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Migration, Crisis and Adjustment in an Enlarged E(M)U: The Spanish Perspective

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**Migration, Crisis and Adjustment in an Enlarged E(M)U:
The Spanish Perspective**

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April 2014

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ABSTRACT

Migration, Crisis and Adjustment in an Enlarged E(M)U: The Spanish Perspective

This paper investigates the labour market and welfare changes experienced by enlarged-EU migrants before and after 2007. For this purpose, we briefly review the Spanish socio-economic institutional background, as well as its migration policy towards enlarged-EU citizens. Then we discuss the importance of inflows and stocks of enlarged-EU migrants in Spain, including their socio-demographic, labour market and welfare use characteristics. We proceed to evaluate the impact of enlarged-EU migrants on the Spanish labour market and the welfare state, with particular attention paid to how the situation has changed for enlarged-EU migrants after 2007, in relation to other migrants and natives. After investigating the effects of enlarged-EU migrants on the native population, the paper concludes with a discussion on lessons learned.

JEL Classification: J15, J24, J61, J62

Keywords: immigration, EU enlargement, Great Recession

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I. Introduction

Since the turn of the century, Spain has received an impressive inflow of immigrants, at approximately an average annual flow of 500,000 per year between 2002 and 2007, who have been quick to find jobs in the booming economy and integrate in its society. The enlargement of the European Union from fifteen to twenty-five countries in 2004, and twenty-seven in 2007, is partly responsible for this booming inflow of migrants. While immigrants from the new-EU-12 countries accounted for only 2 per cent of the total immigration flow into Spain in 2000, they accounted for 9 per cent in 2004, and since 2008 their share has remained constant at around 16 per cent of the country's total immigrant population. Romanians, followed by Bulgarians and Polish, represent the vast majority of enlarged-EU migrants in Spain.

However, the Spanish economy suffered a major reverse following the international financial crisis of 2007, marked by the burst of the Spanish real-state bubble, collapsing GDP growth and a soaring unemployment rate. Despite 10 of 12 new-EU member states becoming members of the Schengen zone from 21 December 2007, Spain had transitional arrangements with Romania and Bulgaria, limiting the labour market entry of their citizens from 1 January 2007 to 31 December 2008. Such transitional arrangements established that citizens from these countries needed to first show proof of residence in Spain for a minimum of two years in order to be able to work or be self-employed with the same rights as nationals, or otherwise get a visa. From 1 January 2009, Romanians and Bulgarians were finally free to enter, reside and work for wage and salary jobs in Spain, as with any other member of the Schengen zone.

Although it is not possible to disentangle the separate effects of the crisis and transitional arrangements for post-enlargement migration in Spain, this chapter

investigates the labour market and welfare changes experienced by enlarged-EU migrants before and after 2007. For this purpose, Section 2 briefly reviews the Spanish socio-economic institutional background, as well as its migration policy towards enlarged-EU citizens. Section 3 discusses the importance of inflows and stocks of enlarged-EU migrants in Spain, including their socio-demographic, labour market and welfare use characteristics. Section 4 evaluates the impact of enlarged-EU migrants on the Spanish labour market and the welfare state, with particular attention paid to how the situation has changed for enlarged-EU migrants after 2007, in relation to other migrants and natives. After investigating the effects of enlarged-EU migrants on the native population, the paper concludes in Section 5 by discussing some lessons learned.

II. Spanish institutional background and migration policy towards enlarged-EU immigrants

Immigration in Spain

Spain has experienced a unique and unprecedented immigration boom in recent decades, with immigrant numbers increasing from 4 per cent of the population in 1990 to 14 per cent in 2011. At least four reasons explain this immigration boom. First, the booming Spanish economy and the social promotion of its national (especially female) population, in the form of increased education levels and higher labour force participation, generated a demand for foreign workers (Carrasco *et al.*, 2008). Second, its physical proximity to northern Africa and Eastern Europe places Spain close to countries that supply immigrants. Third, its shared language and historical pass with South Americans facilitates the social and cultural assimilation of immigrants from this continent. Finally, the government's weak control on immigrant inflows and several

generous amnesties has *de facto* converted Spain into an immigrant friendly country (Dolado and Vázquez, 2007).

Spanish immigration policy

Spain has not had an active policy of attracting immigrants. As early as 1985, it imposed severe restrictions on non-EU foreigners who wanted to establish Spanish residency and citizenship.¹ Further tightening took place from 1993 onwards, with tougher restrictions on work and residency permit renewals, as well as the implementation of an immigration quota system, limiting the entry of foreigners to around 30,000 per year. At the turn of the century, Spain updated its immigration legislation and assimilated it to that of other European countries.

However, the free entrance of foreigners as tourists, together with a lax implementation of immigration laws and several generous amnesties that have granted legal residence to illegal immigrants (1985, 1991, 1996, 2000, 2001 and 2005), have converted Spain into an attractive destination for immigrants. In fact, the most common way of obtaining legal status in Spain during the past two decades has been through amnesties, often originally entering either illegally or as tourists (see Amuedo-Dorantes and de la Rica, 2005, 2008; Dolado and Vazquez, 2007; and Izquierdo *et al.*, 2009).² Between 1985 and 1991, as many as 150,000 immigrants regularized their status; between 1996 and 2001, a total of 400,000 immigrants did the same; while as many as 550,000 immigrants obtained residence permits in the last amnesty of 2005.

¹ To have the legal status, immigrants were required to acquire a work and residency permit that restricted them to a particular activity and geographic area only for a year. In addition, immigrants were not granted any social benefits, despite paying social security taxes when employed.

² For instance, in the 2000 amnesty, immigrants had to provide proof of one of the following: (i) residence since 1 June 1999; (ii) having held a work permit any time during the three-year period preceding 1 February 2000; (iii) being denied asylum before February 2000; (iv) having applied for any type of residence permit before 30 March 2000; or (v) family ties to legal residents or to individuals in any of the previous categories.

Legal framework for enlarged-EU migrants

Today, Spain is part of the Schengen zone, a group of countries in Europe that have no internal border control, and thus their citizens can cross into the different countries without showing a passport. Among the 12 new-EU countries from the 2004 and 2007 EU enlargement, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Czech Republic, Slovakia and Slovenia have been members of the Schengen zone since 21 December 2007.³ By contrast, Romania and Bulgaria are *not* members of the Schengen zone, and Cyprus has experienced a delay in its implementation due to its own disputes. Despite 10 of the 25 member states immediately opening their labour markets for Bulgarian and Romanian workers when the Accession Treaties were signed on 1 January 2007, Spain, jointly with Greece, Hungary and Portugal, neither opened its labour market nor applied the EU law on free movement of Romanian and Bulgarian workers until 1 January 2009.⁴ That said, given that both Romania and Bulgaria have been EU-member states since 1 January 2007, their citizens are free to enter and reside in Spain. However, although the *Spanish Real Decreto 240/2007* permits Bulgarians and Romanians to work or be self-employed in Spain with the same rights as nationals, they must *first* prove a minimum of two years residence in Spain. This implies that Romanians and Bulgarians needed a visa to work in Spain between 1 January 2007 and 1 January 2009, in addition to other requirements asked of non-EU citizens, such as a valid passport, no criminal record, private health insurance, documentation to justify the purpose of the trip (visiting friends, work or holiday), a return travel ticket and some financial guarantee (a minimum of € 600). As a result of these strict entry requirements, a substantial proportion of Romanians and Bulgarians entered the country legally through a temporary visa or permit, such as a tourist or family-visit visa, followed by an

³ For overland borders and seaports; since 30 March 2008 also for airports.

