2011a, 2011b), which cannot be fully traced back to the different socioeconomic composition of the immigrant populations and has been only partially affected by the recent economic crisis (Fellini, 2017; Guetto, 2018; Panichella, 2018). The European pattern of immigrants' labour market incorporation is shown in the first column of Table 1, for the EU countries and period (2005-2008) selected for our subsequent analyses.²

[About here Table 1]

In Southern Europe, the adjusted immigrant-native employment gap in the working age population is virtually null, or even positive in the case of Greece. However, in these

¹ In contrast with previous results, Bratsberg and Raaum (2011), using fixed-effects panel models, found no positive effect – and even a negative impact for some groups – of citizenship on the labour market outcomes of immigrants in Norway.

² The reasons underlying the country and year selection are explained in the methodological section.

countries immigrants experience a much higher probability of being employed in a low-skilled job compared to natives, with Greece showing the highest immigrants' penalisation (35 p.p.). On the contrary, in France, Germany, Belgium, and the Netherlands immigrants have lower employment probability (the gap is greater than 10 p.p.). However, in the Netherlands, the country with the highest immigrants' penalisation in terms of employment (18.4 p.p.), immigrants show the lowest level of penalisation in terms of job quality (approximately three times lower than in Greece). Austria lies somewhere in between.

The different models of immigrants' labour market incorporation across European countries are usually traced back to differences in the structure of labour demand and institutional settings. As for the former, Southern European countries are characterised by a wider unsatisfied demand for low-skilled labour, supported by the high incidence of small firms operating in traditional sectors, which make large use of irregular work. Also, the domestic and care work labour demand from households is fuelling many low-skilled job opportunities, especially for females. Thus, Southern European countries offer immigrants many job opportunities, but of low quality and pay, with low returns to the education acquired in the origin country (Fellini, Guetto, and Reyneri, 2018; Guetto, 2018) and high risks of entrapment in the secondary segment of the labour market (Simón, Ramos, and Sanromá, 2014; Fellini and Guetto, 2018).

With regard to institutional factors, in Southern European countries the lack of generous and generalised unemployment benefits and welfare provisions is deemed to positively affect immigrants' employment probability (Reyneri and Fullin, 2011a). As Table 1 shows, the average "replacement rates" of unemployment benefits are much lower in Southern than in Western European countries, especially in Italy and Greece. As

immigrants usually need to finance their stay, the inadequacy of unemployment benefits is a strong push factor to actively look for a job and accept whatever kind of opportunity. Higher unemployment benefits tend to increase immigrants' reservation wages and temper their urge to find a job, which may contribute to immigrants' lower employment rates in Western Europe (Causa and Jean, 2007; Hansen and Lofstrom, 2009).

The stronger unemployment push that immigrants experience in Southern European countries is reinforced by the stricter regulation of the naturalisation process. As shown in the last column of Table 1, European countries differ a lot in terms of immigrants' easiness of access to citizenship. Differences between the selected Southern and Western European countries are mostly due to the eligibility rules, especially the required residence period. For instance, 10 years of uninterrupted residence are required in Italy against 3 years in Belgium, in order to be eligible for citizenship.³ The harder long-term settlement perspectives urge immigrants in Southern Europe to have a job to renew the stay permit. In the Italian case, for instance, even if non-EU immigrants managed to arrive legally, they face a high risk of falling back to irregularity, as it is difficult for them to hold stable jobs, which represent one of the stepping-stones towards regularisation (Kosic and Triandafyllidou, 2003; Reyneri, 2003; Triandafyllidou and Kosic, 2006).⁴

What citizenship/legal status premium is thus to be expected in labour markets where immigrants are not penalised, or even show higher employment rates relative to natives? Would their "advantage" become even greater? If in such labour market settings

³ Countries that restrict naturalisation often allow a relatively easier access to long-term stay permits as a "second-class citizenship" (Huddleston et al., 2015).

⁴ Not only are immigrants in Southern Europe very likely to be employed in low-skilled jobs, but they also tend to work in small firms and with flexible contractual arrangements (Fernández and Ortega, 2008; Martínez-Pastor, 2014), factors that increase their mobility in and out of employment (Fullin, 2011).

improved legal status – and citizenship in particular – is not found to be associated with higher employment chances, should we conclude that there is no citizenship premium?

As mentioned, the literature on citizenship effects has often neglected the effect that improved legal status may have on immigrants' reservation wages or, more broadly, on their propensity to accept whatever kind of job. However, this mechanism may be fundamental to understand the effects of all changes in immigrants' legal status in Southern European countries, including citizenship effects. In Southern Europe, the long-term stability and a likely easier access to the welfare system fostered by any kind of improved legal status can temper immigrants' willingness to accept any job. On the contrary, in Western European countries where high immigrant-native employment gaps are found, the improved legal status may be conducive to better employment prospects for immigrants.

With reference to the transition from the non-EU to the EU-citizen status for Romanians and Bulgarians upon the 2007 EU enlargement, we thus expect the effects to differ across contexts. We expect that the more stable legal status of Romanians and Bulgarians already living in Southern European countries upon enlargement, beyond improving their integration prospects in the receiving country, also modifies their reservation conditions, with overall nil or even negative effects on their employment chances after 2007. On the contrary, in Western EU countries, the typical mechanisms enlightened by the literature on the citizenship premium likely prevail and Romanians' and Bulgarians' employment chances are expected to increase after 2007.

Our first hypothesis can thus be summarised as follows:

- **H1a:** *the acquired EU citizen status did not increase the employment chances of Romanians and Bulgarians already living in Southern EU countries upon the 2007 EUEE, or even had a negative effect;*
- **H1b:** *the acquired EU citizen status has had a positive effect on the employment chances of Romanians and Bulgarians already living in Western EU countries upon the 2007 EUEE.*

On the other hand, the weaker unemployment push induced by the EU citizen status can support immigrants' search for better job matches in Southern European countries. That is, if the huge ethnic segregation in the secondary segment of the labour market in Southern Europe depends, at least in part, on immigrants' need to accept any kind of job, EU citizenship acquisition may have a stronger positive effect on immigrants' job quality as they can wait for better jobs and working conditions. Thus, our second hypothesis can be summarised as follows:

- **H2:** *the positive effect of the EU citizenship acquisition on Romanian and Bulgarian immigrants' job quality has been stronger in Southern compared to Western EU countries.*

3. Data and Methods

We compare new EU-member and non-EU immigrants' employment outcomes before and after the 2007 EUEE using data from the European Labour Force Survey (EULFS). We consider eight European countries, representative of Western (Austria, Germany,

Belgium, Netherlands and France) and Southern (Italy, Spain and Greece) Europe.⁵ The time-window is limited to 2005-2008, due to the constraints of the available data which do not provide reliable information on immigrants' employment before 2005 for all the selected countries. Moreover, we have to focus on a pre-2009 period to avoid the confounding effects of the economic crisis.

