

CHARACTERISTICS OF THE NEW IMMIGRANTS: A RECENT ANALYSIS OF EMPLOYMENT AND EDUCATIONAL MISMATCH¹.

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Abstract

In the last decade Spain has become a host country for immigrants, in convergence with the majority of European Union countries. This phenomenon is having important consequences for the labour market performance, since access to employment plays a key role in the assimilation process of immigrants in the host country. Recent literature on immigration has been primarily focused on analysing the labour-market situation of immigrants in comparison to native workers. In most cases, as these studies point out, immigrant workers experience a more unstable labour situation and/or worse labour conditions when compared to natives.

The present study aims to contribute to the current literature on the labour-market situation of immigrants in the host country. For that purpose, we use a survey of our own elaboration (March 2007) comprising a sample of 900 immigrants representative of the different nationalities and carried out in the Madrid region. The results obtained in our work reveal the existence of important differences between the various immigrant collectives depending on their geographic areas of origin. Furthermore, we also find that, according to other previous works, labour mobility contributes to reduce in a significant way the risk of over-education among immigrants.

JEL Classification: J15, J61, J71

Key Words: Immigrants, job finding, labour mobility, over-education

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1. Introduction

It has been estimated that at the beginning of the 21st century there are more than 16 million foreigners in the European Union (EU). If we examine the case of Spain, we can observe how this country has become in the last decade a receptor country for immigrants in convergence with the majority of EU countries. Although this process has slowed down as a result of the difficult economic times, especially since the second semester of 2007, the number of immigrants continues to increase.

According to the figures of the municipal census (*Padrón*), the number of immigrants in Spain has increased from the 280,000 registered at the beginning of the 90s to two millions in December 2004. The percentage of immigrants in Spain, according to recent works like Fernández and Ortega (2008), has grown from 1.14% in 1996 to 8.98% in 2006.

It is important to note that almost 40% of foreign population register in the Census are in irregular situation. With the implementation of a “regularisation process” in May 2005², the number of immigrants in a regularised situation in our country experienced a significant increase. Thus, according to the *Observatorio Permanente de Inmigración (OPI)*, the number of immigrants with a residence permit or employment authorization in December 2005 amounted to two and half millions, a figure that represents a 38.52% increase in comparison with that of December 2004. This kind of “amnesty” gave rise to some controversy: although some studies like Carrasco et al. (2008) indicate its low effect in the employment probabilities of natives, these results are not wholly exempt from certain polemic.

We are going to focus our attention in the Madrid Region which, together with Catalonia, constitutes the two Spanish regions with the highest number of immigrants. In fact, according to a study of Aguilera (2006), the regions of Catalonia, Madrid, Valencia and Andalusia concentrated more than two thirds of foreigners with valid residence permit or employment authorization at the end of 2005. In addition, the greater increases in the number of immigrants since December 2004 have also taken place. During this period, for example, the Region of Madrid has increased its number of foreigners in 144,585 persons. Choosing Madrid for our study is not a random decision. As many studies have indicated the characteristics of the host region have important effects in the labour market condition face by immigrants.

Understanding the assimilation process of immigrants in the host country, it is important to pay attention to the immigrant labour-market conditions they have to face, as these are the main instrument to enable their integration. The higher or lower probabilities to have access to “regular” jobs depend on diverse factors that allow us to understand the different labour-market situations of various

² Third Transitory Disposition of Royal Decree 2393 of year 2004 for the approval of the regulations of the Foreign Nationals Organic Law 4/2000 concluded the 7th of May 2005.

immigrant collectives. In particular, we will focus our analysis on the labour characteristics of legal immigrants who reside in Madrid, after the regularisation process of 2005. Among these labour characteristics, we will pay particular attention to the factors which determine the probabilities of finding a job, as well as labour mobility and its role in reducing the probabilities of over-education.

For the purpose of the paper, we have developed a survey of our own elaboration (March 2007) which comprises a sample of 900 immigrants representative of the different nationalities. The survey has been carried out in the Region of Madrid and has provided us with recent information about the labour and social situation of the immigrant collective, not offered by the available surveys. In such surveys, we can distinguish between natives and immigrants but not between the different nationalities. This is important because, as we will see below, the labour situation of immigrants differs according to their geographic area of origin. Likewise, this survey provides detailed information about certain issues which differentiate native and immigrants workers, such as the channels for finding a job, most common contractual categories, the transfers of money to the country of origin, etc.

From a labour perspective, the immigrant collectives have often to confront greater obstacles in order to compete in the domestic labour market. These difficulties result in lower probabilities of finding a job and at the same time, a greater mismatch between educational requirements of job and educational attainments of workers.

Leaving aside this difficulties, there are other aspects related to labour instability which reveal the extent to which the situation of the immigrant worker is “different” from that of the native worker. In this respect, the data from the *Anuario de Estadísticas Laborales y Asuntos Sociales 2004* (Labour Statistical and Social Issues Yearbook) show that only 8.95% of the registered contracts of immigrants were permanent, in contrast with a 91.05% of temporary contracts. In fact, the two most widespread types of temporary contract are commonly observed among immigrant collectives. In particular 45.09% of the contracts signed in 2004 by immigrant workers were for “*trabajo o servicio*” (work or service), and 40.96% were temporary contracts for production requirements. This high temporality can be the result of various factors such as: their extensive presence in sectors like construction, catering, cleaning, domestic services and agriculture; their hiring through a temporary job agency; or the lack of homologation of academic diplomas.