⁴ The 10 states that had no restrictions on labour market access were the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Poland, Slovenia, Slovakia, Finland and Sweden.

overstay, implying that their legal status in the country had expired. Indeed, Rodríguez-Planas and Vegas (2012) find that female Moroccans and Ecuadorians follow a similar assimilation pattern, which contrasts with that observed among Romanian women. While the former mainly come to Spain to work legally and (some of them) move out of employment over time, Romanians are considerably (and persistently) more attached to the labour force. Although they tend to lack legal status upon arrival, they gain this status over time. Interestingly, the study by Rodríguez-Planas and Raquel Vegas (2012), which uses retrospective survey data collected in 2007, suggests that many Romanians may have anticipated this legal change that facilitated their legal and employment assimilation process and entered Spain *prior* to the legislation change, even if that implied working without legal status. At least partly due to this legislative change, Romanians became the second largest group of immigrants in Spain in 2007, representing 11 per cent (closely following Moroccans).

Owing to a generalized serious labour market disturbance after the 2008 Great Recession, the Spanish government decided to unilaterally suspend EU law on free movement for Romanian workers on 22 July 2011, and as required by the safeguard clause, subsequently requested the European Commission to state that EU law on free movement for Romanian workers should be suspended in Spanish territory. The Commission approved this request on 11 August 2011, authorising Spain to temporarily restrict access to its labour market for Romanian workers until 31 December 2012, due to the soaring unemployment rate and sluggish economic recovery. However, it is important to note that these restrictions do not apply to Romanian nationals who were already active in the Spanish labour market on that date, or those who were registered as jobseekers by the Public Employment Services in Spain at that time. In addition, Bulgarian and other enlarged-EU country workers also enjoy full rights to free movement in Spain, unlike Romanian workers.

By the end of 2012, Spain will not have to notify the Commission to continue to apply restrictions on labour market access of Romanian workers after 1 January 2012, given that the Commission authorisation to re-introduce restrictions under the safeguard clause following Spain's request is valid until 31 December 2013.

II. Scale and composition of enlarged-EU migrants in Spain

Inflows and stock

Figure 1 plots the inflow of immigrants from the most popular enlarged-EU countries: Romania, Bulgaria and Poland,⁵ highlighting a sharp inflow Romanians in Spain at the turn of the century, *before* the Accession Treaty of Romania on 1 January 2007. While there were no more than 8,000 Romanians in Spain in 2000, this number had increased to over 300,000 by 2006. Since 1 January 2007, when Romania became part of the European Union, Romanians have experienced a particularly interesting status in Spain, having emerged as the second largest group of immigrants in Spain with an 11 per cent share (closely following Moroccans). In contrast, the inflow of Bulgarians and Polish immigrants is considerable more modest, despite following a similar pattern of slowdown after 2008.

⁵ To analyse inflows and stocks of migrants in Spain we use the *Spanish Local Population Registry*, which has the advantage of including undocumented immigrants. As the Spanish welfare system offers free health care and education to all residents – including undocumented immigrants – it needs a population registry to keep a record of all individuals who can access this universal welfare. As a consequence, it is in immigrants' best interests to register in the Local Population Registry immediately after arriving in Spain. The registration process does not require proof of legal residence and guarantees full data confidentiality (i.e. the Spanish Government cannot use information in the Local Population Registry to deport undocumented immigrants). Moreover, in the case of an amnesty, the undocumented immigrants can show proof of residence and date of arrival in Spain – a necessary condition to be considered eligible for the amnesty – through their registration in the Local Population Registry. Finally, immigrants are required to update their status every two years, which guarantees the accuracy of the immigrant population in the Spanish Local Population Registry.

Table 1 compares immigrants from the 12 member states that joined the European Union in 2004 and 2007, showing that the number of individuals from the enlarged-EU member states living in Spain substantially increased between 2000 and 2008. Subsequently, the share of immigrants from enlarged-EU member states has remained constant over time. After Romanians, Bulgarians and Polish have the highest incidence among New-EU-12 citizens in Spain, followed by Lithuanians, while few immigrants have come from Cyprus, Malta, Slovenia and Estonia.

Table 1 also shows that immigrants from enlarged-EU countries collectively accounted for 17 per cent of the immigrant population in Spain in 2011. Again, it is worth noting that the growing inflow since the beginning of the century increased very modestly following the Great Recession: while the number of immigrants from enlarged-EU countries in Spain grew from 23,467 in 2000 to 980,509 in 2008, the increase from 2008 to 2011 was from 980,509 to 1,111,676. Nonetheless, the number of enlarged-EU migrants has continued to increase after the Great Recession, suggesting that on average the inflows are still larger than the outflows.

Socio-demographic characteristics of enlarged-EU migrants

The Spanish LFS gathers information on demographic (age, years of education, marital status and region of residence) and employment characteristics (work status, occupation and industry), although unfortunately no information on earnings is available. For immigrants, defined as foreign-born workers who are not Spanish nationals, the LFS collects information on the number of years of residence in Spain, as well as the country of birth. Our analysis focuses on individuals between 16 and 64

years old, excluding older individuals to avoid complications involving retirement decisions.⁶

One of the strengths of the LFS lies in its supposed inclusion of both legal and illegal immigrants, in contrast to alternative datasets that *only* cover legal ones, such as the data from the Social Security Records or the Wage Survey Structure. However, the potential under-reporting of illegal immigrants is likely, especially before an amnesty (as the LFS is voluntary, in contrast to the Census, which is mandatory). Similarly, return migration related (or not) to an amnesty may also warrant concern, given that both return migration and under-reporting of immigrants may generate deterministic biases in our analysis. However, studies suggest that amnesties should not be a major concern in our analysis (see Amuedo-Dorantes and de la Rica, 2007; Fernandez and Ortega, 2008; and Rodríguez-Planas, 2013).⁷

Table 2 presents descriptive statistics for natives and immigrants, and also distinguishes migrants' region of origin. Focusing first on enlarged-EU migrants, we observe that 53 per cent are women. Moreover, as expected, enlarged-EU migrants are younger and more likely to have a high-school degree than the native population.⁸ By contrast, enlarged-EU migrants are less likely to have a college degree than natives, and particularly males. While their household structure resembles that of natives in terms of average size, some interesting differences emerge. For instance, enlarged-EU migrants

⁶ Unfortunately, the Spanish Local Population Registry has limited information on immigrants' socio-demographic characteristics and labour force status. To analyse migrants' profile and evaluate their impact in Spain, we focus on data from second quarter of the Spanish Labour Force Survey (LFS) from the years 2000 to 2011. As is common practice in the research using this dataset, we only use the second quarter to avoid repeated observations. The LFS is carried out every quarter on a sample of around 60,000 households. Each quarter, one sixth of the sample is renewed. However, the dataset does not include a variable that allows identification of individuals along the six consecutive interviews.