In each country and year, we select the foreign-born without the citizenship of the destination or of another EU15 country, aged 15-64 at interview. As for the treated group, we consider Romanian and Bulgarian nationals who became EU citizens at the moment of the accession of Romania and Bulgaria (1st January 2007) in the EU. As for the control group, we select all other non-Western nationals – i.e. the foreign-born with EFTA, North-American, Australian or other Oceanian nationality have been excluded – whose legal status remained unchanged.

We consider two labour market outcomes accounting for the different models of immigrants' labour market incorporation across EU countries: the first is employment probability, which measure immigrants' employment opportunities, and the second is the probability of holding a low-skilled job, a proxy of immigrants' job quality.

Given that the EULFS is a repeated cross-sectional survey, the comparison of the evolution of the labour market behaviour of Romanian and Bulgarian nationals with that of all other non-Western nationals is carried at the group-level, before (2005-2006) and after (2007-2008) the EUEE, through the *Difference-in-Differences* (DiD) estimator. Our estimate of the effects of EU citizenship acquisition is given by the following formula:

⁵ Scandinavian countries, UK and Ireland are not included because the quasi-experiment cannot be implemented due to lack of necessary information and too small numbers of immigrants from Romania and Bulgaria in the selected period.

$$\text{DiD} = (\hat{Y}^{2008^t} - \hat{Y}^{2006^t}) - (\hat{Y}^{2008^c} - \hat{Y}^{2006^c})$$

where \hat{Y} represents the average probability of being employed or, if employed, of holding a low-skilled job for our treated and control groups. The effects of the 2007 EUEE are thus estimated two years after its implementation. Given the focus on short-term effects, we define as low-skilled jobs only the occupations included in codes 8 and 9 of the 1-digit ISCO, i.e. we limit the effects of EU citizenship acquisition on at least avoiding unskilled manual jobs. Due to the small number of Romanian and Bulgarian immigrants in several countries, especially in Western Europe, the DiD estimation is implemented by pooling the three Southern and the five Western European countries. Sample sizes and percentages of Romanian and Bulgarian immigrants in each country by year are shown in Table A1 in the Appendix.

The DiD estimator rests on the assumption of exogeneity of the policy change with respect to immigrants' labour market outcomes. This assumption might be threatened by migration inflows from Romania and Bulgaria ignited by the 2007 EUEE, which could have changed immigrants' composition before and after the treatment. For this reason, based on available information on the years since migration in the host country, we select only immigrants *who were already in the destination country in 2005*. Excluding migration inflows from Romania and Bulgaria in the selected time window also allows dealing with the restrictions on the free movement of workers which followed the 2007 EUEE.⁶

⁶ As mentioned in paragraph 2.1, Romanians and Bulgarians who were already residing in a EU25 country at the date of accession had direct access to the labour market of that country but not automatically to the labour market of other member states.

The DiD estimator also requires the availability of a control group that approximates the counterfactual trend that we would have observed for Romanian and Bulgarian immigrants had the legal framework remained the same (Lechner, 2011). An indirect proof of the counterfactual validity of our control group is obtained by testing the so called Parallel Trend Assumption (PTA). That is, treated and control groups should show the same trend in the outcome variable in the period before the treatment. Given that we only have two years of pre-treatment observation, the PTA is considered satisfied if $(\hat{Y}^{2006^t} - \hat{Y}^{2005^t}) - (\hat{Y}^{2006^c} - \hat{Y}^{2005^c}) \approx 0$.

To reinforce the comparability of the treated and control groups across years, our DiD estimates are calculated through logistic regressions with robust standard errors, adopting the following model's specification:

$$LMO_i = b_0 + b_1 2006 + b_2 2007 + b_3 2008 + b_4 RO \& BU + b_5 (2006 \cdot RO \& BU) + b_6 (2007 \cdot RO \& BU) + b_7 (2008 \cdot RO \& BU) + XB + e_i \quad (1)$$

where the coefficients b_1 , b_2 and b_3 capture possible changes in labour market outcomes (LMO_i) that would have occurred even in the absence of the 2007 EUEE (i.e., the trend for the control group) while b_4 captures possible differences between the treated and control groups before the treatment (in 2005). The coefficients of interest, i.e. our DiD estimates, are b_6 and b_7 , while b_5 represents the test of the PTA assumption. Finally, XB represents a vector of coefficients for control variables.⁷ The inclusion of control variables allows account to be taken of possible changes over time in the (observable)

⁷ Controls include education (lower-secondary, upper-secondary and tertiary), years since migration (1-5, 6-10, >10), age (5-year intervals), sex, having ever been married, the degree of urbanisation of the city of residence (dense, medium, thin) and year. Since analyses are implemented across country clusters (Southern vs. Western Europe), models also include dummies for each country of residence interacted with all other variables included in the models.

characteristics of Romanian/Bulgarian and other non-EU national groups. A first potential source of compositional changes is selective return migration, which could differently affect treated and control units. A second potential source of compositional changes within the treated group stems from the fact that Romanian and Bulgarian national groups sampled in 2007 and 2008 may include newly regularised immigrants, following the 2007 EUEE, who were not sampled in 2005 and 2006 given their irregular residence status. In fact, the EULFS only surveys immigrants regularly residing in the destination country.

As an additional robustness check, we present the results of models that compare the treated group with different control groups defined distinguishing the “other non-EU national” group into national sub-groups (other Europe, MENA, other Africa, Asia, and Latin America).

