TESTING DISCRIMINATION IN THE LABOR MARKET:
THE CASE OF SECOND-GENERATION LATIN AMERICAN IMMIGRANTS IN BARCELONA, MADRID, AND VALENCIA

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## Content

List of Tables ........................................................................................................................................ iii
List of Figures ........................................................................................................................................ iii
List of Appendices ................................................................................................................................. iii
List of Acronyms .................................................................................................................................... iv
Acknowledgments .................................................................................................................................... v
Abstract .................................................................................................................................................. v
Relevance to Development Studies ......................................................................................................... v
Keywords .................................................................................................................................................. v

### Chapter 1: Introduction

1.1 Labour outcomes of immigrants in Spain ......................................................................................... 1

### Chapter 2: Migration Background in Spain

2.1 Migration evolution in Spain ............................................................................................................... 5
2.2 Spanish labour market and immigration policy .................................................................................. 7

### Chapter 3: Conceptual Framework

3.1 Types of discrimination in the labour market .................................................................................. 9
3.2 Measuring the labour market discrimination ..................................................................................... 10

### Chapter 4: Literature Review

4.1 Labour outcomes of immigrants in Spain ......................................................................................... 11
4.2 Second-generation immigrants and labour market outcomes in Europe ....................................... 14
4.2.1 Labour market outcomes of second-generation immigrants using survey datasets ................ 14
4.2.2 Labour market outcomes of second-generation immigrants using experiments ....................... 15

### Chapter 5: Methodology and Hypotheses

5.1 Experiment design and sample .......................................................................................................... 17
5.2 Curriculum vitae construction .......................................................................................................... 18
5.3 Treatment randomization .................................................................................................................. 19
5.4 Jobs vacancies applications and measurement of call-backs ............................................................ 19
5.5 Sampling ........................................................................................................................................ 20
5.6 Research question ............................................................................................................................. 20

### Chapter 6: Empirical Results

6.1 Descriptive statistics ......................................................................................................................... 21
6.2 Econometric model ........................................................................................................................... 22
6.3 Empirical results ............................................................................................................................... 23
6.3.1 Discrimination: General results .................................................................................................... 23
6.3.2 Discrimination by occupational category .................................................................................... 25
6.3.3 Discrimination by sex .......................................................... 26
6.3.4 Discrimination by level of study ........................................... 27
6.3.5 Discrimination by city .......................................................... 29
6.4 Research limitations and ethical issues .................................... 30
Chapter 7: Discussion and conclusion ........................................ 30
Appendices .................................................................................. 33
References .................................................................................. 35
List of Tables

Table 1 Descriptive statistics (positive call-backs).................................................................21
Table 2 Main results, probability of call-back: marginal effects ........................................24
Table 3 Probability of call-back by occupational category: marginal effects ..................25
Table 4 Probability of call-back by sex: marginal effects ..................................................27
Table 5 Probability of call-back by level of study: marginal effects ................................28
Table 6 Probability of call-back by city: marginal effects ..................................................29

List of Figures

Figure 1 Europe: International immigrants as percentage of total population .................. 5
Figure 2 Spain: Foreigners with register certificate or valid residency card ......................6
Figure 3 Spain: Percentage of change of the registered unemployment by continent of origin 8

List of Appendices

Appendix 1 Randomization and resumé combinations ..................................................33
Appendix 2 Number of observations for resumé format ..............................................33
Appendix 3 Detailed descriptive statistics ........................................................................34

List of Acronyms

EU – European Union
USA – United States of America
CV – Curriculum vitae
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Abstract

The immigration is a relatively recent phenomenon in Spain that has been increasing significantly in the last decades, mainly for people coming from Latin America and Morocco. This tendency has led to the formation of second-generation immigrants, raised and educated in the host country and willing to participate in the labour market under similar conditions as their native peers. However, this might not occur, since Spanish society tend to have rough attitudes and strong stereotypes against foreigners, which is reflected in the lower employment rate of the minorities.

In this context, the present investigation analyze if there is a discrimination in the hiring process against Latino and Morocco second-generation immigrants in Spain, using a field experiment approach. The data were collected by sending resumés for job openings in Barcelona, Madrid and Valencia, and with the use of a probit model were estimated the probability of having a positive call-back for each minority with respect the Spaniards. In general terms, except for Moroccan males, no evidence of discrimination was found against Latinos and Moroccans second-generation immigrants, which suggest that the integration process in the labour market of these groups has been successful. In the case of Moroccans males, the discrimination prevails although they have local language skills and studied in the host country.

Relevance to Development Studies

The immigration implies economic and social changes to the host country, the better understanding of this phenomena, specifically about the employment opportunities of immigrants and their descendants, requires having extensive research that facilitates the analysis of the situation from different perspectives. Since the lack of integration in the labour market for second-generation have a negative effect in their human and economic development and thus affect the development of the country, the identification of the existence of labour discrimination allow to evaluate the effectiveness of the policies and identify the necessity of modify/create new ones that helps to reach the expected results.

Keywords

Immigration, second-generation, labour market, Latinos, Moroccans, resumé experiment, curriculum vitae
Chapter 1: Introduction

“The only difference between man and man all the world over is one of degree, and not of kind, even as there is between trees of the same species.”

Where in is the cause for anger, envy or discrimination?”

— Mahatma Gandhi

In public discourse it is not uncommon to hear statements such as “black people have more problems to be employed” or that “women are less likely to be hired or to have access to better positions”. These two groups, and as may be the case with other minority groups, may be treated differently or discriminated in the labour market, regardless of their competencies. The existence of discrimination has been questioned for decades, however, finding evidence regarding this topic is not an easy task, in recent years there has been a considerable increase in the amount of research that has tried to test discrimination by using experiments like audits or resumé studies, which is the approach of the present research.

Historically, many European countries, like France, Italy, Germany, have been selected as the preferred destination for a large number of immigrants. This became more evident after the second world war, when people mainly from Africa, Asia, Eastern Europe, and asylum seekers were searching opportunities and new beginnings for their families, a reality that continues till today. However, for Spain, this phenomenon is relatively recent.

One of the biggest concerns about immigration is the opportunities that this population has in the labour market. Do they integrate and how about subsequent generations? The integration of immigrants is likely to directly influence the economic and fiscal behaviour of the country. In addition, the potential impact generated by higher unemployment, such as social disorder and conflict (delinquency, terrorism, manifestations), are of concern. Such consequences have occurred in France, UK and other European countries (Algan et al. 2010). Therefore, to understand the extent of the integration of the immigrants it is not enough to see the first generation, but also to analyze the second-generation of immigrants, which are influenced by both, their place of birth (Spain) and their family background.

The immigration waves that Spain has experienced in the last decades has allowed the formation of the second-generation of immigrants, being raised and educated in the host country, willing to participate in the labor market, and whose success can be considered as a signal of their social and economic integration (Enríquez González. 2019). This second generation tends to experience more pressure, since they are expected to be in a better position and have more opportunities than their predecessors. In addition, this generation might be more confused since they are between the culture of their place of birth and of their parents. For the parents of second-generation immigrants it is important that their children know about their origin country, reflecting their desire to retain some of their original customs in combination with the customs and norms of the host country (Aparicio and Portes 2014). The later is important as second-generation seeks opportunities for its development.

Despite the relevance of immigration in Spain, there is still little empirical evidence that helps to understand how well migrants integrate in the labour market, specifically for the second-generation. Most investigations focus their analysis on the first generation and study mainly the
income that the immigrants might receive, as is the case of Antón, José-Ignacio et al. (2009). This may be because the increase in immigration to Spain is relatively recent. In addition, the lack of accurate statistics about the number of second-generation immigrants, makes the task even more difficult. Since second-generation immigrants acquire Spanish citizenship, especially in the case of Latin-Americans, most statistics related to population or education fail to make a distinction between natives and immigrants (Enríquez González. 2019). Although, some studies have found evidence that second-generation of immigrants have high enrolment rates in the education system, and there is evidence of the economic disadvantage minority groups experience in relation to natives (Aparicio and Portes 2014) even though they speak the language and have been in their host country for a long period.

This research contributes to the limited literature on the labour market experience of second-generation immigrants. It goes beyond the problems that immigrants second-generation may face in terms of access to education, or their personal aspirations regarding employment, economic status, among others, that can be influenced a variety of traits. The paper investigates whether second-generation immigrants with the same education level and experience as natives, experience labour market discrimination. Such discrimination might be one of the reasons why there is still a significant gap among economic outcomes of immigrants’ families as compared to natives.

The drawbacks that second-generation immigrants may face in the labor market can be an indication of inequality of opportunity. On the one hand, it is expected that second-generation immigrants can compete with natives, since they acquire local labour skills, in contrast to the new immigrants that might have less country-specific knowledge than natives. On the other hand, this is also reflected on side of firms, where employers might not have enough information related to the countries background of the first-generation immigrants, thus their abilities and competences to develop the work, however, this should not affect the labour outcomes of second-generations. Nevertheless, there is evidence from studies conducted in several EU countries that do not support these statements. Using different approaches like surveys and censuses (Heath and Cheung. 2007, Silberman et al. 2007, Behrenz et al. 2007, Phalet 2007) or audit experiments (Midtboen 2016, Carlsson 2010) these studies find continued discrimination against second-generation immigrants.

Analysing the job opportunities of second-generation Latinos and Moroccans in Spain is relevant, given the increasing tendency to immigrate to the country. In 2018, Latinos with residence permit in Spain represented around 16.0% of the total and were the third most important group after Europeans and Africans. Similarly, immigrants from Morocco were selected as comparison group given their presence in the country, on their own they account for 14.5% of the total residence permits, this is the country with the largest minority in Spain coming from outside EU (Secretary of State of Migrations, Government of Spain. 2019). Moreover, the data of births classified by the mother and father nationality show that Morocco is the most important origin (besides the European countries), Latin America ranks second ((INE, National Institute of Statistics. 2017).

Analysing job opportunities is also relevant as minorities may face labour market challenges. For instance, the results of different surveys, related to the attitudes toward immigration show that Spaniards have rough attitudes against foreigners in general (CIS, Sociological Research Center. 2015, 2016, Fernandez, et al. 2019). In addition, according to the statistics of unemployment, 27% of the total of foreign unemployed people comes from Morocco, country with the higher percentage, followed by Latinos, accounting around 19% of the total (Ministry of Work, Migration and Social Security, Government of Spain. ca. 2018). These statistics
correspond to first-generation immigrants given the lack of availability of national data about second-generation immigrant, however, the results of the second follow-up survey of the “Investigación Longitudinal sobre la Segunda Generación” (Longitudinal Research on the Second Generation), show that there is a gap between the unemployment rate for natives descendants (14.8%) and the second-generation immigrants (20.8%). Also, those in the minority group tend to occupy lower responsibility positions (have almost half opportunities of getting a professional job than the natives), and take longer to find work (Aparicio Gómez et al. 2018: 9-10, 22-27).