⁷ Responding to the LFS cannot be used as proof of residence. Thus, it is likely that many illegal workers decline answering the LFS, which would show up as underreporting to migrants prior to the amnesty in relation to afterwards.

⁸ Education is self-reported by the migrant and it is mainly from the country of origin. Sanromá *et al.*, 2009, estimate that immigrants in Spain acquire the bulk of their human capital in their home country (10.95 of their 11.1 years of education, on average, corresponds to their home country), and they find that only 5.5% of immigrants get some schooling in Spain.

are less likely to be married and more likely to have children than natives (albeit fewer of them).

Most immigrants come to Spain to work, and enlarged-EU migrants are not any different in this respect, with almost 80 per cent of male and over 60 per cent of female migrants from EU-enlargement countries working in Spain. Of these immigrants, close to one-third work under a permanent contract, which guarantees them high severance pay if dismissed. Furthermore, a differential gender pattern emerges, whereby enlarged-EU female migrants are 14 percentage points more likely to work than their native counterparts. This higher labour force commitment implies that the share of those who work under a permanent contract is the same as native women (close to one third of those employed in a wage and salary job). By contrast, men do not exhibit a higher employment commitment, and the share of enlarged-EU male migrant workers with a permanent contract is two-thirds the size of that observed among natives, at 33 per cent.

Perhaps surprisingly given their education level, enlarged-EU migrants are primarily employed in low-earning occupations, with as few as 5 per cent of male and 6 per cent of female enlarged-EU migrants working in medium- or high-earning occupations (as shown in Table 2).⁹ Where does the typical enlarged-EU immigrant work, and how does this differ from other migrant groups living in Spain? Given that enlarged-EU and other immigrants are disproportionately over-represented in low-skilled occupations in Spain, Table 3 presents the list of main sectors that these immigrants work in, as well as their relative importance. While enlarged-EU women are disproportionately employed in the domestic sector as nannies, nurses and housekeepers, enlarged-EU men are mainly employed in the construction sector. The

⁹ High-earning occupations are directors, managers, scientific technicians, professionals and academics. Middle-earning occupations include: technicians and support professions; accountancy, administrative and other office employees; and craftsperson and skilled workers in manufacturing and construction. Low-skilled occupations include workers in: catering, personal and protection services and sales; agriculture, livestock, forestry and fishing; installation and machinery operators and assemblers; and other elementary occupations.

domestic sector is also the most common occupation among other female immigrants. In contrast, while many women from other ethnic groups work in the sales sector (with a share of 6 per cent), the share of enlarged-EU female migrants in this sector is only 3 per cent, which is likely due to their lower language skills. Finally, both enlarged-EU and other female migrants are also prominently represented in the food-services sector (as waiters and cooks). In addition, both enlarged-EU and other migrants hold other unskilled jobs (such as janitors, drivers and warehouse workers), with over 25 of enlarged-EU migrants and 20 per cent of other migrants working in such types of jobs.

Non-enlarged-EU men are also employed in the construction sector, albeit with a considerably lower share than that observed among enlarged-EU men. The construction sector was booming during the 2000s, and thus finding a first job here was much easier than in other sectors, before immigrants could eventually make a transition to other sectors. Accordingly, the shorter experience in the country is likely to explain the high concentration of enlarged-EU migrants in the construction sector.

In Table 2, we also find that enlarged-EU migrants are less likely to be welfare recipients or receive pensions than natives. As Rodríguez-Planas (2013) explains, their legal status or insufficient contribution is likely to hamper participation in social programmes in Spain, a country with a low level of social assistance and a Welfare state in which access to pensions is conditioned on having contributed to social security. The only exception is the receipt of unemployment insurance (UI) receipt by enlarged-EU men, which, at 8 per cent, is two thirds that of native men.¹⁰ Given that enlarged-EU men are considerably more likely to be working under a fixed-term contract and in low-earning occupations – including construction work, a sector heavily hit after the real-

¹⁰ To be able to receive UI benefits in Spain you have to be registered in the Social Security records, under 65 years old, unemployed and have contributed to social security for at least 12 months (not necessarily consecutive).

estate bubble burst in 2008 – than native men, they are more likely to have been hit harder by the great recession than natives, explaining their higher UI receipt.

Relative to other migrants, migrants from the EU enlargement member states are those who have most recently arrived in Spain. On average, they have been in Spain for close to 5 years, which is less than half the average length of African migrants. Indeed, this most likely explains the concentration of enlarged-EU migrants in low-earning occupations, relative to their African and South American counterparts.

IV. Enlarged-EU migrants' Labour market and welfare assimilation in Spain

4.1 Empirical specification

This section examines the labour market and welfare assimilation of enlarged-EU migrants in Spain before and after the 2007 crisis. In particular, we analyse differences in observable characteristics between enlarged-EU migrants and natives, as well as enlarged-EU migrants and other migrants, and explain the observed descriptive differences from the previous section. Moreover, we study whether these differences changed after the 2007 crisis, estimating a cross-sectional linear probability model. The variable X_{ijt} is a vector of person-specific characteristics that includes the following socio-demographic controls: age and age squared, marital status, four education dummies (primary education, secondary education but no high-school degree, high-school graduate and college education), household size, number of children in the household and four dummies indicating the age of the children in the household (0-4, 5-9, 10-15 and 16-29 years old). i indexes the individual, t the LFS year, and j indexes the country of origin. Enl_EU_{ijt} is a dummy variable indicating whether the individual is an

enlarged-EU immigrant, $Post_{2007_{ijt}}$ is a dummy variable indicating whether we observe the individual after 2007, and $(Enl_{EU_{ijt}} \times Post_{2007_{ijt}})$ is an interaction of the two. $Female_{ijt}$ is a dummy variable indicating whether the individual is woman, and $(Enl_{EU_{ijt}} \times Female_{ijt})$ is an interaction of the two. $(Enl_{EU_{ijt}} \times Female_{ijt} \times Post_{2007_{ijt}})$ is an interaction of the three variables. YSM_{ijt} and YSM_{ijt}^2 control for years since migration to Spain (and its square). The specification also includes *Comunidad Autonoma* fixed effects, LFS year fixed effect, a time trend (t) and a time trend interacted by *Comunidad Autonoma* fixed effects. Z_{ijt} is a vector describing labour market characteristics (at the province level) and includes the following variables: unemployment rate, share of immigrants, share of immigrants on welfare and share of inactive immigrants at the province level. A normally distributed error term is represented by ε_{ijt} .

The LHS variable, Y_{ijt} , varies according to which aspect of migrants' assimilation is under analysis. For example, when we examine work assimilation, Y_{ijt} is a dummy indicating whether the individual is working at the time of the survey. Other aspects analysed include dummies for: working under a permanent contract; being self-employed; receiving cash-welfare benefits, such as UI benefits, retired pension and other types of pension, including disability pension, and only receiving UI benefits.¹¹ Furthermore, in order to identify possible skill mismatches and over-qualification, we construct a variable that has the value 1 if the individual works in a low-earning occupation, 2 if in a middle-earning occupation, and 3 for a high-earning occupation, and is only estimated for individuals working at the time of the survey.