It should be noticed that the EU citizenship gives the same fundamental advantages of naturalisation, but it also implies important differences that could reduce its impact. In fact, while the implications in terms of legal stability are the same as for naturalisation, the signalling effects are null in the case of the EU citizenship, given its automatic take-up, while some occupations in the public sector could be limited to citizens of the receiving country. Moreover, although our analytical strategy allows us to deal with selectivity and reverse causality issues, our results cannot be generalised to the whole immigrant population. To partly cope with these limitations, in the following section we present a descriptive, cross-sectional comparison of naturalised and non-naturalised immigrants’ labour market outcomes, using the same EULFS data.

4. Empirical Results

4.1 Quasi-Experimental Evidence from the 2007 European Union Eastern Enlargement

Figure 1 shows the labour market outcomes of our treated (Romanian and Bulgarian nationals) and control groups (all other non-EU nationals) before and after the 2007 EUEE. The points represent average probabilities (with 95% confidence intervals) of being employed (upper graphs) or employed in an unskilled manual job (lower graphs) estimated after pooling the receiving countries in a Western and a Southern European cluster.

[About here Figure 1]

In Western Europe, the treated national groups seem to have experienced a substantial increase in their employment chances (top-left graph of Figure 1), with an estimated DiD of $(\hat{Y}^{2008^t} - \hat{Y}^{2006^t}) - (\hat{Y}^{2008^c} - \hat{Y}^{2006^c}) = 17.5$ percentage points (p-value=0.008). The latter may be ascribed to the 2007 EUEE, since the pre-treatment trend for the treated group is flat and there are no statistically significant differences between treated and control groups. The estimated DiD in the Southern European cluster is instead negative and marginally significant (-4.0 percentage points, p-value=0.095), again with no statistically significant differences in the pre-treatment trend between treated and control groups.

When it comes to the probability of being employed in an unskilled manual job, in Western Europe we hardly see any effect of the 2007 EUEE. In fact, notwithstanding some fluctuations which can be attributed to the relatively small number of treated units in each year (see Table A1), differences in trends between treated and control groups, before and after the treatment, are not statistically significant. On the contrary, in

Southern Europe treated immigrants have experienced a substantial drop in the probability of holding an unskilled manual job, with an estimated DiD of $(\hat{Y}^{2008^t} - \hat{Y}^{2006^t}) - (\hat{Y}^{2008^c} - \hat{Y}^{2006^c}) = -7.0$ percentage points (p-value=0.025).

In the following tables, we control whether our results hold in a multivariate regression framework, starting from the effects of the 2007 EUEE on employment probability. Model 1 in Table 2 shows interaction coefficients drawn from logistic regressions specified as in equation (1). The results of multivariate models are in line with the descriptive ones: the interaction coefficient expressing the DiD estimate of the impact of the 2007 EUEE, two years after the policy change, is positive and statistically significant in Western Europe, slightly negative and marginally significant in Southern Europe. Absolute estimates of the DiD, based on predicted probabilities, are almost identical to descriptive results and equal to 16.2 percentage points (p-value=0.015) in Western Europe and -3.8 percentage points (p-value=0.089) in Southern Europe. Considering the number of control variables included in the models, this reinforces the assumption that the treatment was indeed exogenous. Also, such evidence suggests that possible compositional differences over time between treated and control groups, due to selective return migration and/or the legalisation of irregular Romanian and Bulgarian immigrants following the 2007 EUEE, are not likely to impact our results.

The EU citizenship acquisition has thus opposite effects on immigrants' employment chances: positive in Western and slightly negative in Southern Europe. Before shifting to the regression results concerning job quality, Model 2 shows that Romanian and Bulgarian immigrants in Western Europe have improved their employment chances, as an effect of the 2007 EUEE, with respect to all other national groups considered. On the contrary, in Southern European countries all national groups have marginally improved

their employment chances with respect to the Romanians and Bulgarians. The evidence that interaction coefficients expressing different DiD estimates are similar regardless of the definition of the control group further reinforces the claim that the 2007 EUEE has had a causal impact on treated immigrants' employment probabilities.

[*About here Table 2*]

Table 3 shows the results of equation (1) applied to the risk of holding an unskilled manual job, conditional on being employed. Regression results concerning the Western European cluster are virtually identical to those already shown in Figure 2, that is: Romanians and Bulgarians' probability of being employed in an unskilled manual job, relative to all other non-citizen immigrants, does not change significantly throughout the observational window. On the contrary, treated units in Southern Europe seem to have improved their probability to access better jobs, relative to control units. However, the interaction coefficient expressing the 2008-2006 DiD estimate is only marginally statistically significant (-5.0 percentage points, p-value=0.091).

The evidence of job quality improvement among Romanian and Bulgarian immigrants in the Southern European cluster appears to be relatively weak and statistically uncertain. However, some peculiarities of the Southern European model of immigrants' labour market incorporation need to be recalled when evaluating their chances of upward occupational mobility. First, in Southern Europe there is a much stronger gender segregation in the labour market, compared to other European areas. For instance, in the analytical sample on which the analysis of Table 3 is based, about 66% of immigrant women work as housekeepers, personal carers or domestic helpers, jobs which offer very few chances of upward mobility (Recchi and Triandafyllidou, 2010; Fellini and Guetto,

2018). On the other hand, 80% of men are concentrated in manual jobs (1-digit ISCO groups from 7 to 9), mostly in construction and manufacturing. Thus, immigrant men are more likely than women to access at least skilled manual occupations, or to rely on self-employment which often represents the only available way toward better working conditions and income (Ambrosini, 2013; Fellini and Guetto, 2018), especially for more settled immigrants from new EU member states (Recchi and Triandafyllidou, 2010). As for the Italian case, transitions from dependent occupations of the (skilled) working class to self-employment constitute a well-known path toward upward mobility (Barbieri and Bison, 2001), especially in terms of higher income (Brandolini, D'Amuri, and Faiella, 2015), all factors that contribute to a relatively higher incidence of self-employment within the native labour force. Conversely, in other Western countries self-employment is less common, and its higher incidence among immigrants has been usually interpreted in light of their labour market marginalisation (Zhou, 2004; Blume et al., 2009; OECD, 2011).

