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ricerca_meq@unibg.it

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The Great Recession and the labour market in Italy: the case of Albanian Immigrants

Federica Origo, Viktor Shehi

The Great Recession and the labour market in Italy: the case of Albanian Immigrants

Federica Origo (University of Bergamo)

and

Viktor Shehi (University of Bergamo)

ABSTRACT

The aim of this paper is to identify the labour market impact of the Great Recession on Albanian immigrants compared to natives in Italy, investigating how this relationship has evolved since the beginning of the downturn. The empirical analysis is based on microdata from the Italian Labour Force Survey (ILFS) for the 2007-2015 period. Results from descriptive statistics and probit estimates show that Albanian immigrants have been hardly penalized by the recession in terms of relative employment probability, mainly between 2012 and 2014. Furthermore, the employment gap with the natives has been widening during the downturn. However, estimates based on pseudo panel data show that the deteriorating labour market performance of the Albanians registered during the crisis is explained by the fact that Albanian immigrants are more concentrated in socio-demographic groups that were more severely hit by the crisis, such as males, the young and the low educated. Once we control for observed characteristics and unobserved heterogeneity, we do not find significant changes in the employment differential between the two groups during the downturn.

KEYWORDS Great Recession, Italy, labour market, employment, Albanian immigrants

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Corresponding author: Federica Origo, Department of Management, Economics and Quantitative Methods, Università degli Studi di Bergamo, Via dei Caniana 2, 24127 Bergamo. E-mail: federica.origo@unibg.it

1. Introduction

The 2008-2009 crisis, also known as the Great Recession, is without precedents in post-war economic history, also in terms of serious consequences in labour markets of developed economies, which have experienced a rapid increase in unemployment and the interruption of a decade-long process of employment growth. The global economic crisis influenced also international migration patterns, affecting the size and characteristics of migration flows, the employment situation of foreign workers in the host countries, the processes of integration, the level of remittances and migration policies. In particular, in most OECD countries the Great Recession hit immigrants almost immediately and with a more pronounced negative impact than in the native-born population, also because immigrants are more concentrated in small firms and in industries that are more sensitive to the business cycle, such as construction, agriculture, domestic and care services.

In this perspective, Italy is an interesting case also because it has registered two recessionary periods in the last years: the first, as in the other OECD countries, as a consequence of the diffusion of the 2008 global financial crisis, while the second followed the sovereign debt crisis that hit a few EU countries in 2011. The severe impact of the recession on the Italian economy, together with the fact that Italy is one of the leading countries of the European Union for recent immigration flows, with 5 million foreigners in 2015 (corresponding to 8.2% of the population), makes the Italian labour market an interesting ground of investigation for the effects of the Great Recession on immigrants and natives. Among immigrants in Italy, the Albanians are the largest ethnic group coming from Europe and the second community among non-EU individuals legally residing in Italy. Furthermore, Albanian immigrants are a unique case because over a million Albanians (about 27.5% of the total Albanian population and 35% of the active population) live abroad. The massive migration outflows of Albanians occurred over a short period of time, when the country moved almost overnight from absolute isolation to large-scale migration in the ‘90s as a consequence of the end of the communist regime. The uniqueness of Albanian migration is further characterised by the fact that it has been directed almost exclusively towards two neighbouring countries: Italy and Greece.

In this perspective, the aim of this study is to assess the impact of the Great Recession on the Italian labour market, trying to find if there has been a different impact of the recession on Albanian immigrants compared to natives and other immigrants. The empirical analysis is based on individual data from the Italian Labour Force Survey (ILFS) and covers the period from 2007 to 2015, allowing us to study the labour market dynamics of immigrants and natives before, during and after the Great Recession.

The remainder of the paper is structured as follows: Section 2 reviews the main literature on this topic. Section 3 presents the data and some descriptive statistics. Section 4 discusses the empirical

strategy. Section 5 presents the main results of the empirical analysis. Finally, the last Section concludes.

2. Literature review

Immigrants are likely to be more exposed than natives to the economic cycle, and are therefore more heavily penalised during recessions. According to the OECD (2012), a number of factors contribute to explain this evidence. First, immigrants disproportionately share the demographic characteristics of the groups most likely to lose jobs during economic downturns. Immigrant workers, and workers from families with an immigrant background, are actually overrepresented among the low-skilled. Furthermore, language barriers, low education levels and difficulties in translating credentials among the better-skilled exacerbate their relative disadvantage. Second, immigrants are more likely to work in industries and occupations or to be hired with type of contracts, such as temporary ones, more sensitive to the business cycle. Finally, recently arrived immigrants are more likely to have shorter tenure and to gain less firm-specific knowledge, making their replacement less costly (Papademetriou et al. 2010). All of this suggests that immigrants should be more vulnerable to job cuts. In addition, according to Cerveny and van Ours (2013), educational attainment difference between immigrants and natives, ethnic identity and location are found to be other important factors that contribute to worsen their condition.

A few recent papers, summarized in Table 1, have empirically investigated the relative labour market performance of immigrants during the Great Recession, finding mixed results. We classify these studies into two main groups: those that have actually found a different impact of the crisis for the two group of workers, with immigrants more penalized by the downturn especially in terms of unemployment spells; and those that did not find any different impact of the crisis. However, all the studies find the existence of a gap between the two groups of workers regardless of the crisis, with immigrants more penalized than natives also before the crisis itself.

(Table 1 around here)

Focusing on the case of Italy, Paggiaro (2011) provides some empirical evidence about the vulnerability of immigrants to the Great Recession by using longitudinal data from the Italian Labour Force Survey (ILFS) for the 2007-2009 period. Using short panels from ILFS[1], where each individual

[1] The ILFS follows a rotating sample design, where households participate for two consecutive quarters (four interviews with the same persons); they exit for the following two quarters, and come back into the sample for a further two consecutive quarters. Therefore, 50% of the households interviewed in the course of a quarter are re-interviewed after 3 months, 50% after 12 months, 25% after 9 and 15 months, respectively.

is interviewed four times within a 15 months window, he exploits information about typical individual demographics, employment status, household characteristics, and some information about past working histories. Using a propensity score matching estimator, he does not find statistically significant differences in the probability of becoming unemployed for the immigrants compared to the natives. He then concludes that the impact of the downturn is mostly related to observed characteristics and not to the immigrant status itself. Bonifazi and Marini (2014) also use the longitudinal data of the ILFS to evaluate the effects of the economic crisis on Italian and foreign workers in Italy between 2006 and 2010. According to their multinomial logit estimates, the crisis has meant a sharp deterioration of the Italian labour market, particularly in the manufacturing and construction sectors. However, the situation regarding foreign workers did not worsen in relative terms: their disadvantage compared to the Italians in terms of employment opportunities was 30% between 2006 and 2007 and increased to 31% between 2008 and 2009. Bonifazi and Marini (2014) argue that this small difference demonstrates how the economic crisis did not lead to changes in the condition of foreign workers when the structural variables are under control. They conclude that everything took place in a context that saw a worsening of the employment situation and the distance that separates foreigners from Italians has not changed.

