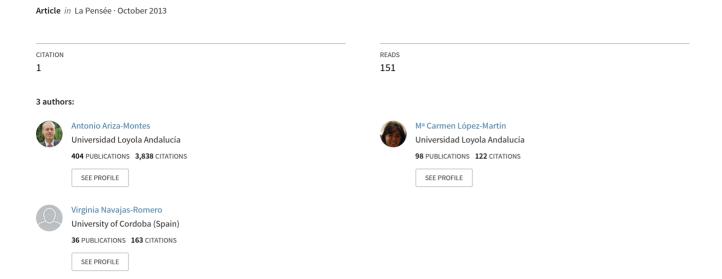
Native-inmigrant Working Conditions in the European Labor Market



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Native-immigrant working conditions in the European labor market

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ABSTRACT

The aim of this paper is to explore the immigrant, first generation immigrant descendants, and native populations in the European Union context. Using a logistic regression model, it is evaluated the working conditions that characterize these group of individuals compared to each other.

1. Introduction

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Viewed from an economically oriented perspective, successful integration of immigrants in the labor market is important for aggregating labor supply, fostering economic growth, enhancing public finances, and more specifically for contributing finding solutions to those problems associated with the significant demographic change that implies older populations in Europe (Husted, Heinesen and Andersen, 2009). Despite this, in the current context of economic crisis, the immigration debate in Europe is more heated than ever. The demographic contemporary configuration of this continent could not be understood apart of the migratory phenomenon; however, the studies on this subject are scarce and very limited of scope, especially in the sphere of the European Union. This circumstance is derived from, among other reasons, the difficulty in obtaining reliable and homogeneous information to quantify the impact of immigration for each of the countries in the European Union: on the one hand, the large number of people who are in irregular status, and on the other, the heterogeneity of existing information sources. On what most researchers agree regarding this field is that migration can be explained by the combination of two elements that are known as "push effect" (e.g., Zimmermann, 2005) and "pull effect" (e.g., Argerey et al., 2005).

The aim of this paper is to explore the immigrant population in the context of the European Union, landing on one of the most controversial aspects of the phenomenon: the integration of such persons in the labor market.

2. Immigration and labor market

At European level there is not a sufficient proportionality between the importance of the migratory phenomenon and empirical research on this issue. In the concrete case of labor market, the studies have been primarily focused on analyzing both the possible impact on native workers (employment opportunities, working conditions, wages...) and the labor assimilation of immigrants into the job market pertaining to the country of destination (e.g., Lalonde and Topel, 1997).

Notwithstanding the widespread perception in some social strata that immigration increases unemployment among native workers while degrading working conditions of the host country, the fact is that the studies conducted so far have not found significant and negative impacts on this regard (e.g., Zimmermann, 2005). Herrarte et al. (2007) also acknowledge the controversy in the international literature about the effects of immigration on labor market destination. According to these authors, most of the studies performed in the USA and Europe have sought to contrast a negative relationship between wages and immigration. In the context of European countries, the work of De New and Zimmermann (1994), carried out in Germany during the decade of the eighties, obtained results similar to those of Jaeger (1996) completed in the United States at the same time, finding that immigration affect low skilled workers adversely and the most qualified individuals positively. Donaghey and Teague (2006) observed as well a certain tendency to the reduction of wages, but only among unskilled workers. In the study by Winkelmann and Zimmermann (1992), it is also concluded that the negative impact of immigration over unemployment duration for Europe is small in the short term, and for Greenwood and McDowell (1986) that brevity of the impact occurs similarly on wages. Meanwhile, Pischke and Velling (1997) performed an analysis with spatial data for 167 regions in Germany not finding negative effects of immigration on employment.

In conclusion, it can not be ensured today, with sufficient empirical evidence, that there is a direct relationship between immigration and working conditions of native workers, possibly because, as discussed below, native and foreign workers constitute two clearly differentiated groups from the labor standpoint.