The rest of the paper is structured as follows. In section 2 we offer a brief review of the literature. In Section 3 we describe the survey of our own elaboration. Section 4 offers a descriptive analysis of the labour market characteristics of the immigrant workers resident in the Region of Madrid. In section 5 we examine different aspects related to the probability finding a job. We study in Section 6 the determinants of the labour mobility of immigrant and their role in reducing the risks of over-education. Finally Section 7 summarises the main conclusions of our study.

2. Previous Literature.

The literature which has focused on the study of the causes of immigration is pretty extensive. There are numerous papers analysing the different “pushing factors” from the country of origin, and a similar number of works that have examined the “pulling factors” to the host countries. According to the Human Capital Theory, the probabilities to emigrate are greater the higher the expected earnings in the host country, the lower the expected earnings in the country of origin, or the lower the costs of migration. The socio-economic situation and the size of the Welfare State in the host country are also additional factors that “implicitly” increase the actual income of immigrants and, therefore, have a positive effect on the decision to emigrate. An easier access to social programmes (education, health-care, retirement, etc.) as well as employment opportunities can also be considered explanatory factors that account for higher immigration rates. On the other hand, the high poverty and unemployment rates in the country of origin are other factors that contribute to the decision to emigrate. Finally, when taking the decision to emigrate, the costs are significantly lower if there are relatives or acquaintances already living in the host country, so the immigrant can settle in a familiar environment with other members of his/her own culture. As our study suggests, this have played a significant role in explaining the migratory flows to Spain.

The most recent literature has concentrated on analysing either the possible effects of immigration in the host country or the situation of immigrant. In both cases, the studies have primarily focused on labour-market aspects. The recent works of Borjas et al. (2008), which examines the imperfect substitution between immigrant and native workers, and Borjas (2009), which studies the effect of immigration on the wage structure, are examples of the former type of studies. For the Spanish case, we can mention the work of Dolado et al. (2008), which examined the effect of the first migratory flow, and the papers of Amuedo-Dolantes y De la Rica (2007) and Carrasco et al. (2008). More specifically, this last article does not find any significant effect of immigration on neither the probability of finding job nor earnings for native workers.

Regarding the second group of works, we can mention those studies that have emphasised the limited portability of human capital. The literature which has focused on this subject is very extensive. One of the pioneering work is Chiswick (1978) revealing the lower portability of the human capital among the immigrants in the U.S. Later, there have been several works confirming these results for different countries, like Chiswick and Millar (1995) for Australia, Baker and Benjamin (1994) for Canada, Bell (1997) for the United Kingdom, Schmidt (1992), Constant and Massey (2003) for Germany, or Longva and Raaum (2003) for Norway.

For the case of Spain we can pay attention to the work of Fernández and Ortega (2008). Using the data from the Spanish Labour Force Survey, this study shows that immigrants initially experience higher rates of labour participation and unemployment, as well as a greater incidence of over-education and temporality. Five years after their arrival the labour participation and unemployment rates

start to converge with the domestic values. However the incidence of over-education and temporality remains almost constant. This fact is particularly relevant because it indicates a labour-market situation for the immigrant collective less “favourable” than for native workers.

The work of Sancromá et al. (2008) uses information from the Municipal Census (2001), the European Community Household Panel (2000) and the Wage Structure Survey (2002) to analyse the portability of the human capital of immigrants to the Spanish labour market. According to these authors, the phenomenon of over-education shows greater incidence and intensity among immigrants, although certain process of assimilation is also observed.

Using the information of our own survey, we attempt to provide an in-depth analysis of the labour situation of immigrants in the Region of Madrid in 2007. Furthermore we will study the incidence of over-education and its relation with labour mobility and the geographic area of origin of immigrants.

3. Description of the Survey

Between the 1st and 27th of March 2007 we interviewed 900 immigrants in the Region of Madrid³. For the purposes of our study, we consider as immigrants all those persons who do not have the Spanish nationality (we excluded people with double nationality) and also Spanish citizens who were born outside the borders. Likewise, we also excluded all the immigrants from Western countries, including in this category all EU member states.

For the sample selection we made a particular effort to ensure that the immigrants from the most important collectives in the Community of Madrid and, especially, the metropolitan area of Madrid, were duly represented in the sample survey. For this reason we divided the sample according to the nationality of immigrants. We carried out a stratified sampling procedure by country (or region) of origin, using the data from the Municipal Census (*Padrón*). As a result, the total sample was distributed as shown in the Annex 1 (Table 15). The search of the immigrant collectives for the survey was primarily driven in the city of Madrid (92.77% of respondents, compared to the 7.56% coming from other municipalities). The interviews were conducted in two different ways: a high percentage of them on the street, and the rest in the consulates of the different countries in Madrid.

The survey has a classic structure. The first questions deal with the personal and socio-demographic characteristics of the respondents like nationality, gender, civil status, etc. Next the respondents are asked about issues related to their current labour-market situation as well as previous labour experiences⁴. Finally the survey includes a set of questions about money transfers to the countries of origin.

³ The sample for the study was defined as n= 900 individual surveys that gives a theoretical sampling error for the collected data of $\pm 3.33\%$ with a confidence level of 95.5%.

⁴ In the labour-market situation section of the survey, we made questions similar to those included in other secondary sources like the Spanish Labour Force Survey or the European Community Household Panel (ECPH)

To simplify, our analysis and due to the relative small sample size of certain immigrant collectives, we have decided to aggregate the countries of origin in five geographical areas: (1) Non-EU (Romania and other non-EU countries); (2) Africa (Morocco and the rest of African countries); (3) Central America (it includes Central America as well as North America and the Caribbean area); (4) South America (Colombia, Ecuador, Peru and the rest of South American countries); (5) Asia (China and the rest of Asian countries).

