Potential Work Experience as Protection against Unemployment: Does it bring Equal Benefit to Immigrants and Native Workers?

Abstract

This article studies the beneficial return from potential work experience in preventing job loss, and seeks to explain whether its capacity for protection is different for immigrants compared with native workers. Logistic regression models are calculated from panel data of the Spanish Labour Force Survey between 2008 and 2010. Results indicate that for some foreign-born groups the inequality with respect to natives grows over time. Whereas for Spaniards increased years in the labour market reduce the risk of becoming unemployed, Africans, Latin Americans and Eastern Europeans with more time in the labour market experience hardly any advantage when compared with their fellow immigrants. Although the ethnic penalty is slightly reduced after taking into account socio-demographic differences, the lower return is mainly explained by employment factors. Foreign-born workers are permanently over-represented in low-skilled and non-standard jobs where potential work experience does not result in more protection. The access through the bottom of a segmented labour market has prevented immigrants becoming upwardly mobile to more stable occupations. These positions would have provided them with protection against unemployment during the economic crisis, in the way that they have done for native workers.

Key words: non-standard employment, job loss, overeducation, tenure

Introduction

In times of economic crisis, like those experienced in most Western societies since 2008, avoiding unemployment depends to a large extent on accumulated human capital. Alongside the importance of educational level (OECD, 2011), work experience is a relevant resource for obtaining a more stable position in the labour market and, ultimately, insulates against job loss (Mincer, 1974). Yet, the level of protection that longer experience provides may be conditioned by career trajectory and, in particular, the kind of job which one has. In recent decades there has been an increase in non-standard employment in the form, amongst others, of temporary and part-time jobs (OECD, 2014). This type of work tends to be at the bottom of the occupational structure

and may provide a weaker link with employers due to poor opportunities of formal or informal training (De Grip et al., 1997).

The main objective of this article is to find out whether the return from potential work experience acquired in the host country differs for immigrants and natives. Those born abroad experience devaluation in their human capital due to emigration (Friedberg, 2000), which in turn affects their initial labour integration. From a classical perspective, however, this disadvantage would disappear with length of residence, because during this time immigrants may accumulate new human capital and thus improve their job match (Jovanovich, 1979; Chiswick, 2005). For this reason, the ethnic gap in terms of work experience protection should be greater in the early years, but reduce with time in the labour market. Alternatively, from a structural approach, those that access the labour market through the secondary segment would have difficulties escaping the lowest positions (Piore, 1975), which as a result would progressively affect their human capital. Unstable jobs may produce a depreciation in labour trajectory and therefore do not provide the protection offered by longer periods in the labour market. From this perspective the gap between immigrants and natives in the return from their potential work experience should increase over time.

Southern European societies share a Mediterranean welfare state (Esping-Andersen, 1999), where the private sphere occupies a special role in providing the security the public sector is not able to offer. This is the first time Southern Europe has faced economic crisis with a large section of society —the immigrant population— lacking the social and family networks that have traditionally helped protect against absence of resources. To study the research question of this paper the Spanish case has been chosen. Spain experienced a huge increase in immigration during the first decade of the 21st century. The foreign population represented 4.9% of the total in 2000, whereas it was 14.5% ten years later. As in other Southern European countries, labour integration of those foreign-born has taken place in the secondary segment, i.e. low-skilled occupations with unstable working conditions. The Spanish labour market is also characterized by many rules and strong partial regulation, whereby flexibility mechanisms only affect some groups of employees (Esping-Andersen and Regini, 2000). The gap between *insiders* and *outsiders* workers is very marked, especially through division by type of contract (Polavieja, 2005; Mato, 2011). Spain has one of the

highest rates of temporary employment of all OECD countries, more than 30% just before the Great Recession.

In the empirical analysis I study to what extent potential work experience reduces the risk of becoming unemployed. To do this the panel data version of the Spanish Labour Force Survey (SLFS) between 2008 and 2010 is used. During this period the unemployment gap between the foreign and native-born increased enormously, even though large immigrant outflows due to the economic recession had not yet started. The main advantage of using panel data is that it permits the analysis of the unemployment issue, focusing on a sample of working people and taking into account the characteristics of their jobs, factors less frequently studied due to the common use of cross sectional data. There is an extensive body of literature about immigrant labour integration and the return from their human capital in the host country. However, little is known about how labour market position may affect their assimilation and, in particular, their potential work experience as protection against unemployment.

The article has five sections. It begins with a brief description of work experience value and the expansion of non-regular jobs in recent decades. Second, the theoretical framework and the hypotheses derived from it are presented. Third, the data, variables and techniques used are explained. The empirical results of the study, related to the explanation of ethnic disadvantage as well as work experience return, are presented in the fourth section. Finally, in the fifth the main conclusions are discussed.

Work Experience and Non-Standard Employment

Human capital is an important resource in order to access labour markets and acquire a good position (Mincer, 1974; Becker, 1975). While formal education is considered *general* human capital, because it can be used in any job, work experience is more *specific* human capital. This is obtained by time spent in labour market through formal or informal training. For example, firms may decide to invest in the preparation of their employees if it is considered that will be compensated by higher worker productivity. One particularity of this type of specific human capital is that it yields more productivity only in the company where the investment was made. Thus, a high turnover of workers is unlikely, since both the firm and the employee will be interested in extracting the maximum return from that training.

Empirical literature indicates the positive influence of work experience accumulation on career trajectories. For example, there is a strong link between tenure and wages, primarily because productivity increases along time working in the same firm (Brown, 1989; McDonald and Worswick, 1998). When employees receive specific training, it has a positive influence on wages. However, this investment has no effect if workers move to another company (Lynch, 1990). The payoff between on-the job training and increasing earnings seems to be similar for every worker, regardless of gender or race (Duncan and Hoffman, 1979). In this sense labour markets appear to reward everyone equally. Thus the key is to explain what getting the kind of jobs in which receiving specific preparation is more likely depends on. Moreover, the cost of little accumulated job tenure is a higher risk of becoming unemployed (Dieckhoff, 2007). The protection provided by work experience in the same company may be due to accumulation of job-specific investment over time; but also because the cost of firing employees increases with time in the firm.

In the last decades non-standard jobs have increased in most developed countries (Kalleberg, 2000; Barbieri, 2009). This type of employment tends to offer worse labour conditions, associated with higher instability, lower salaries and few opportunities for promotion (Kalleberg, 2003). For instance, temporary employment is associated with higher risk of job loss, whereas part-time work experience offer lower returns in terms of wages (Ferber and Waldfogel, 1998; Giesecke and Groß, 2003). Additionally, non-traditional employment also offers less chance to accumulate job tenure. For example, workers with fixed-term contracts have a lower probability of getting training in the firm than employees with a permanent contractual relationship (Cutuli and Guetto, 2013). Similarly, part-time work reduces the likelihood of taking part in formal on-the-job training. This partly explains the gender gap in opportunities for this type of preparation, given that women are over-represented in this type of jobs (Evertsson, 2004). There may also be a difference between working in the private and public sectors. In the United States, in recent decades, employees in private jobs have seen how tenure and long-term employment relationships have progressively decreased (Farber, 2008).