Tables 4 to 9 present the results from these regressions. Given our interest in analysing how enlarged-EU migrants compare to natives, equation (1) is estimated on a sample of enlarged-EU migrants and natives, with the results from these estimations

¹¹ We cannot include housing, schooling or health-care benefits as these are not measured in the LFS.

detailed in column (1) of Tables 4 to 9. Column 2 repeats the analysis yet compares enlarged-EU migrants to other migrants living in Spain.

Our analysis focuses on the coefficients, α_2 , and $(\alpha_2+\alpha_6)$, which capture male and female differences from 2000 to 2007 between enlarged-EU migrants and: (i) natives (in column 1); and (ii) other migrants living in Spain (in column 2), controlling for migrants' year of arrival in Spain. If lower employment- or welfare-participation rates among immigrants are simply due to differences in observable characteristics between enlarged-EU and other migrants, the coefficients α_2 and $(\alpha_2+\alpha_6)$ should not be significantly different from zero when these controls are included in the model. The coefficients $(\alpha_2+\alpha_4)$ and $(\alpha_2+\alpha_4+\alpha_6)$ measure the male and female differences between enlarged-EU migrants and natives (in column 1) or other migrants (in column 2) *after* 2007. Below, we initially focus on the differential effects prior to 2007 (Section 4.2), and subsequently on the differential effects after 2007 (Section 4.3). Any changes before and after 2007 can be attributed to both the crisis and the transitional agreements between Spain and Romania and Bulgaria, as citizens from these two countries represent by far the largest share of enlarged-EU immigrants in Spain.

4.2 Labour market and welfare between 2000 and 2007

Below we summarize the main results from Tables 4 to 9. We first focus on the period pre-2008, before Section 4.3 investigates the differential effects after 2007.

Compared to natives, enlarged-EU male migrants are less likely to work upon arrival. By contrast, enlarged-EU female migrants are slightly more likely to work upon arrival than their native counterparts. Estimates from column 1 in Table 4 show that, upon arrival to Spain, enlarged-EU male migrants are 7 percentage points less likely to work than their native counterparts (once all observable socio-demographics have been

accounted for). By contrast, female enlarged-EU migrants are slightly more likely to work than native women, by 2 percentage points.¹² Given the average employment rate for enlarged-EU men (women) of 79 (63) per cent, our estimates imply that enlarged-EU migrants are 9 (3) per cent *less (more)* likely to work after first arriving than their male (female) counterparts. This situation does not seem to change with time in the country.

The findings for enlarged-EU males differ from those cited within Spanish migration literature. For instance, Fernández and Ortega (2008) find that the labour supply of new male immigrants arriving from Eastern Europe is higher than that of similar natives, and decreases over time. In contrast to this study, the authors use data from an earlier period (1996 to 2005) and do not only focus on enlarged-EU countries. However, focusing on migrants from the EU-enlargement member states and using only the 2006 to 2008 LFS, de la Rica (2009) also finds evidence that the employment situation of these immigrants in Spain deteriorates over time. More specifically, she finds that while there is no difference in the probability of *recent* EU-enlargement migrants and natives working, *non-recent* EU-enlargement migrants do worse in terms of employment than their recent counterparts.

Compared to other immigrants, enlarged-EU migrants are more likely to work upon arrival, and their employment situation improves over time. Estimates from column 2 in Table 4 show that, upon arrival in Spain, enlarged-EU migrants are 6 percentage points more likely to work than other migrants (once all observable socio-demographics have been accounted for). Moreover, this employment situation improves with time in Spain.

¹² We obtain the estimate of 2 percentage points by adding -0.066 and -0.083.

Enlarged-EU migrants are less likely to work under permanent contracts than natives, although their employment situation in Spain improves with time. Table 5 shows that enlarged-EU migrants are more likely to work under more vulnerable conditions. Upon arrival, male (female) migrants are 39 (15) percentage points less likely to work under permanent contract than their native counterparts. However, this gap narrows over time and takes 12 (5) years for men (women) to vanish, before subsequently reversing.

Enlarged-EU migrants are less likely to be self-employed than natives and other migrants. This difference is larger among males than females. Given that they are high-skilled workers, it may be the case that enlarged-EU migrants are more entrepreneurial than natives or other migrants; however, we find no evidence of this in Table 6. Upon arrival, enlarged-EU male migrants are 12 and 5 percentage points less likely to be self-employed than natives or other migrants, respectively. Moreover, when compared to natives, this differential does not decrease over time. The same pattern is observed among women; however, the differential between enlarged-EU female migrants and natives or other migrants is considerably smaller than that observed among men.

Enlarged-EU migrants are over-qualified for their jobs, more so than natives and other migrants. A common finding in the case of Spain is that immigrants are much more likely to be over-educated than similar natives (Fernández and Ortega, 2008; Alcobendas and Rodríguez-Planas, 2009). Like these authors, we also find that enlarged-EU migrants are more over-educated than natives and other immigrants (as

shown in columns 1 and 2 of Table 7).¹³ In line with earlier results, we find that over-education is more concerning for enlarged-EU males than females.

Moreover, we find that the over-education differential between enlarged-EU migrants and natives does *not* decrease over time, namely there is *no* convergence.¹⁴ While this result differs from those earlier described on migrants' employment and work security assimilation in Spain, it is consistent with findings from Fernández and Ortega (2008), which reveal that the over-education gap of male immigrants with comparable natives is *unaffected* by the number of years since migration. These findings are also in line with Alcobendas and Rodríguez-Planas (2009), who find that the degree of assimilation in Spain is higher the lower their education level. These authors find that high-skilled immigrants are over-represented in the "non-qualified" occupation category, which includes jobs such as janitors, entry positions in construction work, non-qualified labourers, house cleaning, child caring and elderly caring.

There is a negative residual welfare gap between enlarged-EU migrants and natives or other migrants. The residual welfare gap is the difference in welfare use between migrants and natives, after having controlled for observable differences across the two groups. The residual welfare gap between enlarged-EU migrants and natives in Spain is a negative 11 percentage points for males and 7 percentage points for females, as shown in column 1 in Table 8. This negative residual welfare gap upon arrival is consistent with the Rodríguez-Planas (2013), who finds that immigrants in Spain are less likely to participate in cash-benefit social programmes than natives, even when controlling for

¹³ The variable "over-qualification" is constructed with value 1 if the individual works in a low-earning occupation, 2 if in a middle-earning occupation and 3 for a high-earning occupation. This last specification is estimated only for individuals working at the time of the survey.

¹⁴ However, we do find that over time, enlarged-EU migrants improve their skill mismatch in relation to other migrants.

observable characteristics.¹⁵ The author concludes that the self-selection of immigrants coming to a relatively ungenerous welfare state (at least in terms of means-tested social programmes) is a likely reason for this result.