4. Descriptive analysis

4.1. Labour Situation

In order to understand the process of assimilation of the immigrant in the Region of Madrid, it is necessary to know their labour conditions. In Table 1 provides detail information on the labour-market situation of immigrants in Madrid, according both to gender and country of origin. The first result worth mentioning is the low percentage of immigrants who are inactive. Retired immigrants and the category “house keeping” exhibit very low percentages (especially in the case of African women, with only a 14.3%). When we look at the different employment categories, we note that the percentage of individuals in the categories of wage-earner and self-employed amounts to 80% of the respondents.

These numbers suggest a relatively favourable situation of immigrants in Madrid in terms of employment opportunities. Similar results are obtained if we look at the data provide by the Spanish Labour Force Survey for the first quarter of 2007⁵. According to this data the percentage of immigrants in an employment situation in Madrid was close to 72%. Despite the greater percentage of employees, the immigrant collective in Madrid experiences a higher risk of unemployment (close to 18%) than native workers (around 6%).

If we look in further detail to the result, we find that the majority of immigrants (between 60% and 70%) are working more than 15 hours per week as Salary Workers. However, there are important differences according to the geographic area of origin. From the data shown in Table 1, we can observe that immigrants from Central America show the lowest percentages in this category (less than 60%) and those from South America exhibit the highest values (more than 70%). However, when we examine the labour situation of men and women separately, we find different patterns. On the one hand, we find that among men the lowest percentage of salary workers with less than 15 hours per week corresponds to immigrants from non-EU countries, while the greatest percentage is found among those from South America. On the other hand, almost 80% of women from Asian work more than 15 hours per week as wage workers, while the percentage among women from Central America is around 50%.

⁵ According to the Spanish Labour Force Survey (first quarter -2007) the percentage of employees in the Community of Madrid with Spanish or double nationality was 57.54%, while the percentages of unemployed and non-active were 6.12% and 39.26% respectively

Table 1 : Labour-Market Situation by Geographic Area of Origin

Total						
	Non-EU Countries	Africa	Central America	South America	Asia	Total
Salary Worker >15h	70,97	66,20	58,93	73,65	71,43	70,89
Self-employed	5,16	4,23	5,36	5,83	14,29	6,22
Family Business >15h	0,00	0,00	0,00	0,22	2,38	0,33
Salary Worker<15h	2,58	2,82	5,36	3,46	0,00	3,00
Unemployed	12,26	10,56	19,64	9,50	2,38	10,11
Student	7,10	11,27	7,14	4,10	5,95	6,11
Home Keeping	1,94	4,93	1,79	2,59	0,00	2,56
Retired	0,00	0,00	0,00	0,22	0,00	0,11
Others	0,00	0,00	1,79	0,43	3,57	0,67
Male						
	Non-EU Countries	Africa	Central America	South America	Asia	Total
Salary Worker>15h	66,15	72,04	72,04	76,24	67,31	72,40
Self-employed	12,31	3,23	3,23	6,63	21,15	8,23
Family Business>15h	0,00	0,00	0,00	0,55	0,00	0,24
Salary Worker<15h	1,54	2,15	2,15	2,21	0,00	1,69
Unemployed	12,31	9,68	9,68	8,84	1,92	8,96
Student	7,69	12,90	12,90	4,42	3,85	7,02
Home Keeping	0,00	0,00	0,00	0,00	0,00	0,00
Retired	0,00	0,00	0,00	0,55	0,00	0,24
Others	0,00	0,00	0,00	0,55	5,77	1,21

Female						
	Non-EU Countries	Africa	Central America	South America	Asia	Total
Salary Worker>15h	74,44	55,10	50,00	71,99	78,13	69,61
Self-employed	0,00	6,12	8,82	5,32	3,13	4,52
Family Business>15h	0,00	0,00	0,00	0,00	6,25	0,41
Salary Worker<15h	3,33	4,08	8,82	4,26	0,00	4,11
Unemployed	12,22	12,24	23,53	9,93	3,13	11,09
Student	6,67	8,16	5,88	3,90	9,38	5,34
Home Keeping	3,33	14,29	2,94	4,26	0,00	4,72
Retired	0,00	0,00	0,00	0,00	0,00	0,00
Others	0,00	0,00	0,00	0,35	0,00	0,21

An overall examination of all the different immigrant collectives does not reveal the existence of important gender differences in terms of unemployment (11% for women, 9% for men). However, differences in unemployment can be appreciated between the different groups of immigrants. The data show that immigrants from Central America show the highest risk of unemployment with more than 20% of them in such situation, and women contributing especially to this high percentage. In contrast, immigrants from Asia register a lowest risk of unemployment (around 2%).

4.2. Type of contract

The type of contract is one of the most important factors determining the quality of employment. As we have previously indicated, the Spanish labour market is characterised by the high rate of temporary contracts, a feature that becomes even more relevant when studying the immigrant collectives. Table 2 shows the most frequent types of contract among the immigrants in the region of Madrid⁶.

First of all, we can point out that both men and women from Central America have the highest percentage of immigrants employed without any sort of written contract (31% in the case of men, 39% in the case of women). In contrast, the immigrant collective from South America shows the lowest propensity of being employed without a written contract, especially in the case of men with only a 12%. Furthermore, this immigrant collective has the highest percentage of permanent contracts (slightly higher in the case of women with, 38.2%, than in the

⁶ An important aspect of our survey is that includes the following types of contract: 1) no-written contract; 2) temporary contract; 3) seasonal contract; 4) [*Contrato de temporada*]; 5) permanent contract; 6) others; and 7) do not know/no reply. This disaggregation is important because the relatively high percentage of no-written contracts among immigrants from certain geographic areas of origin.

case of men, 34.8%). It is interesting to note that for men the seasonal contract seems to be more common than the temporal contract in the case of immigrants from non-EU countries, Africa and Central America (nearly 25% of men from these geographic areas are employed with a seasonal contract, compared to 15% employed with a temporary contract). In contrast, the opposite is observed among South American and Asian immigrants.