To dig deeper into the possible impact of the 2007 EUEE on immigrants' job quality in Southern Europe, the last three columns of Table 3 present DiD estimates calculated separately by gender, and with self-employment as an additional outcome for male immigrants. The coefficients for the 2008-2006 DiD estimate is negative and statistically significant only for immigrant men. The absolute DiD estimate of the impact of the 2007 EUEE among them is not negligible, indicating a reduction of 8.9 percentage points (p -value=0.029) in the probability of holding an unskilled manual job. Confirming our expectation that transitions toward self-employment usually represent a way to upward mobility in Southern Europe, the 2007 EUEE also markedly improved Romanian and Bulgarian immigrants' likelihood of working as self-employed compared to the control

group, with an absolute 2008-2006 DiD estimate of approximately 10 percentage points (p-value=0.000).⁸

[About here Table 3]

4.2 Additional Evidence from the Cross-Sectional Comparison of Naturalised and Non-Naturalised Immigrants

For the cross-sectional comparison of naturalised and non-naturalised immigrants' labour market outcomes, we select the foreign-born from non-Western countries aged 15-64 at interview, and apply logistic regressions on both the employment outcomes we used for the quasi-experiment.⁹ The independent variable is a dummy taking value 1 in case of possession of the citizenship of the destination country. The two logistic regressions are implemented for each of the eight selected countries for the pooled 2005-2008 years, separately for men and women.¹⁰ Sample sizes and percentages of naturalised immigrants in each country by gender are shown in Table A2 in the Appendix.

In Figure 2 we summarise the results of the 32 logistic regressions on the probability of being employed and holding a low-skilled job, implemented across the eight selected countries and estimated separately for men and women. Each point corresponds to the coefficient associated to the dummy for citizenship possession (log-odds ratio).

⁸ Additional results, not presented for reasons of space but available upon request, show that the 2007 EUEE has improved Romanian and Bulgarian men's job quality and chances of becoming self-employed in Southern Europe with respect to each of the national groups included in the control group.

⁹ Given that long-term consequences of naturalisation are considered, for the analysis of job quality, skilled manual (1-digit ISCO codes 6 and 7) and service sector occupations (1-digit ISCO code 5) have been included among low-skilled jobs.

¹⁰ As control variables we include area of origin (2004 and 2007 new-EU countries, other non-EU15 European countries, MENA, other Africa, Asia, Latin America), education (low-secondary, upper-secondary and tertiary), years since migration (1-5, 6-10, >10) and two-way interactions between the three variables, age (5-year intervals), having ever been married, the degree of urbanisation of the city of residence (dense, medium, thin), region (NUTS-2) and year.

As for the “citizenship premium” on employment probability, the coefficient is negative in Italy and Greece among both men and women, while it is positive and statistically significant in Belgium, Germany, France and the Netherlands. In Spain the coefficient is not statistically different from zero, while in Austria the coefficient is negative among men and positive among women. When it comes to the association between the possession of the citizenship of the destination country and the probability of being employed in a low-skilled job, in all countries the log-odds ratios are negative and statistically significant. Thus, in all countries naturalised immigrants, *ceteris paribus*, are found to hold better jobs than non-naturalised immigrants. However, the difference is stronger in Southern European countries, especially in Italy and Greece, irrespective of gender. Given that in the latter countries citizenship possession is negatively associated with the employment probability, the results of this cross-sectional analysis generate a trade-off between citizenship premia that reproduces the European trade-off between immigrants’ employment rates and the quality of their jobs. As it is evident in the male subsample, Austria seems to stand in between Western and Southern European countries, consistent with the characteristics of its institutional and labour market setting, which are meant to be crucial moderators of citizenship effects (see Table 1).

[About here Figure 2]

5. Conclusions

Notwithstanding the slight convergence induced by the Great Recession (Fellini, 2017; Guetto, 2018; Panichella, 2018) the models of immigrants’ labour market incorporation differ substantially across European countries (Reyneri and Fullin, 2011a, 2011b). In countries that combine a high and unsatisfied demand for low- and unskilled labour with

very poor welfare provisions for the unemployed and difficult access to legal stability for immigrants, the latter tend to be strongly attached to the labour market. This setting is typical of Southern European countries, where little or no immigrant disadvantage in employment chances is found, whereas immigrants face high risks of entrapment in the secondary segment of the labour market. Conversely, in Western European countries the characteristics of the labour demand, more biased toward highly-skilled workers, the more generous welfare, and the easier access to legal stability through naturalisation contribute to higher immigrant-native employment gaps. On the other hand, immigrant disadvantage in terms of job quality is substantially lower than in Southern Europe.

In this paper, we argued that the effects of improved legal status on immigrants' labour market outcomes are moderated by these different models of immigrants' labour market incorporation. Indeed, exploiting the quasi-experimental setting provided by the 2007 European Union Eastern Enlargement (EUEE), we showed that the effects of EU citizenship acquisition differ across Western and Southern Europe. Romanian and Bulgarian immigrants in Western Europe have substantially improved their employment chances following the 2007 EUEE, whereas in Southern Europe their employment chances slightly reduced. On the other hand, Romanians and Bulgarians in Western Europe did not improve on their risks of holding an unskilled manual job relative to the control group, whereas in Southern Europe some improvement in their job quality has been found.

Although the EU citizenship represents a weaker condition than naturalisation and our results cannot be extended to all immigrant groups, we can argue that an improved legal status *in any case* produced positive causal effects on immigrants' labour market outcomes. The acquisition of the EU citizen status had indeed positive effects in both

Western and Southern European countries as it produced better outcomes on the dimension which most penalises immigrant workers according to the specific model of labour market incorporation: the improvements Romanian and Bulgarian immigrants experienced following the 2007 EUEE concerned their lower employment chances in Western Europe, and their segregation in low-skilled jobs in Southern Europe. Even though the quasi-experimental setting focuses on differences between Romanians and Bulgarians and other comparable immigrant groups, we can conclude that improved legal status contributed to make new EU citizens performing more similarly to natives. Another aspect not explicitly considered in our study but which, however, has to be seen as positively affecting new EU citizens' labour market outcomes is the implicit regularisation that the EU enlargement produced. As discussed, the transition from irregular to regular status has been proved to envisage a less disadvantaged insertion in the labour market. However, our study only considered immigrants regularly living in the country and we could not explore the effect of this specific transition.