It is interesting to note that the coefficient in the “years since migration” variable in column 1 of Table 8 is positive and statistically significant. Although this estimate may seem to suggest that enlarged-EU migrants increase their welfare use relative to similar natives over time, when information from column 1 in Table 9 is added it becomes clear that assimilation into welfare is mainly driven by UI benefits. This is consistent with Rodríguez-Planas (2013), who finds that there is no assimilation into cash-welfare benefits in Spain (other than UI benefits). This result contrasts with findings from other countries, and even those with traditionally not very generous states, such as the United States.

When comparing enlarged-EU welfare use to that of other migrants in Spain, we also observe a negative residual welfare gap for males (of 3.3 percentage points), yet not for females (shown in column 2 of Table 8).

Enlarged-EU migrants are less likely to receive UI upon arrival than natives, yet this differential decreases over time. Column 1 in Table 9 shows that enlarged-EU migrants are 7 percentage points less likely to receive UI upon arrival in Spain than natives. This result is consistent with the defined benefit pay-as-you-go Spanish social security system, which conditions the receipt and level of unemployment benefits to the worker’s labour history (wages and number of years of contribution).

When we compare UI receipt between enlarged-EU migrants and other migrants in Spain, holding all other characteristics constant, we find a considerably smaller

¹⁵ Rodríguez-Planas (2013) includes the following benefits as cash-welfare: (i) unemployment benefits; (ii) disability pensions; (iii) survivor’s pension; (iv) family allowance; and (v) other social programmes.

difference for males (column 2 in Table 9). Among women, enlarged-EU migrants are slightly more likely to receive UI upon arrival than other migrants.

We find that enlarged-EU immigrants assimilate into unemployment benefits with time spent in the new country, and do so at a faster rate than natives (or other migrants). However, the difference in UI receipt between enlarged-EU migrants and natives disappears four and a half years after arriving, and begins to reverse. In contrast, Rodríguez-Planas (2013) finds that it takes between 6 to 8 years in Spain for the difference to vanish when all immigrants (rather than just enlarged-EU) are compared to natives. Since enlarged-EU immigrants concentrate in the most vulnerable positions, they are the first to be hit by recession, and consequently use unemployment benefits as a supplement of income once they have the right to do so. This is a likely part of the explanation for the sustained stock of enlarged-EU immigrants, even after the Great Recession.

4.3 Effects of the 2007 Crisis

In this section, we focus on the differential effects between enlarged-EU migrants and natives or other migrants after 2007. In our specification, these effects are measured by the coefficients $(\alpha_2 + \alpha_4)$ for males and $(\alpha_2 + \alpha_4 + \alpha_6)$ for females. In Spain, there have been counteractive effects for Romanians and Bulgarians after 2007. On the one hand, the labour market contracted with the Great Recession, and the Spanish transitional arrangements with Romania and Bulgaria were such that between 1 January 2007 and 31 December 2008 citizens from these countries needed to first show proof of residence for a minimum of two years residence in Spain in order to work or be self-employed with the same rights as nationals, or otherwise get a visa. On the other hand, from 1 January 2009 Romanians and Bulgarians were finally free to enter, reside and work for wage and salary jobs in Spain, as with any other member of the Schengen

zone. Nonetheless, this only lasted slightly over a year and a half for Romanians, because Spain temporarily restricted access to its labour market for Romanian workers who were *not* active in the Spanish labour market or were *not* registered as jobseekers by the Public Employment Services in Spain from 11 August 2011 to 31 December 2013¹⁶.

Below we summarise our key findings regarding how the crisis and the transitional arrangements affected enlarged-EU migrants in Spain.

The employment disadvantage of enlarged-EU male migrants relative to their native counterparts worsens after the 2007 crisis. By contrast, no relative effect is observed among enlarged-EU female migrants and natives. The previous section highlighted a gender differential in that enlarged-EU males were less likely to work than natives, yet the opposite was true for females. Does this differential pattern by gender change after the 2007 crisis? It does not; in fact, these relative differences widen after 2007. After the recession, enlarged-EU males are 22 percentage points (or 30 per cent) *less* likely to work than their native counterparts, whereas enlarged-EU females are 3 percentage points (or 5 per cent) *more* likely to work than their native counterparts.

In terms of employment, enlarged-EU migrants do relatively worse than other migrants after the 2007 crisis. Among males, the employment advantage of enlarged-EU migrants relative to other migrants reverses. Among females, the employment advantage practically vanishes with the crisis. Although enlarged-EU migrants had better employment prospects than other migrants in Spain, their relative employment situation changes after the 2007 crisis, with enlarged-EU male migrants 1.5 percentage points *less* likely to work than other migrant males, and there is no longer practically

¹⁶ Note that this last restriction is not observed in our data that ends the second quarter of 2011.

any employment difference between enlarged-EU female migrants and those from other ethnic groups.

Moreover, the 2007 crisis differentially affects men and women from EU enlarged countries in terms of job security. The employment situation worsens for males after the 2007 crisis, as they are more likely to have temporary jobs, while the opposite is true for women. After 2007, male enlarged-EU migrants are 43 percentage points less likely to work under a permanent contract than their native counterparts. By contrast, enlarged-EU women are 18 percentage points more likely to work under a permanent contract than their native counterparts.

Relative to other migrants, the only difference in the likelihood of having a permanent contract lies in enlarged-EU females being more likely to have such type of contract after the 2007 crisis. We observe few differences in terms of job temporality between enlarged-EU migrants and other migrants in Spain (shown in column 2 of Table 5), with the one major difference being that enlarged-EU females are 7 percentage points (or 24 per cent) more likely to have a permanent contract than their counterparts after the 2007 crisis.

Relative to other migrants, enlarged-EU migrants are more likely to move towards self-employment than other migrants after the 2007 crisis. The self-employment differential between enlarged-EU males and other migrants is cut by half after the 2007 crisis, from 5 percentage points to 2.6 percentage points, while the differential practically disappears among women. This relative increase in self-employment among enlarged-EU workers is a likely side effect of the Spanish restrictions on Romanians' access to wage and salary jobs.

After the 2007 crisis, enlarged-EU female migrants' skills downgrading is reduced.

After the 2007 crisis, the over-education differential between enlarged-EU women and natives or other migrants is reduced by 6 and 5 percentage points, respectively.

The negative residual welfare gap between Enlarged-EU migrants and natives or other migrants improves for males and widens for females after the 2007 crisis, reflecting the differential gender effects of the crisis among enlarged-EU migrants.

Interestingly, the negative welfare gap between enlarged-EU migrants and natives or other migrants shrinks considerably among males after the 2007 crisis, yet widens among females. Given that this is mainly driven by the unemployment benefits (shown in Table 9), it reflects the relatively worse labour market position for enlarged-EU males and relative labour market improvement for enlarged-EU females *after* 2007.

4.4 Impact of enlarged-EU migrants on the receiving country

The number of enlarged-EU migrants in Spain increased from 23,467 in 2000 to 1,111,676 in 2011, representing 17 per cent of the foreign-born population. Most of the literature on migration finds a small effect (if any) of migration inflows on the labour market prospects (employment and wage) of natives with similar skill levels, which has also been confirmed for the Spanish case (Carrasco *et al.*, 2008). Consequently, in light of previous evidence, one should not expect any large effects of the enlarged-EU migrants on the labour market outcomes of natives with similar skill levels.

