UAB
Universitat Autònoma de Barcelona

EFFECT OF THE CANDIDATES' LEVEL OF EDUCATION ON FIRMS' HIRING STRATEGIES

AUTHOR: ARIADNA FREIXA BENAVENTE

DEGREE: BUSINESS MANAGEMENT AND ADMINISTRATION

TUTOR: Dr. JAVIER FERNÁNDEZ-BLANCO

DATE: 27th MAY 2016

ABSTRACT

The present project aims at presenting the partial equilibrium of a modeled positive theory which describes the tradeoff the firms face in the hiring processes for vacancies that do not require high or specific level of education between the expected productivity and quitting rates of the candidates subject to their level of education. The basis of the theory is a performed experiment, by sector and geographically limited, to 20 retail and restoration firms in Catalonia and to 5 temporary employment agencies. The results lead to the affirmation that the hiring strategies used by the surveyed firms are, in fact, direct contributors to the enhancement of the overqualification problem, mostly in temporary positions. Due to general assumptions in the demand side about the implications of the candidates' education level, the surveyed retail and restoration firms prefer overqualified candidates for temporary vacancies and not overqualified candidates for indefinite vacancies. Firms face a tradeoff between the candidates' productivity and quitting rates when the vacancy is temporary but has some probability of being converted into an indefinite one.

Keywords: level of education, overqualification, hiring strategies, temporary vacancies, indefinite vacancies, vacancies that do not require high or specific level of education, positive theory

TABLE OF CONTENTS

1. INTRODUCTION

The mismatch in the labor market regarding education is present both in Spain and Catalonia, and most of the research point at the maladjustment of education in comparison to the needs of the labor market of the country as the principal cause of this mismatch. While secondary students are encourage to engage in superior studies, many vacancies in the Spanish and Catalan labor market require only primary studies and job experience, which causes that once graduated students from superior studies enter the labor market, very often they will be performing tasks or will be covering a vacancy that does not require the level of education they possess.

Most explanations and studies about the matching processes between candidates and vacancies have focused on the supply side, mainly about the effect of being unemployed for a certain period of time, strategies to search for a job, the variables that contribute to excel in job interviews, the characteristics of the candidates that affect the selection process, among others. However, not many theories have been created about the demand side, which is why this project is focused on it to try to comprehend which is the role of firms and how they contribute to the enhancement of the qualification mismatch.

With this social and economic problem in mind, and with my own personal experience in the labor market, a question to focus on was perceived. This project aims at addressing how this qualification mismatch, specifically overqualification, is encouraged by the firms' hiring strategies, and how it is displayed in temporary compared to indefinite job positions for vacancies that do not require a high or specific level of education.

Before proceeding, I would like to properly clarify which are the types of vacancies that I am interested in and the ones that are not going to be studied. When the expression "high or specific level of education" is used, it refers to vacancies that require high or tertiary education, but also to those that require specific knowledge and skills acquired through in-the-job training, vocational training (in Catalan called Formació Professional) or other types of courses. Vacancies as a hairdresser, a beautician, a mechanic or a butcher can be examples of those jobs that require a specific level of education, and examples of the vacancies I am not going to study.

1.1. Objectives, research question and methodology

The general objectives for this project are:

- Study the firms' hiring strategies for vacancies that do not require a high or specific level of education to understand whether and how these strategies may cause overqualification in the current Spanish labor market.
- Determine how the candidate's level of education (whether its studies are directly related to the specific vacancy or not) influence the selecting process.
- Comprehend whether the length of the contract of the vacancy is a factor to be taken into account when choosing among different candidates for a job position that does not require a high or specific level of education.

The specific objectives for this project are:

- Present the previous empirical evidence and studies made in this field to be able to define the research question and assumptions that are going to be used to create a theory
- Clearly define an experiment to be executed in different firms in order to obtain data and information so as to create a simplified positive theory that can define the hiring strategies of those firms looking for candidates to cover vacancies that do not require a high or specific level of education.
- Analyze the results obtained throughout the experiment and the theory developed in order to draw conclusions

Therefore, the research question this project wants to address is:

How does the level of education of the candidates affect the firms' hiring strategies for temporary versus indefinite vacancies that do not require a high or specific level of education?

To achieve these objectives and answer the posed question, first I am going to review the previous empirical evidence and main studies made about the mismatch problem in the labor market delving into the overqualification issue. In this first part of bibliographic research, I am going to mention the contrasted differences of the overqualification problem in temporary vacancies compared to indefinite ones. Furthermore, I also want to work on the assumptions or prejudices in the demand side and the response from the supply side to them that may

contribute to the enhancement of the overqualification problem. This information and the research question are going to be the basis to develop the experiment to carry out to different firms. Once the experiment is completed, a theory is going to be presented that encompasses the results and data found in the experiment. Some of the previous assumptions are going to be included in the theory to simplify it and to better explain and cover the variables I am really interested in.

To finalize the project, some conclusions are going to be drawn about the results achieved both with the experiment and the model produced and some comments are going to be written about how this study could be further developed or improved.

2. PREVIOUS EMPIRICAL EVIDENCE

2.1. Mismatch in the labor market

The labor market mismatch, not only occurring in Spain but also in other developed economies such as Italy, Ireland, Czech Republic and Austria, is caused by inadequate levels of education, the inflexibility in the labor market and the salary pressures of the highly qualified candidates as stated by the Hays Global Skills Index 2013, elaborated by the British multinational Hays together with Oxford Economics. When the mismatch problem is temporary, it directly depends on the period of the economic cycle the country is facing, therefore, is natural that it is higher in recessive phases and lower in expansive phases (Ivie and Bancaja, 2009); and, although the Spanish labor market follows a similar pattern, the mismatch problem is not temporary nor a consequence of the current economic crisis.

The matching frictions in the Spanish labor market are more than obvious, with an unemployment rate of 20.9% and a total of 58.868 job vacancies in the last trimester of 2015 according to the Instituto Nacional de Estadística (INE). Part of those frictions could be explained due to the fact that the candidates are not adequate to perform or cover the job vacancies demanded by the firms. According to the 2012 Randstad report, in each selection process between 800 and 1.300 candidates apply but, still, the 43% of the vacancies are not covered because firms do not find what they need in those candidates. Therefore, it is not a surprise that the number of selection process failures accounts for 60%.

The report published in 2014 by the IESE Business School "Armonizar educación y empleo en España. Reto en 5 años" points at the structure and rigidity of the Spanish education system as the responsible for creating candidates with high level of education that do not match with the requirements of the firms. Moreover, the candidates do not have the communication skills nor the needed emotional intelligence that the labor market is demanding.

This paper is going to be focused on the qualification mismatch, understood as the mismatch between the educational qualifications held by a worker and those required by his job. The qualification mismatch emerges in the market because of the adjustments lags of firms, the wage rigidities, the adjustments lags of education system, the frictions in the matching process and the imperfect information between the applicant and the firm in the selection process (Quintini, 2011). A relevant problem between education and labor market becomes apparent when we realize that the unemployment rate is significantly higher for people with low level of education than for those with a high one:

Graph 1. Spanish unemployment rate of population between 25-64 years old by level of education in 2014
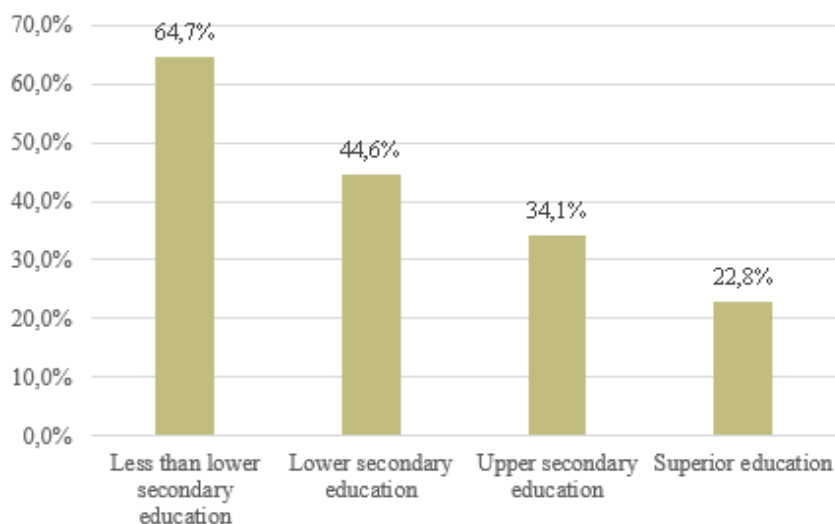
Source: own elaboration with INE data (Encuesta de la Población Activa)