As regards the specific case of Albanian immigrants, Gedeshi and Zwager (2012) examine the ways in which the global financial and economic crisis influenced Albanian international migration trends and remittance practices. Their analysis is based on qualitative interviews carried out from December 2009 to early January 2010 in the main entry doors of Albania[2]. The sample includes 2470 long-term Albanian migrants. As regards the impact of the crisis, the most reported effects of the economic downturn on migrant households were found in terms of declining working days or working hours, employment loss and increase in prices and cost of living. A comparison with a 2010 survey showed that the crisis resulted also in declining household income. Another effect of the downturn was a higher mobility of workers across industries, especially from the construction sector, which was severely affected by the economic crisis, to agriculture or other sectors.

3. Data and descriptive statistics

The empirical analysis is based on microdata from the Italian Labour Force Survey (ILFS) for the 2007-2015 period. For each quarter, the survey collects information on about 70,000 households

[2] They chose this period because it is characterized by the return to Albania of a large number of Albanian migrants to celebrate traditional winter holidays. Even if the survey has certain limitations, such as the exclusion of short-term migrants, irregular migrants, and those who, because of difficult economic conditions or other circumstances, could not visit their home country at that time, this study is very interesting, especially for the research question proposed, which tries to assess the effects of the Great Recession on Albanian immigrants living in Italy and Greece.

distributed in about 1,100 municipalities, corresponding to over 250,000 households and 600,000 individuals on a yearly basis. Given the rotation structure of the sample, each household is interviewed 4 times over 15 months, with a two-quarter break between the first two and the last two interviews.

As we are interested in studying the impact of the recession on labour market conditions of Albanian immigrants compared to natives, we selected all individuals aged between 15 and 64, corresponding to around 3,5 millions of observationsover the period considered[3]. Individuals have been grouped in a variable called *imm*, which assumes 4 values depending on citizenship. The native population is defined as all individuals holding an Italian citizenship, while the others are immigrants. Subsequently the immigrant population has been classified into three categories: Albanian immigrants, other immigrants from Eastern Europe and immigrants from the rest of the world. Other immigrants from Eastern European countries include those coming from Estonia, Latvia, Lithuania, Czech Republic, Slovakia, Hungary, Poland, Romania, Bulgaria, Slovenia, Croatia, Bosnia-Herzegovina, Kosovo, Macedonia, Montenegro, Serbia, Belarus, Moldova, Ukraine. As a measure of labour market performance, we use the employment status (a dummy variable equal to 1 for employed individuals, 0 for those not employed).

Table 2 provides some basic statistics separately for natives and the three groups of immigrants in 2015.

(Table 2 around here)

Albanian immigrants are on average younger than other Eastern European immigrants (36 years old, compared to 39) and much younger than natives, who are on average 42 years old. Around 47.5% of the Albanian immigrants are aged 15-34, compared to 29.1% among their native peers. As regards gender, no significant differences emerge between Albanian immigrants and natives, even if the share of women is slightly larger among natives. Other immigrants from Eastern European countries present larger gender differences, with women being nearly twice as men (62.6% against 37.5%). This may be explained by the high number of carers coming from countries such as Ukraine and Romania.[4] Regarding family status, Albanian immigrants are the group with the highest share of couples with children (77.1%). Albanians are also more likely to be married (69.2%, against an

[3] See Table A1 in Appendix for descriptive statistics on pooled data.

[4] This is confirmed by the share of individuals declaring to live not in a family unit, which is much higher for immigrants from Eastern Europe than that of all other groups (25.7%, against the overall average of 11.7%). This means that women from Eastern Europe come alone in Italy in order to work as carers for the Italian elderly and thus do not live in family units.

average of 45% among Eastern European immigrants and 52% for natives). Albanian immigrants seem also to be those more concerned about marriage, as only 4% of them are separated, a figure much lower than the overall national average of 8% and 5 times lower than the figure for immigrants coming from Eastern European Countries. Geographical distribution by nationality confirms that richer regions are preferred by the immigrants because of the higher employment opportunities and higher wages. Northern Italy welcomes 61.4% of Albanian immigrants, 56.6% of immigrants from Eastern Europe and 63.3% of all other immigrants. As regards educational attainment, natives have the highest share of high educated individuals (around 25%). Less than 6% of Albanian immigrants holds a college degree, compared to 10-11% of other immigrants. As one may expect, individuals with low educational attainment prevail in the Albanian community (59.8%), even if other immigrants in this case display a higher share, with 60.9% of them holding a low level of education.

Looking at labour market statistics in 2015 (Table 3), Albanian immigrants display the lowest employment level among the groups considered (50.5%, compared to 55.1% of natives and 61.3% of immigrants from Eastern Europe). Statistics by gender shows large differences between men and women, with lower employment rates for the latter in all the groups. Albanian women, in particular, are characterized by the lowest employment rate (35.6%). Women from Eastern Europe, instead, display the highest employment rate (57.7%). The bad performance of Albanian immigrants seems to be influenced by the female component of the community, provided that 65.3% of Albanian men are employed, a higher figure than that of natives (64%).

(Table 3 around here)

The distribution of workers across sectors shows that Albanian immigrants display the highest share of workers employed in agriculture (8.4%), twice as much as the national figure. They are also mostly concentrated in manufacturing which, together with construction, includes 46.5% of Albanian workers. 28.29% of Albanian workers are employed in construction (4.5 times than the share of natives, and twice as times the immigrants from Eastern Europe). This specialization of Albanian immigrants in manufacturing and construction may actually be a relevant factor in studying the impact of the recession, as these sectors are those that suffered much more than others during the recession. Finally, ILFS data provide also net monthly wages, highlighting significant differentials between natives and immigrants, with the latter earning much less than the first and less than the national average (in 2015, 1350.26 Euros for natives vs 984.15 Euros for immigrants). Statistics by gender show that immigrant women earn very low wages compared to Italian women (829.94 vs 1203.16 euro respectively).

Focusing on Albanian immigrants, Figure 1 shows yearly percentage changes in employment levels for Albanian and native workers from 2008 to 2015 and the difference in employment rates between the two groups (grey bars). From 2008 to 2013, employment of Albanian immigrants has been declining on average by 2.4 percentage points per year, against 0.6 percentage points for natives. On the contrary, in 2014 and 2015 there has been a mild recovery for both groups. This different performance had dramatic consequences on the employment gap between the two groups. While in 2008 the difference was 4.1 percentage points in favour of Albanian immigrants, in 2013 the situation was reversed, with natives facing an employment rate 5.2 percentage points higher than the Albanians.

(Figure 1 around here)

In Figure 2 we plotted the share of individuals employed at t-1 and still employed at t by nationality and gender. The Figure shows a huge decline in the employment probability at time t conditional on being employed at time t-1 (the year before) mainly for Albanian males. This is particularly clear in 2009, when 91% of those employed in 2008 were still employed, compared to 97% between 2006 and 2007.

Looking at transitions from 2006 to 2007, descriptive statistics show a negative differential for Albanian women relative to Italian women in terms of stability of employment (94.5% of Italian women who were employed at t-1 are still employed at t, compared to 88.6% of Albanian women). As regards men, instead, before the crisis Albanian males registered roughly the same employment stability as natives (96.6% and 96.4% respectively). The situation changed in the following years, when the crisis has mainly hit men and, in a more pronounced way, Albanian men relative to both Italian men and Albanian women. The downturn has then created an employment gap between natives and Albanian immigrants, which has been widening further in 2013, when only 88.8% of Albanian males employed in 2012 were still employed, compared to 94.6% for native males. The two groups, however, show a similar trend as regards the within group gender gap, since women of both groups have almost the same probabilities as men to be employed at t given employment status at t-1.