By contrast, recent literature has presented evidence of some complementarities between low-skilled immigrants and high-skilled natives. For the Spanish case, Farré *et al.* (2011) show that the massive inflow of immigrants during the past decade has had a positive effect on the labour market participation of high-skilled native women. The

authors show that female migration has substantially reduced the price of domestic services, with high-skilled women having hired domestic services in response, substituting away hours of home production (childcare and housekeeping) by hours of work in the market. The estimates in Farré *et al.* (2011) indicate that the large inflow of immigrants to Spain between 1999 and 2008 led to a 3-percentage-point increase in the participation rate of highly skilled women with family responsibilities.

As shown in Table 3, enlarged-EU female immigrants are disproportionately employed in domestic services; therefore, this group is likely to have contributed to the increase in the labour market participation of native women. The share of enlarged-EU women over the immigrant population increased from almost 2 to more than 16 per cent between 1999 and 2008. According to the estimates of Farré *et al.* (2011), this group would have been responsible for around a 0.42-percentage-point increase in native female employment (i.e. 14 per cent of the total increase in native female employment).

How do enlarged-EU migrants affect the Spanish pension, health and education systems? Due to the immigration boom being a relatively recent process in Spain, very few migrants receive old age pensions as they are typically still of working age (Muñoz de Bustillo and Antón, 2009). Indeed, this is particularly true of enlarged-EU migrants, given that they are younger than those from other origins. Moreover, the Spanish Social Security System is a defined benefit pay-as-you-go system whereby the pension level largely depends on the worker's labour history (wages, number of years of contribution and age of retirement). Therefore, even if they were over 65 years old, enlarged-EU migrants would not receive an old age pension unless they contributed the minimum 15 years required by law. Moving now to the effects of enlarged-EU migrants on the health care system, Muñoz de Bustillo and Antón (2009) analyse immigrants' use of Spanish public health care insurance using data from the 2003 Spanish Health Survey, finding that immigrants incur lower health expenditures than natives, even when controlling for

observable characteristics.¹⁷ Finally, Salinas Jiménez and Santín González (2010) estimate that the total direct expenditure accumulated by the Spanish national and regional governments from the school years 2000-2001 to 2006-2007 amount to € 2.570 million euros, most of which (around 70 per cent) was concentrated in Andalucía, Cataluña y Madrid. Accordingly, given that enlarged-EU migrants represent 17 per cent of all migrants, they have increased the Spanish educational expenditures by no more than € 436,9 million euros.

V. Conclusion: Lessons Learn

The Spanish economy has suffered a major reverse since the great recession, with the burst of the real-estate bubble, a failing banking system, a lack of liquidity and loans for firms and a rigid labour market having driven the economy to a double recession within four years. The change of government at the end of 2011 has shifted the social welfare priorities, changing the regulation so that universal health care is no longer readily available to legal and illegal immigrants. Consequently, the inflow of immigrants has come to a halt, while the soaring unemployment rate is pushing both immigrants and natives to leave the country, as the employment perspective becomes meagre.

How have enlarged-EU immigrants coped with the soaring job destruction rates observed in Spain? Our analysis reveals that the employment and welfare situation of enlarged-EU migrants after 2007 crucially depends on their gender. For instance, enlarged-EU males are the big losers, given that their employment situation worsens and their job precariousness increases. Unsurprisingly given the worsening of their labour market, they are relatively more likely to receive UI than pre-2008 (although

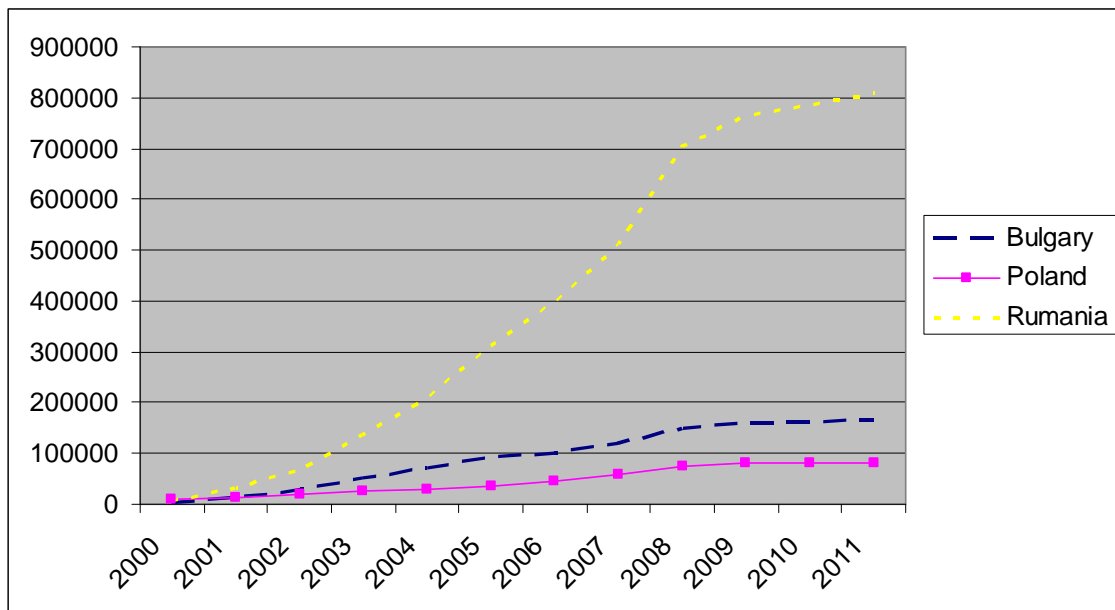
¹⁷ According to the raw data, immigrants are more likely to visit the family doctor and go to the emergency room than natives. Similar results are found by Jiménez *et al.*, 2009.

their UI intake is still lower than that of natives and other migrants), and they are also relatively more likely to be self-employed (albeit their relative level is still below that of natives and other migrants). By contrast, post-2007 enlarged-EU female migrants are relatively better off regarding all such dimensions vis-à-vis natives and other migrants.

Clearly, occupation gender segregation must be behind possible explanations for these findings. Since enlarged-EU male migrants were working disproportionately more in construction jobs than other migrants (31 per cent versus 17 per cent), they are those most hit by the real-state burst. By contrast, given that enlarged-EU females are disproportionately in domestic services jobs (35 per cent versus 25 per cent), they are the ones who have suffered less from the recession. There are at least two reasons for this delayed effect of the crisis on domestic services jobs: first, as the real-state bubble burst, male dominated sectors were immediately hard hit; and second, since many males (regardless of their country of origin) were losing jobs in Spain, their spouses (especially the native ones who had a relatively low labour force participation) reconsidered their labour market choices and entered employment, by doing so increasing the demand for domestic services, at least in the short-run. Nonetheless, as this crisis keeps on shredding jobs it is most likely a matter of time before even female workers in the domestic sector eventually feel the consequences of the downturn.