Graph 2. Unemployment rate of population of European countries between 25-64 years old by level of education attained in 2014
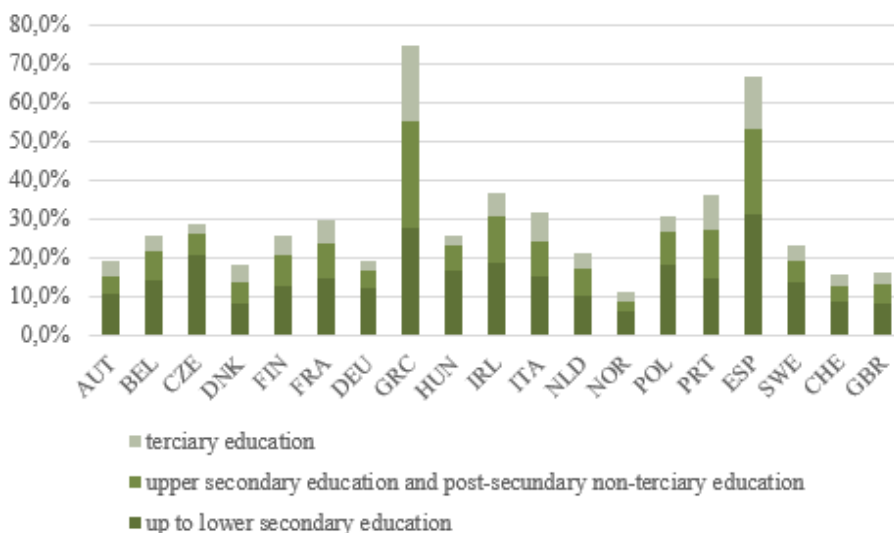
Source: own elaboration with EUROSTAT data

The reason behind this difference in the unemployment rate taking into account that is the high educated population the one that does not match with the labor market requirements in Spain, is due to the fact that, as the candidates with high level of education do not find a job in their level range, they opt to look for a job in vacancies that do not require a high or specific level of education. Therefore, many of the overqualified individuals with a tertiary education level end doing jobs that are more suitable for workers with upper-secondary level

education and, in turn, may force some workers with upper-secondary education to accept jobs below their qualification (Dolado et al., 2009), causing the low educated workers to suffer the highest rates of unemployment.

The job matching theory (Mortensen, 1982) considers that the maladjustments between the level of education of the workers and the formation needs required by the vacancy emerge from the imperfect information of the labor market, that is, when the hiring process is taking place, the firm does not receive all the information from the candidate (his real productivity, expectations, motivation…) and even sometimes the candidate does not know everything about the vacancy he or she is applying to.

2.2. Overqualification

When studying the qualification mismatch, is the overqualification the problem that is more notorious in the Spanish labor market and its regions and that has been present for two decades now. The following table shows the number of total years of overqualification in the expansive phase (2004) of the economy in Catalonia.

Table 1. Overqualification in Catalonia in 2004

	Working population (in thousands)	Working population (in %)	Total years of overqualification (in thousands)[1]	Average years of overqualification[2]
Overqualified	922,1	40,7	4155,8	4,5
Not overqualified	1346,0	59,3	-1251,4	-0,9
TOTAL	2268,1	100	2904,4	1,3

[1] thousands of years of extra education received by the total population compared to the minimum required for the job

[2] average number of years of extra education received per person compared to the minimum required for the job

Source: Serracant, 2005. Data from the Institut d'Estadística de Catalunya (IDESCAT)

In 2004, the 40,7% of the working population in Catalonia was overqualified with an average of 4,5 years of extra education received compared to the minimum required for the job. In global terms, the average Catalan worker had studied 1,3 years more than the required for his job in 2004. Therefore, it can be clearly seen that Catalonia has not a qualification mismatch problem in general, but an overqualification one.

According to the OECD, Spain appeared to have the largest incidence of overqualification (at its maximum) and one of the highest averages on the general population over the 1990s and 2000s, and the numbers have only increased.

Overqualification can be seen as the thrown away of time and monetary resources for the society as a whole because it emerges from the waste of the possible synergy between the educational and the managerial world.

Alba-Ramirez (1993) proved that, in general, overqualification is not static, showing that in Spain the overqualified workers improve their match quality over time and that overqualification falls with age. There is extensive evidence about the overqualification being larger for youth than for adults (Crompton, 2002 and Dorn and Sousa-Poza, 2005). According to the Observatorio de Emancipación del Consejo de la Juventud de España (CJE) the 52,7% of the young workers (16-25 years old) are overqualified for the job they are performing.

Moreover, not only does the age and the level of education influence; some studies have found that graduates of certain fields of education, such as humanities, are more likely to be overqualified than others (Silles and Dolton, 2002; Chevalier, 2003 and Wolbers, 2003), fact that points at the potentially important role played by career guidance and the education system in tackling overqualification. Gender is yet another variable that has an impact on overqualification; Catalan women are on average 4,25% more overqualified than man for the job they are performing (Idescat, 2004).

2.3. Overqualification in temporary versus indefinite contracts

The aim of this project is to look at whether and why the overqualification problem shows a different pattern in temporary compared to indefinite job positions.

The Spanish labor reforms aiming at the unemployment reduction by lowering protection for temporary jobs and contracts (but without changing the permanent contracts protection) have encouraged the temporary hiring, incrementing the reluctance of the firms to convert these into permanent jobs (Bassanini and Duval, 2006). According to the OECD, Spain was one of the most restrictive countries in terms of protection legislation on permanent employment compared to the OECD countries in 2006, only surpassed by Portugal and Czech Republic (Going for Growth OECD, 2008). In 2009, about 25% of the total Spanish workers were hired on temporary contracts, which was more than double the OECD average (OECD, 2010). Today this difference still exists with a 21% of temporary contracts in Spain and 11,5% in the EU-28. The tendency towards temporary contracts among new workers, which are mostly young candidates and with a higher level of education than their previous generations, contribute to the increase of overqualification. It has been showed that working on a temporary contract has an effect on the likelihood of having job mismatch (Wolbers,

2003). Actually, in Spain, young workers employed in an indefinite contract have a 12,5% less probability to be overqualified compared to those that are employed in temporary contracts (Bancaja and Ivie, 2009).

2.4. Assumptions about overqualification in the demand side

Many previous studies (Sheppard and Herrick, 1972; House, 1974; Quinn and Shepard. 1974; Quinn and Mandilovitch, 1975 and Katcher, 2016) that have tried to clarify this aspect of the overqualification problem, have found that the following assumptions are present consciously or unconsciously in the employers' or recruiting people's mind:

- At the beginning of the job, overqualified workers are more motivated and enthusiastic than those who are not, and bring new skills in the work group or firm
- Hiring overqualified workers will upgrade the level of talent in a firm
- Education enhances productivity; they are positively correlated, therefore a highly qualified worker will be more productive than a less-qualified worker.
- Due to having a more trained learning capacity, overqualified workers can learn new tasks more easily and are more flexible to perform any task.
- After a short period overqualified workers will be unmotivated, dissatisfied and bored because the tasks they are performing are below their intellectual capacities and skills.
- Overqualified workers tend to quit the job sooner due to lack of motivation, no personal fulfillment or because they are given another job opportunity that better suits their qualifications.

This project is not aiming at proving whether these previous assumptions are true or not, but at taking them into account and incorporating them in the model if they coincide with the results of the experiment and the answers of the surveyed firms.

2.5. Response from the supply side to these assumptions

The supply side of the labor market interacts and responds to the assumptions and expectations of the demand side. The first assumptions previously stated have been the cause of the perceived need of the candidates to increase their level of education in order to denote or try to quantify their abilities or skills to perform tasks (even when they do not require any specific level of education). Therefore, the economic theories of human capital and signaling should be considered.

The human capital theory was the first theory proposed that tried to formalize the relation between the level of education attained by individuals and its labor market situation. Previously, the education had only been seen as a consumption good rather than an investment. The "human capital" term has been constructed by the contributions of many different authors (Lewis, 1954; Mincer, 1958; Schultz, 1962 and Becker, 1964). The human capital theory states that individuals invest in their education to increment their knowledge and capacities in order to boost their productivity and subsequently be compensated in the labor market by an increase in wage or by a diminished risk of being unemployed. According to the theory, the high educated workers, and therefore more productive, should be employed in the high qualified and better paid jobs. However, as we have seen, some maladjustment occurs between the level of education of the workers and their job positions.

Other theories have been developed after the human capital theory, but I will present the signaling theory as a crucial one that is very influential in the current labor market.

In selection processes, the employer cannot directly observe the productivity of the candidate, only some attributes and characteristics such as his education, age, race, sex and previous work, among others. Of these observable attributes, some are fixed or immutable (called indices) while others can be subject to modifications (called signals). Education is a variable that an individual can modify over the years. The theory states that there are some costs attached to the acquisition of signals; for example, education is costly and the individual will invest on it if, and only if, there is sufficient return in his future possible wage to compensate this investment. Therefore, individuals will choose their signals in order to maximize the difference between signaling costs and compensation. Signaling costs should not be only seen in monetary terms but in a more broad perspective; for example, time is a signaling cost too (Spence, 1973). However, it is thought by the same author, Michael Spence, that signaling could bring negative implications to the market due to the fact that if individuals realize that the main selection criteria for firms is the level of education for the candidates -because it is thought to be a productivity credential-, they will keep investing in their education causing an increase in the level of education of the working population, which is, in fact, what has happened in the Catalan and Spanish labor market.