(Figure 2 around here)

4. Empirical strategy

The aim of the empirical analysis is to investigate the labour market performance of Albanian immigrants in Italy compared to natives and other immigrants during the recent economic crisis. The

first step of the empirical analysis is to estimate the effect of nationality on the probability to be employed in each year between 2007 and 2015. Our dependent variable is individual employment status. The latter is measured with a dummy variable that is equal to 1 if individual i in year t is employed, 0 otherwise.

For each year, given the binary nature of the dependent variable, we then estimated the following probit model:

$$empl_i = \beta_0 + \beta_1 alb_i + \beta_2 east\_eu_i + \beta_3 other\_imm_i + x_i\gamma + u_i \qquad (1)$$

where *alb* is a dummy variable for Albanian immigrants, *east_eu* a dummy variable for immigrants from other Eastern European countries and *other_imm* a dummy variable for other immigrants. The vector *x* includes controls for gender, age, marital status, family status, education and region.

The estimation strategy proposed above relies on cross-section data. Albeit the richest specification includes a number of controls, we cannot rule out that other unobservable characteristics may be correlated with both immigrant status and labour market performance. In order to further control for unobserved heterogeneity, it may be preferable to use panel data. However, ILFS provides longitudinal data for a time spell of only two years. In order to get longer panel data starting from repeated cross-sections, we create a "pseudo panel" data-set, which allows us to track specific groups of people, whose membership is already fixed and predetermined by some characteristic shared by the individuals, through their randomly selected representatives in the consecutive surveys. Deaton (1985) suggests the use of cohorts to estimate a fixed effects model from repeated cross-sections. The approach is to group individuals sharing some common characteristics into cohorts, and to treat then the averages within these cohorts as observations for a sort of "representative individual" in a pseudo panel. Compared to true panel data, which are defined by the time dimension (T) and the number of individuals (N), pseudo panel data can be further defined along two additional dimensions, namely the number of observations within a cohort (n_c) and the number of cohorts (C). Although pseudo panel data are often regarded as inferior to true panel data, some classes of models can be consistently estimated also using pseudo panels (Hammer, 2007). Furthermore, under specific conditions pseudo panel data may be preferable to "genuine" longitudinal data. Deaton (1985) identified four advantages. First, data from different sources can be combined into a single pseudo panel data if comparable cohorts can be defined in each source. Second, pseudo panel data allow to minimize attrition problems often found in true panel data. Third, the problem of individuals' response errors is smoothed by the use of cohort means and it can be explicitly controlled by using errors invariables methods. Fourth, inconsistencies between micro and macro analysis can be analysed by moving from

individual data to larger cohorts to one macro cohort (Russell and Fraas, 2005). Finally, being based on repeated cross-sections, pseudo panel data usually allow to cover a longer time period than true panel data (Verbeek, 2008).

In this perspective, pseudo panel data, grounded in sound theory, is an alternative approach to conduct a longitudinal study on behavioural changes. Furthermore, although the cohort level of aggregation in a pseudo panel dataset causes a loss in terms of individual information, it has been suggested that this loss can be minimised if the variation within cohorts is smaller than the variation between cohorts. This condition ensures that each cohort can be treated as an independent individual and be traced over time. In this perspective, as Glocker et al. (2007) argue, there is a trade-off between the number of individuals within a cohort and the number of cohorts. On the one hand, in case a small number of cohorts is chosen to gain a larger number of observations per cohort, individuals within a cohort may be rather heterogeneous, which could induce inefficiency in estimation due to aggregation. On the other hand, if individuals in the sample are allocated to a large number of cohorts, there is the risk that - depending on sample size - only a small number of observations belong to any given cohort, which could induce biased estimates. Verbeek and Nijman (1992) conducted an empirical analysis to compare estimates obtained using the fixed effect estimator with a genuine panel dataset and with a pseudo panel dataset created from the original individual data. They found that the difference between the estimates from genuine panel data and from pseudo panel data can be reasonably ignored if the cohort size is sufficiently large (100 individuals or more).

The pseudo panel dataset used in this study was constructed from repeated cross-sections from the ILFS. Cohorts are defined by year of birth, with individuals aged 15-64 grouped in 5 year cohorts, for a total of 11 cohorts. The first group consists of all individuals born between 1945 and 1949 (those aged 60-64 in 2009), while the last cohort includes individuals born between 1995 and 2000 (those aged 15-20 in 2015). Other variables used to create the cohorts are: gender, immigrant status (Native, Albanian, Eastern European, Other) and region of residence (we considered the 20 Italian administrative regions). The combination of these variables leads to 1731 cohorts[5]. On average cohort size is greater than 100 observations. The fact that we have also few cohorts with less than 100 observations is not a critical issue, provided that the between-group standard deviation of the variables used in the empirical analysis is larger than the corresponding within-group standard deviation (see Table 4).

(Table 4 around here)

[5] See Table A2 in Appendix for descriptive statistics on pseudo panel data.

Using pseudo panel data, we then estimate the following model:

$$\overline{empl}_{ct} = \bar{x}_{ct}\beta + \bar{\mu}_c + \bar{v}_{ct} \quad c = 1, \ldots, C \quad t = 1, \ldots, T \qquad (2)$$

where all the variables are means computed for all individuals belonging to cohort c at time t. μ_c are cohort (i.e., pseudo individual) fixed effects[6] and x_{ct} includes controls for education, marital status and family status.

5. Main results

Probit estimates

As a first step of the empirical analysis, for each year between 2007 and 2015, we estimate employment differentials between the natives and the three groups of immigrants considered (i.e., Albanians, immigrants from Eastern Europe and other immigrants). Figure 3 depicts both the raw employment differentials (solid lines) and the estimated marginal effects obtained from probit estimates with controls for gender, age, education, marital status, family status and regions (dashed lines). Solid lines in the Figure highlight that Albanian immigrants were 3.7% more likely to be employed relative to natives before the crisis. However, compared to natives, a relative better performance is registered for the other two groups of immigrants, with a differential of almost 14% for those coming from Eastern European countries and 8% for the remaining immigrants. The recession seems to have reversed the situation, particularly for Albanian immigrants and other immigrants. In 2013, the first were 5% less likely to be employed than natives, while other immigrants suffered an employment penalty of around 1% relative to natives. Eastern European Immigrants were able to maintain a positive performance relative to natives also during the downturn, even if their employment premium relative to natives has halved from 2007 to 2013, falling from around 14% to 7%. The recession seems to have penalized much more Albanian immigrants, than the other immigrants, with a total loss (relative to natives) of 9% percentage points from 2007 to 2013 (compared to -7% of Eastern European and -8.5% of other immigrants). In 2015 some signs of recovery emerge for Albanian immigrants, whose employment penalty with respect to natives reduced to less than 5%. A similar recovery is registered also for Eastern European immigrants, but not for the remaining ones.