Since the mid-eighties, the main strategy for reducing unemployment levels in Spain has been based on increased flexibility of the labour market through its contracting mechanisms (Jimeno and Toharia, 1994). The Labour Reform of 1984 sought to

minimize the barriers that employers faced when hiring. The immediate effect was the creation of about two million jobs. However, job creation was achieved at the cost of significantly increased rates of temporary employment, which rose from 10% in 1984 to 35.3% in 1995. In Spain, having a fixed-term contract is associated with a higher risk of experiencing unemployment (Amuedo-Dorantes, 2000; Garcia-Pérez and Muñoz-Bullón, 2011).

As in other developed societies, labour fragmentation in Spain has coincided with the simultaneous growth of both skilled and unskilled jobs (Oesch and Menes, 2011). Until 2008, the housing bubble and growth of employment in construction, hospitality and domestic service made possible the emergence of many low-skilled occupations with poor working conditions. A lack of native workers facilitated the access of immigrants to the labour markets of Southern Europe (Ribas-Mateos, 2004; Kogan, 2006). In Spain, those working in low-skilled occupations found more barriers to promotion to stable jobs than similarly low-qualified workers in other countries such as the United States and Denmark (Bernardi and Garrido, 2008). Before the current economic crisis the incidence of overeducation and concentration on the bottom rung of the structural ladder in Spain was deeper among immigrants than natives (Fernández and Ortega, 2008; Bernardi and Martínez-Pastor, 2010).

Theoretical Framework and Hypothesis

Many studies of labour inequality between ethnic groups have used a neo-classical economic perspective. In this theoretical approach individuals enter the labour market with different capacities, not only because of distinct innate abilities, but also because of varied skills acquired through schooling and different types of training, i.e. investment in human capital (Becker, 1975). Although the labour position that ones occupies is strongly related with human capital accumulated, it is possible to find cases of overeducation, i. e. people working in jobs that require lower formal education than they possess. Overeducation usually has more effect at the start of working lives. However, this problem is only temporary because over time, through turnover, the overqualified can be promoted within or across firms (Jovanovich, 1979; Sicherman and Galor, 1990). The acquisition of labour experience helps them in their later careers, thus improving their job match.

From a complementary perspective, ethnic inequalities may be analyzed considering institutional factors. Labour markets contain different segments, where the secondary is characterized by low-skilled occupations, with little chance of promotion, instability and high turnover of workers (Piore, 1975). Employees in the secondary segment experience difficulties moving into the primary one, which includes skilled jobs with high wages, good working conditions with promotion possibilities and, above all, labour protection. Overeducation may therefore become a chronic problem. If labour conditions and productivity are connected with jobs and not only with personal characteristics, investments in extra human capital do not automatically result in promotions (Thurow, 1975). Professional training and more education only increase wages if these investments aid abandoning the secondary segment (Rumberger and Carnoy, 1890). The problem, however, is that movement between segments is somewhat restricted. Overqualified workers may accumulate disadvantage in respect to further promotions because the probability of getting formal and informal on-the-job training is lower (Büchel and Mertens, 2004). Moreover, when the overeducated leave their jobs and move to new ones an improved employment match is not guaranteed (Sloane, 1999).

Among immigrants it is very common to find labour disadvantages in comparison with natives. The reason being that when human capital has been acquired before emigrating it is devalued upon arrival in the host country (Friedberg, 2000). The lower return from education means that overeducation among the foreign-born is more extended than among natives during their first years in the labour market. Assimilation theses, however, predict that the penalty experienced by immigrants is only temporary (Chiswick, 2005). During the first years of residence they can invest in new human capital. Work experience accumulation, learning the official language and the acquisition of new formal education mean that over time the labour gap between immigrants and natives is reduced or even eventually disappears (Chiswick et al., 1997; Bratsberg and Ragan, 2002; Ballarino and Panichella, 2013).

Other research indicates that the disadvantage experienced by immigrants does not depend only on their personal characteristics or their posterior investment in new human capital. Although differences in human capital are partly responsible for inequality between the groups, some empirical evidence shows the degree of immigrants' concentration in the secondary segment. The types of occupations and industries in

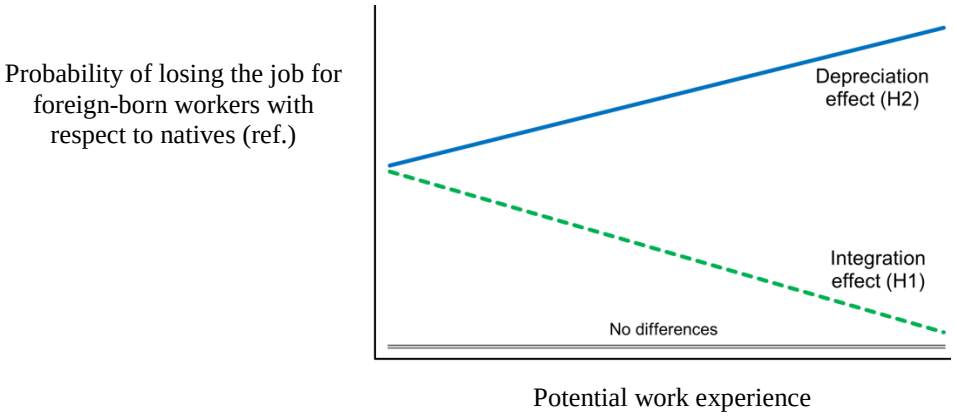
which they develop their careers make them much more vulnerable to layoffs (Kogan, 2004). One of the consequences of experiencing interruptions in a working career is the depreciation of human capital itself (Mincer and Ofek, 1982). Immigrants tend to be over-represented in the most unstable sectors and thus their wages are generally lower than those of other employees (Williams and Rubin, 2003). Furthermore, some research questions the assertion that immigrants improve their occupational attainment over time (Constant and Massey, 2005; Bernardi et al., 2010; Brodmann and Polavieja, 2010).

According to the previous theoretical perspectives, the ethnic gap in terms of work experience returns presents two possible scenarios. In both cases there would be a penalty for immigrants caused by the devaluation of their human capital upon arrival to the host country. This initial disadvantage has an important consequence: overeducation is more widespread among the foreign-born than among natives. This means that immigrants are more concentrated in low-skilled occupations, where the presence of non-standard jobs is higher (De Grip et al., 1997; Kalleberg et al., 2000). In the assimilation approach, however, the ethnic inequality would focus mainly among people with less time in the labour market. Investment in new specific resources contributes to reducing the greater impact of overeducation among the foreign-born and, eventually, convergence with natives. The job match attained over time should help immigrants to achieve traditional and skilled jobs, which are not only more protected against economic downturns, but also provide more opportunities to accumulate job tenure trough formal or informal training. In a nutshell, along time there would be an integration effect that reduces the ethnic gap. The inequality between immigrants and natives with respect to their work experience returns becomes smaller as workers accumulate years in the labour market (Hypothesis 1).