3. THE EXPERIMENT AND ITS RESULTS

Constructing an answer for the research question is the aim of this and the following sections. To be able to present some relevant data, the scope of the experiment was by sector and geographically limited to the retail and restoration sectors in Catalonia.

According to INE (Instituto Nacional de Estadística), the number of vacancies in the last trimester of 2015 in Spain were 58.868 and 91,0% of these were in the service sector. Inside the service sector, the retail and restoration subsectors, representing the 64,6% of the business volume and the 23,1% of the workers employed in the service sector in Spain, presents a higher proportion of overqualified workers compared to other services (Ivie and Bancaja, 2009). This data is consistent with other previous studies that state that workers in the retail subsector are more likely to be overqualified (Silles and Dolton, 2002). Moreover, the retail and restoration subsector has an extensive amount of vacancies that do not require a high or specific level of education. Those stated facts are the reasons why the experiment was centered in the retail and restoration subsectors. Furthermore, the experiment was limited to Catalonia, where 312.000 people are employed in the retail subsector and where the service sector accumulates the 91,3% of the total vacancies (IDESCAT, 2015:4).

The main objective of the experiment was to achieve significant results in order to be able to create a macroeconomic model that explains the behavior of the firms when performing selection processes. I decided to perform the experiment by presenting a questionnaire (the translated version of the original questionnaire can be found in the Appendix 8.1) to different retail and restoration firms with points of sale in Catalonia that could face the decision of which type of candidate (in terms of education) to hire for vacancies that do not require high or specific level of education according to the length of the vacancy.

The experiment was initiated in the 5th of January 2016 and it was closed the 9th of April 2016. In this period, 114 firms in the retail and restoration sector with points of sale in Catalonia were contacted in order to conduct the experiment (the list of the contacted firms can be found in the Appendix 8.2). A first contact with the firms was made through a telephone call, where I explained the project and invite them to participate in the experiment. Then, the questionnaire was presented to the Human Resources or Personnel Departments of the firms so that they could examine the type of questions asked and the information needed. Without being provided with any data, assumptions or hypotheses that could compromise or modify their answers, the firms had to answer it.

Moreover, during the same period, a complementary experiment was performed to temporary employment agencies located in Catalonia in order to have a more concrete view of the firms' criteria when selecting candidates for temporary vacancies. A set of questions about hiring tendencies of retail firms was sent to 25 temporary employment agencies (the translated set of questions and the list of the contacted temporary employment agencies can be found in Appendix 8.3 and 8.4 respectively).

3.1. Retail and restoration firms' experiment results:

The questionnaire was answered by 20 retail and restoration firms (a table with the general information of each surveyed firm can be found in the Appendix 8.5), the 17,5% of the total contacted. The results presented in this section are related to the total of 6.104 workers that are covering positions that do not require high or specific level of education at the points of sale in Catalonia of these 20 retail and restoration firms.

The type of contract that prevails in the points of sale of the 20 firms is the indefinite contract, amounting up to the 75,4% of the total of contracts. The rest, 24,6%, are hired in temporary contracts.

The experiment was focused on was the workers' level of education, so a question asked the firms to choose 3 or 4 valuable characteristics among 11 proposed they would value in a candidate to cover a vacancy that does not require a high or specific level of education.

Graph 3. Appreciated characteristics in candidates to cover a vacancy that does not require high or specific education by the surveyed retail and restoration firms:
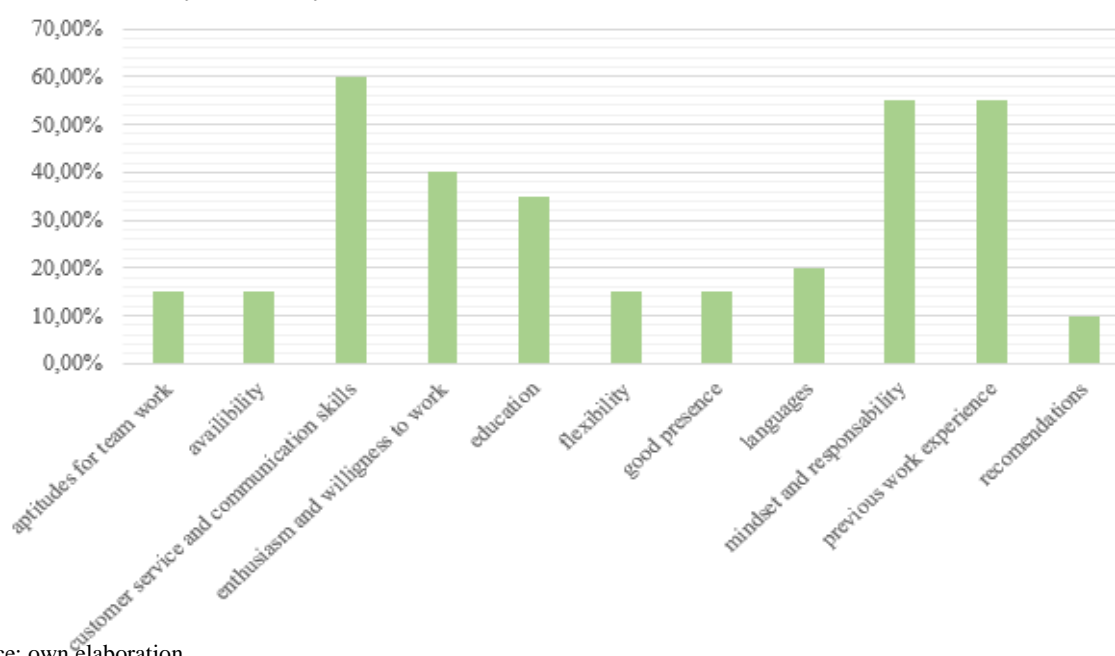
Source: own elaboration

"Customer service and communication skills" was the most valued characteristic, followed by "Mindset and responsibility", "Previous work experience" and "Enthusiasm and willingness to work". The 5th most valuable characteristic was "Education level" which was chosen by the 35% of the surveyed firms.

The education level is not only a relevant characteristic that some of the surveyed firms value in their candidates, but for the 70% of them it is also a signal for the capacities that the candidate may have. The specific capacities that education level signals, according to the these 70%, are that candidates with higher education level adapt faster and better to changing situations, learn the tasks faster, have better customer service and communication skills and they have more willingness to learn and to perform better to improve their position inside the firm. However, the other 30% of the surveyed firms stated that the level of education is neither an indicator of the quality nor the productivity of the worker for these type of vacancies.

The experiment aims at studying the hiring strategies according to the temporality of the contract or position to be covered, therefore, a question was designed to obtain data about the percentage of overqualified workers in temporary contracts compared to those with indefinite contracts. The 20% of the surveyed firms could not respond to this question due to not having a complete enough databases about the employees. However, the results of the 16 firms that could answer it showed that 58% of the temporary workers are overqualified for the position they are covering while only the 27,8% of the workers with indefinite contract are.

Graph 4. Overqualified workers with temporary and indefinite contracts in the points of sale of the surveyed firms:
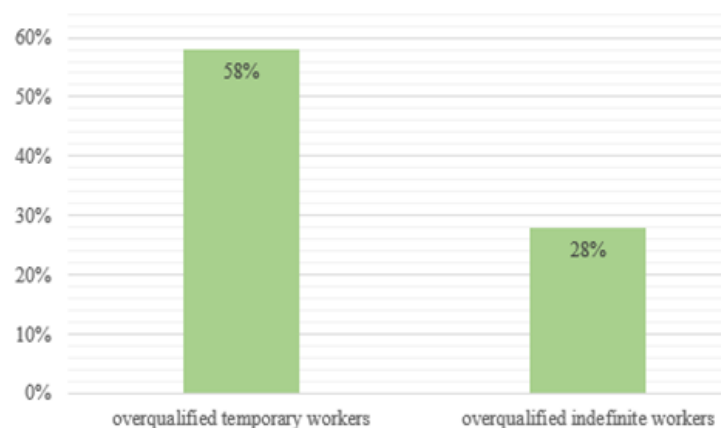
Source: own elaboration. Results of 16 retail and restoration surveyed firms.

When asked about the probability of a temporary vacancy being converted into an indefinite vacancy (assuming the candidate is good), the 75% of the surveyed firms considered the probability that a temporary *contract* could be converted into an indefinite *contract*. The probability for all of them was between the 80%-90%. The other 25% of the firms considered the probability of a temporary *position* (not a temporary *contract*) being converted into an indefinite *position*. In this case, the result was that only around the 30% of workers hired specifically for a temporary position were then converted into indefinite workers in that position that become indefinite due to the concrete needs that were being covered.

Furthermore, the 65% of the surveyed firms would not consider the level of education as a very relevant characteristic to take into account when deciding to hire a candidate for a temporary position that has a high probability that is converted into an indefinite position, they would consider other factors first. If the probability was high, the 20% would choose a candidate that is not overqualified for the concern that an overqualified candidate would leave the company after a short period when being offered a more suitable job in another firm. The other 15% would choose a candidate that has a high level of education because of the positive capacities that are associated to it and because, if the worker was good, they would then move him or her another position inside the firm.