Furthermore, some studies have found that Latinos and Moroccans are disadvantaged in the labour market (Amuedo-Dorantes and De la Rica 2007, Bernardi et al. 2011, De Prada, et al. 1995, Algan et al. 2010, Silberman et al. 2007). Spain may be considered a country with high negative stereotypes mainly for Moroccans (Sadiq and Ennaji 2004: 63); businessman may have preferences to hire people with their same culture rather than foreigners (Pereda, et al. 2000:3).

In this context, the present research paper aims to identify if having a Latin-American background or a Moroccan background versus being a native, influences the labour market opportunities that second-generation immigrants in Spain face. The paper relies on an experimental approach.

The measure of hiring discrimination was assessed using experiments with curriculums vitae (CV), to identify if there is a significant difference in the probability of a positive call-back according to the nationality of the applicant. The challenge in applying the experimental technique to second-generation Latino nationality in the Spanish labor market was to provide a clear distinction among these groups in the resumes, based just on their nationality background, given their similarities. Therefore, the design of the curriculums was the key aspect of the investigation, being necessary that the only distinct characteristics among the job applicants to be their nationality, which is the variable that is being tested.

There is an important number of investigations that confront the difference in the labor market between second-generation immigrants and natives in various countries, their conclusions are in most of the cases similar, finding evidence of discrimination against minorities (Algan et al. 2010, Heath and Cheung. 2007, Behrenz et al. 2007), however, there are some that did not found significant difference among natives and immigrants descendants (Yemane and Fernández-Reino 2019) or have mix results ((Algan et al. 2010). Specifically for Spain, a significant number of researches studied the first generation of immigrants (particularly Latin Americans), focusing on their disadvantages in the labor market regarding the employment status, (Amuedo-Dorantes and De la Rica 2007), the wages (Antón, José Ignacio et al. 2010), quality of jobs (Fernández and Ortega 2008, Bernardi et al. 2011), and presenting evidence that the immigrants level of education, gender and the country of origin (where Latin-Americans, Africans and Asians are particularly disadvantaged) influences their income (Aparicio and Portes 2014:90). For Moroccans, the results tend to be also negative, with less preference than the Spaniards (De Prada, et al. 1995). In this sense, it is interesting to understand if the second-generation of immigrants faces similar discrimination when applying for jobs, which is the motivation to develop the present investigation.

This research confronted the nationality background by analyzing the difference in the call-back on job openings for applicants born in Spain but with different background (Spanish, Latin American and Moroccan), controlling for aspects as the education, CV format, among others, using probit models. If there is a significant preference for hiring Spanish candidates, it would indicate that there are signals of discrimination in the process. On the other hand, if there is no
significant difference in the results it could be interpreted as a more equitable labor market. This paper adds to the literature initial insights on whether Latin American background can influence the labour status of the immigrant’s descendants in Spain, trying to identify if there is evidence of discrimination in the first step of the hiring process.

Before this paper, to the best of my knowledge, there is just one investigation that attempts to analyze Latin American immigrants in Spain using correspondence experiment written by Yemane and Fernández-Reino (2019), focused on the differences in the call-back between Latino immigrants in Spain and in the USA, however, it does not refer directly to second-generation immigrants but to Latinos emigrated at a young age, having a citizenship of the host country (instead of nationality), also called “1.5-generation” Latinos (Gonzales and Chavez 2012) 257. Most literature available related on this topic for Spain focuses on discrimination for different ethnic groups and measuring it in different types of markets like the rental market (Bosch et al. 2010), different types of discrimination like age (Riachand Rich 2007), combining sex and age discrimination (Albert et al. 2011) or using different methodologies like surveys (Antón, José Ignacio et al. 2010). Therefore, the novelty of this research is based on that it provides evidence regarding the discrimination that second-generation Latinos may have using a resume experiment, concentrating on the outcomes on the Spanish labor market, specifically in Barcelona, Madrid, and Valencia, and it adds a third comparison group, the Moroccans second-generation.

This study can be useful to analyse the success of the integration programs and policies for immigrants that Spain has to promote their social and labour integration through the Secretary of State for Migrations, and if there is evidence of discrimination, to evaluate how these programs can be improved or used to reach their objectives of promoting the social insertion of the immigrant population in the country (Secretary of State of Migrations, Government of Spain. 2019). Besides, this paper may be interesting for organizations that fight for the fulfillment of human rights, in this case, related to equality and the right to work.

In general terms, the present research did no find empirical evidence of discrimination in the Spanish labour market against Latinos and Moroccans second-generation (excluding Moroccans males). These results suggest that the integration process of the second-generation Latinos and Moroccans immigrants in the labour market seem to be having success. It is accepted that discrimination cannot be statistically verified, except for Moroccans males, for which the discrimination prevails regardless their language skills and education in the host country.

The structure of the paper is as follows, chapter 2 relates to the migration background in Spain to have a better understanding of the evolution of the immigration and the labor market in the country. Chapter 3 refers to the main concepts involved in the immigration phenomena. In chapter 4 is presented the literature review of the main papers related to the labour market in Spain and the second-generation of immigrants in Europe. Chapter 5 explains the methodology followed in the investigation and the hypotheses tested. Chapter 6 presents and discuss the findings. Finally, chapter 7 concludes.
Chapter 2: Migration Background in Spain

2.1 Migration evolution in Spain

The migration phenomena in EU has evolved through time, at first it consisted mainly of movements within the EU region, thus until the second world war the continent was a net emigrant, however, during the 20th century this pattern started to change, beginning with the process of decolonization in the 50’s – 70’s, followed by a flow of low skilled workers immigration mainly from Africa, Asia and Eastern Europe and asylum seekers in the 70’s-90’s. In the last three decades, Latin Americans joined this wave of migration. This is how Europe became to what is now, a net immigration continent (Migration Data Portal. 2019).

However, not all the EU countries experienced the same migration evolution, in the case of Spain the migrant stock represented just 2.1% of the total of the population in 1990, growing at a moderate pace till 2000 (4.1%) (Migration Data Portal. 2019). Furthermore, in the last decades the immigration to Spain experienced a significant increase, representing 12.8% of the total population in 2017, this implies that in just seven years there were over 4.3 million of immigrants more (see Figure 1), being in majority females (51.4%), with an average age around 39 years old (United Nations, Department of Economic and Social Affairs, Population Division 2017). As a consequence, Spain was positioned as the third country with the largest number of immigrants in 2017, and by January 2018 it has near 20.6% of all non-European Union (EU) living in the EU, interestingly, this tendency is not reflected in the behaviour of the residents permit, since Spain reported a reduction in 2017 compared to 2016 of citizenships granted (European Commission. 2019).

![Figure 1](image_url)

*Figure 1*

*Europe: International immigrants as percentage of total population*

In relation to the origin of the immigrants, according to the statistics of foreigners with register certificate or valid residency card, the composition of the immigration by continent of origin in Spain has changed through the years (Figure 2), for instance, in 2000 the foreign residents...
where mostly from Europe (40%), followed by the Africa (22%) and America (22%), of which the majority where from Latin American (92.4%), and in less proportion where the people from the Asian continent (8%). In 2005 Central America and South America became the main origin of the immigrants with 35.7%, Europe ranked second place with 33.1%, Africa 23.7% and the rest 7.5% from Asia, Oceania, and North America. However, this tendency were reversed and by 2018, Europe was again the main origin of the immigrants in Spain with 55.1%, in contrast, Central America and South America were positioned in third place with 16.2%, after Africa (19.6%) (Secretary of State of Migrations, Government of Spain. 2019).

![Figure 2](Image)

*Figure 2*

**Spain: Foreigners with register certificate or valid residency card**
*(Stock in thousands)*

When analyzing the immigrants by nation, we have that the main countries of origin by continent for 2018 are: Rumania, United Kingdom, Italy, Bulgari, Germany, France, and Portugal, for Europe, representing 79.6% of the total immigrants from Europe. In the case of Africa, most of the immigrants come from Morocco (74.1%), in fact, this is the country with more representation outside the EU (14.5% of the total). Ecuador, Colombia, Bolivia, Dominican Republic, and Peru leads the list of countries from America (54.1%). Finally, from Asia, the Chinese account for almost half of the immigrants (Secretaría de Estado de Migraciones, Gobierno de España (Secretary of State of Migrations, Government of Spain). 2019). The autonomous community with the largest number of immigrants are Cataluña (22.0%), Madrid (16.3%), Andalucía (14.3%) and Valencia (13.3%). Particularly, Latin Americans are located mainly in the provinces of Madrid and Barcelona (42.4%) (Secretary of State of Migrations, Government of Spain. 2019).

These waves of immigrants have had different effects in the population. In this line, some investigations have tried to study the perception that Spanish have about immigrants. For instance, a survey made in 2017 amongst Spanish citizens showed that although around 50% of the Spanish people have positive feelings related to immigrants, the perception of the number of immigrants as excessive or high was about 65.8%, and although the number of Spanish that think that immigrants take jobs from them has decreased, it remains high (53.9%) (Fernandez, et al. 2019: 7,75,112). Following this analysis, Spanish tend to perceive immigrants in a negative way, as more
competition in the labour market and promote more delinquency and insecurity (CIS, Sociological Research Center. 2015).

According to the perception of discrimination survey, the extent of approval that Spanish has if an enterprise hire first a person born in Spain (rather than a foreigner) even if having equal education and experience is high, with 34.2% of the sample that agrees completely and 24.1% agrees to certain extent, furthermore, 78.4% of the interviewed believed that not everyone has the same opportunities to be selected for a job, even if they seem to have similar capabilities, stating that among the reasons for this to happen is being a foreigner (39.8%). Similarly, 72.6% think that not all people have the same opportunities to reach jobs with more responsibilities, being a foreigner influences the lack of opportunities by 31.8%. For 48.7% of the sample, the discrimination by nationality is frequent and it represents the third reason for not getting a job, after age and sex (CIS, Sociological Research Center. 2016: 1,4-6,29).

2.2 Spanish labour market and immigration policy

Most of the immigration policy in Europe has been associated with economic and social situations that prevail in the countries and in the world. For instance, after World War II, there were millions of refugees looking for a place to establish, a lot of them chose Germany as their new home. Likewise, France also received a considerable number of immigrants after Algerian’s independence. Other factor related to the tendency to emigrate is the economic situation, where more growth leads to receiving more immigrants to countries like UK, France, and Germany in the 50s and 60s, in this line, phenomenon like the oil crisis slowed this tendency although in a smaller scale (Algan et al. 2010). In the last decades, immigration has been influenced mainly by the slow economic performance of developing countries, “attracted by the economic opportunities” that the countries of destination may have (Heath and Cheung. 2007: 3). This explains to some extent why in recent decades Spain has shown an important increase in immigrants.

In this context, it is necessary to evaluate the tendency of labour demand in Spain. According to OECD statistics, the foreign-born unemployment rate of Spain was 20.7% in 2018 (of the total foreign-born labour force), positioning as the second country with more unemployed after Greece, the native-born showed an unemployment rate of 14.2% (OECD International Migration Statistics. ca. 2018).