Regarding gender differences, not having a written contract appears to be more frequent among women than men, independently the geographic area of origin. The temporary contract is also more frequent among women from all immigrant collectives but from South America, among whom 25% of men have a temporary contract in comparison to 13% of women. It is worth mentioning the high percentage of Asian men who do not respond or do not know the type of contract they have (17.8%). A fact that can be partially explained due to the high percentage of self-employment among this immigrant collective (20% of the total number of respondents from this collective).

Table 2: Type of Contract by Geographic Area of Origin

Type of Contract	Non-EU Countries	Africa	Central America	South America	Asia	Total
No-written Contract	27,05	20,39	35,90	17,49	21,92	20,97
Temporary Contract	19,67	16,50	15,38	17,49	15,07	17,36
Seasonal Contract	16,39	23,30	15,38	11,49	1,37	13,19
<i>Contrato estacional</i>	11,48	6,80	2,56	6,79	16,44	8,33
Permanent Contract	18,03	23,30	23,08	36,81	27,40	30
Others	5,74	2,91	5,13	7,05	6,85	6,11
Do Not Know	0,00	0,97	0,00	0,00	1,37	0,28
No Reply	1,64	5,83	2,56	2,87	9,59	3,75

4.3. Occupation and Sector of Activity

Table 3 compares the percentage of employees by gender and occupation obtained from the Labour Force Survey (first quarter of 2007) and from our own survey.

Table 3: Employed by Gender and Occupation

	Spanish Labour Force Survey 2007 (1 Q)			Own Elaboration Survey (March 2007)		
	Male	Female	Total	Male	Females	Total
Business and Public Adm. Managers	9,00	4,87	7,21	1,18	1,06	1,1
Professionals and Technicians	18,25	23,45	20,5	2,37	0,79	1,5
Supporting Professionals and Technicians	16,51	20,56	18,26	5,03	4,76	4,9
Administrative Assistant	8,43	17,01	12,13	4,44	9,79	7,3
Catering, Personal Services and Retail	10,83	17,77	13,83	28,99	31,75	30,4
Handcrafts, Construction and Mining	17,84	1,81	10,93	24,85	1,85	12,7
Operators	9,26	2,22	6,22	5,03	0,26	2,5
No qualifications	7,83	11,77	9,53	28,11	49,74	39,5

If we compare the information from both data bases, we find the high concentration of immigrants in “catering, personal services, and retail” and “non-qualified” occupations. This tendency of immigrant collectives to be employed in this type of jobs can be clearly observed in Table 4.

Table 4: Occupation by Geographic Area of Origin

Main Employment	Europa NC	Africa	Am.Central	Sudamerica	Asia	Total
Business and Public Adm. Managers	0,83	0,00	0,00	1,31	2,70	1,12
Professionals and Technicians	0,83	1,94	2,63	1,31	2,70	1,54
Supporting Prof. and Tech.	0,83	0,97	7,89	7,61	1,35	4,89
Administrative Assistant	4,17	6,80	2,63	9,45	4,05	7,26
Catering, Personal Serv. And Retail	25,83	23,30	39,47	28,08	55,41	30,45
Handcrafts, Construction and Mining	15,83	21,36	13,16	11,55	1,35	12,71
Operators	2,50	3,88	0,00	2,89	0,00	2,51
No qualifications	49,17	41,75	34,21	37,80	32,43	39,53

Approximately 70% of the immigrants employed in the region of Madrid are concentrated in these occupational categories (30.4% in “catering, personal services and retail” and 39.5% in “non-qualified” occupations). We can perceive, however, clear signs of labour segregation between men and women. The

percentage of men in non-qualified employment is 28%, while for women this figure rises to almost 50%. In contrast, we find a high concentration of male immigrants employed in “handcrafts, construction and mining” (24.9% in comparison to 1.9% for women in this type of employments). If we focus on the different immigrant collectives, according to their geographic area of origin, the most significant finding is the high concentration of Asian immigrants, close to 55%, in “catering, personal services, and retail”. This percentage rises to 63% in the case of men. Finally we find that immigrants from non-EU countries tend to be concentrated more frequently in “non-qualified” occupation, especially in the case of women for whom the percentage rises to almost 60%.

Regarding the sector of activity, the most relevant conclusion is the absence of significant differences in relation to the geographic area of origin. Since the study is based on the Region of Madrid, it is not surprising to find more than 80% of employment concentrated in the service sector (reaching 90% in the case of women), followed far behind by the construction sector⁷.

4.4. Labour conditions

We will first concentrate on the incidence of part time employment among immigrants. Table 5 compares the Spanish Labour Force data with data obtained from our own survey.

<i>Table 5: Part-Time Employment</i>		
	Spanish Labour Force Survey 2007 (1 Q)	Own Elaboration Survey (March 2007)
Total	11,24	14,6
Male	4,46	8,7
Female	20,18	19,9

We find a similar percentage of women working part time. The most significant difference can be appreciated in the case of men. Part-time employment appears to be more common among male immigrants in comparison to native male workers. Likewise, we can observe in Table 6 that the Central American immigrant collective shows a higher percentage of part time employment (above 20%) and it is the only collective among which this percentage is greater for men than for women. By contrast, Asian immigrants show lower percentages of part-time employment (especially in the case of men, for whom part-time employment represents only 6.7% of the total employment). Finally, it is worth noting that the greatest difference in terms of gender in relation to part-time employment is found

⁷ Incidentally, the percentage of Asian immigrants employed in the construction sector is 0%.

among South American immigrants. For this collective we find that more than 20% of women are working part-time in comparison to 8% of men.