In contrast, segmentation perspective expects ethnic disadvantage to accumulate over time. The initial penalty experienced by the devaluation of the human capital of the foreign-born would become chronic in a labour market where opportunities to get off the bottom rung of the structural ladder are limited. Immigrants access the host labour market through low-skilled and non-regular employment, which is more vulnerable and offers few chances to establish a strong relationship with employers through some type of training. The penalty experienced over time, because most immigrants do not manage to escape the secondary segment, would imply depreciation of their human capital. For this reason the accumulation of potential work experience in the host country does not

foment stability. Thus I expect that the ethnic gap will be smaller among workers with little time in the labour market, whereas the differences will be bigger with more potential years worked (Hypothesis 2).

Figure 1. Resume of hypothesis



Data, Variables and Techniques

To study the effect of potential work experience on the probability of becoming unemployed, panel data from the Spanish Labour Force Survey from 2008 to 2010 (SLFS) are used. This period is appropriate for two reasons: the unemployment rate in Spain increased from 9.4% in I/2008 to 19.3% in IV/2010. At the same time, the unemployment gap between immigrants and natives grew from 5.2% to 11.2%. Furthermore, the foreign-born population was relatively stable at the time and the increase in immigrant outflows caused by the second economic recession in 2011 had not started yet. According to the Spanish National Institute of Statistics (INE), the negative migration balance of foreigners in Spain has been rising sharply since 2012.

The SLFS is conducted quarterly in about 65,000 households by the INE. A sixth of the interviewed sample is changed every quarter, thus providing information about individuals every three months for up to a maximum of a year and a half. The survey also includes illegal immigrants, because people without residency permits can also register to get welfare benefits. The sample is composed of men and women between the ages of 16 and 64 who were employed at the time of interview, and interviewed again three months later. There are 524,939 observations that satisfy these restrictions, which correspond to 179,777 individuals. The socio-demographic and employment characteristics of the sample are in Table A1 (see Appendix).

The initial situation of being employed (t_0) permits two possible final positions a quarter later (t_1): still working or being unemployed. Thus, the dependent variable of the study is being employed/unemployed at t_1. With respect to the explanatory factors, the key independent variable is the potential work experience (PWE) in the Spanish labour market. This variable is calculated differently for the native and foreign-born. For the Spanish it is assumed that potential work experience starts at the moment they leave the education system. In the case of immigrants, it is considered to start upon arrival in the host country. The huge inflow of migrants took place recently and mainly for work reasons, thus for the majority of immigrants their working career in Spain started their first year of residence. Yet, for those foreign-born who continue to study after emigration, the variable is calculated in the same way as for the native population. This last group represents 26.7% of immigrants in the sample, and 9.3% when we focus only on the three ethnic groups that show an absolute disadvantage when compared with natives (in Results section). Additionally, to capture the non-linear effect of potential work experience, the analysis will include this same variable squared.

In order to study the effect of ethnicity, I distinguish between foreign and native-born. Specifically, a classification with seven categories is used: i) Spaniards born in Spain (natives); ii) Spaniards born abroad; iii) nationals from the European Union 15 and other Western countries (EU15); iv) nationals from Central and South American countries (Latin Americans); v) nationals from non-EU 15 European countries (Eastern Europeans); vi) nationals from African countries; and vii) nationals from Asia.

The remaining independent variables can be divided into two blocks. The first includes socio-demographic factors. For the variable 'educational level' four categories have been chosen based on the ISCED: i) primary education or less (including illiterate and no education); ii) lower secondary; iii) upper secondary (including vocational); and iv) tertiary. The place where immigrants acquired their education, distinguishing between abroad and in Spain, will be used for robustness tests (Table A3). It will also take into account the possibility of the individual studying formal education at the same time as working. In addition to the sex variable, for age a classification of four categories is used: 16-24, 25-34, 35-44 and 45-64. In regard to the type of household, whether the individual lives alone, with a spouse (or partner), or with children younger than 16 are all factors separately taken into account. Finally the place of residence in Spain is also controlled for. Given that immigrants choose to live in regions where job opportunities

are higher (Amuedo-Dorantes and De la Rica, 2010), I have created a classification of three categories taking into account unemployment rates in the 17 Spanish Autonomous Communities during the period 2008-2010: i) regions with low levels of unemployment (9-11%); ii) with a medium level (12-16%); and iii) with a high level (17-23%).

The second block of variables is related with employments factors. Firstly, for type of contractual relationship I distinguish between fixed-term contracts and permanent contracts, including the self-employed and employers in this last category. Additionally, whether the job is part-time or full-time is also considered. The analysis will take into account time accumulated working in the current firm. Job tenure is measured in years and its square is also included to capture the non-linear effect.

With respect to occupation, the EGP class scheme (Eriksson et al., 1979) is used. The classification contains the following ten categories: I Higher service (mostly professionals, large enterprise employers and higher managers); II Lower service (mostly associate professionals, lower managers and higher sales); III Routine clerical/sales; IVa Small employers; IVb Independent (self-employed and no employees); V Manual foremen (manual workers with supervisory status); VI Skilled manual (mostly craft workers, some skilled service and skilled machine operators); VIIa Semi-unskilled manual (mostly machine operators, elementary labourers, elementary sales and services); VIIb Farm workers (employed farm workers and family farm workers); IVc Farmers/Farm managers (self-employed and supervisory farm workers).

Another variable of this second block is connected with the sector of activity. To do this the classification proposed by Singelmann (1978) is used: i) extractive sector (e.g., agriculture and mining) and transformative sector (e.g., food, textiles, metal, machinery, chemical manufacturing); ii) construction; iii) distributive services (e.g., transportation, communication, wholesale trade and retail trade); iv) producer services (e.g., banking, insurance, engineering, legal services); v) public administration; vi) social services (e.g., medicine, health services, education, non-profit making organizations, welfare, religious services, government…); and vii) personal services (domestic, hotels, entertainment, repairs…). Finally, separately in a different variable, it will also control for whether the individual works in the public or private sector.

The transitions studied in this paper are those between two consecutive quarters of SLFS, i.e. the time between the interview (t_0) and three months later (t_1). To model these transitions and analyze the probability of becoming unemployed, logistic regression for panel data (*xtlogit*) is used, making it possible to identify different observations for the same individual. These analyses will be complemented by adjusted predictions at representative values. The margins for the interaction between ethnicity and potential work experience will be seen across a range from 0 to 10 in increments of 1 year. In this way we can compare the effect of each year on the labour market for immigrants and for natives separately.