Although there is no available national statistics of unemployment that allows to distinguish the second-generation immigrants or statistics of discrimination, the Ministry of Work, Migration and Social Security of Spain publish statistics of register unemployment by continent and country of origin (see Figure 3), which shows that there was a decrease in the global unemployment in Spain by 4.1% in 2018, mainly due to better outcomes for workers from Africa (-5.8% of unemployment), that contribute with -2.1 percentages points of the total variation, followed by Europe -4.2% (contribution of -1.7 percentages points), and America1, one of the continents with the less favourable results in the unemployment, with a decrease of just 1.9% (-0.4 percentage points of the total). On the other hand, Asia and Oceania presented an increase in unemployment by 0.9% and 3.0% respectively, however, their contribution to the total was near

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1 More than 95% of the countries included are from Latin America.
zero percentages points. (Ministerio de Trabajo, Migraciones y Seguridad Social, Gobierno de España (Ministry of Work, Migration and Social Security, Government of Spain). ca. 2018). These statistics give a general idea about the ethnic stratification that may exist in Spain; however, it has to be analyzed carefully since it does not provide information about equality of skills and opportunities in the labor market.

The labour market in Spain for the immigrants is characterized by the differences in the unemployment rate for immigrants versus natives, and within the immigrants according to their origin, what gets worst considering that the number of immigrants with a working age in Spain is increasing, representing around 10% of the total workforce in 2018 (population with age of 15 years or older) (Ministry of Work, Migration and Social Security, Government of Spain. ca. 2019b).

In this line, the number of working permits provided has shown a steady behavior in recent years, with near 12% of the request having a negative result in 2016 and 2017. Particularly, the denied authorizations from America have shown an increase from 9.2% in 2016 to 10.7% in 2017, being the continent with the greater number of negative responses (41.1% of the total) (Ministry of Work, Migration and Social Security of Spain., which gives measures of what Heath and Cheung (2007) calls “the gross disadvantages” that immigrants face, it can be a sign of deeper implications of their integration in labor force (Heath and Cheung. 2007: 24).

Although these statistics have to be analyzed carefully, since from July 2018 there is no need to be registered in order to have access to the public health system in Spain, this may lead to a decrease in the registration of new immigrants and a under renewal of the existent ones (Enríquez González. 2019: 6).

Concerning the regulation in the labour market, it differs depending on the immigrant origin. The Maastricht Treaty establishes that people from the EU region are free to work in Spain, however, this does not apply for non-European immigrants, who need a work permit to participate legally in the labour market (Ortega Pérez. 2003).
In its beginnings, the labour legislation for immigrants in Spain was influenced by it admission in the European Union in 1986, which required the regulation of non-European citizens to participate in the labour market. Later, in the first law “Ley de Extranjería” or the Law on the Rights and Freedoms of Foreigners in Spain, it was established that immigrants who wanted to work in the country had to have a job offer to apply for a work visa and residency permit. In 1996, an amendment of the law was made focusing on immigrant rights, including the family reunification and permanent resident category, which was reinforced by the addition of the integration aspect in the law 4/2000. Nevertheless, this change did not last long, since it was considered “too permissive” for the European Union standards, which led to a new amendment, the Law 8/2000, focused on the regulation of illegal immigration. In addition to this law, Spain has established bilateral agreements related to the immigration and labour market with Ecuador, Colombia, Morocco, Dominican Republic, Nigeria, Poland, and Romania (Ortega Pérez. 2003).

Chapter 3: Conceptual Framework

This chapter presents the main concepts related to the labour market outcomes, discussing briefly the theoretical models of discrimination and how to measure this phenomenon, to have a better understanding of the relationship with the immigration.

The model of labor-market success states that it is the “human capital or skills” of an individual what matters when looking for a job rather than other personal characteristics as ethnicity or social class, this is supported by the assumption of firms being profit-maximizing, therefore it is expected that individuals (under the same conditions of education and skills) compete and obtain a payment according to their marginal productivity, regardless of their background (Heath and Cheung. 2007).

This condition of a perfect market in the economic theory may not always be fulfilled, hence, the labor opportunities for minorities (as the second-generation immigrants), may vary depending on the differences in culture or the stereotypes that the local society may have regarding their background. In this sense, second-generation immigrants may not have the same chances as the natives of being hired even though they have the same capabilities as their local peers.

However, there is also a possibility that immigrants have other positive characteristics that undermine to some extent their disadvantages, like the ambition and the willingness to have a better life, that can be more marked than in the natives with the same professional formation (Heath and Cheung. 2007). Although it can be less evident in the second-generation immigrants depending on the social and economic conditions of their parents.

In this context, this paper investigates the discrimination in the labour market, which refers to the difference in the treatment received by groups of workers depending on their characteristics, like race, ethnicity, sex, among others, instead of their productivity (Arrow. 1973).

3.1 Types of discrimination in the labour market

There are two main ways to evaluate labour market discrimination. First is the economic model developed by Gary Becker called “taste-based discrimination model”, which in general terms focuses on the preferences of employers (or any other actor) to discriminate against some type of
applicants on the basis of taste, in this case, employers can be even willing to pay to hire their preferred workers, this implies that the “minority workers” may earn less than their native peers, or employers may just decide to not hire workers from certain group (Burstein 1994: 58-59).

The taste discrimination model can be divided into three models: Model (A), “the employer discrimination”, which refers to the unwillingness of employers to hire people with certain characteristics or background, in this case, the cost for hiring an undesired person, for example employing Latinos instead of Spaniards, besides the wage includes a disutility, which reduces their profit. This has implications in the hiring process since employers would like to hire only the Spaniards if the wages that they have to pay are lower than the cost of hiring a Latino (under the assumption that Latinos and Spaniards are perfect substitutes). However, the discrimination may not be so clear to measure, since for instance if the Spaniard’s wages are significantly higher than the wages of Latinos, this gap may be greater than the disutility that employers have when hiring a Latino, thus, the Latinos may be hired but the discrimination prevails (Neumark 2016: 7-8). However, given the nature of the experimental approach taken for the present investigation, it is not possible to evaluate wages differential. Models (B) and (C) are related to the “employee and customer discrimination”, that is when the workers request to earn more or customer to pay less as a reward to be dealing with Latinos (following the example above) (Neumark 2016: 9-10).

The second type of discrimination is the “statistical discrimination”, which consist on making a distinction among job aspirants based on their observable characteristics such as race, age, gender, among others, given the imperfect information regarding the productivity of the workers, these characteristics can be taken as a reference of the expected productivity (Autor. 2009) 19. This theory can be seen as “a model of stereotyping based on assumed group averages” (Neumark 2016: 11).

The data gathered in the present research does not allow to make a distinction of the type of discrimination that might be present in the Spanish labour market, since the call-back of the employers might be related to either, their preference of working with people with certain background, their preconception about the minority groups, or a combination, depending on the gap of wages between natives and immigrants. If there is no wage differential between groups, the discrimination might be based on the stereotypes regarding their productivity.

3.2 Measuring the labour market discrimination

The literature regarding labour market discrimination is extensive and varies according to the type of discrimination to be analyzed. For instance, some studies have tested if there is evidence of discrimination regarding the age (Riach 2015, Baert et al. 2016), sex (Ahmed et al. 2012, Baert 2015, Albert et al. 2011) or even related the type of employment (Baert et al. 2013).

There are different methods to test for discrimination in the labour market, from using surveys to applying experimental approaches. However, the use of surveys to evaluate discrimination outcomes has some additional implications since it may be difficult to control for unobservable characteristics of the job applicants that cannot be addressed by the researcher but that influences the hiring decision, therefore, the results should be taken with caution. These constraints have led to the increasing use of experimental approaches to collect information regarding the labour outcomes of certain groups of population, for example, by submitting fictitious job applications, to measure the difference in the level of the response received according
to the type of discrimination under study, thus if the aim is to evaluate race or national origin discrimination, the most common variables used are different candidate names. The age, gender, marital status, motherhood and religion discrimination is addressed more directly, by including the information in the application process. Similarly, physical appearance discrimination has been addressed by adding a photo in the resumes. To investigate the effect of wealth differences, researchers have utilized the neighbourhood of residence and caste as variables (Baert 2017: 2, 6-10).

Furthermore, several studies have found evidence of discrimination regarding ethnic/nationality background using resumé experiments (measured as the call-back rate). For example, a study made with audits in Great Britain showed that there is a significant difference in the call-backs for job application among ethnic groups, where the ones who have a black Caribbean background were the group that received the lowest call-back rates (5.3%) in comparison to the white British that experienced a rate of 10.7%. Similar results were found in the United States context, where Latinos had fewer call-backs than black job applicants (although is not statistically significant) (Rich 2014: 15-16).

Chapter 4: Literature Review

As stated before, migration has become one of the main topics in Spain given the recent tendency of immigrants, mainly from Europe and Latin America, to choose it as a destination, having implications in the country’s labour market. There is a fair amount of literature that analyses the migration phenomena in Spain, however, the ones dealing specifically with Latinos immigrants employing experiments are scarce, whereas investigations of second-generation immigrants are almost inexistent. As far as our knowledge, only one of them seems to be more related to the impact on the labour market of the “second-generation” Latinos of immigrants (Yemaneand Fernández-Reino 2019), moreover, the field experiments in Spain regarding this topic are still limited.

This chapter presents the literature review of the main investigations related with the labour market and about second-generation immigrants, trying to make emphasis of the Spanish situation regarding Latinos immigrants and the variables that are used in this investigation, presenting the influence that the human capital of the second-generation immigrant, as their education and skills, have on the access and success to employment.

4.1 Labour outcomes of immigrants in Spain

Generally, the analysis of the labour market outcomes of immigrants is made through two main results, their employment status and the wage differences compared to the native population, nevertheless, there is an increasing tendency to explore the quality of jobs that immigrants have access to. In the case of Spain, the empirical evidence suggests that the labour outcomes of the immigrants vary according to their origin, education, gender and period passed since the arrival of the host country.

For instance, a study made with data of the Population Census (year 2001) and Earnings Structure Survey, using probit regressions for more than 100 thousands observations, with
information about working-age immigrants in Spain that have five or less years of residence in the country (these data set allowed to make the analysis by immigrants groups: Europeans, Africans and Latinos; in comparison to Spaniards), found evidence that in general immigrants, man and women, have significantly lower probability to be employed than the natives, by 15.3 percentage points and 4.3 percentage points, accordingly. These results vary when splitting the sample, in the case of the Latinos group, males are 14.6 percentage points less likely to be employed than natives, however, for women the effect is near zero and non-significant. The magnitude of the employment gap for Africans men are smaller, that is, in the order of 8.0 percentage points with respect to natives, whereas African women are 12.9 percentage points less likely to be employed than Spaniards, nevertheless, the negative effect of been Latino or African in the labour outcome seems to vanish as the immigrant has more time living in Spain. (Amuedo-Dorantes and De la Rica 2007: 265, 268-269).

Similarly, Carrasco et al. (2008) employed data sets of the population censuses (1991 and 2001), work permit (1993-1999), Labour Force Survey, and Wage Structure Survey (2002) to construct three different samples ranging from 64 to 128 observations, but instead of testing the probability of being employed, they evaluated the effect that immigration has in the employment and wages of native-born workers using ordinary least squares (OLS). They did not find a significant effect of immigration (legal and illegal) in the employment or wages results for the native Spanish workers, which may imply that immigrants would not be that close substitutes of Spaniards (Carrasco et al. 2008: 640-643).