(Figure 3 around here)

[6] Given the variables we used to create cohorts, controls for year of birth, gender, immigrant status and region are included in the fixed effects.

However, these correlations are likely to be influenced by composition bias. Albanian immigrants are actually more concentrated then natives and other immigrants in sectors and socio-demographic groups that were more hit by the crisis. In order to take into account differences in observable characteristics, we introduce controls for gender, age groups, education, marital status, family status and region of residence. The dashed lines in Figure 3 show the estimated marginal effects for the immigrant dummies with the richest specification. Once controlling for gender, age, education, marital status, family status and region, the difference in employment probability between the Albanians and the natives goes from -3% in 2007 to -9% in 2013, but it shrinks to -7.5% in 2015. Once we take into account differences in observable characteristics, we then find that Albanian immigrants were already penalized relative to natives before the recession, and were further penalized with the downturn, increasing their employment gap with Italian natives. Eastern European immigrants, instead, have an employment premium relative to natives in all the years considered, but the downturn completely wiped off their employment premium compared to natives.

In order to check the sensitivity of our results to model specification, in Table 5 we report the main probit estimates for three selected years: 2007 (before the crisis), 2013 (the worst year for the Italian labour market during the crisis) and 2015 (after the crisis).[7] We tried different specifications, adding the available controls progressively: gender and age (column 2), education, marital status and family status (column 3), and region of residence (column 4). For the sake of comparison, in column 1 we report the estimated raw differentials. After controlling for gender and age, education, marital and family status, the premium of being Albanian relative to natives found in 2007 in the basic model substantially declines, but it remains positive (from +3.7% to +2%). The same effect is found also the other groups of immigrants. Quite interestingly, the picture changes substantially when we control for regions, since Albanian immigrants are found to suffer a penalty relative to natives of -2.9% and this negative differential is statistically significant. We obtain similar results for the other immigrants, while the Eastern European ones continue to register a higher employment probability relative to natives, even if it is now much smaller than it was in the basic model (+4.9%, compared to +13.8%). These results confirm that immigrants are more likely to locate in high employment regions and the positive employment differentials between immigrant and natives observed in the raw data before the recession are entirely due to regional compositional effects.

(Table 5 around here)

[7] See Table A3 in Appendix for complete estimates.

Overall, probit estimates show a different impact of the recession between natives and Albanian immigrants, with the latter more penalised then all other immigrants also after controlling for observed characteristics, particularly age and education.

Pseudo panel estimates

In order to further control for potential unobserved heterogeneity, we move to fixed effects estimates using the pseudo panel dataset. Notice that, due to the lack of information on age as continuous variable (and thus year of birth) in ILFS microdata before 2009, pseudo panel data could be created only since 2009. Nonetheless, they still provide useful information about the effect of the crisis, because the Italian labour market showed the first signs of the crisis in late 2009, with the worst performance reached in 2013 (Istat, 2016). Hence, with pseudo panel data we can further control for unobservable characteristics that can be correlated with both immigrant status and labour market performance. To identify how the employment differential between natives and immigrants changes over time, we interacted the immigrant status (i.e., immigrant from Albania, Eastern Europe and the rest of the world) with the year dummies and used this interactions as independent variables in our model. For each ethnic group, the interacted terms can be interpreted as the differences in employment probability compared to natives in each year considered.

In Table 6 we report the relevant estimates based on pseudo panel data.[8] Columns differ for either the estimator or the model specification. More specifically, we report pooled OLS estimates without controls in column 1, pooled estimates with controls in column 2, Fixed Effects (FE) estimates without (time varying) controls in column 3 and FE estimates with controls in column 4. The table is divided into four panels: in panel A we present the estimated time fixed effects, while in the subsequent panels we report the estimated interactions between time fixed effects and nationality for the Albanians (panel B), immigrants from Eastern Europe (panel C) and the remaining immigrants (panel D).

Estimates in column 1 of panel A confirm that, compared to 2009, the employment probability has been significantly declining in all the following years, registering the largest negative differential in 2013 (-7.2%). In 2014 the Italian labour market starts recovering, albeit without reaching again the employment level registered in 2009 (the estimated employment differential is -3.3%). In 2015 the estimated employment differential is still negative, but smaller and not statistically significant. Estimates in the first column of panel B show that these negative trends are exacerbated for Albanian

[8] Complete estimates are available upon request.

immigrants, who have registered, compared to natives, a larger decline in their employment probability since 2012. On the contrary, immigrants from Eastern Europe have registered a much better employment performance than the natives throughout the crisis (column 1 of panel C). Furthermore, no statistically significant differences emerge between the natives and the remaining immigrants, except in 2014 (column 1 of panel D).

However, when we control for observable characteristics, employment differentials over time and between different ethnic groups are much less pronounced (see column 2 in all the four panels). Quite importantly, all the estimated coefficients for the interaction terms between the dummy for Albanians and the time dummies are not statistically significant. Nonetheless, in both models the estimated coefficient for the Albanian dummy is negative ad statistically significant, showing that the employment probability of the Albanians is around 4.5% lower than that of the natives. When we compare the Albanians with the natives, FE estimates without controls show similar employment differentials, albeit smaller in size, than those found with the pooled OLS without controls. Compared to natives, Albanian immigrants result to be penalized in terms of employment probability in years 2012, 2013 and 2014, with an increasing gap from 3.4% in 2012 to 5.3% in 2014. On the contrary, FE estimates show that Eastern European immigrants perform similar to Albanian workers, even if with statistically significant negative gaps with respect to natives starting one year later (in 2013) and continuing in 2015 (see column 3 in Panel C). No statistically significant differences over time emerge between the natives and the remaining immigrants. Finally, when we add the time varying controls in the FE model, we obtain similar results to those obtained with pooled OLS with all the controls (see last column in the four panels). Compared to natives, the Albanians did not register any statistically significant difference in their employment performance over the business cycle, with the exception of 2014, when Albanian immigrants lost 4 percentage points more than natives did in the same year relative to 2009. Other Eastern European immigrants also performed worse than natives in 2014 (and in 2013 too, see column 4 in Panel C).

(Table 6 around here)

Altogether, these results suggest that Albanians are characterized by an employment penalty with respect to natives. However, the crisis did not increase such penalty: the observed worsening in labour market conditions of the Albanians compared to the natives is due to their concentration in socio-economic groups, such as males, the young and the low educated, that were more hit by the crisis. In other words, Albanian immigrants seem to suffer a "long run" employment penalty with respect to the natives, but the latter has not been worsening during the crisis.

Our results nicely complement those found in previous studies, particularly on Italy (Paggiaro, 2011; Bonifazi and Marini, 2014). Considering a longer time span and using alternative estimation strategies, our results confirm that the crisis had the same impact on the labour market performance of natives and immigrants, particularly the Albanians. However, our estimates also show that it may be misleading to consider immigrants as a homogeneous group, since both probit and pseudo panel estimates show quite heterogeneous trends for the Albanians compared to immigrants from other Eastern European countries. Furthermore, from a methodological point of view, our results point out the need to take into account both differences in observable characteristics and unobserved heterogeneity. For example, the pre-crisis employment premium found in raw data for the Albanian workers relative to the natives becomes an employment penalty once we control for observable characteristics in probit estimates. In the same vein, pseudo panel estimates allow to better interpret the relative worsening of employment performance of the Albanians compared to natives during the crisis found with probit estimates.