The analysis of the effect of the 2007 EUEE on treated immigrants' job quality also gave us the chance to dig deeper in the peculiar gendered pattern of immigrants' labour market incorporation in Southern Europe. In fact, the effect has been found to be totally driven by the improved chances of exiting unskilled manual jobs among men, while no effects were detected among women. This result is consistent with immigrant women's entrapment in the household and personal services sector, which offers very few opportunities for upward mobility. On the contrary, immigrant men can access at least the skilled manual works, often shifting to self-employment as a way to better income and working conditions. However, also among men the chances to access non-manual occupations are extremely low, and remained so even for Romanian and Bulgarian

immigrants after gaining the EU citizenship: the probability of working in managerial, professional, technical and clerical occupations remained approximately 6% in 2008 for treated immigrants, against about 8% found for the control group.

Our empirical analyses are not without limitations. First, the lack of proper longitudinal data impeded us to analyse labour market trajectories at the individual level. In fact, we could only compare changes across years in the employment stocks, which limits our ability to assess the mechanisms through which EU citizenship effects are produced. Second, a weakness of our quasi-experimental design is represented by the short time-window at our disposal, especially when it comes to the test of the Parallel Trend Assumption. The focus on short-term effects may also have hampered our chances to detect “long-range” upward occupational mobility.

Finally, the causal effects that EU citizenship acquisition has had for Romanian and Bulgarian immigrants may not necessarily extend to other forms of improved legal status and/or other immigrant groups. To partly cope with this, we presented a cross-sectional comparison of the labour market outcomes of naturalised and not naturalised immigrants, performed on the same selection of Western and Southern European countries. Results showed that in Southern European countries the possession of the citizenship of the destination country, net of observable characteristics, is negatively associated to immigrants’ employment probability, while it is more strongly associated to the probability of holding a skilled job compared to Western European countries. The latter results may be influenced, to some extent, by differences in the intensity of selectivity and reverse causality in the citizenship-labour market outcomes link across European countries. However, the fact that the quasi-experimental analysis of EU citizenship acquisition and the cross-sectional analysis of naturalisation – representing very different

substantive and methodological scenarios – produced very similar patterns of cross-national effects is suggestive of the role that institutional contexts and models of immigrants' labour market incorporation play in moderating the effects of improved legal status in Europe.

Bibliographical References

Ambrosini, M. (2013). Immigration in Italy: Between Economic Acceptance and Political Rejection. *Journal of International Migration and Integration*, 14(1), 175–194.

Amuedo-Dorantes, C., & Bansak, C. (2011). The Impact of Amnesty on Labor Market Outcomes: A Panel Study Using the Legalized Population Survey. *Industrial Relations*, 50(3), 443–471.

Azzolini, D., & Guetto, R. (2017). The impact of citizenship on intermarriage: Quasi experimental evidence from two European Union Eastern enlargements. *Demographic Research*, 36(43), 1299–1336.

Barbieri, P., & Bison, I. (2001). Self-employment in Italy: Scaling the Class Barriers. In R. Arum and W. Müller (Eds.), *The Reemergence of Self-Employment: A Comparative Study of Self-Employment Dynamics and Social Inequality* (pp. 121–173). Princeton: Princeton University Press.

Barcellos, S. (2010). The Labor Market Value to Legal Status. RAND Working Paper No. WR-754.

Bevelander, P., & Pendakur, R. (2012). Citizenship, Co-ethnic Populations, and Employment Probabilities of Immigrants in Sweden. *Journal of International Migration and Integration*, 13(2), 202–22.

Blume, K., M. Ejrnæs, H. Skyt Nielsen, & Wurtz, A. (2009). Labor Market Transitions of Immigrants with Emphasis on Marginalization and Self-employment. *Journal of Population Economics*, 21(4), 881–908.

Brandolini, A., D'Amuri, F., & Faiella, I. (2015). Country case study–Italy. In Jenkins, P., Brandolini, A., Micklewright, J., and Nolan, B. (Eds.), *The Great Recession and the Distribution of Household Income* (pp. 130–152). Oxford: Oxford University Press.

Bratsberg, B., Ragan, J. F., & Nasir, Z. M. (2002). The effect of naturalization on wage growth: A panel study of young male immigrants. *Journal of Labor Economics*, 20(3), 568–97.

Bratsberg, B., & Raaum, O. (2011). The Labour Market Outcomes of Naturalised Citizens in Norway. In *Naturalisation: A Passport for the Better Integration of Immigrants?* (pp. 183–206). Paris: OECD Publishing.

Causa, O & Jean, S. (2007). *Integration of Immigrants in OECD Countries: Do Policies Matter?* OECD Economics Department Working Papers No. 564, OECD Publishing.

Chiswick, B.R. (1978). The Effect of Americanization on the Earnings of Foreign Born Men. *Journal of Political Economy*, 86(5), 897–922.

Ci, W., Hou, F., and Morrissette, R. (2018). Acquisition of permanent residence by temporary foreign workers in Canada: a panel study of labour market outcomes before and after the status transition. *IZA Journal of Development and Migration*, 8(2), 1–24.

Corluy V., Marx, I., & Verbist, G. (2011). Employment chances and changes of immigrants in Belgium: The impact of citizenship. *International Journal of Comparative Sociology*, 52(4), 350–368.

- Engdahl, M. (2011). The Impact of Naturalisation on Labour Market Outcomes in Sweden. In *Naturalisation: A Passport for the Better Integration of Immigrants?* (pp. 99–130). Paris: OECD Publishing.
- Fasani, F. (2015). Understanding the Role of Immigrants' Legal Status: Evidence from Policy Experiments. *CESifo Economic Studies*, 61(3), 722–763.
- Fellini, I. (2017). Immigrants' labour market outcomes in Italy and Spain: Has the Southern European model disrupted during the crisis? *Migration Studies*, 6(1), 53–78.
- Fellini, I., & Guetto, R. (2018). A “U-Shaped” Pattern of Immigrants' Occupational Careers? A Comparative Analysis of Italy, Spain, and France. *International Migration Review*, First Published April 5, 2018, <https://doi.org/10.1177/0197918318767931>
- Fellini, I., Guetto, R., & Reyneri, E. (2018). Poor Returns to Origin-Country Education for Non-Western Immigrants in Italy: An Analysis of Occupational Status on Arrival and Mobility. *Social Inclusion*, 6(3), 34–47.
- Fernández, C., & Ortega, C. (2008). Labor market assimilation of immigrants in Spain: employment at the expense of bad job-matches? *Spanish Economic Review*, 10(2), 83–107.
- Fougère, D., & Safi, M. (2011). How Acquiring French Citizenship Affects Immigrant Employment. In *Naturalisation: A Passport for the Better Integration of Immigrants?*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264099104-en>.
- Fullin, G. (2011). Unemployment trap or high job turnover? Ethnic penalties and labour market transitions in Italy. *International Journal of Comparative Sociology*, 52(4), 284–305.