Empirical Results

The main research question of this article is to find out whether potential work experience in the Spanish labour market has or does not have the same influence in protecting against unemployment for different ethnic groups. Table 1 presents six models in which each immigrant collective is compared with natives. Results indicate that years accumulated in the labour market reduce the risk of being unemployed three months later. The return from work experience is the same for natives and for Spaniards born in Spain, nationals from EU15 and Asians. However, years in the labour market protects Latin Americans, Eastern Europeans and Africans less against job loss. In particular, while for natives the longer the time the lower the probability of becoming unemployed, for these three ethnic groups the effect is almost constant along the range from 0 to 10 years (Figure A1).

Table 1. Logistic regression for panel data (*xtlogit*) on the likelihood of becoming unemployed versus continuing being employed (reference category) a quarter later. Male and female workers (16-64 years old)

	Spanish born abroad		**European Union 15**		**Latin Americans**		**Eastern Europeans**		**Africans**		**Asians**	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Ethnic status												
Natives (ref.)												
Immigrant	0.139	(0.18)	0.192	(0.23)	–0.004	(0.12)	0.137	(0.19)	1.222***	(0.21)	–0.300	(0.47)
PWE (years)	–0.096***	(0.00)	–0.097***	(0.00)	–0.096***	(0.00)	–0.096***	(0.00)	–0.096***	(0.00)	–0.096***	(0.00)
Immigrant*PWE	0.017	(0.02)	–0.059	(0.04)	0.134***	(0.03)	0.185***	(0.06)	0.080**	(0.04)	0.001	(0.08)
PWE^2	0.001***	(0.00)	0.001***	(0.00)	0.001***	(0.00)	0.001***	(0.00)	0.001***	(0.00)	0.001***	(0.00)
Immigrant* PWE^2	0.0001	(0.00)	0.002*	(0.00)	–0.004**	(0.00)	–0.010**	(0.00)	–0.001	(0.00)	0.002	(0.00)
Constant		–3.470		–3.479		–3.443		–3.469		–3.466		–3.478
Wald χ^2		2,392.63		2,345.67		2,832.01		2,640.67		2,792.44		2,309.84
Log likelihood		–77,587.131		–75,574.366		–79,087.653		–77,111.646		–76,343.208		–74,978.484
Observations		495,762		485,422		495,443		488,918		485,228		482,666
Individuals		167,715		164,114		168,663		165,712		164,383		163,099

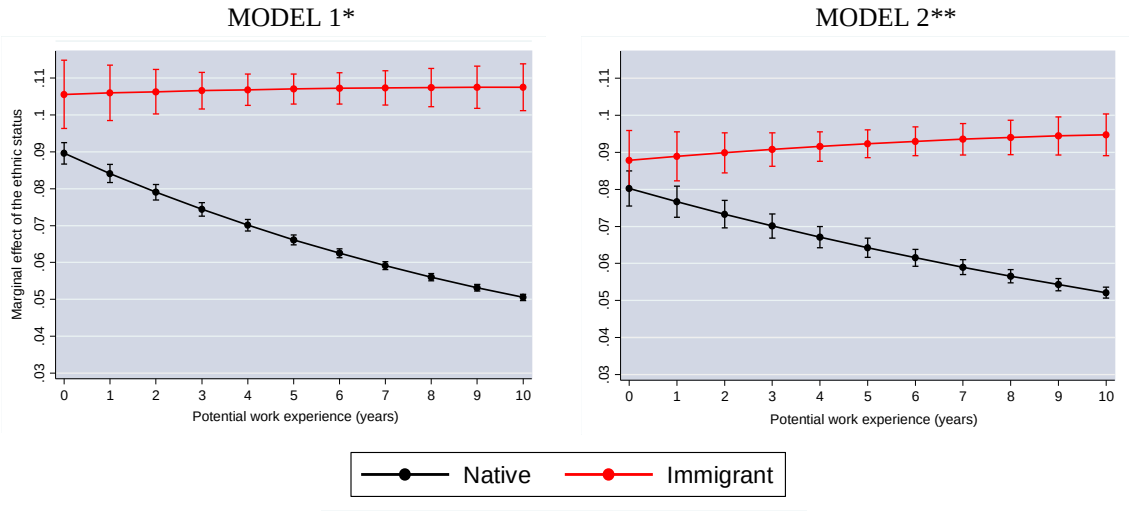
*=10% significance, **= 5% significance***= 1% significance.

Source: Author's calculations based on the SLFS (I/2008-IV/2010).

For Africans the disadvantage with respect to natives starts in the early years. For Latin Americans and Eastern Europeans, on the contrary, there are no differences in comparison with natives in the two first years in the labour market. Nevertheless, there is a pattern for the three groups in which the ethnic gap increases over time. In other words, the differences are bigger among those workers that have accumulated more years. According to the hypotheses, this tendency is closer to the scenario where a depreciation effect works along time. From this point of view, it is expected that immigrants experience a growing disadvantage due to their concentration in the most precarious jobs where the benefit of work experience in providing protection is lower.

In order to establish which factors explain this ethnic gap, more detailed analysis of these specific three groups is carried out (Table 2). Figure 2 presents the margins for the interaction between ethnicity and potential work experience. The immigrant category includes Latin Americans, Eastern Europeans and Africans. In Model 1, where there are no controls, we observe the previous pattern, in which the differences between the foreign and native-born increasing along time, is confirmed. For natives the more potential work experience the lower the risk of losing their jobs. For immigrants, until the fifth year, time in the labour market increases the likelihood of becoming unemployed. After this period the effect becomes negative.

Figure 2. Margins after a logistic regression on the probability of becoming unemployed a quarter later. Interaction between ethnicity and potential work experience. Male and female workers (16-64 years old)

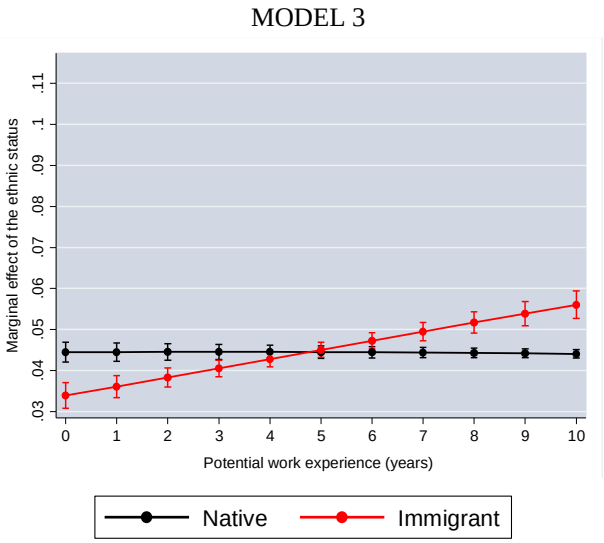


*Model 1: no controls.
*Model 2: controlling for socio-demographic factors.
Source: Author's calculations based on the SLFS (I/2008-IV/2010).

In Model 2 diverse socio-demographic factors are taken into account. After applying these controls the differences are slightly smaller. In particular, the foreign-born in their first year in the labour market do not show any disadvantage in comparison with natives with the same potential work experience. The gap between the groups increases because of the continuous reduction in probability of unemployment for natives (as in Model 1). But there is also a small opposite effect for foreign-born workers. Immigrants with seven years' work experience have a one percentage higher probability of losing their jobs than their countrymen just starting their working career. In a nutshell, Model 2 indicates that the compositional differences do not explain the increasing disadvantage for immigrants.