In terms of the negative aspects or consequences of hiring an overqualified candidate, the 85% of the surveyed firms mentioned the quitting of the job causing a high staff turnover inside the firm, being directly related to the high number of overqualified workers in temporary vacancies. The 40% also mentioned the demotivation and dissatisfaction of the overqualified worker.

3.2. Temporary employment agencies' experiment results:

The complementary experiment consisted in contacting 25 temporary employment agencies in Catalonia, however only the 20% of those answered the three questions related to the tendencies of the retail firms when asking the agencies to look for candidates to fill a temporary vacancy that does not require a high or specific level of education. The answers to the questions for each temporary employment agency can be found in the Appendix 8.6.

All the 5 surveyed temporary employment agencies reached the same conclusion when being asked which type of candidate (in terms of education) a retail firm would choose to cover a temporary vacancy that does not require a high or specific level of education. They answered

that if the vacancy is temporary (and not extended for a long period of time), retail firms would choose a candidate with high level of education because he or she would learn faster.

Although the job offers that the retail firms process through the temporary employment agencies do not specify nor demand a concrete level of education for a vacancy that does not require it, temporary employment agencies agreed it is an element they analyze.

The probability of a temporary vacancy being converted into an indefinite vacancy is a relevant factor when doing the selection process. According to the temporary employment agencies, when the retail firms know that the probability is high, they opt for candidates with the level of education required, and never overqualified candidates, to avoid the worker demotivation and the early quitting.

4. ANALYSIS OF RESULTS

Before commenting the results achieved through the experiment, some general aspects of it are going to be explained. The values obtained in the experiment cannot be generalized due to the fact that a high bias could exist. Only 17,5% of the contacted retail and restoration firms responded the questionnaire and the 20,0% of the contacted temporary employment agencies responded the three questions, fact that could cause a distortion in the conclusions reached. We need to have in mind that the firms that were willing to participate in the experiment could be firms with common characteristics that tend to behave in a certain way and they could be prone to have different hiring strategies to those that did not respond the questionnaire.

Moreover, the selection of firms made through the criteria explained before (they were retail and restoration firms with points of sale in Catalonia) is going to directly influence the conclusions due to the fact that those are not going to refer to the whole demand side of the labor market in Catalonia nor Spain.

From the experiment carried out, it can be seen that the distribution of contracts between temporary and indefinite is not very different to that of the whole retail and restoration sectors in Catalonia. While the average percentage of indefinite contracts in the 20 surveyed firms was 75,4%, the average percentage of the retail and restoration sectors in Catalonia amounts up to 78,4% (in the first trimester of 2016). On the contrary, the percentage of temporary contracts is higher in the sample, with a 24,6%, than the average of the retail and restoration sectors in Catalonia, with a 21,6%. Although a slight difference is perceived between the experiment sample and the general values for the sector, neither of those converge to European levels. The EU-28 average percentage of temporary contracts is of 11,5% according to Eurostat.

Table 2. Occupation by type of contract in the first trimester of 2016:

	Surveyed retail and restoration firms	Catalan retail and restoration subsectors	EU-28
Indefinite	75,4%	78,4%	88,5%
Temporary	24,6%	21,6%	11,5%

Source: own elaboration with EPA (Idescat and INE) and EUROSTAT data

Regarding the level of education, it is the 5th most relevant characteristic out of 11 that retail and restoration firms value in candidates to cover a vacancy that does not require high or specific education. The reason of such position is the fact that the 70% of the surveyed firms value the level of education as a signal for the capacities that the candidate may have. In the questionnaires, the reasoning for this response was that candidates with high level of education:

-   Tend to adapt better and learn the tasks faster
-   Are willing to work harder, to learn more and be promoted
-   Have better communication skills

These arguments fit with the assumptions presented in the section 2.4 of the project:

-   Due to having a more trained learning capacity, overqualified workers can learn new tasks more easily and are more flexible to perform any task.
-   Education enhances productivity; they are positively correlated, therefore a highly qualified worker will be more productive than a less-qualified worker.

However, according to the surveyed firms, not everything about a candidate with high level of education for a vacancy that does not require a high level of education is positive. The 85% of them mentioned the quitting of the job causing a higher turnover inside the firm as a negative aspect of hiring an overqualified employee, being directly related to the high number of overqualified workers in temporary vacancies. Furthermore, the 40% of the surveyed firms mentioned the demotivation and dissatisfaction of the overqualified worker.

The arguments against hiring overqualified workers also fit with the other assumptions presented in the section 2.4:

-   After a short period overqualified workers will be unmotivated, dissatisfied and bored because the tasks they are performing are below their intellectual capacities and skills.
-   Overqualified workers tend to quit the job sooner due to lack of motivation, no personal fulfillment or because they have found another job opportunity that better suits their qualifications.

The overqualification affects the 58% of the temporary workers of the surveyed firms, while it only affects the 27,8% of the indefinite workers. Therefore, there is an average of 35,2% of overqualified employees in the points of sale in Catalonia of the 16 retail and restoration firms that could answer the question related to the overqualification of their employees. This value is very high compared to the whole Spanish labor market average of overqualified workers (31%) and much higher than the EU average (19%) that were published in 2011 by Eurostat. This values could indicate the increasing tendency of firms to prefer candidates with

high level of education for the vacancies, however, as they tend to leave sooner, only the candidates that are not overqualified for the position would be the ones staying until being converted into indefinite workers. These values could also have another interpretation, they could show the tendency of the candidates with high level of education to search only for temporary positions when the vacancy does not require high or specific level of education because they intend to leave the firm soon or quit when they find a better job opportunity according to their level of education. These values are consistent with the previous studies mentioned in the section 3.3 of the project which state that temporary positions increases the risk of qualification mismatch.

The probability of a temporary worker being converted into an indefinite worker is high (80-90%) if the worker is good, because most of the firms follow the common pattern of 1 year in temporary contract and then, automatically, the worker is converted into indefinite due to the current labor legislation. If we consider the temporary positions (those only created for a specific period of time, such as an extra worker in a shop for sales season), the probability of this job position being converted into an indefinite one is much lower, 30% on average.

From that question regarding the convertibility of a temporary position into an indefinite one, it could be seen that most of the companies do not distinguish between temporary workers and temporary positions; the firms assume it is the same concept. It must be understood that a temporary worker can be covering an indefinite position and then it can be discussed whether he or she should become indefinite. However, in general terms, the temporary position appears with the temporary needs of the firm (although it can become indefinite if, for example, the increase in demand that first seemed temporary then becomes permanent), and it can be covered by workers who, if they are good, may become an indefinite worker for the firm in another type of vacancy.

When having to choose between a candidate with high level of education or low level of education for a temporary vacancy that does not require a high or specific level of education and that has high probability that it is converted into an indefinite position, 65% of the firms did not choose between any of them arguing that it would depend on the other characteristics of the worker and that his or her level of education would not be a relevant factor to make this decision. Another 20% of the surveyed firms would choose a candidate with low level of education, not overqualified, due to the fact that there is a high probability that the worker would leave the company early when he or she received a more suitable job offer. The other 15% would choose a candidate with high level of education, arguing that he would probably

be more capable of learning new tasks with the possibility of being promoted to more complex positions that would require his or her level of education.

Although a general conclusion about the preferences of the firms when hiring a candidate for a temporary position with a high probability of being converted into indefinite cannot be made due to the disparities of the answers, with the answers to the other questions jointly with the arguments to this question, a tendency towards a hiring strategy can be perceived.

With the information of the answers of the retail and restoration firms and the results of the temporary employment agencies questionnaires, it can be inferred that, in general, when the vacancy is temporary and lasts for a short time span, retail and restoration firms prefer a candidate with high level of education because of the positive connotations and consequences it brings. When the vacancy is temporary but has a high probability of converting into an indefinite job position, restoration and retail firms prefer a candidate with the level of education required (not more than the required), because they fear the early quitting of the worker, leaving them with an empty vacancy that needs to be covered again. Finally, if the vacancy is indefinite, although they would rather the candidates had the qualities of the worker with high level of education, they would opt for a candidate with reasonable or low level of education in order to ensure a long term commitment of the worker with the company assuming that a higher level of productivity is going to be reached in the following periods thanks to the in-the-job training and learning process.

5. THEORY

In this section, a partial equilibrium achieved through a positive theory encompassing the results and the analysis of the experiment is going to be presented. The theory created is a positive theory and not a normative one, therefore, it aims at explaining the reality and not at expressing whether the firms' hiring strategies are desirable or not.

As widely agreed and understood, the main goal for a firm is to maximize its profits.