6. Conclusions

The aim of this study was to investigate the impact of the Great Recession on labour market outcomes of natives and immigrants in Italy, focusing on Albanian immigrants. We tried to fill a gap in the literature by comparing the labour market performance of Albanian immigrants with that of Italian natives (and with that of other immigrants, particularly those from Eastern Europe) during the Great Recession. The empirical analysis was based on microdata from the Italian Labour Force Survey (ILFS) provided by Istat for the period 2007-2015. We used different empirical strategies, starting from probit estimates and moving to fixed effects estimates based on "pseudo panel" data.

Probit estimates with the richest specification showed an employment penalty for Albanian immigrants, relative to natives, before and after the downturn, Furthermore, the employment differential against the Albanians has been widening during the recession. Eastern European immigrants, instead, registered an employment premium relative to natives throughout the period analysed. However, such relative employment premium has been shrinking during the crisis. Hence, probit estimates also showed that Albanian immigrants have been hardly penalised by the recession even in comparison to other immigrants. Finally, to further control for individual unobserved heterogeneity in testing the existence of a sort of "ethnic penalty" that favoured natives, we moved to Fixed Effects (FE) estimates using the pseudo panel dataset. Both pooled OLS and FE estimates, once we control for all observable characteristics, do not show a differential impact of the crisis on the employment probability of the Albanian immigrants compared to natives in all the years considered.

These results imply that the natives and the Albanians have been penalized in the same way by the recession. In light of these results, we conclude that the impact of the Great Recession has been the same between Albanian immigrants and natives and no significant changes occurred in the gap between them during the downturn. Even if Albanian immigrants faced a marked decline in their employment probabilities, this outcome was a consequence of some observable characteristics of Albanian immigrants, such as their gender (mainly males), their younger age and their lower educational attainment, as well as their specialization in manufacturing and construction sectors, that made them more vulnerable than the natives to the economic crisis.

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Table 1 - Studies on the impact of the crisis on immigrants compared to natives

Different impact

Author	Country	Time	Dataset	Model	Results
Kelly et al. (2015)	Ireland	2006-12	QNHS	Binary probit	The employment penalty suffered by immigrant workers, relative to native workers, increased significantly over the recession.
Turrión (2010)	Spain	2005-10	SLFS	Descriptive statistics	Sharp worsening of the employment situation of foreigners, who have been affected by the crisis more than the native component.

Same impact

Author	Country	Time	Dataset	Model	Results
Papademetriou et al. (2010)	USA	2007-08	CPS	Descriptive statistics	The recession affected both groups. The gap between them remained unchanged. (Hispanics were more penalized than other immigrants).
Burkert (2010)	Germany	2005-10	BA	Descriptive statistics	The recession affected both groups. Unemployment was and remains much higher for migrants than for native.
Cerveny and Van Ours (2013)	The Netherlands	2007-13	LISS	FE linear probability model	No statistically significant differences between the cyclical sensitivity of unemployment rates of non-western immigrants and that of natives.
Paggiaro (2011)	Italy	2007-09	ILFS	Propensity score	Once controlling for observable characteristics, no different impact of the downturn for the two groups. Observed differences due to their characteristics.
Bonifazi Marini (2014)	Italy	2006-10	ILFS	Multinomial logistic regression	The crisis seems to have hit the two groups uniformly and did not therefore affect the relative disadvantage of foreigners compared with Italians.

Table 2 - Individual characteristics by nationality, 2015

	All	Natives	Albanian Immigrants	Eastern European Immigrants	Other Immigrants
Composition (%)	100	90.24	1.01	4.13	4.62
Location (% on Italy)					
North	46.48	44.99	61.40	56.58	63.28
Centre	18.32	17.70	26.33	26.53	21.21
South	35.21	37.31	12.27	16.89	15.52
Education (%)					
Low	43.89	43.08	59.79	38.89	60.86
Intermediate	41.60	41.96	34.63	51.01	27.39
High	14.51	14.97	5.58	10.10	11.39
Age (mean)	42.1	42.5	35.9	38.8	38.4
Age cohort (%)					
Very Young: Age 15-24	15.50	15.63	18.99	12.72	14.68
Young: Age 25-34	14.47	13.47	28.55	24.34	22.11
Middle aged: Age 35-44	21.72	20.81	27.66	29.25	31.45
High-Middle aged: Age 45-54	25.65	26.04	17.08	22.68	22.46
Older People: Age 55-64	22.66	24.04	7.72	11.01	9.29
Gender (%)					
Males	48.45	48.87	50.12	37.35	49.71
Females	51.55	51.13	49.88	62.65	50.29
Marital status (%)					
Single	37.89	38.52	25.33	31.01	34.49
Married	52.10	52.38	69.23	44.95	49.37
Separated	7.94	7.12	4.08	19.68	14.43
Widowed	2.06	1.98	1.36	4.35	1.71
Family status (%)					
Couple with children	63.14	64.02	77.06	48.58	55.86
Couple without children	14.72	14.85	10.77	16.43	9.25
Lone parent	10.40	10.58	4.42	9.25	9.26
Not in family unit	11.74	10.55	7.75	25.73	23.42

Table 3 – Labour market conditions by nationality and gender, 2015

	All	Natives	Albanian Immigrants	Eastern European Immigrants	Other Immigrants
Employed (%)					
All	55.26	55.09	50.46	61.28	54.22
Males	64.26	64.02	65.26	67.27	66.61
Females	46.98	46.56	35.58	57.70	41.98
Wage (€)					
All	1308.13	1350.26	1030.22	965.39	995.57
Males	1441.85	1478.82	1181.57	1181.70	1098.08
Females	1157.49	1203.16	790.220	826.93	842.79
Sector of employment (%)					
Agriculture	4.09	3.87	8.37	6.17	5.41
Manufacturing	19.45	19.65	18.16	14.91	20.38
Construction	6.64	6.23	28.29	11.96	4.97
Trade	13.78	14.38	4.79	4.79	12.71
Other services	56.04	55.86	40.40	62.17	56.52

Table 4 - Between-group and Within-group Variance of selected variables

Variable		Mean	Std. Dev.
empl	overall	0.515719	0.312911
	between		0.287665
	within		0.149473
low_educ	overall	0.552998	0.270799
	between		0.230298
	within		0.163477
intermediate_educ	overall	0.364051	0.239492
	between		0.194233
	within		0.158799
high_educ	overall	0.082951	0.111355
	between		0.089219
	within		0.075222
couple_ch	overall	0.285796	0.565587
	between		0.260189
	within		0.150893
couple_noch	overall	0.151745	0.191932
	between		0.178265
	within		0.117304
lone_parent	overall	0.085159	0.122039
	between		0.093309
	within		0.089735
alone	overall	0.197509	0.235156
	between		0.215603
	within		0.124219

Table 5 – Marginal effects from probit estimates, 2007, 2013 and 2015.