- Gathmann, C., & Keller, N. (2014). Returns to Citizenship? Evidence from Germany's Recent Immigration Reforms. IZA Discussion Paper No. 8064.
- Guetto, R. (2018). Employment returns to tertiary education for immigrants in Western Europe: cross country differences before and after the economic crisis. *Social Inclusion*, 6(3), 64–77.
- Hansen, J., & Lofstrom, M. (2009). The dynamics of immigrant welfare and labor market behaviour. *Journal of Population Economics*, 22(4), 941–970.
- Helgertz, J., Bevelandar, P., & Tegunimatoka, A. (2014). Naturalization and Earnings: A Denmark–Sweden Comparison. *European Journal of Population*, 30(3), 337–359.
- Huddleston, T., Bilgili, Ö., Joki, A.L., Vankova, Z. (2015). Migrant Integration Policy Index 2015. CIDOB and MPG, Barcelona/Brussels.
- Kaya and Kayaoğlu (2011). Is National Citizenship Withering Away?: Social Affiliations and Labor Market Integration of Turkish-Origin Immigrants in Germany and France. *German Studies Review*, 35(1), 113–134.
- Kogan, I. (2003). Ex-Yugoslavs in the Austrian and Swedish labour markets: The significance of the period of migration and the effect of citizenship acquisition. *Journal of Ethnic and Migration Studies*, 29(4), 595–622.
- Kosic, A., & Triandafyllidou, A. (2003). Albanian immigrants in Italy: migration plans, coping strategies and identity issues. *Journal of Ethnic and Migration Studies*, 29(6), 997–1014.

- Lechner, M. (2011). The Estimation of Causal Effects by Difference-in-Difference Methods. *Foundations and Trends® in Econometrics*, 4(3), 165–224.
- Martínez-Pastor, J.–I. (2014). Fixed-term Contracts: Does Nationality Matter? *Journal of Ethnic and Migration Studies*, 40(5), 814–828.
- Mazzolari, F. (2009). Dual citizenship rights: do they make more and richer citizens? *Demography*, 46(1), 169–191.
- OECD (2010). *Naturalisation and the Labour Market Integration of Immigrants*. In *OECD Employment Outlook 2010: Moving Beyond the Jobs Crisis* (pp. 157–186). Paris: OECD Publishing.
- OECD (2011). *Naturalisation: A Passport for the Better Integration of Immigrants?* Paris: OECD Publishing.
- Panichella, N. (2018). Economic crisis and occupational integration of recent immigrants in Western Europe. *International Sociology*, 33(1), 64–85.
- Pendakur, R., & Bevelander, P. (2014). Citizenship, enclaves and earnings: comparing two cool countries. *Citizenship Studies*, 18(3–4), 384–407.
- Peters, F., Vink, M., & Schmeets, H. (2018). Anticipating the citizenship premium: before and after effects of immigrant naturalisation on employment. *Journal of Ethnic and Migration Studies*, 44(7), 1051–1080.
- Recchi, E., & Triandafyllidou, A. (2010). Crossing Over, Heading West and South: Mobility, Citizenship, and Employment in the Enlarged Europe. In G. Menz and A.

Caviedes (Eds.), *Labour Migration in Europe. Migration, Minorities and Citizenship* (pp. 127–149). London: Palgrave Macmillan.

Reyneri, E. (2003). Immigration and the Underground Economy in New Receiving South European Countries: Manifold Negative Effects, Manifold Deep-rooted Causes. *International Review of Sociology*, 13(1), 117–143.

Reyneri, E., & Fullin, G. (2011a). Ethnic penalties in the transition to and from unemployment: A West European perspective. *International Journal of Comparative Sociology*, 52(4), 247–263.

Reyneri, E., & Fullin, G. (2011b). Labour Market Penalties of New Immigrants in New and Old Receiving West European Countries. *International Migration*, 49(1), 31–57.

Ruhs, M. (2017). The Impact of Acquiring EU Status on the Earnings of East European Migrants in the UK: Evidence from a Quasi-Natural Experiment. *British Journal of Industrial Relations*, 55(4), 716–750.

Ruhs, M., & Wadsworth, J. (2018). The Impact of Acquiring Unrestricted Work Authorization on Romanian and Bulgarian Migrants in the United Kingdom. *ILR Review*, 71(4), 823–852.

Scott, K. (2008). The Economics of Citizenship: Is there a Naturalisation Effect? In P. Bevelander and D. J. DeVoretz (Eds.), *The Economics of Citizenship* (pp. 107–126). Malmö: Malmö University.

Simón, H., Ramos, R. & Sanromá, E. (2014). Immigrant Occupational Mobility: Longitudinal Evidence from Spain. *European Journal of Population*, 30(2), 223–55.

Steinhardt, M. F. (2012). Does citizenship matter? The economic impact of naturalizations in Germany. *Labour Economics*, 19(6), 813–823.

Triandafyllidou, A., & Kotic, A. (2006). Polish and Albanian Workers in Italy: Between Legality and Undocumented Status. In F. Düvell (Ed.), *Illegal Immigration in Europe*. London: Palgrave Macmillan.

Zhou, M. (2004). Revisiting Ethnic Entrepreneurship: Convergencies, Controversies, and Conceptual Advancements. *International Migration Review*, 38(3), 1040–1074.