Antón, José Ignacio et al. (2010) also studied the differentials in wages, however they split the sample to compare Latino and Spaniards based on the Wage Structure Survey 2006, with more than 90 thousands observations, and also used different methodology, the Machado-Mata econometric model, among their main findings are the significant difference in the earnings between Spanish and Latinos, been more evident in the higher levels of wages, from 1.4% in the 90th percentile to 12.3% in the 10th percentile. The results may be consequence of the “limited transferability of human capital accumulated in the country of origin” and the difficulties that Latinos have to reach high labour positions, however, these results are similar to other developing countries, suggesting that speaking Spanish makes no a significant difference in the labour outcomes for low skilled jobs (Antón, José Ignacio et al. 2010: 247, 250). Nonetheless, the evidence for Spain is still scarce to be confident about the effect of immigration in the labour market, besides, the lack of a data set that contains enough information about the time passed for immigrants in the country and wages altogether, makes this type of analysis even more challenging for Spain.

Furthermore, the main issue is not just the unemployment rate of immigrants but the real opportunities that this part of the population has to find a quality job in comparison to their similar qualified native counterparts. In this sense, Fernandez and Ortega (2008) focused their analysis not just on the ability of immigrants to find a job but also on the type of job that they have, employing the Labour Force Survey (1996-2006) with more than 300 thousand observations. The results suggest that in general, the immigrants were around 22 percentages points more likely to be overeducated as compared to the Spanish, immigrants also appear to have more temporarily contracts than natives (27 percentages points). Whereas these differences between immigrants and natives start to converge after five years of arrival, there is a gap between the quality of jobs obtained by immigrants in favour of their counterparts Spaniards. (Fernández and Ortega 2008: 86, 92-93).
In addition to the quality of jobs, Bernardi, Garrido et al. (2011) addressed the immigrant’s situation in Spain by analyzing their risk to be unemployed, using a logistic model and a multinomial logistic model, the later to measure the type of job obtained. The data set employed was the Spanish Labour Force Surveys for the period 2002-2007 (with more than 300 thousand observations). Among the findings are that men (female) immigrants have more risk to be unemployed than the Spaniards when considering only nationalities, being higher for Moroccans and Africans, with 8.0 (22.0) and 9.0 (23.0) percentage points lower probability of being employed than natives, respectively. For Latin American countries (Ecuador, Colombia and another Latin America), the likelihood of employment is between 0.0 to 4.0 (3.0 for females) percentage points inferior to Spaniards.

However, when controlling for other variables like age and education, the magnitude of the effects is significantly reduced, for Moroccans the probability is reduced by 2.0 percentage points for males (8.0 percentage points for females). For Latino males, the odds vary from a positive effect, by 1.0 percentage point, to a negative probability of being employed with respect to Spaniards, 3.0 percentage points, for Latino women all the probabilities are positive from 1.0 to 6.0 percentage points. The reduction of unemployment is even higher when adding time variable, for Latinos, there is almost no difference in the employment odds, for Moroccans the result is 2.0 percentage points less likely to be employed than natives. The later suggests that immigrants that have been more time in Spain are not that disadvantaged compared to the natives. However, immigrants seem to be disadvantaged regarding the quality of jobs they have access to, which is strong and remains regardless of the time of residence of immigrants in the host country, contrary to what is stated by assimilation theory (Bernardi et al. 2011).

In this line, the evidence suggests that immigrants in Spain are disadvantaged when looking for skilled job opportunities, which prevail regardless of the time that the immigrant has been living in the host country, sign that the assimilation hypothesis might not fulfill completely in the Spanish labor market.

The labour outcomes for immigrants can be also influenced by the country where they had the education and experience. The study made by Sanromá et al. (2009), found evidence that having schooling years in the host country and work experience increases significantly the returns for immigrants, they employed Ordinary Least Squares (OLS) models and the National Immigrant Survey (2007), with a size sample near to 5 thousand found that, first, the time that immigrants have been living in the host country has a positive and significant effect in the wages of 1.4% of increase by year. Similar results are obtained when evaluating the immigrant experience in Spain (1.4% increase in wages), whereas, for work experience obtained in the home country, the outcome is more moderate (0.6%). Moreover, years of schooling in the home country and Spain increases significantly the immigrant wage by 1.7% and 3.3% respectively, yet this is lower than the native’s wages growth (4%). The wage gap varies according to the immigrant origin, for instance, Latin American immigrants earn 23.3% less than the ones coming from developed countries and Eastern Europe countries (Sanromá et al. 2009: 10-12, 20-21).

For Spain, there is a study that evaluates the discrimination against Moroccans immigrants, but instead of online or mail applications, it used applicants actors “audit testing” (one with Moroccan background and one native), which allowed making an analysis of the labor outcomes beyond the positive callback to get to the job offer, for the econometric analysis, the sample was constructed only with the observations in which both actors were able to apply for the job, there were 552 “valid test” (observations). The study was made in three provinces, Barcelona, Madrid,
and Malaga. In general, the positive callback rate was 24.9%, for the next stage of the hiring process, the interview invitation, the discrimination was 7.8%. Lastly, from the 52 interviews carried out, the natives receive 14 job offers, Moroccan 3, and in 9 cases both actors received an offer, the discrimination rate in this stage was 2.9%. Therefore, the cumulative discrimination against Moroccans was 35.6% (De Prada, et al. 1995: 18-20, 35-36).

4.2 Second-generation immigrants and labour market outcomes in Europe

The nationality background can also play an important role in the labour status of the immigrants’ descendants. It is expected that given the similarities of second-generation immigrants to natives concerning education, language, labour market knowledge, among others, this population will have better access to employment than their predecessors.

However, as is stated by Heath and Cheung (2007), this result may be ambiguous if we consider that the second-generation immigrants may have increased reservation wages, and thus result in a higher unemployment rate in comparison to the first-generation immigrants. In addition, minorities disadvantages may prevail in the immigrant’s descendants, as result of the social reproduction that marks a pattern in the behaviour of the new generation, the lack of support of the family to confront the exigencies of the education system and the persistence of the discrimination can trait the professional life of the new native-born minorities (Heath and Cheung. 2007: 9-10).

Although the empirical evidence of the labour opportunities of the second-generation is not that extensive as for the first generation, in this section are presented some investigations related to the labour outcome for this minority group in Europe.

4.2.1 Labour market outcomes of second-generation immigrants using survey datasets

Algan et al. (2010) studied the gaps between natives and first and second-generation immigrants focusing in variables such as the educational attainment, hourly wages and employment, using data from different surveys and censuses, and different models (OLS, probit), with samples that varies from thousands to hundreds of observations depending on the country. The evidence of France, Germany, and the United Kingdom suggests that the second-generation immigrants have different labour outcomes than the first generation depending on the country, the methodology and variables of analysis. According to the results, UK second-generation immigrants have the best outcomes in terms of earnings in relation to their predecessors. For instance, Indian immigrants first-generation wages gap for male (female) are -26% (-23%) in comparison to natives, whereas for second-generation the gaps were -4.7% for male and -5.1% for women, on the contrary, France and Germany did not show any improvement in the wages of second-generation with respect to first-generation immigrants.

In terms of employment, second-generation immigrants in the UK have greater employment rates than their predecessors, except for the Black Caribbean group. Whereas, for France and Germany the results are not so clear, particularly for France, the employment gap seem to be even worse for the immigrants male descendants, such as African first-generation male (female) have 18.1 (19.9) percentage points less probability of being employed than natives, moreover, the likelihood for second-generation is 47.9 (31.4) percentage points lower for male and female, respectively. The investigation concluded that there is an indication that both first and
second-generation immigrant has on average inferior labour outcomes than the natives, which can be explained by discrimination, difficulties to integrate, or due to the transfer of the disadvantages from the first generation. (Algan et al. 2010: 16-17, 22-23, 27).

Similar results were found on the Swedish labour market, where there is evidence that being a second-generation immigrant lowers the probability of been hired in relation to natives, in the case of the non-European second-generation group, the likelihood of having a job is 10 percentages points lower than natives. There is also a difference in terms of wages, although the results are significantly inferior just in the case of the ones that have Nordic backgrounds. In this research probit models and two-step, Heckman procedure were followed, the data was taken from the Census and the National Statistics Office of Sweden (Behrens et al. 2007: 161, 166-168).

Some studies have concentrated to investigate the influence of ethnicity or religion in the labour market results. In the case of France, for example, it has been studied that this type of discrimination can be experienced in groups like the ones dominated by Muslims, using data from “Génération 98” survey with more than 40 thousand observations, and logistic regressions; Silberman, Alba et al. found that the generation born in France but with foreign parents are 12.0 percentage points less likely to be employed than native French in the case of men; for women the probability of being employed is also negative but slightly smaller in magnitude (9.0 percentage points). When breaking down the sample for ethnic groups, the Maghrebins (a well-known Muslim minority), the second-generation immigrants male and women are more likely to be unemployed by 19.0 and 26.0 percentage points respectively. One explanation for this outcome can be discrimination by the employers, the mechanism of discrimination are racism, acculturalization, place, and religion (Silberman et al. 2007: 6-7, 16-17, 22-23).

Similarly, another study made using data from the EU-Labour Force Survey, with between 20 and 30 thousand observations, and probit model evaluated the employment success for first and second-generation immigrants. The results for the ones that have Turkish and North African background suggest that low skilled immigrants’ successors have 16.9 percentage points less probability of being employed than natives, the opposite happens for more qualified second-generation immigrants since high skilled are 18.3 percentage points more likely to be employed. The result can be since second-generation studied in the host country and therefore do not need to have further recognition. Added to this, the immigrant’s children have higher language skills than their parents to perform better in the labour market (Corluy et al. 2015: 8, 35-36).

4.2.2 Labour market outcomes of second-generation immigrants using experiments

When using an experimental approach to evaluate the effect of the family background on the labour outcome, the evidence suggests that there are significant differences in the labour market according to the predecessor’s origin.

For instance, Veit and Thijsen (2019) investigated the effect of cultural distance on the job opportunities for Germany, The Netherlands, Norway, Spain, and UK, utilizing correspondence experiment and probit models, with a sample size of nearly 6 thousand observations, specifically for Spain the sample consisted on 1,427 applications, the analysis was also made by origin group for European, and Middle Eastern and Africans. In general, the positive response rate varies by country, the highest corresponding to Germany, with 49% and the lowest to Spain with 13%. Concerning to the likelihood of having a positive call-back, the natives receive more responses (37%) than the minorities (31%). Overall, both domestic and foreign-born immigrants (second
and first-generation immigrants), receive fewer positive call-backs than the natives. Country individual analysis suggests that for Germany and Spain, the negative response rate in relation to natives is significant only for the first-generation immigrant, by 17 and 26 percentages points accordingly, in contrast, the positive call-back rate for second-generation immigrant seems to be similar to the natives. The results dividing the sample by minorities origin showed that Middle Eastern and African background have significantly fewer call-backs for all the countries in the study, in Spain the likelihood of call-back was around -19 percentage points (Veit and Thijsen 2019: 8, 11, 13).