Dependent variable: Employment dummy

	(1)	(2) +	(3) +	(4) +
	Basic model (without controls)	Gender and Age	Education, Marital status and family status	Region
Year 2007				
Nationality:				
Ref: Natives				
Albanian Immigrants	0.0366***	0.0121	0.0209*	-0.0292**
	(0.00925)	(0.0103)	(0.0112)	(0.0115)
Eastern European	0.138***	0.120***	0.0920***	0.0487***
Immigrants	(0.00602)	(0.00653)	(0.00751)	(0.00785)
Other Immigrants	0.0765***	0.0158***	0.0198***	-0.0339***
	(0.00484)	(0.00546)	(0.00602)	(0.0062)
Pseudo R-squared	0.0012	0.1929	0.2362	0.2576
Observations	427,708	427,708	400,423	400,423
Year 2013				
Nationality:				
Ref: Natives				
Albanian Immigrants	-0.0519***	-0.0615***	-0.0236***	-0.0894***
	(0.00748)	(0.00802)	(0.00814)	(0.00816)
Eastern European	0.0710***	0.0653***	0.0493***	0.00555
Immigrants	(0.00408)	(0.00434)	(0.00454)	(0.00466)
Other Immigrants	-0.00878**	-0.0499***	-0.0220***	-0.0846***
	(0.00406)	(0.00434)	(0.00446)	(0.0045)
Pseudo R-squared	0.0007	0.1531	0.1982	0.2233
Observations	371,349	371,349	371,349	371,349
Year 2015				
Nationality:				
Ref: Natives				
Albanian Immigrants	-0.0463***	-0.0567***	-0.0113	-0.0753***
	(0.00838)	(0.00898)	(0.00907)	(0.00917)
Eastern European	0.0619***	0.0565***	0.0444***	0.00309
Immigrants	(0.00411)	(0.00436)	(0.00454)	(0.00466)
Other Immigrants	-0.00868**	-0.0459***	-0.0115***	-0.0666***
	(0.00398)	(0.00428)	(0.00438)	(0.00445)
Pseudo R-squared	0.0005	0.1486	0.1957	0.2199
Observations	356,732	356,732	356,732	356,732

Note: Standard errors in parentheses; p<0.01, ** p<0.05, * p<0.1

Table 6 – Pseudo panel estimates

Dependent variable: Mean of the employment dummy

	(1)	(2)	(3)	(4)
	OLS pooled		FE	
	w/o controls	with controls	w/o controls	with controls
A) Time dummies				
2010	-0.0663***	-0.00857	-0.0016	-0.00526***
	(0.0169)	(0.00835)	(0.00197)	(0.00193)
2011	-0.0618***	-0.00785	0.00284	-0.00441
	(0.0168)	(0.00821)	(0.0033)	(0.00325)
2012	-0.0619***	-0.0119	0.00279	-0.00832*
	(0.0164)	(0.0081)	(0.00445)	(0.00433)
2013	-0.0720***	-0.0258***	-0.00736	-0.0218***
	(0.0161)	(0.00823)	(0.00519)	(0.00505)
2014	-0.0329**	-0.0148*	-0.00131	-0.0192***
	(0.016)	(0.00854)	(0.00645)	(0.00637)
2015	-0.0215	-0.00696	0.0100	-0.0107
	(0.0156)	(0.00862)	(0.00755)	(0.00748)
Nationality/Year interactions				
B) Albanian imm				
alb_2010	-0.0172	0.00834	0.00403	0.0074
	(0.0249)	(0.0227)	(0.0159)	(0.0158)
alb_2011	-0.0332	-0.00354	-0.0139	-0.00862
	(0.0246)	(0.0222)	(0.0178)	(0.0176)
alb_2012	-0.0567**	-0.024	-0.0341*	-0.0263
	(0.0235)	(0.0219)	(0.0198)	(0.0196)
alb_2013	-0.0672***	-0.021	-0.0410**	-0.0294
	(0.0227)	(0.0219)	(0.0202)	(0.0198)
alb_2014	-0.0917***	-0.029	-0.0530**	-0.0414*
	(0.0237)	(0.0235)	(0.0217)	(0.0214)
alb_2015	-0.0582**	0.00726	-0.0129	-2.23E-05
	(0.0236)	(0.0241)	(0.023)	(0.0224)

Table 6 – Contd

C) Eastern EU imm				
east_eu_2010	0.109***	0.00291	-0.00475	-0.00357
	(0.021)	(0.0172)	(0.0126)	(0.0125)
east_eu_2011	0.0914***	0.000967	-0.00248	0.000948
	(0.0209)	(0.0168)	(0.0141)	(0.0137)
east_eu_2012	0.0777***	-0.0133	-0.0157	-0.0111
	(0.0204)	(0.0167)	(0.0139)	(0.0131)
east_eu_2013	0.0583***	-0.0285*	-0.0332**	-0.0270*
	(0.0199)	(0.017)	(0.0147)	(0.0142)
east_eu_2014	0.0183	-0.0524***	-0.0404***	-0.0338**
	(0.0197)	(0.0172)	(0.0156)	(0.0149)
east_eu_2015	0.0278	-0.0457***	-0.0321*	-0.0244
	(0.0192)	(0.0176)	(0.0168)	(0.016)
D) Other imm				
other_imm_2010	0.00654	0.00629	0.0078	0.00757
	(0.0216)	(0.0168)	(0.0106)	(0.0107)
other_imm_2011	0.00273	0.0151	0.0106	0.014
	(0.021)	(0.0163)	(0.0122)	(0.0123)
other_imm_2012	-0.00985	0.00641	0.000887	0.00523
	(0.0205)	(0.0159)	(0.013)	(0.013)
other_imm_2013	-0.0138	-0.00278	-0.0161	-0.0106
	(0.0197)	(0.0161)	(0.0138)	(0.0134)
other_imm_2014	-0.0373*	-0.00577	-0.00461	0.00325
	(0.0196)	(0.0161)	(0.0145)	(0.0141)
other_imm_2015	-0.0312	-0.00644	-0.00214	0.00623
	(0.0191)	(0.016)	(0.016)	(0.0153)
Nationality				
Ref: Natives				
Albanian imm	-0.0475***	-0.0425**		
	(0.0165)	(0.0171)		
Eastern EU imm	0.0942***	0.0276*		
	(0.0143)	(0.0146)		
Other imm	-0.0159	-0.0503***		
	(0.0128)	(0.0131)		
Constant	0.561***	0.295***	0.525***	0.394***
	(0.00826)	(0.0266)	(0.0046)	(0.0221)
Observations	11,008	11,008	11,008	11,008
R-squared	0.022	0.605	0.0128	0.3641
Number of id			1,731	1,731

Note: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Figure 1 - Yearly employment change and differential in employment rates between natives and Albanian immigrants, 2008-2015