In Figure 3 the margins for the interaction between ethnicity and potential work experience are presented after controlling for both socio-demographic and job characteristics (Model 3). These analyses are calculated to find out to what extent the immigrant penalty is caused by employment factors. The results show a notably different scenario to the previous two. Now the gap between immigrants and native has significantly reduced. In particular, those immigrants with less than three years in the labour market have a lower probability of leaving employment than natives. These differences disappear among workers with between three and six years' work experience. From seven years in the labour market onwards immigrants are at a disadvantage. On the other hand, in this full model we observe that work experience does not have any effect on natives. This means that the protection of time is closely related with job characteristics. What is interesting is that for immigrants, however, work experience implies a penalty. The more years accumulated the higher the risk of unemployment.

Figure 3. Margins after a logistic regression on the probability of becoming unemployed a quarter later. Interaction between ethnicity and potential work experience*



*Controlling for all socio-demographic and employment factors.
Source: Author's calculations based on the SLFS (I/2008-IV/2010).

There are different factors that contribute to explaining the likelihood of losing one's job (Model 3 of Table 2). First, in this full model we observe that being an immigrant reduces the risk of leaving employment. This finding contrasts with the results obtained in the two previous models, where immigrants had a higher likelihood (Model1) or did not show any differences (Model 2). With respect to education, those with a higher educational level and involved in formal studies have a lower risk. The youngest and oldest workers are more likely to lose their jobs, while gender does not have any influence. Additionally, people who live alone or with a partner are more protected. Having children in the household however does not increase the risk of employment loss. With respect to the region of residence in Spain, higher unemployment rates are indicative of a higher likelihood of being unemployed a quarter later.

Beside these socio-demographic factors, there are others related with the work characteristics that also affect the risk of job loss. The effect of the type contract is remarkable: those with a fixed term contractual relationship experience a much higher probability of leaving employment. The influence of job tenure is also significant: the more years worked in the current firm the lower the risk of losing the job, although this effect is reduced along time. Moreover, those who work in a skilled occupation, in a full-time job or in the public sector have decreased probability of becoming

unemployed. With respect to the sector of activity, construction and personal service are the most vulnerable.

Table 2. Logistic regression for panel data (*xtlogit*) on the likelihood of becoming unemployed versus continuing being employed (reference category) a quarter later. Spaniards born in Spain and immigrants from Latin America, Eastern Europe and Africa

	MODEL 1		MODEL 2		MODEL 3	
	Coef.	**SE**	**Coef.**	**SE**	**Coef.**	**SE**
Immigrant	0.212**	(0.09)	0.111	(0.09)	–0.362***	(0.07)
PWE (years)	–0.095***	(0.00)	–0.068***	(0.00)	0.001	(0.00)
Immigrant*PWE	0.120***	(0.02)	0.108***	(0.02)	0.085***	(0.01)
PWE^2	0.001***	(0.00)	0.001***	(0.00)	–0.0003***	(0.00)
Immigrant*PWE^2	–0.002**	(0.00)	–0.002**	(0.00)	–0.001*	(0.00)
Education						
Primary or less (ref.)						
Lower Secondary			–0.451***	(0.03)	–0.137***	(0.03)
Upper Secondary			–1.239***	(0.03)	–0.391***	(0.03)
Tertiary			–2.040***	(0.04)	–0.550***	(0.04)
Studying			0.116**	(0.05)	–0.132***	(0.04)
Age						
16-24 (ref.)						
25-34			–0.467***	(0.04)	–0.180***	(0.03)
35-44			–0.620***	(0.05)	–0.122***	(0.04)
45-64			–0.861***	(0.06)	–0.046	(0.05)
Women			0.052**	(0.02)	–0.027	(0.02)
Household						
One-person			–0.300***	(0.05)	–0.146***	(0.04)
Married/partner			–0.401***	(0.03)	–0.189***	(0.03)
Children<16 years old			0.048**	(0.02)	0.028	(0.02)
Region low unemployment (ref.)						
Medium unemployment			0.290***	(0.03)	0.261***	(0.03)
High unemployment			0.963***	(0.03)	0.558***	(0.03)
Fixed-term contract					1.536***	(0.02)
Part-time work					0.348***	(0.02)
Job tenure (years)					–0.167***	(0.00)
Job tenure^2					0.003***	(0.00)
Higher service (ref.)						
Lower service					0.343***	(0.05)
Routine non-manual					0.411***	(0.05)
Small employers					–0.431***	(0.09)
Self-employed					0.774***	(0.06)
Manual supervisors					0.312***	(0.11)
Skilled manual					0.425***	(0.06)
Semi/unskilled manual					0.584***	(0.05)
Farm workers					1.344***	(0.07)
Farmers					0.197*	(0.11)
Agriculture/industry (ref.)						
Construction					0.531***	(0.03)
Distributive services					–0.214***	(0.03)
Producer services					–0.234***	(0.04)
Public administration					–0.065	(0.06)
Social services					–0.396***	(0.04)
Personal services					0.081**	(0.03)
Public sector					–0.308***	(0.08)
Constant	–3.421		–2.091		–3.644	
Wald χ^2	3,510.33		7,298.50		17,561.96	
Log likelihood	–83,031.024		–79,489.371		–69,600.415	
Observations	506,189		506,189		506,189	
Individuals	173,375		173,375		173,375	

*=10% significance, **= 5% significance***= 1% significance.
Source: Author's calculations based on the SLFS (I/2008-IV/2010).

The over-representation of immigrants in the most unstable jobs explains an important part of their absolute disadvantage when compared with natives. While in Model 1 foreign-born workers are more likely to become unemployed, in Model 3 immigrants have a lower probability than natives of losing their job. On the other hand, the concentration of the foreign-born in non-standard employment also contributes to understanding why their potential work experience offers inferior protection than it does to Spaniards. Figure 3 shows that the gap between immigrants and natives would be rather different if it weren't for their distinct professional status. Taking into account job characteristics the disadvantage of the foreign-born only occurs among workers with more than six years in the labour market.

Complementary analyses confirm that the lower return from work experience for the foreign-born continues even after taking into account region of birth and place of education. Once all these factors are controlled for, time in the Spanish labour market protects Africans, Latin Americans and Eastern Europeans less than it does natives (Table A2). On the other hand, both immigrants who finished their studies in Spain and those who obtained them before arriving there have inferior protection against unemployment than natives with the same potential work experience (Table A3).

Conclusions

The Great Recession has meant rising unemployment in the majority of European countries. However, the impact has been not equal for the native and the foreign-born populations. According to Eurostat, since 2008 immigrants have experienced a greater reduction in rates of employment. Human capital is an important resource for workers when it comes to avoiding the multiple risks that go with periods of economic downturn. The objective of this paper was to study the return from potential work experience in protecting against job loss and how this protection may differ depending on ethnic group.