The labour market in Sweden seems to change the ethnic preferences through generations, since the results of a correspondence experiment suggest that second-generation immigrant have better probability of call-back to an interview than the first-generation, although in both cases the response likelihood turns out to be less than the natives, by -17.0 percentage points for second generation and -22.0 percentage point for their predecessors. For this study 3,942 job applications were sent to make a linear probability model, the minority group corresponds to the Middle Eastern background (Carlsson 2010: 266-267, 269).

In the case of Spain, most of the formal investigations related to immigration were available since 1991, later than other European countries, is even more unusual the ones focusing on second-generation immigrants. Furthermore, the investigations were made according to the political agenda and the economic resources that the country had at that time (Aparicio and Portes 2014: 18).

Nevertheless, there is a recent paper that deals with discrimination for Latinos that emigrate to the USA and Spain at a young age, using an unpaired résumé experiment, which means that only one application was sent to each job opening. In total 1,547 applications were made in Spain and 804 in the USA, the empirical estimations were made using OLS models. The background signals were made by including distinctive names for each group and the citizenship in the résumés. The study also tested the influence of “competence “characteristics (job experience and academic achievements) and warmth (personality related as friendly and cooperative).

The average positive call-back rate was 20.0% and 22.0% for Spain and the USA respectively. Among the main results are that: First, immigrants with a Latino background in the US have 10.0 percentage points lower probability of receiving a positive response than white applicants (statistically significant). Whereas for Spain, the call-back rate is 4.0 percentage points lower than natives, although the results are not statistically significant. Second, the outcomes by sex suggest that Latino males and females in the USA have a lower call-back rate than whites by 13.0 percentage points and 7.0 percentage points accordingly, though the results are statistically significant just for males. In contrast, for Latino male in Spain, there is no evidence of discrimination, they have 3 percentage points higher call-back rate than natives, yet non-significant. Whereas for Latino females the results are significant, the call-back rate is 12 percentage points lower than Spaniards. Including warmth signals in the application (like being friendly, cooperative, trustworthy) reduces the gap in the call-back rates between Latinos and natives in the US. The opposite happens when adding warmth indicators to applications in Spain, the overall response rate declines from -0.02 to -0.07, and statistically significantly different from zero (Yemane and Fernández-Reino 2019: 8-11).
Chapter 5: Methodology and Hypotheses

There are different ways to measure the labor success of second-generation immigrants in Spain. One way is by comparing the outcome of the immigrants to those of natives, however, given the heterogeneity of the groups of immigrants, this outcome may vary according to the immigrant country of origin. For this purpose, in this research, we use a resumé experiment, which is a technique used in several studies to measure social phenomenon such as discrimination (Crabtree. 2017: 2). This approach is also called a “natural experiment”, made in real-life settings in contrast with the ones made in laboratories (De Prada, et al. 1995: 6).

This research uses a paired design method, which implies to send different CVs of candidates with different origin to the same job opening, to see if there is a significant difference in the response, which can be interpreted as evidence of bias. The methodology applied is a behavioural field experiment in the form of a correspondence test. The identification of the new jobs was made through internet, using a popular website that allowed to have a record of every application and that also have the option to make more direct requests to the firms, reducing the use of job agencies that tend to employ the same application for all the current vacancies that they manage, which preclude the identification of positive callbacks by firm name and type of job in the database. Also, making email applications reduced the cost of implementation and facilitates the application process being one of the most widely used means of communication.

The approach selected is a field experiment (resumé study) given the disadvantages that other methods can have, like the limited generalizability in the case of laboratory experiments and the possibility of omitted variables when using survey results (Pager and Western 2012). The behavioural approach of this paper consist on sending curriculums to different firms to evaluate if there is evidence of discrimination, and is addressed by the call-backs received, following the resumé methodology used by many researchers that also tried to identify discrimination in this way but establishing different criteria, like racial names (Bertrand and Mullainathan 2004) to combining names and pictures (Galarza and Yamada 2014) to see the influence of race in different labour markets.

5.1 Experiment design and sample

The key question of this research is whether ethnic minorities as Latinos compete in equal conditions in the labor market compared to the natives. To know the extent of the differences, we also included Moroccans as the second group of comparison, since are the ones who have the largest number of immigrants in Spain, this allowed us to analyze if the jobs in Spain are given based on meritocracy and equality among these groups.

The focus of the experiment is related to second-generation Latino immigrants. In this sense, all the candidates of the fictitious CVs used in the experiment had their education in the host country, developing professional skills according to the local standards, and being proficient in speaking the native language2 (for instance, in Barcelona they speak Catalan), to isolate the effect of nationality background from potential language effects. The CVs also contained comparable

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2 In the case of Valencia, the proficiency of the local language “Valenciano” was not included directly in the curriculum, however this might not have affected the results since the applicants have all the education in within the province, the call-back rate is similar to the one obtained in the other provinces (see table 1).
characteristics related to age, other languages and computer skills, to avoid having disadvantages in skills and thus in occupational positions.

To analyze if their different background (their parent’s origin) have influence over the labor outcome, we include the nationality in the CVs, using in the case of Latinos four countries of origin, Colombia, Ecuador, Bolivia, and Honduras, the first three countries are the ones with more presence in Spain, and finally Honduras is included given the important increase of immigrant experienced in the last decades. In addition, there were also included in the CVs other signs of background, using distinctive names (although in the case of Spanish and Latinos, there is not a clear distinction of names) and addresses, selecting neighborhoods where there are more presence of people of each nationality, ensuring that the different places where near to each other (to avoid differences that could affect the call back for the closeness to the job offer or socioeconomic status), this was made to provide more signs that the candidates are related with their parents background.

The data was collected through the identification of firms that require to hire employees for different types of job qualifications, using a search job website, this permitted to use a formal platform, avoiding having to rely on more particularistic criteria like contacts or friendship.

5.2 Curriculum vitae construction

To implement the experiment this research uses three different CVs templates, to be randomized into the three different backgrounds (Latino, Moroccan and Spanish), besides, two profiles were made to apply for vacancies with different requirements, one corresponding to a university degree and other with middle school training. Thus, there were eight groups of CVs each related to a different ethnicity background (Latinos, Moroccans, and Spanish), level of education (university degree and middle training), and to a different city (Barcelona, Madrid, and Valencia).

All groups of CVs included male and female applicants for jobs positions in the service sector, like commerce, hostelry and administration, as these are the main economic activities where the foreigners have registered contracts, representing 35.5% of the total (after agriculture with 33.4%) (Ministry of Work, Migration and Social Security, Government of Spain. ca. 2019a), which can be considered as an appropriate way to measure the discrimination by origin background and not just the preferences of having native employees. This allows evaluating if there is evidence of what (Heath and Cheung. 2007: 7) called “direct discrimination”, meaning that having candidates with the same skills in the selection process the employers prefer one ethnicity over the others.

The CVs profiles were chosen according to the number of job openings and their requirements, to keep the number of applications manageable, resulting in the following vacancies: Administrator, administrative assistant, receptionist, commercial adviser, sellers, telemarketer, and waiter/waitress. In this sense, we considered two levels of education according to the requirements of these positions as follows: university degrees in business and administration; and middle school training in administration management (one for each city and nationality), all the study centers included were public to not involve economic status in the decision making of the firms. The applications were made for entry-level low and medium-skilled jobs considering that the increase of the immigrants’ waves to Spain from Latin America has been done mainly in the last three decades, which implies that the second-generation is still young (almost half of the entries from the year 2000 where Latinos) (Domingo. 2005), thus may not have high levels of education or an
extensive job experience. Each CV had a unique email and cellphone number, to avoid confusion when recording the callbacks.

The jobs where searched in a popular job search website for the three cities: Barcelona, Madrid, and Valencia, being the major cities of the country, highlighting that Cataluña and Madrid are the two autonomous communities where close to 48% of immigrants from Central and South America are located (Secretory of State of Migrations, Government of Spain, 2019). The city selection for the experiment according to the immigrant concentration it is similar to the approach followed by studies like (De Prada, et al. 1995: 18).

Since the resumes had small variations to simulate real applications to the same job positions, we classified the variables in the CVs in fixed and randomized. The fixed variables, meaning that have to be always together are names, email, cellphone and addresses, and the randomized variables are age, education (school-institute, university), professional practice, competencies/abilities and level of English language. Furthermore, we employed three different CVs formats, the fixed variables were assigned to each CV's format randomly to avoid measurement errors, following to some extent the methodology applied by (Midtbøen 2016), but instead of changing the format at the middle of the experiment, we made a format combination, which was used in each job application in a random way. Besides, to ensure that the competencies included in each format were similar, before beginning the experiment, the CV formats were sent to experienced Spanish citizens, to have their observations and make the final changes. The CVs are available on request.

5.3 Treatment randomization

The use of three different backgrounds (Latins, Moroccan, and Spanish) and two genders (male and female) required to apply a randomization technique to assign the CV format and the gender to be sent to each job opening. In this sense, this research used six different combinations of gender and backgrounds, ensuring that in every application there was one male and one female, the gender of the third application was randomly assigned. Similarly, the three CV formats were distributed in three different combinations, ensuring that each application made to the same firm will have a different format (see Appendix 1). All the combinations were obtained using a random number generator.

5.4 Jobs vacancies applications and measurement of call-backs

The job vacancies to apply were selected carefully, evaluating the requirements that matched with the fictitious profiles created, which were divided into two main groups according to their competences, university, and middle training postulations. There were some restrictions when selecting the job vacancies, the ones that required to have a photograph in the CVs, ask for a specific sex or identification number were eliminated. In addition, most of the applications were made through direct request, since as the job agencies manage several vacancies for similar job positions, sometimes when receiving the call back the firm name did not appear in the database.

The applications sent to each firm were made in different hours or days and following a different order, trying to not make it suspicious for the hiring business to receive similar submissions. Call-backs for interviews were received by telephone or by email. To avoid detection,
there were sent just one set of applications to each firm, although they could have more than one vacancy. If there were positive responses, a reply was sent indicating the unavailability of the applicant, to avoid inconveniencing the employers. For this research, positive call-backs include the ones that asked directly for an interview as the ones that required more information as additional test, this is what is called “positive call-back sensu lato” (Baert et al. 2013: 8).

5.5 Sampling

One important aspect of any experiment is the selection of the sample size that allows the research to obtain results that may be representative and have the power to detect the treatment effect of the phenomena to investigate (Crabtree. 2017). For this research the data collection was made between August and September of 2019, the target sample was 294 job openings for each minority group, making a full target sample of 882 observations. In total, the applications were sent to 326 job vacancies, however, 25 job positions had to be discarded because it was not possible to send all the three curriculums before they close the offer. Therefore, the final sample consisted of 301 job openings making a total of 903 observations. Although the size of the sample of this research is lower than other similar studies (Yemane and Fernández-Reino 2019), it is still useful to comprehend the phenomena and it is not that far from the one used in recent investigations (Baert et al. 2017).

5.6 Research question

The research objective was to identify if there is evidence of discrimination in the labour market in Spain for second-generation Latin American immigrants. The paper aimed mainly at answering the following question: Does being a second-generation Latin American immigrant influence the labour opportunities in Spain? In addition, the paper also examines differences in labour market opportunities for second-generation Moroccans. In both cases, labour market opportunities are measured in terms of call-back rates as compared to native Spaniards. The paper also investigates differences in call-back rates across males and females, across three cities and job types.