In a market where firms live for infinite periods it is important to take into consideration not only the current period, but also the future periods. Therefore, the aim for a firm would not only be to maximize the profits for the first period (π_1), but also the profits for the future periods (denoted by $\beta\pi_2$), which could be written as follows:

max. $\pi_1 + \beta\pi_2$

This formula could also be used to maximize the profits obtained of a job position. I am using this interpretation of the equation in order to create the theory. If it is an indefinite position, the goal will be to maximize the profits for all the periods. However, the maximization problem changes when we are only interested in the current period. We would be talking, in this case about a temporary position, which exists only for one period. Then, the problem could be written as follows:

max. π_1

First, it is important to understand which would be the profits for a firm if the vacancy is covered by a worker with high or low level of education. It could be written as follows:

$$J_i = y_i^t - \overline{w} + \beta[\alpha[(1 - \lambda_i)J_i^I]]$$

Where:

i = the type of worker $i \in \{l,h\}$ where "l" refers to workers with low level of education and "h" to workers with high level of education

y = expected productivity of a worker. $y = E_i(y)$

t = period

$\overline{w}$ = the wage paid. It is fixed because it is assumed that the wage is given and no negotiations are done in the selection and hiring process

β = weight of future periods. The intertemporal discount factor

α = probability of the temporary position being converted into an indefinite position after the first period. If the position is temporary, lasting only for the first period, then $\alpha = 0$. If the position is indefinite since the beginning, then $\alpha = 1$.

λ = quitting rate of the worker

$\mathbf{J^I}$ = the firm's future profit in the following period if the position is Indefinite.

$$J_i^I = y_i^t - \overline{w} + \beta[(1-\lambda_i)J_i^I]$$

$$J_i^I = \frac{y_i^t - \overline{w}}{1 - \beta(1-\lambda_i)}$$

If after the first period a job position is converted into an indefinite position, the future periods are all the same as the second period, therefore, to simplify the equation, only two periods are going to be considered. Then $\beta = 0$, therefore, $J_i^I = y_i^2 - \overline{w}$

The equation encompassing all the elements would be:

$$J_i = y_i^1 - \overline{w} + \beta[\alpha[(1-\lambda_i)(y_i^2 - \overline{w})]$$

where $(y_i^1 - \overline{w})$ are the profits for the firm from in period 1 and worker i (π_i^1)

and $(y_i^2 - \overline{w})$ are the profits for the firm in period 2 from the worker i (π_i^2)

Once the equation is constructed, the problem the firm is facing can be analyzed. The problem of the firm is whether a low qualified worker or a high qualified worker for a vacancy that does not require a high or specific level of education should be hired:

$$\text{max. } \{J_l, J_h\}$$

To simplify, I am assuming that the candidates do not differ in anything but for their level of education (all the other variables are fixed) to study if differences in the hiring strategies exist between candidates with high level of education or low level of education for either indefinite or temporary jobs.

To be able to develop this model and simplify it, I am going to use some assumptions, which were previously stated in the section 2.4 and later stated by the surveyed firms:

<u>First assumption:</u> candidates with higher education level have higher expected productivity. ($y_h > y_l$) The level of education acts as a proxy of the expected productivity

- Education enhances productivity; they are positively correlated, therefore a highly qualified worker will be more productive than a less-qualified worker.

<u>Second assumption:</u> candidates with higher education level have higher probability of leaving the job after the first period ($\lambda_h > \lambda_l$)

- After a short period overqualified workers will be unmotivated, dissatisfied and bored because the tasks they are performing are below their intellectual capacities and skills, causing a decrease in their productivity.

- Overqualified workers tend to quit the job sooner due to lack of motivation, no personal fulfillment or because they are given another job opportunity that better suits their qualifications.

Therefore, looking at the equation and taking into account the assumptions, it can be inferred that the optimal maximization of benefits for the firm would be:

- For temporary jobs, the firm wants to max. π_1. According to the model, only $J = y_i - \overline{w}$ has to be taken into account because $\alpha = 0$. Therefore, the firm is going to choose the H candidate[1] as long as $y_h > y_l$

- For indefinite jobs, the firm wants to max. $\pi_1 + \beta\pi_2$. According to the model, $J_i = y_i^1 - \overline{w} + \beta[\alpha[(1 - \lambda_i)(y_i^2 - \overline{w})]]$ has to be taken into account with $\alpha=1$. Therefore, the firm is going to choose the L candidate when $\lambda_h > \lambda_l$ and the $y_h \sim y_l$, or when the L candidate can reach a similar level of productivity as the H candidate after a short period of in-the-job training . The firm is only going to choose the H candidate when the y_h is much bigger than y_l, even if $\lambda_h > \lambda_l$.

- For temporary vacancies that have some probability to be converted into indefinite vacancies ($0<\alpha<1$), the firm is going to choose the candidate looking it as a tradeoff; weighting if a lower productivity can compensate the uncertainty of the worker leaving in the following period. If α is high, the firm is going to choose an L candidate, whereas if α is rather low, the firm is going to choose an H candidate.

---

[1] "H candidate" is going to be used to refer to a candidate with high level of education and "L candidate" to refer to a candidate with low level of education

To have a better understanding of this tradeoff that the firm is facing, a graphical representation is going to be presented. It is needed to fix some values in order to represent the indifference curve. I am going to assume $\beta = 1$, therefore the future period weights the same as the first period. Moreover, the wage, which is not negotiated, is going to be fixed at $\overline{w} = 0,8$. Then, $\lambda_l = 0,05$, because it is assumed that workers with low level of education have a low probability of leaving the firm, and finally, the productivity of the worker with low level of education is going to be normalized at $y_l = 1$. Due to the assumptions used in the model, the productivity of the worker with high level of education (y_h) is going to be higher than the productivity of the worker with low level of education (y_l). Also, to simplify the representation, the productivity between periods is the same for both types of workers. ($y_i^1 = y_i^2 = y_i$). Substituting every variable by the given value, the equation evolves into:

$$y_h = \frac{1 + \alpha - 0.8\alpha\lambda_h}{1 + \alpha - \alpha\lambda_h}$$

Now, a comparative statics is presented to see the difference in the problem the firm is facing when the probability of the temporary position being converted into an indefinite position is $\alpha=0.3$ (answered by the 25% of the surveyed firms when thinking about the probability a temporary position is converted into an indefinite position) and $\alpha=0.85$ (answered by the 75% of the surveyed firms when thinking about the probability that a temporary worker is converted into an indefinite worker).

Graph 5. Comparative statics of the firm's tradeoff with different α
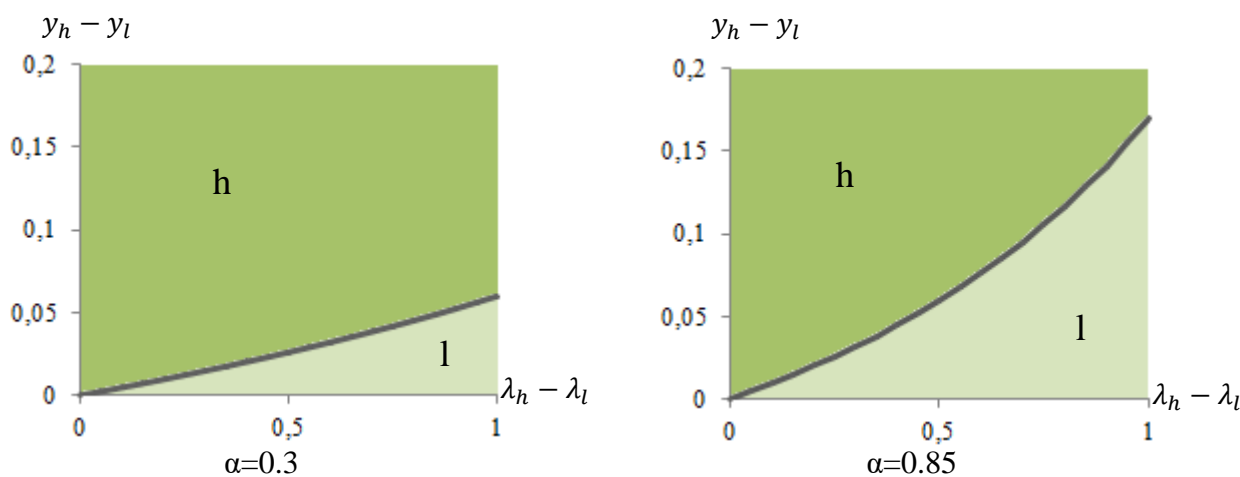
Source: own elaboration

The firm is going to choose a candidate with high level of education as long as its expectations about the worker's productivity and quitting rate are positioned in the dark green area or "h" area. Instead, the firm is going to choose a candidate with low level of education if the expectations are positioned in the light green area or "l" area. The line that divides both areas is the indifference curve, where the firm is indifferent between hiring a candidate with high or with low level of educations given the expectations that it has over them.

This graphical representation enables to see that when the probability that a temporary position is converted into an indefinite position grows, the area where the firm chooses a candidate with low level of education also grows. Nevertheless, even a small increase in productivity makes that firms prefer to hire a candidate with high level of education.