However, the long-term labour market prospects of immigrants in Spain are not that pessimistic. On the one hand, the Spanish population is rapidly aging, which will tend to increase the demand for elderly care, and immigrants, and particularly women, will find jobs in the domestic sector. On the other hand, if the economic recession exacerbates the Spanish brain drain, there may be a shortage of highly educated workers (i.e. engineers) in some years. Consequently, if wages do not recover sufficiently to bring back native workers, there may be a market for high skilled immigrants.

Figure 1: Main enlarged-EU countries



Source: Spanish Local Population Registry.

Table 1. Number of individuals born in the EU enlargement countries living in Spain

	2000	2004	2008	2009	2010	2011
Bulgaria	3,268	70,364	150,742	159,993	163,550	165,668
Cyprus	226	234	294	317	320	327
Slovenia	193	405	995	1,146	1,172	1,199
Estonia	111	507	1,138	1,306	1,433	1,601
Hungary	1,142	2,458	6,973	8,092	8,727	9,135
Latvia	169	1,207	2,453	2,787	3,312	3,632
Lithuania	193	9,164	20,107	20,774	20,930	20,977
Malta	174	187	247	269	281	299
Poland	8,625	27,658	75,758	81,371	81,842	80,961
Czech Republic	1,462	3,784	8,323	9,053	9,445	9,514
Slovakia	361	2,477	7,315	7,884	7,971	8,015
Rumania	7,543	206,395	706,164	762,163	784,834	810,348
Total EUenl	23,467	324,840	980,509	1,055,155	1,083,817	1,111,676
Total						
Immigrants	1,472,458	3,693,806	6,044,528	6,466,278	6,604,181	6,677,839
EU-enlarged as a per cent of all migrants	2%	9%	16%	16%	16%	17%

Source: Spanish Local Population Registry.

Table 2. Descriptive statistics, natives and immigrants, by region of origin

	Natives		All Immigrants		EU enlargement		Africans		South Americans	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Sample size	392,983	442,021	27,078	32,437	3,377	3,862	6,009	5,216	10,215	14,308
Working	0.80	0.49	0.78	0.55	0.79	0.63	0.71	0.28	0.80	0.64
Permanent contract	0.50	0.31	0.36	0.28	0.33	0.29	0.32	0.14	0.37	0.33
Self-employed	0.19	0.07	0.14	0.06	0.07	0.02	0.10	0.03	0.12	0.05
Welfare recipient	0.17	0.13	0.12	0.09	0.09	0.06	0.16	0.10	0.10	0.08
Unemployment insurance	0.05	0.05	0.08	0.05	0.08	0.05	0.11	0.05	0.09	0.06
Disability pension	0.05	0.03	0.01	0.01	0.01	0	0.02	0.01	0.01	0.01
Retired pension	0.07	0.02	0.02	0.01	0	0	0.02	0	0	0
Other pension	0.05	0.06	0.02	0.03	0.01	0	0.03	0.04	0.01	0.02
High-skill occup	0.15	0.12	0.13	0.08	0.02	0.02	0.09	0.07	0.12	0.08
Medium-skill occup	0.18	0.25	0.12	0.14	0.03	0.04	0.07	0.13	0.11	0.10
Low-skill occup	0.67	0.63	0.75	0.78	0.95	0.94	0.84	0.80	0.77	0.82
Male	0.44		0.46		0.47		0.54		0.42	
Age	46.65	45.98	39.83	38.79	36.25	34.17	40.47	38.58	39.25	38.42
Years since migration			11	10.72	5.34	4.87	12.78	11.83	8.54	8.49
Age at migration			28.43	27.50	30.90	29.27	26.57	25.05	30.22	29.40
Married	0.84	0.80	0.72	0.68	0.72	0.68	0.79	0.81	0.67	0.62
Primary	0.29	0.32	0.22	0.21	0.12	0.13	0.47	0.56	0.16	0.16
HS dropouts	0.29	0.28	0.21	0.20	0.16	0.19	0.19	0.18	0.21	0.21
HS graduates	0.26	0.22	0.38	0.38	0.63	0.54	0.23	0.19	0.42	0.41
College	0.16	0.17	0.19	0.20	0.09	0.14	0.12	0.08	0.21	0.22
With kids	0.43	0.41	0.54	0.56	0.50	0.51	0.56	0.66	0.57	0.57
Number of kids	1.52	1.51	1.67	1.63	1.45	1.43	1.98	2	1.60	1.57
Household size	3.31	3.26	3.25	3.30	3.12	3.10	3.52	3.89	3.32	3.29

Source: Labour Force Survey 2000-2011.

Notes: *The sample is restricted to individuals 16 to 64 years old who are heads of the household or spouses.

Table 3: Percentage of immigrants workers employed in the most common low-skilled occupations

	Enlarged-EU immigrants		Other immigrants	
	Men	Women	Men	Women
Food services (cooks, and waiters)	3.06	17.57	6.23	10.51
Sales	0.97	3.33	2.50	5.92
Construction	30.58	0.31	16.90	0.23
Manufacturing (food preparation, metals, and electricians)	19.33	6.72	15.86	3.81
Domestic services (nannies, nurses, housecleaning)	0.80	34.61	1.50	25.42
Agriculture and fishing	4.16	0.90	2.41	0.47
Other unskilled jobs (janitors, drivers, warehouse workers)	26.75	25.37	20.95	19.62

Source: Labour Force Survey 2000-2011.

Table 4. Employment

VARIABLES	(1) Native - EU_enl	(2) EU_enl - others
EU_enlargement	-0.066*** [0.017]	0.058*** [0.013]
Female	-0.303*** [0.004]	-0.200*** [0.007]
EU_enlargement*female	0.083*** [0.020]	-0.011 [0.021]
post07	0.008** [0.003]	0.003 [0.011]
EU_enlargement*post07	-0.156*** [0.019]	-0.073*** [0.019]
EU_enlargement*post07*female	0.109*** [0.028]	0.104*** [0.027]
Age	0.048*** [0.001]	0.048*** [0.002]
age2	-0.001*** [0.000]	-0.001*** [0.000]
Ysm	0.006 [0.004]	0.006*** [0.001]
ysm2	-0.000 [0.000]	-0.000*** [0.000]
Married	-0.007*** [0.002]	-0.066*** [0.006]
presence of children	0.013*** [0.003]	0.023** [0.010]
household size	-0.010*** [0.001]	-0.013*** [0.003]
Unemployment rate (province)	-0.005*** [0.000]	-0.009*** [0.001]
Share of immigrants (province)	0.003*** [0.000]	-0.002*** [0.000]
Share of immigrants on welfare (province)	-0.000 [0.000]	-0.002** [0.001]
Immigrant Inactivity rate (province)	-0.000** [0.000]	-0.006*** [0.001]
Constant	-0.082** [0.034]	0.063 [0.150]
Observations	842,180	50,081
R-squared	0.256	0.132