Chapter 6: Empirical Results

This chapter presents the econometric model used and the empirical outcomes of the experiment, beginning with a description of the gathered data, followed by the discussion of the regression analysis, breaking down the positive call-backs according to the occupation, city, and sex.

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3 Among the test required for the employers are data entry skills, customer orientation, and focus skills, basic knowledge of spreadsheets with Excel, sales skills (influence and negotiation), organizational skills, etc.
4 The power calculation for the sample was made using “pwr” package in R. The test was settled for two proportions, using a medium effect of 0.4 for the Cohen’s h, a power of 0.8 and significance level of 0.05.
6.1 Descriptive statistics

The results of this research are constructed according to the call-backs received of 903 applications sent to job openings in three cities of Spain, Barcelona, Madrid, and Valencia, for three backgrounds: Latino, Moroccan, and Spanish. Overall, 67.8% of the applications were for jobs that required school/middle training degree, the rest (32.2%) corresponded to more specialized jobs that requested University degree candidates. The randomization process (detailed in Appendix 1 and Appendix 2) allowed to have a fair distribution between males and female applications, roughly half of the CVs sent were for males and the other half for females. In relation to the job occupations considered, approximately 67% of applications were for jobs related to businesses like administration, and administration assistant that includes positions as a receptionist. In the case of administrator positions, all the CVs had a university degree, which was the requirement for applying. For administrator assistant positions, the higher grade of education was school/middle training. The rest 33% of the applications correspond to positions mainly in the commercial sector, like commercial advisor, sales and telemarketer (see Appendix 3).

Based on the responses received of the job applications, table 1 provides an overview of the results of the correspondence experiment, classified by city. In total, the positive call-back rate was 17.4%, which means that 157 out of 903 applications received either an interview invitation or a request to make another test to continue in the hiring process. The Spanish applications had the higher response rate, with 19.6%, followed by Latino applicants with 17.3% and lastly the Moroccan call-back rate of 15.3%.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Descriptive statistics (positive call-backs)</th>
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<tr>
<td></td>
<td><strong>Latino</strong></td>
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<tr>
<td><strong>Total</strong></td>
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<tr>
<td><strong>(1)</strong></td>
<td>301</td>
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<tr>
<td>Barcelona</td>
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<tr>
<td><strong>Call-backs</strong></td>
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<tr>
<td>%</td>
<td>16.2%</td>
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<tr>
<td>Madrid</td>
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<tr>
<td><strong>N</strong></td>
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<tr>
<td><strong>Call-backs</strong></td>
<td>116</td>
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<tr>
<td>%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Valencia</td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>147</td>
</tr>
<tr>
<td><strong>Call-backs</strong></td>
<td>49</td>
</tr>
<tr>
<td>%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Total</td>
<td>903</td>
</tr>
<tr>
<td>%</td>
<td>17.3%</td>
</tr>
</tbody>
</table>

*None of the differences are statistically significant (t-test), there is not a difference between the background call backs.

The overall discrimination ratio, measured as the share of positive call-back received for Spanish against each minority, is equal to 1.1 for Latinos and 1.3 for Moroccans, suggesting that Latinos
have to send about 1.1 times as many applications as natives to receive a positive response. For Moroccans the ratio is slightly greater, hence they have to apply 1.3 times more than Spaniards to continue in the hiring process. These outcomes are slightly larger than the ones obtained by Veit and Thijsen (2019) of 1.0 response ratio for natives against minorities (Veit and Thijsen 2019: 11), which suggests that the employers might not make a distinction among the groups at the first step of the hiring process.

When evaluating the results by city, Madrid was the one with more positive results, 68 of the 348 applications sent were successful, representing a call-back rate of 19.5%, in which the Spanish CVs received 21.6% call-backs, for Latino and Moroccan this percentage was 19.0% and 18.1% respectively. Similarly, 19.0% (28 out of 147) of the applications made for jobs in Valencia received a positive response, by background 22.4% of the Spanish applications received a call-back, 18.4% of Moroccans and 16.3% of Latin second-generation immigrants. Barcelona is the city with the lowest positive call-back rate (15.0%), although more applications were made to jobs in this city (408), again the Spanish background had the highest call-back rate (16.9%), Latinos received 16.2% positive responses and the Moroccan rate was 11.8%.

In general, the Spanish background seems to have better results, with the highest positive call-backs rates in all cases. Whereas for Latino and Moroccan applications the rate of responses differs according to the province. The differences in the call-backs between the groups were evaluated using a t-test, however, none of the results were statistically significant, indicating that there is no evidence that the call-backs received for each background were different (statistically). It is important to highlight that 78.3% (123 applications) that have positive call-backs the responses were received by email, of which around 80% were requested to make another test to continue in the hiring process.

There is a possibility that in some cases these requests were automatic responses to applications that fulfil the requirements for the job openings, or that the applications were processed by job agencies, although the applications were carefully selected to avoid the agencies intervention, therefore this should not make important differences in the results. The job agencies may influence the outcomes by the application of antidiscrimination policies according to the legislation, among which are: The Universal Declaration of Human Rights (article 7), the International Convention on the Elimination of All Forms of Racial Discrimination, the European Convention on Human Rights, the Spanish Constitution (articles 1 and 14) and the Spanish Criminal Code (articles 510, 511 and 314) (CEAR, Spanish Refugee Assistance Commission). 2016: 5-6). Also, it can be that agencies have their ways to measure the candidate’s qualifications (Carlsson 2010: 272).

6.2 Econometric model

The primary outcome of interest of the resumé experiment is a binary indicator of positive call-back (coded as 1) or not call-back (coded as 0).

The econometric model used is as follows:

\[ \text{Call-back}_i = \alpha + \beta_{\text{Latin}} + \delta_{\text{Moroccan}} + \gamma_{\text{Spanish}} + OX_i + \epsilon_i \]
The equation corresponds to a probit model, where the dependent variable is a dichotomous (yes or not) callback, being one if there is a positive response; \( i \) refers to each application; Latin, Moroccan and Spanish are dummy variables that take the value of “one” if the application corresponds to the respective nationality background; \( X \) are control variables; and \( \varepsilon \) is an error term. The sample was divided into sub-samples to analyze if there were differences in treatment.

6.3 Empirical results

The analysis of the results is made according to the probability of the call-back that each ethnic background has, beginning with the general outcomes for the full sample. Thereafter, there is a report of the response rate breaking down the sample according to the occupational category, sex, level of study, and city.

6.3.1 Discrimination: General results

Table 2 presents the main results of the probability model. Overall, the two minorities group tested are less likely to receive a positive response relative to the natives, although these results are not statically significant. In the case of Latino, the probability of a positive call-back is around 2 percentage points lower than the Spanish. For the applicants with a Moroccan background, the probability of receiving a call-back is 4 percentage points lower in relation to the locals. This last finding is similar to the results of the study made by Veit and Thijsen (2019), although the fewer responses for African second-generation were statistically significant (Veit and Thijsen 2019: 11, 13).

Column 2 presents the results when including control variables (city, sex, résumé format, and occupation) in the model, however, the coefficients remain almost the same. Nevertheless, when including interaction terms (column 3), the size of the effect of having a Latino or Moroccan background is reduced but still negative, these coefficients remain no statistically significant.
According to the above, it can be said that the hiring procedures in the labour market in Spain are similar for natives and second-generation immigrants, for both Moroccan and Latinos background, therefore, the integration process among those groups appear to have been successful.

The fact that the second-generation immigrants have studied in Spain and share the same language could be one of the main reason for the lack of difference in the call-back rate, as is explained by Amuedo-Dorantes and De la Rica (2007), when evaluating the employment assimilation for first-generation immigrants, the fast integration of Latinos immigrants might be explained by the fact that they come from Spanish speaking countries (Amuedo-Dorantes and De la Rica 2007: 273). But this not only applies for Latinos, but there has been proved that qualified second-generation immigrants from other minorities (like Africans), with education and language skills that perform better in the labour market (Corluy et al. 2015: 8, 35-36).

However, as stated by Antón, José Ignacio et al. (2010), language skills may not be enough to explain the lack of differences in the call-backs, the transferability of human capital plays also a role (Antón, José Ignacio et al. 2010: 247, 250). Which in the case of the second-generation immigrants, both Latinos and Moroccans, there is no need for transferability since they were educated in the host country. Moreover, there is evidence that the gap in the call-back rate tends to vanish for second-generation immigrants in Spain (Veitand Thijsen 2019: 8, 11, 13). In addition to the fluency of the local language and education, the Latinos in Spain may be advantaged since they do not have a racial distinction with the Spaniards.

Another tentative explanation is related to the legal conditions of second-generation immigrants, which facilitates their participation in the labour market. This is consistent with the results presented in a report written by Zapata-Barrero and De Witte (2008), who interviewed several important actors involved in works related with discrimination in Spain, which agreed that legal immigrants should not face discrimination by any type, and that the key for evaluating

### Table 2

*Main results, probability of call-back: marginal effects*

<table>
<thead>
<tr>
<th>Callback</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background (Spanish excl)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino</td>
<td>-0.022</td>
<td>-0.021</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.0296)</td>
<td>(0.0295)</td>
<td>(0.0424)</td>
</tr>
<tr>
<td>Moroccan</td>
<td>-0.042</td>
<td>-0.042</td>
<td>-0.006</td>
</tr>
<tr>
<td></td>
<td>(0.0292)</td>
<td>(0.0291)</td>
<td>(0.0423)</td>
</tr>
<tr>
<td>Latino x Male</td>
<td>-0.040</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0541)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moroccan x Male</td>
<td>-0.069</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.050)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
<td>903</td>
<td>903</td>
<td>903</td>
</tr>
</tbody>
</table>

Note: Robust standard errors in parenthesis. Controls: City, sex, resumé format and occupation.

Significance level: *** p<0.01, ** p<0.05, * p<0.1
discrimination is the legal situation of immigrants, moreover, normally the cases of discrimination related to labour are scarce (Zapata-Barrero and De Witte. 2008: 5, 19).

Finally, it is worth noting that the effort made by institutions like “SOS Racisme” to prevent discrimination by nationality at least in the first step in the hiring process (Zapata-Barrero and De Witte. 2008: 18) might play a role in the results.

### 6.3.2 Discrimination by occupational category

Table 3 presents the results of discrimination when dividing the sample by occupational category. Model 1 refers to the applications made to administration positions (which imply having a university degree), having a Latino background decreases the probability of call-back by 1.0 percentage point as compared to the Spanish. Moroccan second-generation immigrant seems to have also less probability of getting a positive response, with a negative effect of 4.2 percentage points than the native applicants, although these negative results are not statistically significant.

The outcome when including interaction effects of being Latino male and Moroccan male change, in magnitude for the later (0.5 percentage points less likely to receive a call-back), however for Latino there is also a change in the sign, being 3.8 percentage points more likely to have a positive response than the Spanish. However, as before these results are also no statistically significantly different from zero.