Analysis from panel data of the Spanish Labour Force Survey has been carried out. The main findings indicate that immigrants from Latin America, Eastern Europe and Africa have a higher probability of being unemployed three months later than natives. This gap increases over time, i.e. the differences are bigger among workers with more years in the labour market. Therefore, the ethnic gap in terms of work experience return increases with the passing of time. It is remarkable that for the foreign-born accumulation of potential work experience means very little additional protection

against job loss, on the contrary to Spaniards. Although the ethnic gap reduces a little when socio-demographic characteristics are controlled for, the pattern changes drastically once factors related with employment are taken into account. Immigrants are permanently over-represented in temporary jobs and part-time work. Moreover, they accumulate less time in firms than natives and are concentrated in low-skilled jobs, seasonal sectors or specific services like construction and hospitality. Their positions in the Spanish labour market prevent the building up of tenure that protects against job loss. This disadvantage depreciates their potential work experience over time.

The net effect of time in the labour market presents an interesting finding. Whereas for natives potential work experience ceases to have influence, for immigrants it has a positive effect on the probability of becoming unemployed. Their slopes cross in the range between three and six years in the labour market, in such a way that among the workers with less time immigrants have a lower likelihood of losing their jobs than natives. However, after the sixth year the disadvantage is reversed. In other words, under equal conditions, recently arrived immigrants enjoy a better situation not only than Spaniards with the same work experience, but also than other immigrants with more time in the country.

The explanation for this unexpected finding could be related with the legal status of immigrants. In 2008 12% of immigrants in Spain were illegal (González-Enríquez, 2009). The last regularization process in the country was carried out in 2005. Thus the majority of foreigners without a residency permit at the beginning of the Great Recession will be those who have spent less time in the country. Given that Spain harbours a considerable black economy and that immigrants are over-represented in it (Baldwin-Edwards, 1998; Reyneri, 2003), it would be plausible that during periods of recession some employers involved in such hidden economic activities prefer to employ illegal immigrants in order to reduce costs. On the other hand, the penalty that immigrants with more than six years in the Spanish labour market experience may be caused by some kind of prejudice. Ethnic discrimination is more widespread during periods of high and increasing levels of immigration, as well as in times of rising unemployment (Coenders and Scheepers, 1998). That scenario fits with the Spanish case during the years studied in this article. These attitudes may specially affect immigrants with full legal status who are competing on equal terms with native

workers. Nevertheless, further research should be done in order to explain these differences.

Overall, one can conclude that the way that immigrants to Southern Europe accessed the job market from 2000 onwards, and the characteristics of these labour markets are crucial to understanding ethnic disadvantage during the current economic crisis. Most immigrants took up non-standard work at the bottom of the occupational ladder on arrival. The difficulties in obtaining promotion in segmented labour markets have prevented upward mobility for immigrants to the kind of more stable positions which had provided them with, in a similar way to natives, protection against unemployment during the Great Recession. Moreover, the possibilities of obtaining job tenure in those positions seem to be low, thus limiting the transformation of potential work experience into more protection against job loss.

References

Amuedo-Dorantes, C. (2000). Work transitions into and out of involuntary temporary employment in a segmented market: evidence from Spain, *Industrial & Labor Relations Review*, **53**(2), 309-325.

Amuedo-Dorantes, C. and De la Rica, S. (2010). Immigrants' responsiveness to labor market conditions and its implications on regional disparities. Evidence from Spain, *Journal of the Spanish Economic Association*, **1**(4), 387-407.

Ballarino, G. and Panichella, N. (2013). The occupational integration of male migrants in Western European countries: assimilation or persistent disadvantage? *International Migration*, **53**(2), 338-352.

Baldwin-Edwards, M. (1998). Where free markets reign: Aliens in the twilight zone, *South European Society and Politics*, **3**(3), 1-15.

Barbieri, P. (2009). Flexible employment and inequality in Europe, *European Sociological Review*, **25**(6), 621-628.

Becker, G. S. (1975). *Human capital. A Theoretical and Empirical Analysis, with Special Reference to Education*. Chicago: University of Chicago Press.

Bernardi, F. and Garrido, L. (2008). Is there a new service proletariat? Post-industrial employment growth and social inequality in Spain, *European Sociological Review*, **24**(3), 299-313.

Bernardi, F. and Martínez-Pastor, J. I. (2010). Falling at the bottom: Unskilled jobs at entry in the labor market in Spain over time and in a comparative perspective, *International Journal of Comparative Sociology*, **51**(4), 289-307.

Bernardi, F., Garrido, L. and Miyar, M. (2011). The recent fast upsurge of immigrants in Spain and their employment patterns and occupational attainment, *International Migration*, **49**(1), 148-187.

Bratsberg, B. and Ragan J. F. (2002). The impact of host-country schooling on earnings: A study of male immigrants in the United States, *Journal of Human resources*, 63-105.

Brodmann, S. and Polavieja, J. (2010). Immigrants in Denmark: access to employment, class attainment and earnings in a high-skilled economy, *International Migration*, **49**(1), 58-90.

Brown, J. N. (1989). Why do wages increase with tenure? On-the-job training and life-cycle wage growth observed within firms, *The American Economic Review*, 971-991.

Büchel, F. and Mertens, A. (2004). Overeducation, undereducation and the theory of career mobility, *Applied Economics*, **36**(8), 803-816.

Chiswick, B., Cohen, Y. and Zach, T. (1997). The labor market status of immigrants: effects of the unemployment rate at arrival and duration of residence, *Industrial and Labor Relations Review*, **50**(2), 289-30.

Chiswick, B. (2005). "The economic progress of immigrants: some apparently universal patterns". In *The Economics of Immigration*, Massachusetts: Edward Elgar Publishing.

Coenders, M. and Scheepers, P. (1998). Support for ethnic discrimination in the Netherlands 1979–1993: Effects of period, cohort, and individual characteristics, *European Sociological Review*, **14**(4), 405-422.

Constant, A. and Massey, D. (2005). Labor market segmentation and the earnings of German guestworkers, *Population Research and Policy Review*, **24**(5), 489-512.

Cutuli, G. and Guetto, R. (2013). Fixed-term contracts, economic conjuncture and training opportunities: a comparative analysis across European labour markets, *European Sociological Review*, **29**(3), 616-629.

De Grip, A., Hoevenberg, J. and Willems, E. (1997). Atypical employment in the European Union, *International Labour Review*, **163**(1), 49-71.

Dieckhoff, M. (2007). Does it work? The effect of continuing training on labour market outcomes: A comparative study of Germany, Denmark, and the United Kingdom, *European Sociological Review*, **23**(3), 295-308.

Duncan, G. J. and Hoffman, S. (1979). On-the-job training and earnings differences by race and sex, *The Review of Economics and Statistics*, 594-603.