Table 6: Part-Time Employment by Geographic Area of Origin

	Part Time Average	Part Time Average Male	Part Time Average Female
Non-EU countries	12,40	7,69	15,94
Africa	11,65	8,45	18,75
Central Amer.	23,08	25,00	21,74
South America	16,54	7,95	22,17
Asia	8,22	6,67	10,71
Total	14,64	8,66	19,90

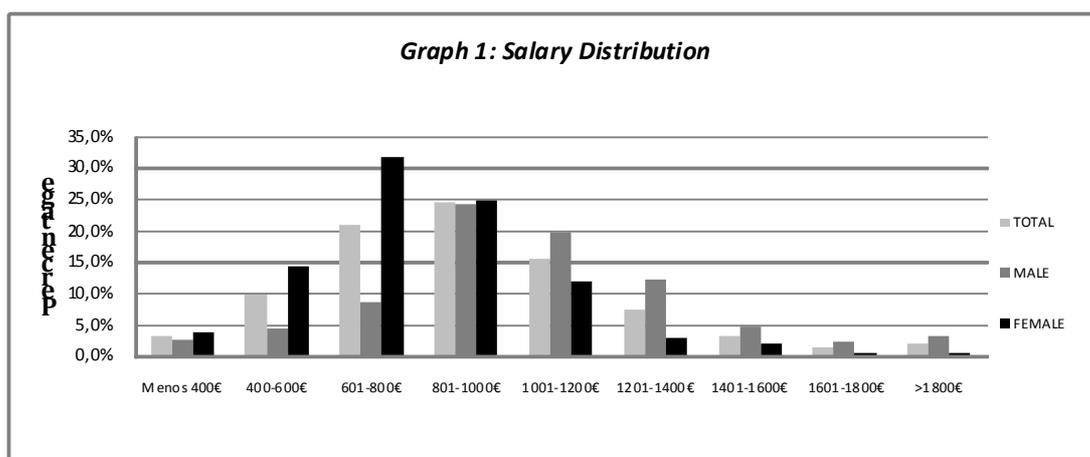
The high incidence of part-time employment observed in the data has to be considered alongside the fact that a significant number of immigrants have multiple employments. The data of the survey indicate that nearly 14% of immigrants in Madrid Region have two or more jobs. This distribution, however, is not homogeneous, with women having a greater tendency to be multi-employed than men. The most significant differences in terms of gender is found among the Asian immigrant collective (more than 18% of women in this collective have more than one part-time employment in comparison to 4% of men) and South American (with 21% of women and 10% of men having more than one employment).

4.5. Wage characteristics

Salary earnings play an important role in determining the labour market condition. This is particularly relevant in the case of immigrants because, as many studies have pointed out, the wage structure is often characterised by discrimination.

In Graph 1 we can observe the wage distribution for the immigrants in the Madrid Region. The figure illustrates the wage differences between male and female immigrants. We find that a high percentage of female immigrants (close to 75%) are concentrated in the lowest segments of the distribution (especially between 601-800 €). Meanwhile among male immigrants this percentage is only 40%. In contrast men have a greater presence in the highest segments of the salary distribution. We find that 12% of male immigrants working in Madrid have a salary in their main employment between 1200-1400 € per month (for females the percentage is just 2%)⁸.

⁸ We also have to indicate that more than 10% of the respondents currently working did not know or did not want to disclose their wage earnings.



A relevant aspect in relation to wage earnings is that part of them can be perceived as “undeclared income”. Our data reveal that more than 25% of the total number of immigrants in Madrid received part of their monthly wage as “undeclared income” (this percentage is slightly higher in the case of women, with the exception of African women). Immigrants from non-EU countries show the highest propensity to receive part of their wage earnings as “undeclared income” (close to 30%). It is also interesting to note that the most significant gender differences take place among the Asian immigrants (25% for women, 7% for men). Having “undeclared income” is closely linked to the no-written contract modality. In this respect, more than 80% of female immigrants employed with this type of contract receive part of their salary as “undeclared income”. It is also important the percentage of immigrants with permanent contracts receiving “undeclared income” (close to 15%).

5. Search and probability of finding a job

All the previous information has allowed us to understand the actual labour market conditions experienced by the immigrants in the Madrid Region. However, for a better understanding it is essential to analyse both, the job search process and the actual probabilities of finding a job. The previous descriptive analysis indicates the existence of importance differences between the various immigrant collectives. However these differences can be due to other factors apart from the geographic area of origin. Thus we proceeded to estimate a probit model which, in addition to the geographic area of origin, also includes other relevant characteristics in explaining the probabilities of finding a job.

5.1. Job search

According to our results obtained from our survey, relatives or friends/acquaintances, either Spanish or not, are the main channels to access employment for immigrants in Madrid Region. As it can be observed in Table 7, more than 75% of immigrants have found a job through one of these channels.