3. Experiment and sample

The data used in this research have been obtained from the 5th European Working Conditions Survey, carried out in 2010 by the European Foundation for the Improvement of Living and Working Conditions. This survey provides insights concerning working environment and employment situation throughout the 27 EU Member States. The target population under study involved those aged 15 years and over (16 and over in Spain, the UK, and Norway) who are employed and reside in the country being surveyed. The sample is multi-stage, stratified and random. The total number of interviews in 2010 was 43,816. In light of the objective of this investigation, it was obtained a sub-sample of 9,215 employees, of whom 4,632 –the 50.3%– were nationals from the European Union country where the survey was conducted, and the remaining 49.7% were salaried immigrants. The 49.4% were men and 50.6% women. The average age was 40.7. Finally, the 3.3% had concluded, at most, elementary school, 63.1% had finished secondary education and 33.5% had completed studies at university.

Given that the present research analyzes the working conditions of immigrant population, it was decided to employ a comprehensive approach when considering an individual as native or immigrant. Therefore it was required that both the respondent and his/her parents were born in the country of residence and works to be considered "native". Otherwise, the employee was considered an immigrant. This methodological approach is in line with the conclusions of the study *International Labour Migration: a Rights-Based Approach*, developed by the International Labour Organization (ILO) where it is recognized that the discrimination to which migrants are subjected in Europe, United States, and Canada, includes immigrant workers from second and third generation, becoming pronounced and generalized.

Considering the main variables of the research, Table 1 displays descriptive statistics for the two groups: native and immigrant workers. Other considered variables showed no statistically significant

differences between both collectives: gender, education, seniority, working hours, night work, shift work, activity sector or size.

Table 1 lists only those variables that presented statistically significant differences between the two groups researched. Thus, it is observed that immigrants are younger, less educated and perform more precarious jobs than natives (for example, 55.5% of blue collar workers, 52.0% of those performing monotonous tasks, and 53.3% of the responsible people for simple jobs are immigrants) with worse working conditions (for example, almost two out of three temporary contracts are signed by immigrants, earning the 57.2% of these citizens a wage below the median). In addition, 77.9% of those who feel discriminated on religious grounds are immigrants, this figure increases to 79.8% in the case of ethnic discrimination and to 85.4% in the case of discrimination due to the nationality. As a result of all this, immigrants feel less motivated, satisfied, and involved with their respective jobs, which obviously affect their work performance. In this line, scientific literature concludes that well-being at work leads to an immediate improvement in job satisfaction and promotes job involvement, thus resulting in a considerable improvement in performance.

Table 1Descriptive statistics.
Source: Own experimental data.

	Native	Native workers		ant workers	GLI G	
Characteristics	Number (n)	Percentage (%)	Number (n)	Percentage (%)	Chi-Square Tests	
Age		•				
15-24 years old	336	47.1%	377	52.9%		
25-39 years old	1,730	47.4%	1,921	52.6%	0.000	
40-54 years old	1,806	51.9%	1,675	48.1%	0.000	
55 years old or older	733	55.5%	587	44.5%		
Level of education						
University education	1,652	53.7%	1,426	46.3%		
Secondary school	2,901	50.1%	2,890	49.9%	0.000	
Primary education or lower	71	23.1%	236	76.9%		
Employment contract	-	-	-			
Long-term contract	3,932	53.5%	3,413	46.5%	0.000	
Temporary contract	648	36.9%	1,110	63.1-%	0.000	
Position						
White-Collar employees	3,217	53.1%	2,846	46.9%	0.000	
Blue-Collar employees	1,360	44.5%	1,699	55.5%	0.000	
Sector						
Public	1,455	56.3%	1,129	43.7%	0.000	
Private	2,751	47.1%	3,092	52.9%	0.000	
Monotonous tasks						
Yes	2,193	48.0%	2,378	52.0%	0.027	
No	2,380	52.6%	2,149	47.4%	0.037	
Complex tasks						
Yes	2,658	53.1%	2,350	46.9%	0.000	
No	1,894	46.7%	2,159	53.3%	0.000	
Task rotation						
Yes	2,429	52.5%	2,195	47.5%	0.000	
No	2,140	47.7%	2,343	52.3%	0.000	
Pace of work dependent on autor						
No	3,824	51.6%	3,582	48.4%	0.000	
Yes	761	44.5%	950	55.5%	0.000	
Job involvement						
Yes	2,831	52.9%	2,523	47.1%	0.000	