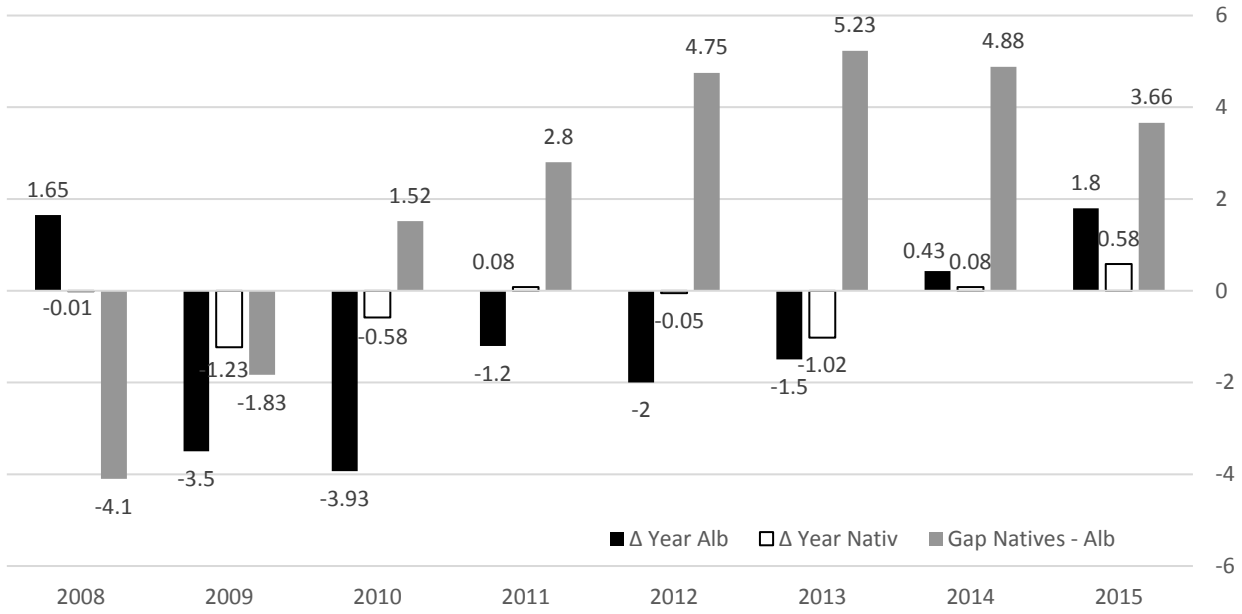


Figure 2 - Share of individuals employed at t-1 and still employed at t by nationality and gender

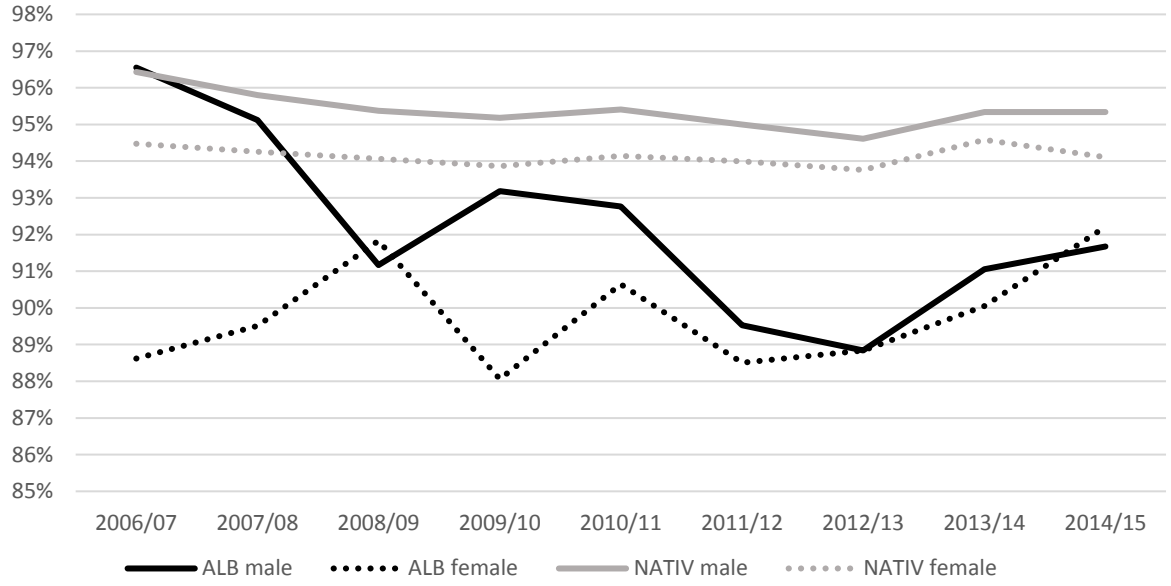
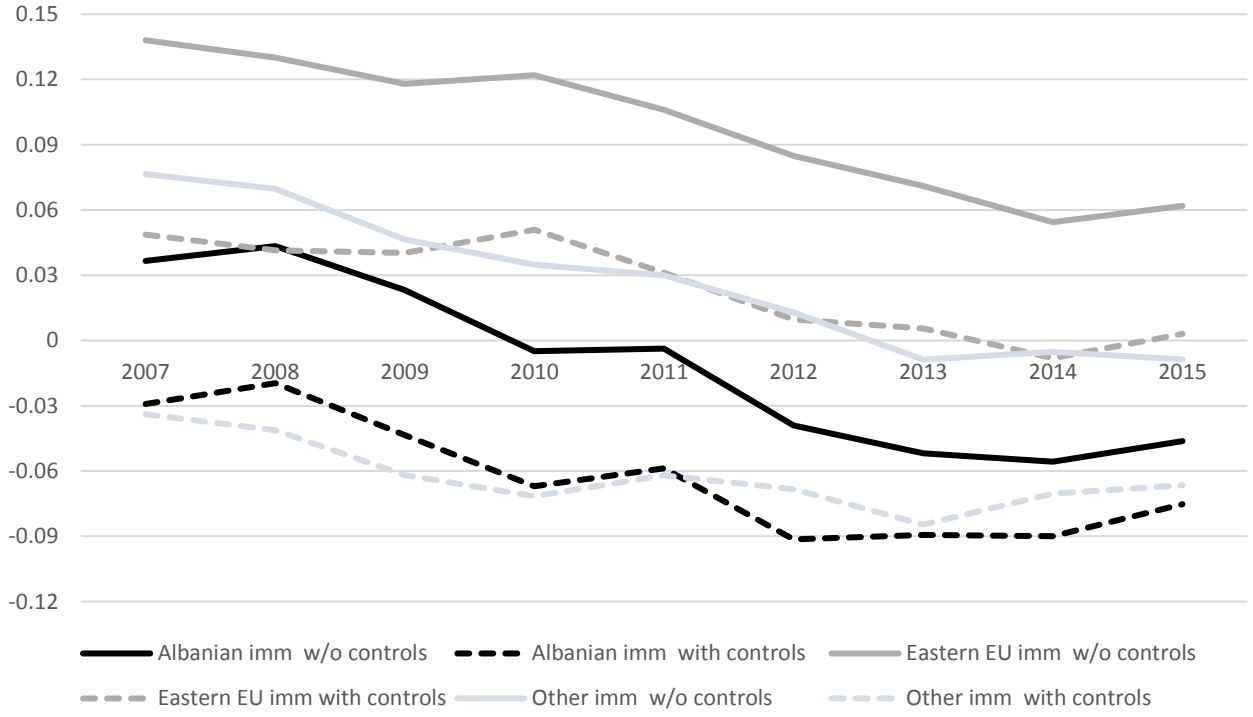


Figure 3 – Employment differential between natives and immigrants, 2007-2015

Dependent variable: Employment dummy. Marginal effects from probit estimates.