Table 7: Channels for Current Main Employment Access

	Non-EU countries	Africa	Central America	South America	Asia
Relatives	25,44%	21,78%	25,64%	16,49%	52,78%
Non Spanish Friends/Acquaintances	41,23%	49,50%	38,46%	44,86%	26,39%
Spanish Friends/Acquaintances	16,67%	14,85%	10,26%	10,27%	2,78%
Immigrants Associations	2,63%	1,98%	0,00%	0,81%	0,00%
Embassy / Consulate	0,00%	0,00%	0,00%	0,81%	2,78%
Spanish Job Agency	2,63%	1,98%	5,13%	5,41%	6,94%
Newspaper Ad	2,63%	2,97%	7,69%	7,30%	5,56%
NGO	0,88%	1,98%	0,00%	0,27%	0,00%
National Employment Office (INEM)	0,00%	0,00%	0,00%	1,08%	0,00%
Going directly to Employer	4,39%	1,98%	5,13%	4,86%	1,39%
Contract in Country of Origin	0,00%	0,00%	0,00%	1,08%	0,00%
Other Channels	3,51%	2,97%	7,69%	6,76%	1,39%

Focusing now on these three channels to access employment, we find differences depending on the geographic area. For all immigrant collectives, with the exception of Asian, “non Spanish friends/acquaintances” represent the main channel to employment access, especially in the case of men. Around half of the male immigrants from non-EU countries, Africa, Central and South America found current employment through this channel. Among the Asian immigrants “relatives” represent the main channel of access to employment, especially among women, with 60% of them accessing employment through this channel. “Spanish friends/acquaintances” is, however, a less common channel among Asian immigrants in comparison to other immigrant collectives.

In Table 8 we show the percentage of immigrants who are currently seeking a job either because they are not employed (like in the case of those immigrants who are unemployed), want to find a new job, or even, wish to earn higher wages. The highest percentage corresponds to immigrant workers who are not currently looking for a job because they already have one (around 64%). It is really significant that 16.1% of workers are searching a job despite of being all ready employed. This suggests they are either not satisfied with their job, or that they need an additional source of income, probably because their wage earnings are not enough to cover their necessities.

Some gender differences are worth noticed. The number of women working more than 15 hours per week and searching for a job is higher than for men. From this we can deduce that female immigrants are in a worse situation than men in terms of job satisfaction.

Table 8: Seeking a Job

	Total	Male	Female
Yes, but works >15 hours pw	14,11	11,86	16,02
Yes, but works <15 hours pw	2,00	1,69	2,26
Yes, because unemployed	10,56	8,72	12,11
No, already works >15 hours pw	61,11	67,31	55,85
No, already works <15 hours pw	2,89	2,42	3,29
No, even if unemployed	8,22	7,51	8,83
No reply	1,11	0,48	1,64

A geographic analysis shows that the immigrants from non-EU countries are the most active workers in terms of job search. As it can be observed in Table 9 the percentage reaches 22.58%.

Table 9: Job Seeking by Geographic Area of Origin

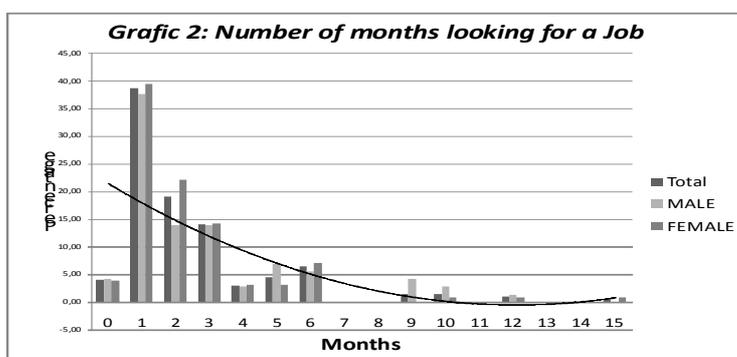
	No-EU countries	Africa	Central America	South America	Asia
Yes, but works >15 hours pw	22,58	7,04	21,43	13,61	8,33
Yes, but works < 15 hours pw	1,29	3,52	1,79	2,16	0,00
Yes, because unemployed	10,97	11,27	21,43	10,15	3,57
No, already works >15 hours pw	52,26	60,56	46,43	62,63	79,76
No, already works <15 hours pw	2,58	1,41	1,79	3,46	3,57
No, even if unemployed	9,03	15,49	7,14	6,70	3,57
No reply	1,29	0,70	0,00	1,30	1,19

Table 10: Expectations of Finding a Job Next 12 Months

	Total	Male	Female
Very Good	13,93	15,07	13,28
Good	30,85	30,14	31,25
Neither Good nor Bad	51,74	52,05	51,56
Bad	0,00	0,00	0,00
Very Bad	0,00	0,00	0,00
Do Not Know	3,48	2,74	3,91

To complete the analysis of job search, we focus on two aspects. First, the perception that immigrants, currently seeking a job, have about the chances of finding it in the next twelve months. And second, the number of months they have been looking for a job. Regarding the first issue, Table 10 shows that immigrants, who are searching for a job in the Madrid Region, have good expectations about finding one. Approximately half of them have good or very good expectations, and the rest did not have either good or bad expectations about finding a job.

In concern the second issue, Graph 2 suggests that immigrants in the Madrid Region do not experience long periods of job seeking. Almost all immigrants who are looking for a job, have spent 6 months or less in this search process. While this aspect may appear to be positive, it can also indicate that these workers are willing to accept jobs which are below their qualifications, only to prevent falling into long-term unemployment.



5.2. Employment Probabilities

To analyse the determinants of employment probabilities for immigrants in Madrid Region, we estimate a probit model. The dependent variable is a dichotomic variable that takes value 1 if the immigrant is employed, either as salary worker, self-employed or in family business, and value 0 if unemployed, non-active, studying, or house-keeping. As explanatory variables we have included the following: geographic area of origin, gender, presence of children, age, educational level, type of permit, knowledge of Spanish language, years since arrival to Spain, and previous unemployment episodes. The data shown in Table 11 reveal significant differences between the diverse immigrant collectives in terms of employment opportunities. We can observe, for example, that an individual who only differs to the reference in that his/her place of origin is Asia

instead of Africa has a probability of finding a job 13.2% higher. For the case of immigrants from non-EU countries and South America, this probability is 7.9% and 8.8% higher respectively, while there are no significant differences between African and Central American immigrants.