No	1,756	46.7%	2,003	53.3%	
Job satisfaction					
Yes	3,912	52.5%	3,546	47.5%	0.000
No	664	40.1%	991	59.9%	0.000
Salary satisfaction					
Yes	2,237	55.5%	1,795	44.5%	0.000
No	2,359	46.2%	2,745	53.8%	0.000
Net monthly income					
More than median	1,668	56.4%	1,291	43.6%	0.000
Less than median	1,313	42.8%	1,753	57.2%	0.000
Motivation					
Yes	2,985	54.0%	2,545	46.0%	0.000
No	1,571	45.3%	1,898	54.7%	0.000
Discrimination linked to ethn	ic background				
No	4,550	51.5%	4,287	48.5%	0.000
Yes	69	20.2%	272	79.8%	0.000
Discrimination linked to natio	onality	=	-		
No	4,563	51.9%	4,232	48.1%	0.000
Yes	55	14.6%	321	85.4%	0.000
Discrimination linked to relig	ion				
No	4,574	50.8%	4,422	49.2%	0.000
Yes	40	22.1%	141	77.9%	0.000

4. Results

The methodology used to achieve our research purposes is based on the binary logistic regression model, a specific type of dichotomous response regression model. This statistical technique determines the probability of the occurrence of an event –being native or immigrant in this case–compared to the probability of the occurrence of the opposite event. The most common way of presenting this model is:

$$\frac{p}{1-p} = e^{\beta_0 + \sum_{i=1}^k \beta_i X_i}$$

The first component of this equation is called the odds ratio (OR) and represents the relative probability of the researched event as opposed to non-occurrence. Hence, an OR with a value of x would indicate that it is x times more likely for an individual to be immigrant as opposed to a native worker.

The results of the logistic regression estimates are presented in Table 2. The dependent variable equals 1 if an employee is immigrant and 0 otherwise. The results indicated that in the overall model estimate, 71.9% of the total variation in the sample was explained by the logistic regression model. This shows that the explanatory variables are relevant in explaining the nationality of the employee. In Table 2, the "estimates" are the ordered log-odds regression coefficients, of which the standard interpretation is that for a one unit increase in the predictor, the response variable levels are expected to change in the ordered log-odds, while the other variables are held constant (Bruin, 2006). For instance, the estimate of age means that if it is shifted from one superior category to an inferior, its ordered log-odds of being an immigrant worker would increase by 0.104 while the other variables held constant. The Wald statistic is the square of the ratio of the coefficient to its standard error. The odds ratios of the predictors are calculated by exponentiating the estimates (i.e., odds ratio= e^{β}), thus they indicate probabilities of the response variable level to change to a higher score due to one unit increase of the predictor. Meanwhile, the lower and upper bounds of odds ratio for each predictor are listed as Confidence Interval (CI) under the confident level of 0.95.

According to the coefficients concerning age, certain labor conditions and specific attitudinal variables increase the odds of an employee being classified as immigrant. As seen in Table 2, compared to native staff, the likelihood for an individual to be an immigrant is higher among the youngest

employees who work in the private sector with a temporary contract and performing a labor activity classified as blue collar. This is a job that offers them a monthly income below the median, characterized by high monotony, poor job rotation, and the pace of work that depends on automated machines or systems external to the employees. Finally, it is more likely for these people to have at some point felt discriminated on religious grounds or in consequence of their national origin (the impact of this variable, on the probability of being an immigrant, is the largest of all multiplying by five the chance of encountering a migrant worker: OR = 5.261). This is translated into a heightened sense of stress and low levels of job satisfaction and involvement.