Again, we cannot generalize this graphical representation because many assumptions have been made. Probably, the picture would have been different if the productivity of each period was not equal. According to the assumptions and prejudices of the firms, the productivity of candidates with high level of education would shrink over time due to lack of motivation and satisfaction, and the productivity of candidates with low level of education would increase because of the in-the-job training and to the learning process, causing an enlargement of the light green area or "l" area.

6. CONCLUSIONS

The mismatch problem and especially the overqualificaition problem is of high magnitude in the Spanish and Catalan labor market, and the experiment performed in a small sample of Catalan retail and restoration firms supports this statement although its results cannot be generalized because some biases could exist.

It can be inferred from the results of the experiment and the partial equilibrium achieved through the macroeconomic theory that the hiring strategies of the surveyed retail and restoration firms, encourage and deepen the problem of overqualification in vacancies that do not require a high or specific level of education because of the existent assumptions and prejudices. If this pattern described by the macroeconomic theory is followed by all the different business sectors for job positions that do not require high or specific level of education, it is no wonder why the average level of overqualification is extremely high for temporary positions both in Catalonia and Spain and also relevant for indefinite positions.

The extremely high overqualification levels in temporary positions could be a not very important problem for the economy as a whole if the percentage of the temporary contracts was inferior. However, Spain, as well as Catalonia (with an average of 24,8% and 21% respectively of temporary contracts in 2015), is very far from converging to European levels (with an average of 11,5% of temporary contracts for the EU-28).

As proved in the macroeconomic theory presented, the level of education of the candidate is determinant in the selection process of the firms that follow the same hiring strategies as the surveyed firms due to the assumptions that are made by those firms. It could also be stated that they are not only assumptions but prejudices, because there is still no generally accepted study that proves a direct positive correlation between the level of education and the level of productivity of a worker, although some studies have partially proven so in some specific developing countries (Jones, 2001).

The responses from the surveyed firms fit with the previous empirical data and also the assumptions that previous authors detected in the labor market. Temporary positions have a higher probability of suffering from qualification mismatches compared to indefinite positions, which is the result of the combination of both positive and negative expectations of hiring overqualified workers to cover vacancies that do not require a high or specific level of education. Firms prefer a candidate that has a high level of education because there is the general thought that education enhances productivity and that due to having a more trained learning capacity, overqualified workers can learn new tasks more easily and are more

flexible to perform any task. However, the negative connotations associated to them such as the workers' demotivation, dissatisfaction and boredom because the tasks they are performing are below their intellectual capacities and skills or their tendency to quit the job sooner due to this lack of motivation and no personal fulfillment or because they are given another job opportunity that better suits their qualifications, cause the firms to prefer to choose an overqualified candidate only for temporary positions and choose a candidate that is not overqualified for indefinite positions or for temporary positions that have a high probability of being converted into indefinite ones.

Moreover, from the answers of the questionnaires, it can be seen that the level of education of a worker act as a signal of his or her capacities rather than his or her knowledge for firms that are looking for a candidate to cover a vacancy that does not require a high or specific level of education. Firms only value the level of education that the candidate possesses rather than the area of knowledge he or she is specialized in. It could be said that education is used as a proxy for the expected productivity.

Furthermore, performing the experiment, it can be perceive that some firms wrongly consider the term temporary job position as a synonym for temporary contract.

To finalize the project, I would like to mention that there are not many studies nor data available about the overqualification problem regarding specific sectors of the economy. The original geographic limitations chosen to perform the experiment (Vic, a city of 42.498 inhabitants in the province of Barcelona) had to be changed to the whole Catalan retail and restoration subsectors due to the non-existent empirical data about the general facts of overqualification in Vic. However, and although data could be found about Catalonia, there is plenty of room to enlarge the databases and the information about it. Therefore, this project could be further developed once more statistics are published about every sector of the economy and could be further complemented by enlarging the sample of the experiment to achieve more relevant results for the whole economy.

7. BIBLIOGRAPHY

Alba-Ramirez, A. (1993). Mismatch in the Spanish labor market. Overeducation? *The Journal of Human Resources.*

Alcelay, S. (2014). España tiene 73.000 puestos de trabajo sin cubrir por falta de formación adecuada. *ABC.* http://www.abc.es/economia/20140526/abci-desajuste-formacion-empleo-201405232114.html [Consulted: 11th November 2015]

Álvarez, U. (2014). Los jóvenes españoles, ¿sobrecualificados y sobreparados?. La Contraeconomía https://lacontraeconomia.wordpress.com/tag/sobrecualificacion/ [Consulted: 2nd December 2015]

Bassanini, A. & Duval, R. (2006). Employment patterns in OECD countries: Reassessing the role of policies and institutions. OECD Social, Employment and Migration. Working Papers No 35. *OECD Publishing.*

Becker, G. (1964). Human Capital. *Columbia University Press.*

Chevalier, A. (2003). Measuring Over-Education. Economica. No. 279, pp. 509-531. *Wiley-Blackwell. London School of Economics Publishing.*

Crompton, S. (2002). I Still Feel Overqualified for my Job. Canadian Social Trends, No. 67, Winter, *Statistics Canada*.

Dolado, J. J. et al.. (2013).Youth Labour Market Performance in Spain and its Determinants: A Micro-Level Perspective. OECD Economics Department Working Papers, No. 1039. *OECD Publishing.*

Dorn, D. & Sousa-Poza A. (2005). Over-qualification: Permanent or transitory. *University of St Gallen*

EUROSTAT. European Statistics. http://ec.europa.eu/eurostat

García Lombardía, P. (2014). Armonizar la educación con el empleo en España, reto en 5 años. *IESE Business School.*

García-Montalvo, J. (2005). La inserció laboral dels universitaris: la qüestió de la sobrequalificació i el desajust formatiu. Nota d'economia 81. 1r quadrimestre 2005. *IVIE i Universitat Pompeu Fabra.*

Hays. (2013). El "desajuste global de talento" provoca que cientos de miles de vacantes laborales se queden sin cubrir por falta de profesionales adecuados. http://www.hays.es/notas-de-prensa/nota-global-skils-index-1115903 [Consulted: 12th November 2015]

Herrenkhol, E. (2010). Six Considerations: Should You Hire the Overqualified Candidate? *Monster.* http://hiring.monster.com/hr/hr-best-practices/recruiting-hiring-advice/acquiring-job-candidates/hiring-overqualified-candidates.aspx [Consulted: 21st January 2016]

House, J. (1974). The effects of occupational stress on physical health. Work and the quality of life. pp. 145-170. *MIT Press.*

IDESCAT. Institut d'Estadística de Catalunya. http://idescat.cat

INE. (2015). Encuesta trimestral de Coste Laboral (ETCL). Notas de prensa cuarto trimestre 2015. http://www.ine.es/daco/daco42/etcl/etcl0415.pdf [Consulted: 20th March 2016]

INE. Instituto Nacional de Estadística. http://www.ine.es

IVIE & Bancaja. (2009). Ciclo económico y sobrecualificación: efectos de la crisis actual. Capital Humano. No. 104. http://www.fundacionbancaja.es/archivos/publicaciones/CH104.pdf[Consulted: 04th February 2016]

Jones, P. (2001). Are educated workers really more productive?. *Journal of Development Economics* 64, No. 1 pp. 57-79

Katcher, B.L. (2014). To hire or not to hire the overqualified, this is the question. *Discovery Suverys, Inc*. http://www.discoverysurveys.com/articles/itw-101.html [Consulted: 16th January 2016]

Leuven, E. & Oosterbeek H. (2011). Overeducation and Mismatch in the Labor Market. *IZA Discussion Paper.* No. 5523

Lewis, W. A. (1954). Economic development with unlimited supplies of labour. *The Manchester School*

McGowan, M.A & Andrews, D. (2015). Skill mismatch and public policy in OECD countries. *Organisation for Economic Co-operation and Development.* ECO/WKP (2015)28

Mincer, J. (1958). Investment in human capital and personal income distribution. *Journal of Political Economy.*

Mortensten, D. T. (1982). The Matching Process as a Non-cooperative/Bargaining Game. *The Economics of Information and Uncertainty. University of Chicago Press.*

Obiols-Homs, F. & Sánchez-Marcos, V. (2015). Education policy, occupation-mismatch and the skill premium.

Observatorio de Emancipación del Consejo de la Juventud de España (CJE). (2013). Población joven y trabajo. Primer Trimestre 2013. www.cje.org [Consulted: 03rd December 2015]

OECD. (2008). Going for Growth. Economic policy reforms. *OECD Publishing.*

OECD (2008). Improving the matching of workers to jobs in OECD. Economic Surveys: Spain 2008. *OECD Publishing.*

OECD. (2010). Reforming the labour market in OECD. Economic Surveys: Spain 2010. *OECD Publishing*.