Tables

Table 1. Institutional and labour market setting in a selection of EU countries

	Immigrant-native gaps in employment and low-skilled job probability ^a , total population aged 15-64 – average 2005-2008		Unemployment benefits ^b , replacement rate – average 2005-2008		Access to citizenship ^c , MIPEX scores: general (eligibility rules, residence period) – 2007
GR	4.4; 35.3	NL	68.7	NL	68 (72, 100)
ES	-0.2; 26.0	BE	62.5	BE	62 (67, 100)
IT	-1.8; 34.3	DE	57.5	FR	61 (79, 100)
AT	-8.2; 28.8	FR	57.5	DE	60 (92, 50)
FR	-10.7; 14.0	AT	55.0	IT	52 (42, 0)
DE	-14.5; 21.3	ES	50.2	ES	48 (50, 0)
BE	-16.4; 15.3	GR	27.0	AT	27 (21, 0)
NL	-18.4; 12.8	IT	23.2	GR	17 (4, 0)

Note: ^a Only non-Western immigrants. Gaps adjusted for sex, age, education, degree of urbanisation of the city of residence, region and year. Low-skilled jobs defined as 1-digit ISCO codes from 5 to 9.

^b Average of the net replacement rates (including social assistance and housing benefits) for two earnings levels, three family situations and 60 months of unemployment. ^c Scores range from 0 (“critically unfavourable”) to 100 (“favourable”).

Source: ^a Own elaborations on EULFS (2005-2008), weighted data. ^b Own elaborations on OECD data (see <http://www.oecd.org/els/benefits-and-wages-statistics.htm>). ^c Own elaborations on MIPEX data (see <http://www.mipex.eu/>).

Table 2 The impact of the 2007 EUEE on employment probability
Overall effects (Model 1) and distinguishing between different control groups (Model 2)

	Model 1 <i>(ref. cat. 2006 × Other)</i>	
	Western EU	Southern EU
Parallel Trend Assumption		
2005 × RO&BU	0.109 (0.275)	0.00508 (0.126)
Difference-in-Differences		
2007 × RO&BU	0.363 (0.352)	-0.0336 (0.156)
2008 × RO&BU	0.905** (0.370)	-0.252* (0.141)
	Model 2 <i>(ref. cat. 2006 × RO&BU)</i>	
	Western EU	Southern EU
Parallel Trend Assumption		
2005 × Other Europe	-0.146 (0.278)	0.000911 (0.133)
2005 × MENA	-0.132 (0.287)	0.0258 (0.149)
2005 × Other Africa	0.0662 (0.302)	-0.0795 (0.223)
2005 × Asia	-0.118 (0.302)	-0.155 (0.186)
2005 × Latin America	0.111 (0.355)	0.0538 (0.147)
Difference-in-Differences		
2007 × Other Europe	-0.385 (0.357)	0.0165 (0.159)
2007 × MENA	-0.445 (0.365)	0.133 (0.187)
2007 × Other Africa	-0.216 (0.383)	0.0476 (0.278)
2007 × Asia	-0.294 (0.386)	0.145 (0.220)
2007 × Latin America	-0.0667 (0.452)	0.0150 (0.187)
2008 × Other Europe	-0.931** (0.375)	0.252* (0.147)
2008 × MENA	-0.987*** (0.384)	0.283 (0.174)
2008 × Other Africa	-0.695* (0.406)	0.270 (0.252)
2008 × Asia	-0.903** (0.405)	0.434** (0.201)
2008 × Latin America	-0.441 (0.483)	0.197 (0.172)
Observations	71,671	112,491
Robust standard errors in parentheses. *** p<=0.01, ** p<=0.05, * p<=0.1		

Note: Coefficients from logistic regressions controlling for education, years since migration, age, sex, having ever been married, degree of urbanisation of the city of residence and year, all interacted with country of residence.

Source: Own elaborations on EULFS (2005-2008), weighted data.

Table 3 The impact of the 2007 EUEE on the probability of holding an unskilled manual job

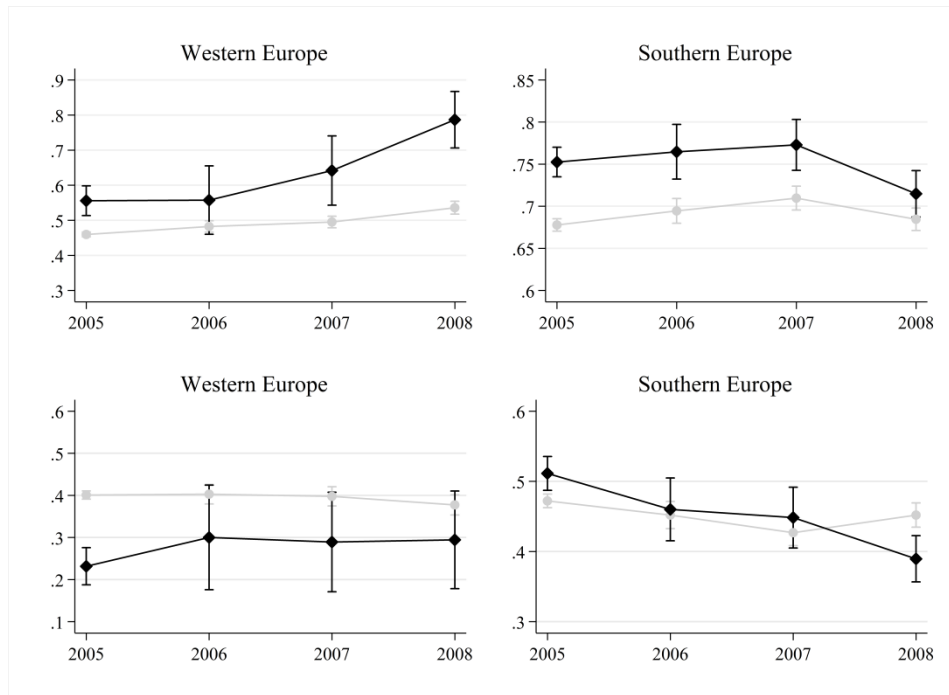
	Western EU	Southern EU	Southern EU <i>Men</i>	Southern EU <i>Men</i> <i>(self-emp.)</i>	Southern EU <i>Women</i>
Parallel Trend Assumption					
2005 × RO&BU	-0.465 (0.398)	0.166 (0.117)	0.145 (0.157)	0.086 (0.248)	0.209 (0.173)
Difference-in-Differences					
2007 × RO&BU	0.100 (0.494)	0.119 (0.143)	-0.099 (0.194)	0.734*** (0.277)	0.366* (0.215)
2008 × RO&BU	0.137 (0.479)	-0.221* (0.130)	-0.427** (0.178)	0.908*** (0.260)	-0.049 (0.195)
Observations	35,930	77,418	48,255		29,163
Robust standard errors in parentheses. *** p<=0.01, ** p<=0.05, * p<=0.1					

Note: Coefficients from logistic regressions controlling for education, years since migration, age, sex, having ever been married, degree of urbanisation of the city of residence and year, all interacted with country of residence.