As indicated in the descriptive analysis of section 4, the gender differences are relevant. Female immigrants face greater difficulties in finding a job. In addition, having a residence permit and employment authorization significantly increases the employment probabilities in comparison with other types of permits.

Table 11: Probit Model for Job Finding Probabilities

	Marginal Effects (Elasticities)	T
<i>Geographic Area of Origin</i>		
Non-EU country	0,079	2,46
Africa		
Central America	0,044	0,95
South America	0,088	2,26
Asia	0,132	5,09
<i>Type of Permit</i>		
Residence	-0,227	-4,32
Residence and Work		
Studies	-0,505	-4,62
Refugee or Asylum Seeker	-0,023	-0,14
None	-0,172	-3,39
Female	-0,048	-1,87
One or More Children	-0,033	-1,09
<i>Age</i>		
16-24 years		
25-34 years	0,178	5,82
> 35 years	0,132	4,23
<i>Educational Level</i>		
Primary		

Secondary	-0,014	-0,44
Higher Education	-0,017	-0,41
Poor Proficiency in Spanish	0,011	0,27
Years since arrival to Spain	0,005	1,33
Unemployed more than once	-0,171	-4,68
N		892
Log likelihood		-349

The profile of the immigrant in the Region of Madrid tends to be that of a young person. More specifically, over 65% of the immigrants in our survey are below 25 years of age and only less than 9% have more than 45 years of age. If we take as reference the group of younger immigrants (from 16 to 24 years of age), the results in Table 11 reveal that both immigrants from the 25 to 34 years old age group and from more than 35 years age group have greater probabilities of employment. However, the best employment opportunities appear to be concentrated in the immigrant group between 25 and 34 years of age which has a probability of being employed 17.8% higher than the 16-25 years of age group.

Finally, it is important to mention that, in contrast with the usual result that gives higher employment probabilities to the individual with a higher educational level, it cannot be appreciated in the case of immigrants the existence of a positive effect of education on the employment opportunities, a fact that indicates the reduced mobility of the human capital in this workers collective. As shown in Table 11, there are no significant differences in terms of employment between immigrants with primary, secondary or tertiary studies.

6. Educational mismatch and labour mobility.

As the data in Table 12 evidence, the problem of over-education appears to have a special relevance for the immigrant collective in the Region of Madrid⁹. In average terms, more than 55% of immigrants have enough education and training to do more qualified jobs. We can perceive, however, important differences in terms of gender and geographic area of origin. First, we find that for all collectives women have the higher risk of over-education. It is interesting to note the case of African women who, by far, have the lowest risk of over-education, a fact which is directly related to having the lowest average education of all the collectives. In contrast, the incidence of over-education is greater among South American immigrants, reaching 60%. These results are in line with other previous works like Fernandez y Ortega (2008) that quantified the phenomenon of over-education to be around 39% for immigrants, with a greater incidence among women than men.

⁹ We define over-education comparing the educational level attained by each worker with the average number of years of education for each employment category

Table 12: Over-Educated by Geographic Area of Origin

	Total	Male	Female
Non-EU countries	54,84	52,31	56,67
Africa	35,21	34,41	36,73
Central America	55,36	54,55	55,88
South America	63,85	61,67	65,25
Asia	50,60	48,08	54,84
Total	56,01	51,94	59,47

Apart from the geographic area of origin, there are other several factors which can affect the probabilities of over-education in the immigrant collective. Among them, one of the most examined in the current literature is the labour mobility. As indicated by previous works (Sicherman and Galor, 1990; Sicherman, 1991; Alba, 1993; Alba y Blazquez, 2004), if over education is a phenomenon of temporal character, it can be expected that, after some time, the workers may eventually be able to gain access to employment in accordance with their qualification level. In this respect, labour mobility can help to attain a better adjustment between the educational achievements of a worker and the requirements of a job position.

In our case, we will measure the labour mobility by looking to the number of employments held by an immigrant worker and then examine the effects on the probability of being actually in a situation of over-education. We identified if an individual is over-educated from the information provided by the respondents to the question “Do you consider that you have enough education or training to perform a job with greater qualifications than the one your currently have (main job)?”.

However, in order to prevent the number of employments to be a endogenous variable when determining the probability of over-education, we proceed to estimate a bivariate probit model with a first equation in which we estimate the probability of having had two or more employments and a second equation in which we estimate the probability of being over-educated in current employment. The results of our estimations are shown in Table 13.

Table 13: Educational Mismatch and Labour Mobility: Bivariate Probit Model

Eq(1): Probability of having had two or more employments

	Coef	t
<i>Geographic Area of Origin</i>		
Non-EU countries	0,025	0,17
Africa		
Central America	-0,070	-0,33
South America	0,400	2,93
Asia	-0,401	-2,17
<i>Type of Permit</i>		
Residence	-0,422	-4,13
<i>Residence and Work</i>		
Studies	-0,398	-2,99
Refugee or Asylum Seeker	0,110	0,78
None	-0,310	-3,10
Female	-0,015	-0,16
One or more Children	-0,147	-2,38
<i>Age</i>		
16-24 years		
25-34 years	0,632	5,55
>=35 years	0,559	4,51
<i>Educational Level</i>		
Primary		
Secondary	0,158	1,49
Higher Education	0,142	1,12
Poor Proficiency in Spanish	-0,101	-1,07
Years since arrival to Spain	0,052	4,65
Constant	-0,615	-3,51