Quinn, R. & Mandilovitch, M. (1975). Education and job satisfaction: a questionable payoff. *Survey Reseach Center University of Michigan.*

Quinn, R. & Shepard, L. (1974). The 1972-73 quality of employment survey; descriptive statistics with comparison data from 1969-70. Survey of working conditions. *Survey Reseach Center University of Michigan.*

Quintini, G. (2011). Over-Qualified or Under-Skilled: A Review of Existing Literature. OECD Social, Employment and Migration Working Papers. No. 121. *OECD Publishing*.

Rahona López, M.M. (2008). La educación universitaria en España y la inserción laboral de los graduados en la década de los 90. Un enfoque comparado. *Premios Injuve para Tesis Doctorales 2008*. Chapter 1.

Randstad. (2012). Skills mismatches & finding the right talent. *Randstad Holding*. Global Press Report wave 3-2012.

Schultz, T. (1962). Reflections on investment in man. Journal of Political Economy. No. 70. *University of Chicago Press.*

Secretaria de Socioeconomia de CCOO de Catalunya. (2008). L'ocupació a Catalunya, 2008. Conclusions síntesi-resum. http://www.ccoo.cat/sase/documents/arxius_pdf/conclusions.pdf [Consulted: 11th December 2015]

Serracant, P. (2005). La sobrequalificació entre els joves catalans. Observatori Català de la Joventut II. Títol III. *Aportacions ; 27.*

Sheppard, H. & Herrick, N. (1972). Where have all the robots gone? Worker dissatisfaction in the 70s. *Free Press.*

Silles, M. & Dolton, P. (2002). The effects of overeducation on earnings in the graduate labor market. No 126. *University of Oxford Publishing.*

Spence, M. (1973). Job market signaling. The Quarterly Journal of Economics, Vol. 87, No. 3, pp. 355-374. *Oxford University Press*.

Tsang, M & Levin, H. (1985). The economics of overeducation. Vol 4. No 2. pp 93-104. *Economics of Education Review*.

Universia España. (2014).¿Qué ha generado el desajuste entre la educación y el empleo?. http://noticias.universia.es/empleo/noticia/2014/12/02/1116148/generado-desajuste-educacion-empleo.html [Consulted: 05th December 2015]

Wolbers, M. (2003). Job mismatches and their labour-market effects among school-leavers in Europe. European Sociological Review. Vol. 19, No. 3, pp. 246-266. *Oxford University Press*

8. APPENDIX

Appendix 8.1: Retail and restoration firms' questionnaire:

Total number of employees	
Total number of employees working in the points of sale in Catalonia	

Are there job positions in the points of sale that do not require high nor specific levels of education? If so, which type of job position?

Percentage of temporary employees in the points of sale	
Percentage of indefinite employees in the points of sale	

Choose 3 or 4 characteristics that you value in a candidate for a vacancy that does not require a high or specific level of education in your point of sale

- ☐ Aptitudes for team work
- ☐ Availability
- ☐ Customer service and communication skills
- ☐ Education
- ☐ Enthusiasm and willingness to work
- ☐ Flexibility
- ☐ Good presence
- ☐ Language (s)
- ☐ Mindset and responsibility
- ☐ Previous work experience
- ☐ Recommendations

Do you value the level of education of a candidate as a signal for the capacities that the worker may have?

Percentage of temporary workers that have a level of education higher than the required for their job position in your points of sale

Percentage of indefinite workers that have a level of education higher than the required for their job position in your points of sale

---

Probability that a temporary vacancy is converted into an indefinite vacancy

---

If the probability that a temporary vacancy is converted into an indefinite vacancy is high, would you prefer a candidate with high level of education or low level of education for a vacancy that does not require high nor specific level of education? Why?

If you think there are negative aspects of hiring an overqualified candidate (a candidate that has a level of education higher than the one required for the job position), which would they be?

Appendix 8.2: List of the contacted retail and restoration firms (the surveyed firms are highlighted in bold)

100 MONTADITOS	FARGGI	NOSTRUM
ABACUS	FEIXES AULET	O'PAN
AREAS DE ALIMENTACION	FES MÉS	**PADEVÍ**
BASE	**FONTVISOCKS**	PANCHITO
BAUHAUS	FOOTLOCKER	PANS &COMPANY
BENETTON	**FOSTER'S HOLLYWOOD**	PARFOIS
BIBA	FUREST	**PAVIC**
BISSÚ	GRANIER	**PEACOCK**
BLANCO	**GRANJA ARMENGOL**	PEIXOS POVEDANO
BON AREA	GROS MERCAT	PINTUR
BON PREU	GRUP CARRERA	PLANA DE VIC
BOSANOVA	HAPPY PILLS	**PLANELLES DONAT**
BROWNIE	IBERICUS	PRINK
CAL ISERN	IKEA	PROGRÉS SABATERIES
CAMPER	IMAGINARIUM	PUNT FRESC
CAPRABO	INSIDE	PUNT ROMA
CASA	JUGUETTOS	PUNTO BLANCO
CASA AMETLLER	**KÖNIG**	**QUEROL**
CASA TIO	LA BURUGESA	RAQUEL SALA
CASAS SABATERIAS	**LA CROSSANDRA**	**SAUS FRUITERIES**
CLAREL	LA SIRENA	SEPHORA
CONDIS	LEROY MERLIN	SERVIFRUIT
CONSUM	LIDL	SHANA
COQUES PERAFITA	LIZARRAN	SMÖOY
CORTEFIEL	**LLAGURT**	SUBWAY
CULIMARIUM	LLAOLLAO	SUPAN
DESIGUAL	MANGO	SUPERVERD
DINO	MARLO'S	SYSTEM ACTION
DOUGLAS	MARYPAZ	TAGLIATELLA
DRIM	MASRAMON	TASCÓN
DRUNI	MC DONALDS	TEXTURA
EL MUSSOL	MEDIA MARKT	THE BODY SHOP
EL RACÓ	**MERKAL CALZADOS**	TNC
ENRIQUE TOMAS	MERKAMUEBLE	**VIENA**
EQUIVALENZA	MISAKO	VINALIUM
EseOese	MOYCOR	VIVES
ETAM	MUY MUCHO	WOMAN'SECRET
EUREKAKIDS	NATURA	YAMAMAY

Appendix 8.3: Temporary employment agencies' questionnaire:

If retail firms are presented with two candidates to choose from to cover a temporary vacancy that does not require a high or specific level of education, would they choose a candidate with high level of education or low level of education? Why?

In the job offers of retail firms for vacancies that do not require high or specific level of education, do they ask for high level of education or education requirements?

Which is the probability that a temporary vacancy is converted into an indefinite vacancy? Does this probability influence in the selection process in relation to the education level of the candidate? How?

Appendix 8.4: List of the contacted temporary employment agencies (the surveyed firms are highlighted in bold)

ADECCO TT
AGENCIA PENELOPE ETT
AGIOGLOBAL
ANANDA TRABAJO TEMPORAL
ASCENDENT ETT
AXXON
CATALANA DE TREBALL
DEKRA EMPLEO
EPOS
EUROFIRMS
GI GROUP
GRUPO ACENDENT STAFF ETT
GRUPO ALLIANCE
GRUPO FASTER IBÉRICA
INTAC VIC
MANPOWER
MASTER WORK
MEDITEMPUS
PRO WORK SELECTION
SELECCIÓN Y TRABAJO
SELECTIVA
SYNERGIE
TEMPJOB ETT
TT TREBALL TEMPORAL
VALESTA ES

Appendix 8.5: Basic information of the 20 surveyed retail and restoration firms:

Commercial name/brand	Company name	CIF	Dimension (number of employees)	Number of points of sale in Catalonia	Number of employees in points of sale in Catalonia
BISSÚ	BISU BAGS, SL	B65967762	20	7	12
BON AREA	CORPORACION ALIMENTARIA GUISSONA, SA	A25445131	3500	368	1500
CASA AMETLLER	CASA AMETLLER, SL	B62591359	887	82	826
CASA TIÓ	UNIÓ INTEGRAL ALIMENTÀRIA, SA	A63371082	113	15	90
ENRIQUE TOMÁS	ENRIQUE TOMÁS, SL	B59544957	420	54	398
EUREKAKIDS	DAMERIK, SL	B17571589	130	30	90
FONTVISOCKS	FONTVISOCKS, SL	B61248548	27	7	25
FOSTER'S HOLLYWOOD	FOOD SERVICE PROJECT, SL	B82798943	8727	23	986
GRANJA ARMENGOL	GRANJA ARMENGOL	39237070J	33	22	30
KÖNIG	KG GIRONA, SL	B55060016	240	8	30
LA CROSSANDRA	PASTISSERIA CROSSANDRA, SL	B63042501	19	3	19
LLAGURT	RAHOLA I SALOMÓ, SL	B55093140	55	24	52
MERKAL CALZADOS	MERKAL CALZADOS, SL	B63266969	1250	61	315
PADEVÍ	PADEVI, SA	A08653577	10	4	10
PAVIC	PAVIC, SA	A08099897	145	21	78
PEACOCK	CALÇATS PEACOCK, SL	B17304239	38	13	34
PLANELLES DONAT	PLANELLES DONAT, SL	A58723453	13	4	10
QUEROL	QUEVEL, SL	B08957896	96	28	88
SAUS FRUITERIES	FRUITERIES VILLALTA-SAUS, SL	B62188115	11	4	7
VIENA	ESTABLIMENTS VIENA, SA	A08874489	1500	45	1462

Appendix 8.6: Temporary employment agencies' questionnaires' answers

TEMPORARY EMPLOYMENT AGENCY :	DEKRA EMPLEO

Si una empresa de comerç al detall se'ls presenten dos candidats a triar per cobrir una vacant temporal que no requereix alts ni específics nivells d'estudis, escollirien un candidat amb un alt nivell d'estudis o un amb baix nivell d'estudis? Per què?