Erikson, R., Goldthorpe, J. H. and Portocarrero, L. (1979). Intergenerational class mobility in three Western European societies: England, France and Sweden, *British Journal of Sociology*, **30**, 415-441.

Esping-Andersen, G. (1999). *Social Foundations of Postindustrial Economies*. Oxford: University Press.

Esping-Andersen, G. and Regini, M. (Eds.) (2000). *Why Deregulate Labour Markets?* Oxford: Oxford University Press.

Evertsson, M. (2004). Formal On-the-Job Training A Gender-Typed Experience and Wage-Related Advantage? *European Sociological Review*, **20**(1), 79-94.

Farber, H. (2008). Employment insecurity: The decline in worker-firm attachment in the United States, *Princeton University Industrial Relations Section*, Working Paper 530.

Ferber, M. and Waldfogel, J. (1998). Long-term consequences of nontraditional employment, *Monthly Labour Review*, **121**(5), 3-12.

Fernández, C. and Ortega, C. (2008). Labor market assimilation of immigrants in Spain: employment at the expense of bad job-matches? *Spanish Economic Review*, **10**(2), 83-107.

Friedberg, R. (2000). You can't take it with you? Immigrant assimilation and the portability of human capital, *Journal of Labor Economics*, **18**(2), 221-251.

García-Pérez, J. I. and Muñoz-Bullón, F. (2011). Transitions into permanent employment in Spain: An empirical analysis for young workers. *British Journal of Industrial Relations*, **49**(1), 103-143.

Giesecke, J. and Groß, M. (2003). Temporary employment: chance or risk? *European Sociological Review*, **19**(2), 161-177.

González-Enríquez, C. (2009): *Undocumented Migration. Counting the Uncontable. Data and Trends across Europe*. Country Report Spain, Research D.G. European Commission.

Jimeno, J. and Toharia, L. (1994). *Unemployment and Labour Market Flexibility: Spain*. International Labour Organization.

Jovanovic, B. (1979). Job matching and the theory of turnover, *The Journal of Political Economy*, **87**(5), 972-990.

Kalleberg, A. L. (2000). Nonstandard employment relations: Part-time, temporary and contract work, *Annual Review of Sociology*, 341-365.

Kalleberg, A. L., Reskin, B. F. and Hudson, K. (2000). Bad jobs in America: Standard and nonstandard employment relations and job quality in the United States, *American Sociological Review*, 256-278.

Kalleberg, A. L. (2003). Flexible firms and labor market segmentation effects of workplace restructuring on jobs and workers, *Work and Occupations*, **30**(2), 154-175.

Kogan, I. (2004). Last hired, first fired? The unemployment dynamics of male immigrants in Germany, *European Sociological Review*, **20**(5), 445-461.

Kogan, I. (2006). Labor markets and economic incorporation among recent immigrants in Europe, *Social Forces*, **85**(2), 697-721.

Lynch, L. M. (1989). Private sector training and its impact on the earnings of young workers, *National Bureau of Economic Research*, Working Paper 2060-88.

Mato, J. (2011). "Spain: fragmented unemployment protection in a segmented labour market". In Clasen, J. and Clegg, D. (Eds.) *Regulating the Risk of Unemployment: National Adaptations to Post-industrial Labour Markets in Europe*. Oxford: Oxford University Press.

McDonald, J. T. and Worswick, C. (1998). The earnings of immigrant men in Canada: Job tenure, cohort, and macroeconomic conditions, *Industrial & Labor Relations Review*, **51**(3), 465-482.

Mincer, J. (1974). *Schooling, Experience and Earnings*. New York: Columbia University Press, 1974.

Mincer, J. and Ofek, H. (1982). Interrupted work careers: Depreciation and restoration of human capital, *Journal of Human Resources*, 3-24.

OECD (2011). *OECD Employment Outlook*. OECD Publishing.

OECD (2014). *OECD Employment Outlook*. OECD Publishing.

Oesch, D. and Menés, J. R. (2011). Upgrading or polarization? Occupational change in Britain, Germany, Spain and Switzerland, 1990–2008, *Socio-Economic Review*, **9**(3), 503-531.

Piore, M. J. (1975). "Notes for theory labor market stratification". In Edwards, R. C., Reich, M. and Gordon, D. M. (Eds.) *Labor Market Segmentation*. D. C. Heath.

Polavieja, J. (2005). Flexibility or polarization? Temporary employment and job tasks in Spain, *Socio-Economic Review*, **3**(2), 233-258.

Reyneri, E. (2003). Immigration and the underground economy in new receiving South European countries: manifold negative effects, manifold deep-rooted causes, *International Review of Sociology/Revue Internationale de Sociologie*, **13**(1), 117-143.

Ribas-Mateos, N. (2004). How can we understand immigration in Southern Europe? *Journal of Ethnic and Migration Studies*, **30**(6), 1045-1063.

Rumberger, R. W. and Carnoy, M. (1980). Segmentation in the US labour market: its effects on the mobility and earnings of whites and blacks, *Cambridge Journal of Economics*, **4**(2), 117-132.

Sicherman, N. and Galor, O. (1990). A theory of career mobility, *Journal of Political Economy*, **98**(1), 169-192.

Singelmann, J. (1978). *From Agriculture to Services: the Transformation of Industrial Employment*. Beverly Hills: Sage.

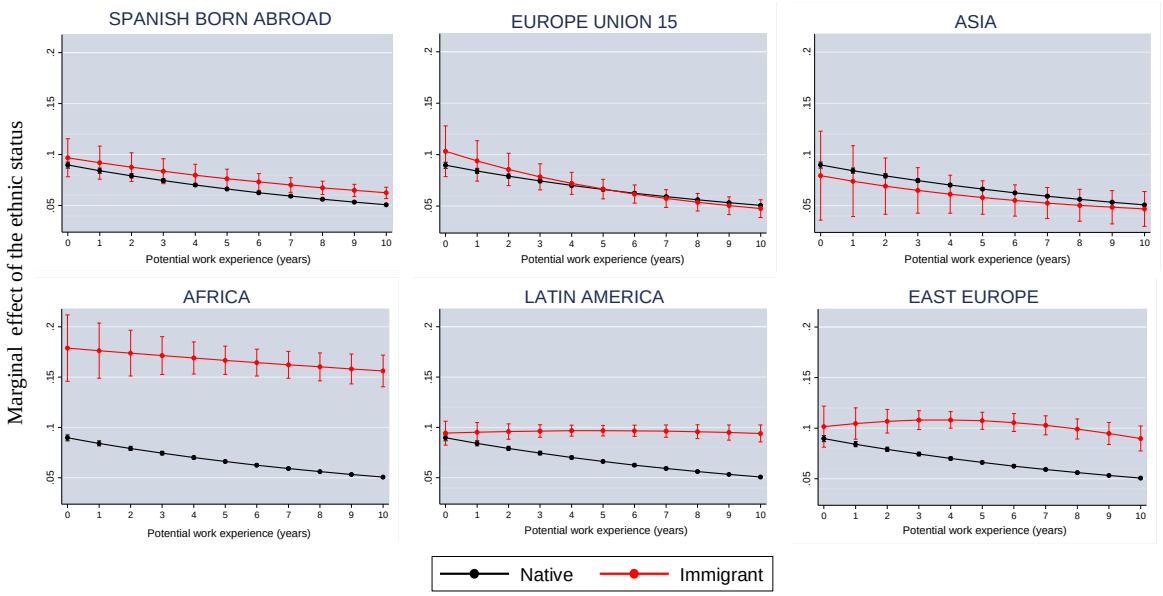
Sloane, P. J., Battu, H. and Seaman, P. T. (1999). Overeducation, undereducation and the British labour market, *Applied Economics*, **31**(11), 1437-1453.