**Table 3**

*Probability of call-back by occupational category: marginal effects*

<table>
<thead>
<tr>
<th>Callback</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td></td>
<td>Administrative assistant; receptionist</td>
<td>Commercial advisor</td>
<td>Sales; telemarketer; waiter</td>
</tr>
<tr>
<td>(A)</td>
<td>(B)</td>
<td>(A)</td>
<td>(B)</td>
<td>(A)</td>
</tr>
<tr>
<td>Background (Spanish excl)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino</td>
<td>-0.010</td>
<td>0.038</td>
<td>-0.006</td>
<td>-0.009</td>
</tr>
<tr>
<td>(0.0502)</td>
<td>(0.0735)</td>
<td>(0.0452)</td>
<td>(0.0635)</td>
<td>(0.0961)</td>
</tr>
<tr>
<td>Moroccan</td>
<td>-0.042</td>
<td>-0.005</td>
<td>-0.022</td>
<td>0.027</td>
</tr>
<tr>
<td>(0.0491)</td>
<td>(0.0719)</td>
<td>(0.0451)</td>
<td>(0.0685)</td>
<td>(0.0958)</td>
</tr>
<tr>
<td>Latino x Male</td>
<td>-0.084</td>
<td>-0.008</td>
<td>-0.094</td>
<td>-0.099</td>
</tr>
<tr>
<td>(0.0739)</td>
<td>(0.0937)</td>
<td>(0.1600)</td>
<td>(0.1284)</td>
<td></td>
</tr>
<tr>
<td>Moroccan x Male</td>
<td>-0.070</td>
<td>-0.080</td>
<td>-0.105</td>
<td>0.016</td>
</tr>
<tr>
<td>(0.0825)</td>
<td>(0.0662)</td>
<td>(0.1638)</td>
<td>(0.0978)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>291</td>
<td>312</td>
<td>105</td>
<td>195</td>
</tr>
</tbody>
</table>

Note: Robust standard errors in parenthesis. Controls: City, sex and resumé format.
Significance level: *** p<0.01, ** p<0.05, * p<0.1

Models from 2 to 4 refers to positions related to a lower level of qualification. When applying to an administrative assistant or receptionist jobs, the Latinos have 0.6 percentage points less probability to receive a call-back than their Spanish peers. Likewise, the Moroccan also had a less positive responses (2.2 percentage points) in relation to the natives. These results are not statistically significant, even when including interaction variables into the equation, the probabilities remained not statistically significant.

For commercial advisor and sales-related positions the outcomes did not change significantly, the Latinos were 2.7 percentage points and 6.1 percentage points less likely to have a call-back than the Spanish respectively (models 1 and 2, column A). Moroccans also have fewer
probability of call-backs than the Spanish in these models, 5.0 and 6.0 percentage points for commercial and sales occupations correspondingly. For models (B), that includes interaction terms the outcomes had different results, for commercial positions Latinos and Moroccans were more likely to have a call-back than Spanish (2.4 percentage points and 0.4 percentage points, one-to-one). However, in the case of sales, the call-back probability was positive only for Moroccans (0.8 percentage points). On the other hand, Latinos were less likely to receive a positive response (4.1 percentage points) than the natives. Although the results turned to be not significant statistically in all the cases.

In general, we can see that Moroccan males have less probability of receiving a call-back than natives in all the occupational categories, this supports the findings made by Amuedo-Dorantes and De la Rica (2007), where African men had worst results on employment than Spaniards and had less mobility to higher job positions. Furthermore, as they tested the assimilation of immigrants, they found that the negative effect was reduced as residence length increases (Amuedo-Dorantes and De la Rica 2007: 274-277). This later might explain in part why although the call-back rate is negative it is still non-significant statistically.

6.3.3 Discrimination by sex

The results of discrimination by sex presented in table 4 show that, for Latino male applicants the probability of been called is 4.3 percentage points less than for Spanish (model 1, A), this outcome remains almost the same when including control variables, 4.1 percentage points (model 1, B), in both cases the results are not statistically significantly different from zero. This finding is consistent with the results of a previous field experiment of discrimination in the Spanish labour market, in which it was not found evidence of discrimination for this minority group (Yemane and Fernández-Reino 2019: 8-11).

In contrast, for males, having a Moroccan background seem to have an influence in the probability of a positive call-back rate, being 7.6 percentage points less likely to receive a favourable response in comparison to the Spanish. Similar results are obtained when considering control variables, the Moroccan males have 7.5 percentage points less probability of receiving a call-back, results that are significant at a 10% level (Model 1, columns A and B). Interestingly, the outcomes for Moroccan man are the only ones significant statistically (even if at a low level) and are also important in magnitude, with a very large effect on an overall mean call-back of 17.4 percentage points.

This finding of discrimination against Moroccan males might be due to a combination of two factors, as such, their nationality and religion. First, there is evidence that Moroccans face discrimination in the labour market in Europe in general (Algan et al. 2010) and in Spain (De Prada, et al. 1995). Second, the employers discrimination against Moroccan man might be related to the Muslims religion, although according to the law in favour of religious rights, this should not exist, however in practice, the application of the law varies (Zapata-Barrero and De Witte. 2008: 8,10), this particular minority has been proved to be in disadvantage in their employment status (Silberman et al. 2007).
The second finding in Table 4, model 2, refers to the results for females, in which for both “A” and “B” regressions, the magnitudes of the coefficients are smaller and non-significant. In the case of model 2 (A), the Latino background applicants have 0.2 percentage points more probability to be called than the Spanish, which is in marked contrast to the findings of the recent investigation for this minority (Yemane and Fernández-Reino 2019: 8-11). Moroccans females are less likely to have a positive response by 0.3 percentage points.

In model 2 (B) both Latinos and Moroccans have less probability of getting a call-back than the natives, by 0.2 and 0.7 percentage points accordingly. However, in this model, all the results are not statistically significant, and not economically important as the marginal effects are close to zero.

The results for Moroccan women are unexpected, since generally, this group is subject to important discrimination, for instance, there is evidence that the call-back gap between African and natives in Spain is higher for females than for African males (Amuedo-Dorantes and De la Rica 2007). However, the lack of significant differences in the call-back rates among Moroccan women and Spaniards (in contrast with the results for males), might be related to the gender pay gap in Spain in favour of man, which is higher in economic activities like business (20.8%), real estate (24.1%) and manufacturing (18.5%) (European Commission. 2017), which are the activities where most of the applications were sent. These wage differences might imply that Moroccan women tend to have better results than men because the cost of hiring them is lower with respect to males.

### 6.3.4 Discrimination by level of study

Table 5 shows the results of discrimination classified by level of study. For applications made with a university degree, Latinos and Moroccans have less probability of receiving a positive call-back than the Spanish (around 1.0 and 4.1 percentage points respectively), for both models A and B, although having a university degree does not influence significantly the results (statistically).
Table 5
Probability of call-back by level of study: marginal effects

<table>
<thead>
<tr>
<th>Callback</th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>(A)</td>
<td>(B)</td>
</tr>
<tr>
<td>Background (Spanish excl)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino</td>
<td>-0.010</td>
<td>-0.010</td>
</tr>
<tr>
<td>(0.0507)</td>
<td>(0.0502)</td>
<td>(0.0364)</td>
</tr>
<tr>
<td>Moroccan</td>
<td>-0.041</td>
<td>-0.042</td>
</tr>
<tr>
<td>(0.0497)</td>
<td>(0.0491)</td>
<td>(0.0361)</td>
</tr>
<tr>
<td>Controls</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
<td>291</td>
<td>612</td>
</tr>
</tbody>
</table>

Note: Robust standard errors in parenthesis. Controls: City, sex, occupation and resumé format.
Significance level: *** p<0.01, ** p<0.05, * p<0.1

Models 2 (A and B), displays the results for school-middle training degree, in all cases having a Latino and Moroccan background decreases the probability of a positive call-back, and as in model 1, these results are also statistically non-significant. These results may be related to the degree of assimilation that foreigners have in Spain. There is evidence that immigrants from non-European countries that have stayed longer in Spain, or for those that have secondary education, the employment gap in relation to the natives is lower than for the ones that just have primary education (Amuedo-Dorantes and De la Rica 2007: 280). Also, the magnitude of the probabilities of call-back is smaller for Moroccans in all the cases, similar to the findings made by Bernardi Garrido, where the Moroccans have worst employment odds even taking consideration of the time passed (Bernardi et al. 2011)

The lack of significance probably relates to the fact that the second-generation immigrants studied in the host country, so the transferability of human capital is not an issue. In this line, Sanromá, Ramos et al. (2009) found that the schooling years that immigrants from less developed countries made in Spain give similar returns as compared to natives (Sanromá et al. 2009: 17). This finding is consistent with the results of other European countries like Belgium, where the increase in human capital to apply for high skilled jobs raises the probability of employment for second-generation immigrants since their knowledge is easily validated enabling them to participate immediately in the labor market (Corluy et al. 2015: 35).

Finally, it is worth noting that the increase in human capital might tend to diminish the gap in unemployment between immigrants and Spaniards. The findings made by Bernardi, Garrido et al. (2011), suggest that the probability of being employed increases as higher levels of education are reached, although, the extent of this reduction differs among nationalities, for Latinos and Africans males the returns of human capital have slight improvements. For Moroccan women, the more year of education the better the probability of employment; on the contrary, Latino women that have tertiary education have worse result on employment than the ones that studies primary or secondary levels, though this last results are not statistically significant (Bernardi et al. 2011: 161-165, 171).
6.3.5 Discrimination by city

According to the results showed in table 6, the point estimates are negative, although on average, all the parameters are statistically not significantly different from zero. Having a Latino and Moroccan background influences in a negative way the probability of a positive call-back for jobs in all the three cities included in the experiment (Barcelona, Madrid, and Valencia) against the locals. Latinos had in general better results than Moroccans, excluding Valencia where the outcomes were the opposite. For Barcelona, Latinos have a 0.7 percentages points less probability to have a positive response in comparison with the Spanish.

Table 6
Probability of call-back by city: marginal effects

<table>
<thead>
<tr>
<th>Callback</th>
<th>Barcelona (A)</th>
<th>Madrid (A)</th>
<th>Valencia (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background (Spanish excl)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino</td>
<td>-0.007</td>
<td>-0.025</td>
<td>-0.029</td>
</tr>
<tr>
<td>(0.0415)</td>
<td>(0.0503)</td>
<td>(0.0499)</td>
<td>(0.0740)</td>
</tr>
<tr>
<td>Moroccan</td>
<td>-0.051</td>
<td>-0.034</td>
<td>-0.039</td>
</tr>
<tr>
<td>(0.0403)</td>
<td>(0.0501)</td>
<td>(0.0487)</td>
<td>(0.0749)</td>
</tr>
<tr>
<td>Controls</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Observations</td>
<td>408</td>
<td>348</td>
<td>612</td>
</tr>
</tbody>
</table>

Note: Robust standard errors in parenthesis. Controls: City, sex, occupation and resume format.
Significance level: *** p<0.01, ** p<0.05, * p<0.1

For Moroccans the effect was bigger with 5.1 percentage points less likely to receive a call-back, these results remain even when including controls to the regression (model 1, A and B). Second-generation Latinos in Madrid have around 2.5 and 2.9 percentage points lower probability of a successful call-back than Spanish (model 2, A and B accordingly). Similarly, Moroccans have less likelihood of call-back by 3.4 and 3.9 percentage points in relation to the natives (model 2, A and B).