APPENDIX

Table A1 - Summary statistics (pooled data), 2007-2015

Variables	N	mean	sd	min	max
year	3,534,000	2011	2.575	2007	2015
reg	3,534,000	10.08	6.233	1	20
north	3,534,000	0.452	0.498	0	1
centre	3,534,000	0.165	0.371	0	1
south	3,534,000	0.383	0.486	0	1
age	2,684,000	41.74	13.85	15	64
ybirth	2,684,000	1970	13.96	1945	2000
male	3,534,000	0.488	0.500	0	1
female	3,534,000	0.512	0.500	0	1
imm	3,534,000	1.18024	0.654	1	4
alb	3,534,000	0.00984	0.0987	0	1
nativ	3,534,000	0.923	0.266	0	1
east_eu	3,534,000	0.0304	0.172	0	1
other_imm	3,534,000	0.0365	0.188	0	1
empl	3,534,000	0.552	0.497	0	1
unempl	3,534,000	0.0568	0.231	0	1
inactive	3,534,000	0.391	0.488	0	1
wage	1,115,000	1,262	516.1	250	3,000
dip	3,534,000	0.416	0.493	0	1
indip	3,534,000	0.136	0.343	0	1
full_time	3,534,000	0.465	0.499	0	1
part_time	3,534,000	0.0875	0.283	0	1
agric	3,534,000	0.0240	0.153	0	1
manuf	3,534,000	0.111	0.314	0	1
construc	3,534,000	0.0441	0.205	0	1
trade	3,534,000	0.0793	0.270	0	1
other_sect	3,534,000	0.294	0.456	0	1
low_educ	3,534,000	0.477	0.499	0	1
intermediate_educ	3,534,000	0.406	0.491	0	1
high_educ	3,534,000	0.118	0.322	0	1
single	3,534,000	0.361	0.480	0	1
married	3,534,000	0.551	0.497	0	1
separated	3,534,000	0.0630	0.243	0	1
widowed	3,534,000	0.0253	0.157	0	1
couple_ch	3,534,000	0.643	0.479	0	1
couple_noch	3,534,000	0.149	0.356	0	1
lone_parent	3,534,000	0.0899	0.286	0	1
alone	3,534,000	0.103	0.304	0	1

Table A2 - Summary statistics (pseudo panel data), 2009-2015

Variables	N	mean	sd	min	max
id	11,008	849.9	497.3	1	1,731
reg	11,008	10.21	5.701	1	20
imm	11,008	2.502	1.142	1	4
gender	11,008	1.503	0.500	1	2
cohort_5y	11,008	6.194	2.984	1	11
year	11,008	2,012	1.969	2009	2015
age	11,008	38.98	14.62	15	64
alb	11,008	0.218	0.413	0	1
nativ	11,008	0.269	0.443	0	1
east_eu	11,008	0.254	0.435	0	1
other_imm	11,008	0.258	0.438	0	1
empl	11,008	0.516	0.313	0	1
male	11,008	0.497	0.500	0	1
female	11,008	0.503	0.500	0	1
dip	11,008	0.423	0.278	0	1
indip	11,008	0.0931	0.129	0	1
full_time	11,008	0.411	0.305	0	1
part_time	11,008	0.104	0.135	0	1
agric	11,008	0.0394	0.109	0	1
manuf	11,008	0.0888	0.132	0	1
construc	11,008	0.0741	0.153	0	1
trade	11,008	0.0605	0.108	0	1
other_sect	11,008	0.253	0.225	0	1
low_educ	11,008	0.553	0.271	0	1
intermediate_educ	11,008	0.364	0.239	0	1
high_educ	11,008	0.0830	0.111	0	1
single	11,008	0.372	0.366	0	1
married	11,008	0.483	0.335	0	1
separated	11,008	0.0978	0.152	0	1
widowed	11,008	0.0471	0.128	0	1
north	11,008	0.418	0.493	0	1
centre	11,008	0.209	0.407	0	1
south	11,008	0.373	0.484	0	1
couple_ch	11,008	0.566	0.286	0	1
couple_noch	11,008	0.152	0.192	0	1
lone_parent	11,008	0.0852	0.122	0	1
alone	11,008	0.198	0.235	0	1
family	11,008	1.915	0.702	1	4
ybirth	11,008	1,973	14.67	1945	2000

Table A3 – Marginal effects from probit estimates, 2007, 2013 and 2015
Dependent variable: Employment dummy

	2007	2013	2015
Nationality:			
Ref: Natives			
Albanian Immigrants	-0.0292**	-0.0894***	-0.0753***
	(0.0115)	(0.00816)	(0.00917)
Eastern European Immigrants	0.0487***	0.00555	0.00309
	(0.00785)	(0.00466)	(0.00466)
Other Immigrants	-0.0339***	-0.0846***	-0.0666***
	(0.0062)	(0.0045)	(0.00445)
Gender			
Ref: Male			
Female	-0.317***	-0.245***	-0.243***
	(0.00169)	(0.00179)	(0.00182)
Age			
Ref: Aged 15-24			
Age 25-34	0.360***	0.367***	0.366***
	(0.00219)	(0.00245)	(0.00243)
Age 35-44	0.433***	0.470***	0.469***
	(0.00239)	(0.00238)	(0.00232)
Age 45-54	0.407***	0.479***	0.486***
	(0.00258)	(0.00254)	(0.00254)
Age 55-64	0.0442***	0.241***	0.305***
	(0.00415)	(0.00375)	(0.00351)
Education			
Ref: Low Education			
Intermediate	0.210***	0.214***	0.214***
	(0.0018)	(0.00188)	(0.00193)
High	0.280***	0.307***	0.306***
	(0.00224)	(0.00225)	(0.00219)
Marital Status			
Ref: Single			
Married	0.107***	0.0997***	0.0950***
	(0.00321)	(0.00305)	(0.00308)
Separated	0.125***	0.106***	0.0930***
	(0.0046)	(0.004)	(0.00389)
Widowed	0.0147**	0.0419***	0.00513
	(0.00659)	(0.006)	(0.00685)

Table A3 contd

Family Status			
Ref: Couple with children			
Couple without children	-0.0217***	-0.0395***	-0.0310***
	(0.00274)	(0.00278)	(0.0028)
Lone parent	0.0573***	0.0281***	0.0161***
	(0.00382)	(0.00361)	(0.00363)
Not in family unit	0.111***	0.0914***	0.0917***
	(0.00396)	(0.00369)	(0.00369)
Region of residence			
Ref: North			
Centre	-0.0508***	-0.0591***	-0.0559***
	(0.00269)	(0.00256)	(0.00257)
South	-0.205***	-0.227***	-0.223***
	(0.00191)	(0.00199)	(0.00204)
Pseudo R-squared	0.2576	0.2233	0.2199
Observations	400,423	371,349	356,732

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Editor

Department of Management, Economics and Quantitative Methods
University of Bergamo
Via dei Caniana n° 2
24127 Bergamo
Italy
Tel. +39 35 2052538
Fax +39 35 2052549

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