Table 2
Logistic regression.

Source: Own experimental data.

Variables in the model						Odds ratios 95% confidence interval		
	Estimate	Std. error	Wald	Sig.	Odds ratio	Lower bound	Upper bound	
Age (0: 55 or more; 1: 40-54 years; 2: 25-39 years; 3: 15-24 years)	0.104	0.040	6.918	0.009	1.101	0.974	1.203	
Type of ownership (0: public; 1: private)	0.288	0.076	14.419	0.000	1.334	1.150	1.548	
Type of contract (0: fixed; 1: temporal)	0.522	0.088	35.147	0.000	1.685	1.418	2.002	
Position (0: white-collar; 1: blue-collar)	0.176	0.078	5.080	0.024	1.193	1.023	1.391	
Monotonous tasks (0: no; 1: yes)	0.171	0.066	6.775	0.009	1.186	1.043	1.349	
Task rotation (0: yes, 1: no)	0.258	0.065	15.950	0.000	1.295	1.141	1.470	
Dependent on automated equipment (0: no; 1: yes)	0.317	0.091	12.098	0.001	1.373	1.149	1.642	
Monthly income (0: > median; 1: < median)	0.587	0.067	76.242	0.000	1.798	1.576	2.052	
Job involvement (0: yes; 1: no)	0.212	0.067	9.934	0.002	1.237	1.084	1.411	
Job satisfaction (0: yes; 1: no)	0.201	0.066	9.211	0.002	1.222	1.074	1.392	
Stress (0: no; 1; yes)	0.327	0.068	22.844	0.000	1.387	1.213	1.586	
Discrimination linked to nationality (0: no; 1: yes)	1.660	0.256	41.906	0.000	5.261	3.182	8.696	
Discrimination linked to religion (0: no; 1: yes)	0.990	0.376	6.928	0.008	2.691	1.288	5.623	
Constant	-1.255	0.157	63.919	0.000	0.285			

Overall estimate = 71.9% (native workers = 72.7%; immigrant workers = 71.2%)

Chi-square test = 411.729

5. Conclusions

In the 21st century society, working is configured as the cornerstone on which rests the very constitution of the human being as a free, independent, and responsible person. From this perspective, as indicated by Charro and Benlloch (2006), it is logical that the predominant strategy of most immigrants is integration in host nations through employment. The labor market in itself is decisive to understand how individuals, who have immigrated, are integrated in new countries (Bisin et al., 2011). In this sense, analyzing the employment characteristics of the immigrant population and comparing them with the compendium of rights and obligations, held by native workers, help to realize the conditions under which it is produced the effective integration of foreign workers in the labor market of host countries.

To analyze working conditions of European employees, distinguishing between natives and immigrant workers, we have used data from the 5th European Working Conditions Survey, carried out in 2010. Thus, utilizing a European wide empirical study, it was found that the working conditions of immigrants differ markedly from those present among natives. Using a logistic regression model, it has been shown in probabilistic terms the features that characterize the immigrant population inserted in the labor market of the European Union. In this sense, it can be defined as a young man engaged in the private sector, working for others with some kind of temporary contract and slightly enriching –low skilled, monotonous, rigid and heterogeneously controlled by automated systems— and poorly paid occupations. Consequently, it is not surprising for these collective to have felt discriminated at some point on religious or nationality grounds and that all is in high levels of stress, attitudes of dissatisfaction, and alienation from their work activities. Our results concur with the often discussed notion that explores native and immigrant working conditions differences in the European labor market; for example, Demoussis et al. (2010) suggest that underrepresentation of high skilled immigrants and paid occupations

is the result of systematic factors rather than random ones and that indicates the existence of invisible barriers ("glass ceiling") that prevent them from moving into high waged occupations.

Finally, the casual relationship between nationality and the variables taken into account in our study have to be relativized as the data under study are cross-sectional and not experimental. Future studies need to be conducted with larger samples and longitudinal analysis.

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