Eq(2): Probability of being Over-Educated

Geographic Area of Origin

No-EU country	0,120	0,85
Africa		
Central America	0,095	0,46
South America	0,522	4,04
Asia	-0,212	-1,23
Female	0,040	0,44
<i>Age</i>		
16-24 years		
25-34 years	0,330	2,93
>=35 years	0,296	2,45
<i>Educational Level</i>		
Primary		
Secondary	0,488	4,65
Higher Education	0,891	6,95
Training at Employment	-0,055	-0,80
<i>Type of Contract</i>		
No written contract		
Temporary Contract	0,279	3,02
Seasonal Contract	0,461	5,08
Contrato estacional	0,645	5,25
Permanent Contract	0,416	4,59
Other	0,100	0,67
<i>Activity Sector</i>		
Industrial		
Construction	0,986	6,37
Services	1,131	9,24
No. of Employments>=2	-1,357	-18,62
Constant	-1,230	-7,02

First of all, it is important to note the existence of some differences among the immigrant collectives in relation to labour mobility. Taking African immigrants

as the reference group, our results show that South American immigrants have the higher labour mobility, while Asian immigrants the lowest.

If we analyse other factors, we can observe that gender is not a determinant factor in terms of labour mobility, although having children has the effect of reducing the mobility of workers. Both age and time in Spain clearly increase the probability of changing employment. The educational level increases labour mobility, revealing the existence of a mismatch between qualification and employment.

Furthermore, South American immigrants have a greater risk of over-education than African immigrants. According to most works in current literature, we find a higher risk of over-education in the immigrants who have higher education levels. To have a contract also appears to increase the educational mismatch and suggests that the individuals with lower qualifications have the worse contractual conditions.

In conclusion, then, we can indicate that labour mobility appears to reduce the risk of over-education among the immigrants in the Region of Madrid. Table 14 shows the estimated probabilities by geographic area of origin. In general terms, as it can be observed, nearly 45% of immigrants who have had two or more employments are now in a situation of over-education, while this figure rises to 60% for those who have only had one employment. The most important effect of the labour mobility to reduce the risk of over-education appears to be among Asian immigrants: while 60% of Asian immigrants who have only had one employment are over-educated, this figure is dramatically reduced to 25% for those who have had two or more employments.

Table 14: Estimated Probability of Over-Education by Geographic Area of Origin

	No. Employments ≥ 2	No. Employments=1
Non-EU countries	40,15	59,67
Africa	28,94	46,00
Central America	37,00	55,6
South America	52,58	70,93
Asia	25,47	60,00
Total	45,00	61,37

7. Conclusions

Spain is one of the countries where the phenomenon of immigration has been experienced with greater intensity in the last decade. How the migratory flux has changed the behaviour patterns of the Spanish labour market is an essential

element that requires to be studied with further attention and is only now started to be fully understood. With this work we have aimed to cast further light on the labour characteristics of the immigrants who arrived to the Community of Madrid after the “amnesty” approved in the year 2005.

As the obtained data from our own survey show, nearly 80% of the immigrants living in Madrid in 2007 were employed, although their unemployment rate, as indicated by previous works, was higher than for native workers (18% compared to 6%). In the light of these data, the greater differences among immigrants are not related to gender but rather to the type of contracts they have. In this respect, the precarious situation of many immigrants is clearly revealed by the fact that more than 30% of them do not have a formal contract. This percentage is even higher in the case of women.

In relation to the area of employment, the sectors in which this collective is primarily employed, as it could be expected, are services and construction and in job positions that require low or no qualifications.

In this work we have placed special emphasis in understanding the patterns of employment finding of immigrants and how the labour mobility affected the high rates of over-education observed in our survey (close to 60%).

From our work, it can be concluded that employment seeking is primarily done through relatives and non-Spanish acquaintances and friends, a fact that, as already pointed out in the Introduction, is one of the main attraction factors of the migratory flux. Among the factors that made up for a successful employment access, we find gender (there is a clear segregation that makes easier for men to find employment), the geographic area of origin, age, and the arrival date to Spain. This last factor can be explained by the fact that it results in a better assimilation and integration in the region of Madrid which, in the long term, facilitates the eventual success in finding employment.

In relation to labour mobility, we have observed how immigrants in the Madrid Region have a different behaviour patterns depending their geographic area of origin (South American immigrants have a greater propensity), age (the greater the age range, the higher the labour rotation) and the fact of having children or not.

The aim of our study was not only to focus on labour mobility *per se*, but also examine how it can contribute to reduce the risk of over-education observable in the immigrant collective in Madrid. From the obtained results, we can clearly perceive how labour rotation can contribute positively to the assimilation process of immigrants in the host country because, as the individual has more employments, there is a greater educational adjustment. There are, of course, other factors which can reduce the risk of over-education like, for example, the type of contract (to have a contract as opposed to not having one) or the greater or lesser educational level. Even so, a particular emphasis should be placed in the role of labour mobility for the reduction of the existing mismatch between educational level and employment.

Annex 1

Table 1: Distribution of Respondents by Nationality

Nationality	Number of Respondents
Ecuador	229
Morocco	120
Romania ¹⁰	97
Colombia	97
Peru	70
China	49
Asia y Pacific Region excluding China	32
Africa excluding Morocco	28
North America, Central America and Caribbean Region	54
South America excluding Colombia, Ecuador and Peru	69
No-EU Region excluding Romania	55
Total	900

¹⁰ At the time of conducting the survey, the Romanian immigrant collective was not included as an EU member.

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