Source: Own elaborations on EULFS (2005-2008), weighted data.

Figures

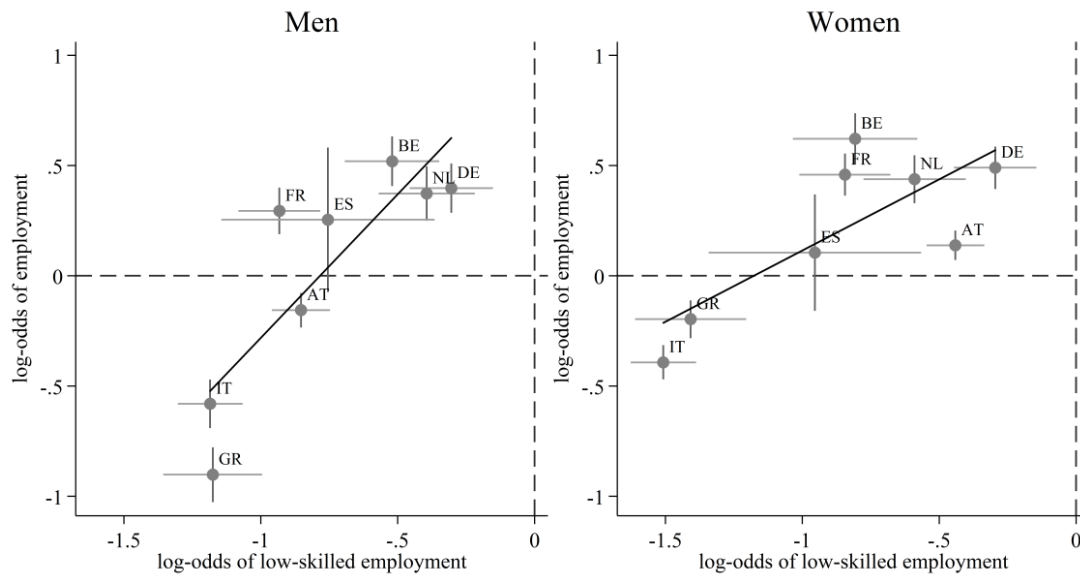
Figure 1 Probability of being employed (upper graphs) and employed in unskilled manual job (lower graphs) among Romanian/Bulgarian (dark lines) and all other non-citizen immigrants (grey lines)



Note: Immigrants who arrived at the destination country after 2005 are excluded. 95% C.I. based on robust standard errors are shown.

Source: Own elaborations on EULFS (2005-2008), weighted data.

Figure 2 Associations between citizenship possession and either of the two:
 (y-axis) immigrants' employment probability; (x-axis) job quality



Note: Coefficients associated to host-country citizenship possession from logistic regressions controlling for area of origin, education, years since migration (and two-way interactions between the three variables), age, having ever been married, degree of urbanisation of the city of residence, region and year. 95% C.I. based on robust standard errors are shown. Low-skilled jobs defined as 1-digit ISCO codes from 5 to 9.

Source: Own elaborations on EULFS (2005-2008), weighted data.

Appendix

Table A1 Sample sizes and % of Romanian and Bulgarian immigrants in each country, by year.
Analytical samples used for the analyses of Figure 1

	2005	2006	2007	2008
Austria	7,053	6,679	6,608	6,541
<i>% RO&BU</i>	<i>4.21</i>	<i>3.86</i>	<i>2.98</i>	<i>3.76</i>
Belgium	1,953	1,960	1,631	1,179
<i>% RO&BU</i>	<i>4.15</i>	<i>3.98</i>	<i>5.46</i>	<i>6.28</i>
Germany	11,423	1,254	1,176	1,131
<i>% RO&BU</i>	<i>2.84</i>	<i>3.11</i>	<i>2.21</i>	<i>2.48</i>
France	7,844	7,432	7,947	7,793
<i>% RO&BU</i>	<i>0.68</i>	<i>1.18</i>	<i>1.64</i>	<i>1.63</i>
Netherlands	4,169	1,265	1,188	1,252
<i>% RO&BU</i>	<i>1.46</i>	<i>2.37</i>	<i>1.09</i>	<i>1.11</i>
Spain	13,487	2,659	2,675	3,062
<i>% RO&BU</i>	<i>16.71</i>	<i>19.37</i>	<i>19.36</i>	<i>18.71</i>
Greece	9,542	8,963	9,049	9,367
<i>% RO&BU</i>	<i>10.56</i>	<i>11.42</i>	<i>10.62</i>	<i>9.70</i>
Italy	9,720	11,355	15,357	18,713
<i>% RO&BU</i>	<i>11.88</i>	<i>14.01</i>	<i>14.47</i>	<i>17.42</i>

Note: foreign-born from non-Western countries and without either destination or other Western citizenship, aged 15-64 at interview.

Source: own elaboration on EULFS data (2005-2008), no weights applied.

Table A2 Sample sizes and % of citizens, by sex and country of residence.
Analytical samples used for the analyses of Figure 2

	Men	Women
Austria	26,663	30,475
<i>% citizens</i>	42.29	44.07
Belgium	10,664	12,235
<i>% citizens</i>	61.43	59.94
Germany	23,309	25,562
<i>% citizens</i>	66.64	63.45
France	36,926	40,176
<i>% citizens</i>	56.49	56.61
Netherlands	16,875	20,395
<i>% citizens</i>	78.16	75.33
Spain	4,356	4,920
<i>% citizens</i>	21.99	22.87
Greece	26,099	25,478
<i>% citizens</i>	17.32	21.92
Italy	36,676	43,017
<i>% citizens</i>	18.72	25.56

Note: foreign-born from non-Western countries, aged 15-64 at interview.
Source: own elaboration on EULFS data (2005-2008), no weights applied.