Table 5. Permanent employment assimilation

VARIABLES	(1) Native - EU_enl	(2) EU_enl - others
EU_enlargement	-0.390*** [0.021]	-0.013 [0.016]
female	-0.181*** [0.003]	-0.053*** [0.006]
EU_enlargement*female	0.144*** [0.024]	0.001 [0.025]
post07	0.016*** [0.005]	0.019 [0.012]
EU_enlargement*post07	-0.036* [0.021]	-0.023 [0.021]
EU_enlargement*post07*female	0.070** [0.029]	0.070** [0.029]
age	0.047*** [0.001]	0.030*** [0.002]
age2	-0.001*** [0.000]	-0.000*** [0.000]
ysm	0.032*** [0.005]	0.009*** [0.001]
ysm2	-0.001*** [0.000]	-0.000*** [0.000]
married	0.014*** [0.002]	-0.027*** [0.006]
presence of children	0.026*** [0.003]	0.028*** [0.009]
household size	-0.017*** [0.001]	-0.002 [0.003]
Unemployment rate (province)	-0.001** [0.000]	-0.003*** [0.001]
Share of immigrants (province)	0.002*** [0.000]	-0.002*** [0.000]
Share of immigrants on welfare (province)	-0.000* [0.000]	-0.002** [0.001]
Immigrant Inactivity rate (province)	-0.000 [0.000]	-0.001** [0.001]
Constant	-0.561*** [0.030]	-0.252*** [0.075]
Observations	842,180	50,081
R-squared	0.157	0.064

Table 6. Self-employment

VARIABLES	(1) Native - EU_enl	(2) EU_enl - others
EU_enlargement	-0.125*** [0.008]	-0.048*** [0.008]
female	-0.114*** [0.001]	-0.068*** [0.003]
EU_enlargement*female	0.071*** [0.007]	0.023*** [0.007]
post07	0.003 [0.004]	0.002 [0.007]
EU_enlargement*post07	0.001 [0.011]	0.022** [0.011]
EU_enlargement*post07*female	0.008 [0.011]	0.005 [0.011]
age	0.011*** [0.000]	0.002* [0.001]
age2	-0.000*** [0.000]	-0.000 [0.000]
ysm	-0.000 [0.002]	0.009*** [0.001]
ysm2	0.000** [0.000]	-0.000*** [0.000]
married	0.007*** [0.001]	-0.003 [0.003]
presence of children	-0.007*** [0.002]	0.006 [0.007]
household size	0.010*** [0.001]	-0.000 [0.002]
Unemployment rate (province)	-0.002*** [0.000]	-0.001* [0.001]
Share of immigrants (province)	0.001*** [0.000]	-0.001*** [0.000]
Share of immigrants on welfare (province)	0.000 [0.000]	-0.000 [0.001]
Immigrant Inactivity rate (province)	-0.000 [0.000]	0.000 [0.000]
Constant	-0.102*** [0.026]	-0.025 [0.044]
Observations	842,180	50,081
R-squared	0.041	0.060

Table 7. Occupational upgrading

VARIABLES	(1) Native - EU_enl	(2) EU_enl - others
EU_enlargement	-0.345*** [0.021]	-0.160*** [0.017]
female	-0.072*** [0.003]	-0.099*** [0.008]
EU_enlargement*female	0.014 [0.020]	0.056*** [0.019]
post07	0.024*** [0.009]	0.006 [0.019]
EU_enlargement*post07	0.021 [0.023]	-0.001 [0.023]
EU_enlargement*post07*female	0.062** [0.025]	0.048** [0.023]
age	0.002** [0.001]	-0.014*** [0.004]
age2	0.000*** [0.000]	0.000*** [0.000]
ysm	-0.013** [0.005]	0.014*** [0.002]
ysm2	0.001*** [0.000]	-0.000*** [0.000]
married	0.014*** [0.003]	0.027*** [0.008]
presence of children	-0.016*** [0.005]	0.001 [0.016]
household size	0.015*** [0.002]	-0.012** [0.005]
Unemployment rate (province)	0.003*** [0.001]	0.005*** [0.002]
Share of immigrants (province)	0.001** [0.000]	-0.005*** [0.001]
Share of immigrants on welfare (province)	0.000 [0.000]	0.001 [0.002]
Immigrant Inactivity rate (province)	-0.000 [0.000]	0.002** [0.001]
Constant	0.938*** [0.032]	1.471*** [0.396]
Observations	532,532	32,492
R-squared	0.287	0.250

Table 8. Welfare residual

VARIABLES	(1) Native - EU_enl	(2) EU_enl - others
EU_enlargement	-0.111*** [0.008]	-0.033*** [0.006]
female	-0.031*** [0.001]	-0.030*** [0.004]
EU_enlargement*female	0.040*** [0.006]	0.038*** [0.007]
post07	-0.008** [0.003]	0.004 [0.005]
EU_enlargement*post07	0.044*** [0.011]	0.021* [0.012]
EU_enlargement*post07*female	-0.064*** [0.013]	-0.056*** [0.013]
age	-0.034*** [0.000]	-0.022*** [0.002]
age2	0.000*** [0.000]	0.000*** [0.000]
ysm	0.019*** [0.002]	0.005*** [0.001]
ysm2	-0.001*** [0.000]	-0.000*** [0.000]
married	-0.123*** [0.002]	-0.022*** [0.004]
presence of children	0.039*** [0.002]	0.014** [0.006]
household size	-0.011*** [0.001]	-0.006*** [0.002]
Unemployment rate (province)	0.002*** [0.000]	0.000 [0.001]
Share of immigrants (province)	-0.001*** [0.000]	0.000 [0.000]
Share of immigrants on welfare (province)	0.001*** [0.000]	0.011*** [0.001]
Immigrant Inactivity rate (province)	0.000 [0.000]	-0.001 [0.000]
Constant	0.743*** [0.035]	0.267*** [0.059]
Observations	842,180	50,081
R-squared	0.142	0.094

Table 9. Unemployment benefit

VARIABLES	(1) Native - EU_enl	(2) EU_enl - others
EU_enlargement	-0.072*** [0.006]	-0.022*** [0.005]
female	-0.002*** [0.001]	-0.033*** [0.003]
EU_enlargement*female	0.007 [0.005]	0.038*** [0.006]
post07	-0.004* [0.002]	0.003 [0.004]
EU_enlargement*post07	0.042*** [0.010]	0.018* [0.011]
EU_enlargement*post07*female	-0.055*** [0.013]	-0.053*** [0.013]
age	-0.003*** [0.000]	0.005*** [0.001]
age2	0.000*** [0.000]	-0.000*** [0.000]
ysm	0.016*** [0.002]	0.006*** [0.000]
ysm2	-0.001*** [0.000]	-0.000*** [0.000]
married	-0.018*** [0.001]	-0.016*** [0.003]
presence of children	0.008*** [0.002]	0.015*** [0.005]
household size	-0.002*** [0.000]	0.000 [0.002]
Unemployment rate (province)	0.002*** [0.000]	0.002*** [0.001]
Share of immigrants (province)	-0.000** [0.000]	0.001*** [0.000]
Share of immigrants on welfare (province)	0.000 [0.000]	0.006*** [0.001]
Immigrant Inactivity rate (province)	-0.000 [0.000]	-0.002*** [0.000]
Constant	0.078*** [0.014]	-0.139** [0.061]
Observations	842,180	50,081
R-squared	0.027	0.055

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