Thurow, L. C. (1975). *Generating inequality*. New York: Basic Books.

Williams, L. and Rubin, B. (2003). Integrating economic dualism and labor market segmentation: the effects of race, gender and structural location on earnings, 1974-2000, *The Sociological Quarterly*, **44**(3), 405-432.

APPENDIX

Figure A1. Margins after a logistic regression on the probability of becoming unemployed a quarter later. Interaction between ethnicity and potential work experience separately by place of birth. Male and female workers (16-64 years old)



Source: Author's calculations based on the SLFS (I/2008-IV/2010).

Table A1. Descriptive statistics (percentages or means) for all variables used in multivariate analysis

	Natives	Abroad	EU15	LatAme	EastEur	Africa	Asia
PWE (mean)	21.6	20.2	11.1	5.5	5.4	8.1	8.2
Education							
Primary or less	15.4	12.2	10.9	21.6	11.3	48.9	38.1
Lower Secondary	26.4	19.6	13.8	21.8	15.9	19.4	23.4
Upper Secondary	32.8	41.1	34.2	43.7	58.5	24.3	24.0
Tertiary	25.5	26.9	41.2	12.9	14.4	7.5	14.5
Education in Spain	-	58.6	23.6	9.1	7.9	13.4	12.3
Studying	2.8	3.1	1.9	1.8	1.1	0.8	2.0
Age (mean)	41.5	40.8	40.8	35.7	35.5	34.9	36.9
Women	43.0	49.6	40.5	56.4	50.1	22.3	34.6
Household							
One-person	9.5	9.3	11.4	8.4	7.0	10.0	10.5
Married/partner	81.9	79.4	79.3	74.4	83.7	67.9	80.1
Children<16	38.8	51.8	47.2	54.4	48.7	55.2	55.6
Region in Spain							
Low unemployment	17.3	13.5	13.1	15.3	20.8	11.5	14.8
Mid unemployment	47.3	52.8	52.9	52.1	47.3	51.8	54.6
High unemployment	35.5	33.7	34.0	32.6	31.9	36.7	30.6
Fixed-term contract	18.0	20.0	19.5	41.1	42.2	47.7	26.0
Part-time work	11.0	14.2	15.1	18.2	16.1	10.2	13.0
Job tenure (mean)	11.1	7.8	5.7	2.1	2.0	2.9	3.8
Occupational class							
Higher service	9.4	10.3	19.9	2.4	1.1	1.3	3.8
Lower service	14.8	12.0	13.7	2.7	2.1	1.4	2.0
Routine non-manual	19.5	18.2	16.2	10.5	5.5	4.6	9.9
Small employers	5.2	4.7	6.5	1.2	1.6	2.2	13.0
Self-employed	9.2	10.1	15.7	4.6	5.1	5.8	20.3
Manual supervisors	1.2	0.9	0.5	0.3	0.6	0.2	0
Skilled manual	12.2	12.6	7.9	15.3	17.2	17.2	17.6
Semi/unskilled manual	24.3	29.2	18.4	58.5	59.7	50.9	30.8
Farm workers	1.8	2.6	1.1	4.4	6.9	15.9	2.6
Farmers	2.5	0.5	0.3	0.1	0.3	0.6	0
Sector of activity							
Primary/industrial	21.0	16.3	14.6	13.1	20.8	32.7	12.7
Construction	9.5	8.1	10.1	15.0	20.4	22.6	4.8
Distributive services	20.4	21.1	19.1	15.3	14.1	13.5	34.2
Producer services	12.8	14.3	20.0	10.0	6.5	8.0	6.5
Public administration	8.9	6.1	1.4	1.2	0.5	1.0	0.2
Social services	16.7	16.0	14.8	5.2	3.3	2.2	3.0
Personal services	10.6	18.2	20.0	40.2	34.6	20.0	38.6
Public sector	20.6	14.4	4.9	1.9	1.1	1.7	2.2
Observations	481,700	14,062	3,722	13,743	7,218	3,528	966

Source: SLFS (I/2008-IV/2010).

Table A2. Robustness test: Logistic regression for panel data (*xtlogit*) on the likelihood of becoming unemployed versus continuing being employed (reference category) a quarter later[1]. Disaggregated by ethnic groups

	Coef.	SE
Native (ref.)		
Latin Americans	–0.356***	(0.09)
Eastern Europeans	–0.562***	(0.14)
Africans	–0.176	(0.15)
PWE (years)	0.001	(0.00)
Latin American*PWE	0.065***	(0.02)
Eastern European*PWE	0.175***	(0.04)
African*PWE	0.093***	(0.03)
PWE^2	–0.0003***	(0.00)
Latin American*PWE^2	–0.001	(0.00)
Eastern European*PWE^2	–0.008**	(0.00)
African*PWE^2	–0.002	(0.00)
Constant		–3.653
Wald χ^2		17,569.97
Log likelihood		–69,585.325
Observations		506,189
Individuals		173,375

[1]Controlled for all socio-demographic and employment factors.
*=10% significance, **= 5% significance***= 1% significance.
Source: Author's calculations based on the SLFS (I/2008-IV/2010).

Table A3. Robustness test: Logistic regression for panel data (*xtlogit*) on the likelihood of becoming unemployed versus continuing being employed (reference category) a quarter later[1]. Disaggregated by place where education was obtained[2]

	Coef.	SE
Native (ref.)		
Immigrant abroad	–0.449***	(0.08)
Immigrant in Spain	–0.175	(0.15)
PWE (years)	–0.020***	(0.00)
Immigrant abroad*PWE	0.096***	(0.02)
Immigrant in Spain*PWE	0.103***	(0.04)
PWE^2	–0.0001	(0.00)
Immigrant abroad*PWE^2	–0.001	(0.00)
Immigrant in Spain*PWE^2	–0.002	(0.00)
Constant		–4.340
Wald χ^2		17,138.81
Log likelihood		–71,102.947
Observations		506,189
Individuals		173,375

[1]Controlled for all socio-demographic and employment factors.
[2]Immigrant categories include Latin Americans, Eastern Europeans and Africans.
*=10% significance, **= 5% significance***= 1% significance.
Source: Author's calculations based on the SLFS (I/2008-IV/2010).