The magnitude of the probabilities of call-back for the Moroccan second-generation in Madrid is alike to the ones obtained for Valencia (-3.8 to -4.0 percentage points). Although, for Latinos that apply in this city, the odds of receiving a positive response are lower than in the others, ranging from 5.9 to 6.0 percentage points less probably to have a call-back than the Spanish.

A tentative explanation of the non-significant results for any of the cities might due to the better economic performance of the country, which is reflected in the labour supply, thus the second-generation immigrants that fulfill the employer’s requirements could have more opportunities to receive a call-back. After the economic recession that affected Spain from 2009 to 2013, Spain has had positive behaviour, the Per capita Gross Domestic Product (GDP) has increased on average 2.7% from 2014 to 2018. At the province level, the average growth rate of the GDP per-capita has been on average: 3.5% for Cataluña, 3.0% for Madrid and 3.4% for Valencia (Datos Macro. ca. 2019). In fact, though the experiment, some firms called more than once to make an appointment for an interview, and in other cases invitations for interviews were received although we did not take the knowledge test online to continue in the process. This might be a sign of the necessity of workers with determined skills in the labour market.
6.4 Research limitations and ethical issues

The analysis of the results of the present research has to be taken carefully, since as is stated by most of the investigations that follow an audit or correspondence experiment design, it measures the discrimination only in the first stage of the hiring process (interview), it cannot be inferred if there is discrimination after this point regarding getting a job or differential in wages.

In addition, most of the positions selected were related to administrative and services activities, therefore, other occupations or sectors may discriminate more or less pervasive than the outcomes that are presented. However, since the main objective of this research is to evaluate the discrimination in the Spanish labour market (specifically in Barcelona, Madrid, and Valencia), against second-generation Latino and Moroccan immigrants, the outcomes are still valid at least for these economic sectors.

Although each application was made carefully, it was always some risk of making a mistake, to send the incorrect format, assigning the wrong treatment (background), or to fail to send one or more applications corresponding to the same firm. Sending the emails manually required to be concentrated since a mistake can lead to making invalid inferences. To reduce the probability to make this error, the date of each application was recorded individually.

Chapter 7: Discussion and conclusion

The immigration is an important phenomenon that has been changing the economic and social reality of many countries around the world, representing important challenges, particularly in the labour market, to adapt to the newly arrived and subsequent generations, being more evident in countries with a relative short immigration history as is the case of Spain. The Spanish society has been characterized by its rough attitudes and strong stereotypes against foreigners, which reflects in the lower employment outcome for immigrants. In this context, the present research paper aims to identify if there is discrimination in the Spanish labour market against second-generation immigrants from Latin-America and Morocco, which are the most important minorities in Spain (after Europeans), to analyze the integration that these minorities have in the Spanish society.

Spain has shown an important increase of immigrants in the last decades, representing 12.8% of total population in 2017 (8.7 percentages points more than in the year 2000) (United Nations, Department of Economic and Social Affairs, Population Division 2017), mainly coming from Latin America and Morocco (16.0% and 14.5% of the total resident permit granted corresponded to these groups respectively) (Secretary of State of Migrations, Government of Spain. 2019), which allowed the formation of second-generation immigrants’ decedents. This new minority has been raised and educated in the host country, and want to participate in the labour market, having an additional pressure of trying to fulfil their family expectations, and confused by their mixed culture, influenced by both, their place of birth and their family background.

In this line, the labour opportunities of the second-generation immigrants might be reduced given their family roots in comparison to their Spaniards peers for several reasons. First, Spain has been known as a country with marked rough attitudes against immigrants (CIS, Sociological Research Center), 2015, 2016, Fernandez, et al. 2019), and with high negative stereotypes regarding foreigners (especially for Moroccans), moreover, employers tend to have
preferences to hire people from their culture (Pereda, et al. 2000: 3). Second, the unemployment rates for foreigners in Spain is high, especially for the ones coming from Morocco and Latinos, 27% and 19% out of total foreign unemployed comes from these groups accordingly (Ministry of Work, Migration and Social Security, Government of Spain. ca. 2018). The results of employment might not be so different for the second-generation, studies have found that the unemployment rate for immigrants descendants is higher than natives (20.8% against 14.8%), they take longer time to find a job and tend to occupy lower responsibility positions (Aparicio Gómez et al. 2018: 9-10, 22, 26, 27).

The above has motivated the present research, which aims to analyze the influence of the background on the employment opportunities for second-generation immigrants from Latin America and Morocco as compared to natives, using a field experiment approach, sending curriculums vitae to a different job opening to evaluate if there is a significant difference in the positive call-back.

In general terms, the main finding of the study is that, although in absolute terms there is a differential in the call-back rate between Latinos, Moroccans, and Spaniards, in which Moroccans have the worst results with a call-back rate of 15.3%, followed by the Latinos with 17.3% and lastly the Spaniards, that received the highest response with 19.6% call-backs, these results turned out not to be statistically significant different. Similar outcomes were obtained when evaluating the probability of call-back, although both Latinos and Moroccan have lower likelihood of having a positive response than the natives by 2.1 and 4.2 percentage points respectively, these were not statistically significant, suggesting that second-generation Latinos, Moroccans, and Spaniards have similar opportunities of being called in the first step of the hiring process, and thus the integration of second-generation immigrants have been successful, except for the Moroccan males, whom significant different results when splitting the sample by sex.

To analyze the discrimination more deeply, the data was breakdown according to the city, economic sector, sex, and level of education of the applicants, although the outcomes changed in magnitude, most of them remained not significant statistically (excluding for Moroccan males). There are several tentative explanations for the lack of significance in the results. First, they might be related to the human capital of the second-generation immigrants, since it has been proved that a higher level of human capital increases the probability of employment for second-generations (Corluy et al. 2015: 35), like their proficiency of the local language, or the fact of have been educated in the host country (Amuedo-Dorantes and De la Rica 2007), and having more schooling years (Sanromá et al. 2009, Bernardi et al. 2011).

Second, the results might be related to the legal status that second-generation Latino and Moroccan immigrants have, as the findings made by Zapata-Barrero and De Witte. (2008), or can be related to the effort that organizations like “SOS Racisme” have made to prevent discrimination in Spain (Zapata-Barrero and De Witte. 2008). Lastly, the economic performance of Spain might play a role in the call-back obtained, after the economic recession from 2009 to 2013 (the GDP per-capita decreased on average 1.5% in that period), Spain has had notable recuperation, the GDP per capita has increased 2.7% on average from 2009 to 2013 (Datos Macro. ca. 2019). Therefore, the dynamic behaviour in the job demand might reduce the employment gap among second-generation minorities and the Spaniards. This may be related to that in the experiment, for some cases, more than one call was received for the same job opening, also interviews were offered even without taking the additional test required by the firms to continue in the hiring process.
Despite the above, there was one statistically significant result (although in a low level, 10%), when evaluating the call-back by sex, the Moroccans males turned out to be less likely to receive a call-back than Spaniards by around 7.5 percentage points, a result that is economically/socially important. This finding probably relates to the fact that Moroccans, in general, may be more discriminated than other minorities due to their nationality in Europe (Algan et al. 2010), and particularly in Spain (De Prada, et al. 1995). Also, the preconception that most population from Morocco is Muslim may play an important role in the call-back response (Zapata-Barrero and De Witte. 2008, Silberman et al. 2007). But why Moroccan women did not have similar outcomes? A tentative explanation for this is the wage gap that exists in Spain against women (European Commission. 2017), thus firms might be more willing to hire Moroccan women (than men), since they may pay them lower wages, which can undermine to some extent the effect of nationality and religion.

The main contribution of this research has been to address discrimination in the labor market for second-generation Latinos, adding Moroccans as a second comparison group for the first time, employing a resumé experiment approach. According to the results, there is no evidence of discrimination in the labour market against Latino (male and female) and Moroccan (female) second generation in Spain, although, these outcomes have to be taken carefully since it only evaluates the first step in the hiring process. Also, there is a possibility that some of the call-backs received correspond to automatic responses or that the applications may have been evaluated by job agencies with particular procedures to select the applicants, through measures to avoid this issue were taken.

The conclusions of the present investigation are preliminary, since the immigrations in Spain is relatively recent, thus although second-generation immigrants are increasing, they are still a small part of the total immigrant population, therefore it remains to be seen how labour market will adjust when the second-generation of immigrants integrate to the labor force in larger numbers. In sum, even though no evidence of discrimination for second-generation Latinos and Moroccans were found in Spain (except for Moroccan males), it is necessary to make more investigations regarding this topic in the future to have more robust results.
Appendices

Appendix 1
Randomization and resumé combinations

<table>
<thead>
<tr>
<th>Combinations</th>
<th>Resumé</th>
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<td>Nationality background</td>
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<tr>
<td>1</td>
<td>Latino male</td>
</tr>
<tr>
<td>2</td>
<td>Latino male</td>
</tr>
<tr>
<td>3</td>
<td>Latino male</td>
</tr>
<tr>
<td>4</td>
<td>Latino female</td>
</tr>
<tr>
<td>5</td>
<td>Latino female</td>
</tr>
<tr>
<td>6</td>
<td>Latino female</td>
</tr>
<tr>
<td>Resumes format</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
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Appendix 2
Number of observations for resumé format

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<th>(2)</th>
<th>(3)</th>
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<td>138</td>
<td>138</td>
<td>132</td>
<td>408</td>
</tr>
<tr>
<td></td>
<td>46.0%</td>
<td>44.7%</td>
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</tr>
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<td>348</td>
</tr>
<tr>
<td></td>
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<td>Valencia</td>
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<td>75</td>
<td>42</td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>10.0%</td>
<td>24.3%</td>
<td>14.3%</td>
<td>100%</td>
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<td>Total</td>
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<td>309</td>
<td>294</td>
<td>903</td>
</tr>
<tr>
<td></td>
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<td>100%</td>
<td>100%</td>
<td>100%</td>
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Appendix 3  
*Detailed descriptive statistics*

<table>
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<th>Percentage</th>
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</thead>
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<tr>
<td>Gender</td>
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<td></td>
</tr>
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</tr>
<tr>
<td>Female</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Commercial advisor</td>
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<td>11.6%</td>
</tr>
<tr>
<td>Sales</td>
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<tr>
<td>Telemarketer</td>
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<tr>
<td>Recepcionist and others</td>
<td>57</td>
<td>6.3%</td>
</tr>
</tbody>
</table>
References


Instituto Nacional de Estadísticas (INE, National Institute of Statistics) (Last updated 2017) 'Nacimientos en los que al Menos uno de los Padres es Extranjero por Nacionalidad de la Madre y País de Nacionalidad del Padre (Births in which at Least One of the Parents is a Foreigner by Nationality of the Mother and Country of Nationality of the Father)' (a webpage of Instituto Nacional de Estadísticas,