> Normalmente se interesan primero por las otras características del candidato antes que el nivel de estudios si la vacante no requiere un nivel específico, pero si están entre dos que les gustan por igual, al ser una vacante temporal, escogen generalmente la persona que tiene un nivel de estudios superior porque piensan que van a ser más productivos porque tienen más facilidad para aprender las tareas a realizar.

A les ofertes de feina de les empreses de comerç al detall per vacants que no requereixen alts ni específics nivells d'estudi, es demana un alt nivell d'estudis o algun requeriment acadèmic?

> No, porque si especifican en la oferta de trabajo un nivel de estudios superior al que es necesario, luego el trabajador les va a pedir un aumento de sueldo. Pero si no lo especifican luego pueden escoger entre los distintos candidatos teniendo el nivel de educación en cuenta sin riesgo a que el escogido pida un sueldo superior.

La probabilitat que un lloc de treball temporal es converteixi en indefinit es té en compte a l'hora del procés de selecció per escollir els candidats segons el seu nivell d'estudis? Com?

> Nosotros solo hacemos el seguimiento de los trabajos temporales, pero las veces que las empresas buscan un trabajador para una vacante temporal que seguramente se convierta en indefinida después de un tiempo, luego prefieren un candidato que no tenga un nivel demasiado alto de estudios, porque si es así muy probablemente va a dimitir porque quiere buscar o ha encontrado otro trabajo que le sea más conveniente y requiera esos estudios.

TEMPORARY EMPLOYMENT AGENCY :	EPOS

Si una empresa de comerç al detall se'ls presenten dos candidats a triar per cobrir una vacant temporal que no requereix alts ni específics nivells d'estudis, escollirien un candidat amb un alt nivell d'estudis o un amb baix nivell d'estudis? Per què?

> En principi si no es requereix nivell d'estudis agafaran la persona que se'ls adapti més al perfil que estan buscant, independentment dels estudis.
>
> Tot així en aquests casos el nivell d'estudis pot ser tant positiu com negatiu. Positiu perquè sempre és bo tenir nivell d'estudis i negatiu perquè l'empresa pot tenir "por" que la persona els plegui quan trobi una feina que s'adapti als seus estudis. Però si és temporal per poc temps, prefereixen una persona amb més nivell d'estudis.

A les ofertes de feina de les empreses de comerç al detall per vacants que no requereixen alts ni específics nivells d'estudi, es demana un alt nivell d'estudis o algun requeriment acadèmic?

> Això depèn de cada empresa. A l'hora de demanar sempre demanen quant més formació i més experiència tingui el candidat/a millor, però si la vacant no requereix estudis, no ho posen a la fitxa.

La probabilitat que un lloc de treball temporal es converteixi en indefinit es té en compte a l'hora del procés de selecció per escollir els candidats segons el seu nivell d'estudis? Com?

> Miren altres coses abans que no pas el nivell d'estudis, però si s'ha de convertir en indefinit, prefereixen un candidat que s'adapti al perfil, que no en tingui més dels necessaris, perquè com he dit abans, tenen la "por" de que la persona marxi aviat de la feina perquè n'ha trobat una altra que s'avingui més amb el que ha estudiat.

TEMPORARY EMPLOYMENT AGENCY :	GRUPO FASTER IBERICA

Si una empresa de comerç al detall se'ls presenten dos candidats a triar per cobrir una vacant temporal que no requereix alts ni específics nivells d'estudis, escollirien un candidat amb un alt nivell d'estudis o un amb baix nivell d'estudis? Per què?

> Per vacants temporals prefereixen persones que tinguin un bon nivell d'estudis, així poden aprendre ràpid la feina, perquè com que és temporal sovint no hi ha massa temps de preparació sinó que volen bons resultats de seguida, i creuen que una persona amb un nivell d'estudis més baixos no els hi podrà oferir.

A les ofertes de feina de les empreses de comerç al detall per vacants que no requereixen alts ni específics nivells d'estudi, es demana un alt nivell d'estudis o algun requeriment acadèmic?

> No, no especifiquen formació

La probabilitat que un lloc de treball temporal es converteixi en indefinit es té en compte a l'hora del procés de selecció per escollir els candidats segons el seu nivell d'estudis? Com?

> Pot variar en funció del tipus d'empresa del que es tracti, però en la majoria dels casos, si la probabilitat de que es converteixi en indefinit és alta, tindran tendència a agafar la persona amb un nivell més baix de formació.
>
> Normalment argumenten que és per un tema de estabilitat, una persona amb més formació acabarà buscant una feina que s'adeqüi al seu nivell formatiu.

TEMPORARY EMPLOYMENT AGENCY :	INTAC VIC

Si una empresa de comerç al detall se'ls presenten dos candidats a triar per cobrir una vacant temporal que no requereix alts ni específics nivells d'estudis, escollirien un candidat amb un alt nivell d'estudis o un amb baix nivell d'estudis? Per què?

> Depèn de si es tracte d'un lloc purament temporal o d'un lloc on hi ha possibilitats de passar a ser estable dins de l'empresa usuària. És a dir, si es tracte d'un lloc purament temporal escolliran la persona que podrà fer aquella feina bé el més ràpidament possible (que sòl correlacionar amb el que té estudis), en canvi si es tracte d'un lloc més estable agafaran algú que no els plegui fàcilment (normalment el que té menys estudis doncs tindrà menys oportunitats laborals).

A les ofertes de feina de les empreses de comerç al detall per vacants que no requereixen alts ni específics nivells d'estudi, es demana un alt nivell d'estudis o algun requeriment acadèmic?

> No, normalment si no requereix un nivell elevat d'estudis no el demanen.

La probabilitat que un lloc de treball temporal es converteixi en indefinit es té en compte a l'hora del procés de selecció per escollir els candidats segons el seu nivell d'estudis? Com?

> Si que influeix perquè des de la nostra empresa intentem portar persones adequades als requeriments del lloc i tendirem a portar candidats amb un nivell adequat d'estudis (ni per sobre ni per sota dels requeriments) per garantir que, en cas que l'empresa així ho desitgi, el candidat estarà motivat per quedar-se en aquell lloc de treball.

TEMPORARY EMPLOYMENT AGENCY :	TT TREBALL TEMPORAL

Si una empresa de comerç al detall se'ls presenten dos candidats a triar per cobrir una vacant temporal que no requereix alts ni específics nivells d'estudis, escollirien un candidat amb un alt nivell d'estudis o un amb baix nivell d'estudis? Per què?

Tot i que no sempre es compleix, si que passa que si el lloc de treball és temporal i el període de formació és breu, seleccionar una persona amb formació elevada et permet que pugui assumir les tasques de forma ràpida. De totes maneres, seleccionar una persona amb formació elevada per un lloc de treball que no ho requereix implica certs riscos, el principal és que no pugui finalitzar el contracte perquè trobi una feina vinculada amb la seva formació.

Aixi doncs, alhora de realitzar una selecció de forma eficaç hauríem de tenir en compte un conjunt d'elements, no únicament la formació.

A les ofertes de feina de les empreses de comerç al detall per vacants que no requereixen alts ni específics nivells d'estudi, es demana un alt nivell d'estudis o algun requeriment acadèmic?

Depèn de l'activitat del comerç. Si es tracta d'un lloc molt tècnic lògicament les empreses si que demanen uns coneixements específics que moltes vegades s'obtenen a partir de la formació. Si pel contrari, el lloc de treball no requereix d'aquests coneixements, l'empresa sol·licita altres competències: orientació al client, actitud servicial, flexibilitat, empatia, dos comercials, facilitat comunicativa, etc, però normalment no posen un nivell d'estudis requerits.

La probabilitat que un lloc de treball temporal es converteixi en indefinit es té en compte a l'hora del procés de selecció per escollir els candidats segons el seu nivell d'estudis? Com?

Si que és una cosa que s'ha de tenir en compte, perquè una persona amb alts nivells d'estudis no es voldrà quedar estancat a una feina que sigui inferior al seu nivell de formació, es desmotivarà. Per tant és millor agafar una persona que té just els nivells d'estudis que es demanen i que per tant no tindrà incentius a buscar una altra feina. Si el candidat té alts nivells d'estudis, l'empresa ho ha de tenir en compte ja que necessitarà projecció dins de l'empresa i canviar a un altre tipus de vacant.

Universitat Autònoma de Barcelona, 27th of May 2016