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*Inserção profissional de diplomados de ensino superior em Espanha : crise e novos desafios*

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# EMPLOYABILITY OF HIGHER EDUCATION GRADUATES IN SPAIN: CRISIS AND NEW CHALLENGES<sup>1</sup>

## INSERÇÃO PROFISSIONAL DE DIPLOMADOS DE ENSINO SUPERIOR EM ESPANHA: CRISE E NOVOS DESAFIOS

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### Abstract

This article analyses the employability of university graduates in Spain, in terms of both the quantity and quality of employment. Regarding quantity, graduate employment rates are higher than those for people with other education levels. Furthermore, both in times of crisis and of bonanza, graduates are more protected against unemployment. This is fundamentally due to the fact that they work in sectors and occupations that are less exposed to cycles. Regarding the quality of their jobs, graduates are less likely to have fixed-term contracts, although not much less than those who have vocational training or upper secondary education. On the other hand, depending on how it is measured, the proportion of underemployed university graduates is between 26% and 38%. The article also confirms that the salaries of university graduates are higher than of those who have other levels of education; but they have decreased considerably over the last two decades, especially in the last bonanza period.

**Keywords:** employment, fixed-term contracts, overeducation, earnings

### Resumo

Este artigo analisa a inserção profissional de diplomados universitários em Espanha, considerando tanto a quantidade como a qualidade de emprego. No que respeita à quantidade, as taxas de emprego dos graduados de ensino superior são mais altas do que para pessoas com outros níveis educacionais. Além disso, tanto em tempos de crise como de bonança, os diplomados universitários estão mais protegidos contra o desemprego. Tal explica-se, fundamentalmente, pelo facto de estes diplomados trabalharem em setores e ocupações que estão menos dependentes dos ciclos económicos. Relativamente à qualidade dos empregos, os graduados são menos propensos a ter contratos a prazo, ainda que não muito menos do que aqueles que completaram formação profissional ou ensino secundário. Por outro lado, dependendo de como é medida, a proporção de graduados universitários subempregados situa-se entre 26% e 38%. A análise também confirma que os salários dos graduados universitários estão acima dos que auferem os diplomados que têm outros níveis de estudo, mas reduziram-se consideravelmente nas últimas duas décadas, sobretudo no último período de bonança.

**Palavras-chave:** emprego, contratos a prazo, sobreeducação, níveis salariais

### Introduction

In recent decades the Spanish labour market has undergone enormous change. On the one hand, the occupational structure has been substantively altered, increasing the proportion of good jobs;

on the other hand, the qualification level of the workforce has also been transformed, shifting from a low level of training to a proportion of university graduates similar to, and in some cases above, that of the main OECD countries. Together with these changes, both the rapid incorporation of women

into the workforce and an increase in flexibility due to fixed-term contracts are noticeable. These radical changes have taken place in the context of a labour market that has been particularly affected by economic cycles, with periods of both massive creation and destruction of posts.

The aim of this article is to analyse the employability of higher education graduates in Spain in recent decades, both in quantitative and qualitative terms. Employability is understood to mean the probability of being employed. Furthermore, three indicators concerning the quality of jobs will be analysed: fixed-term contracts, overeducation or underemployment, and salaries. Thus, the paper is divided into four sections. The first describes key changes in the Spanish labour market related to the employability of university graduates. The second outlines the education revolution that has taken place in Spain. The third section reviews the employability of higher education graduates in quantitative terms. To this end, rates of employment and unemployment are analysed, and multivariable analysis is presented to explain why university graduates are more protected against unemployment. The fourth section analyses the quality of their jobs by employing three indicators mentioned above: the rate of fixed-term contracts, overeducation and salaries. Finally, the conclusions are presented.

Before moving on it is important to distinguish between two types of higher education in Spain: university and non-university. The first-cycle programme for university education is the bachelor's degree. The equivalent for non-university education is advanced vocational training. The bachelor's degree is academically orientated, while advanced vocational training has a clear professional orientation and pertains to post-compulsory non-university education. University education also has second (master's degree) and third (PhD programmes) study cycles.

### *The large-scale transformations in the Spanish labour market*

In recent decades the Spanish labour market has undergone profound changes. These changes have not only affected the quality of those who work, but also the characteristics of the jobs themselves. In order to understand the employability of higher education graduates in Spain, it is necessary to describe these transformations, particularly the increase in the number of employed people, work flexibility, changes in the occupational structure and the education revolution<sup>2</sup>. In this summary I will focus on the first three, as the education revolution merits a separate summary. All the data from this section is drawn from the Spanish Labour Force Survey.

The first key transformation that has taken place relates to the increase in the number of

people employed. Between the mid-seventies and the mid-nineties this figure fluctuated between 11 and 13 million, depending on the economic cycle. However, between the mid-nineties and the fourth quarter of 2006 it grew from 12 to 20.5 million. The crisis then reduced the figure to 16.6 million in 2012. In the first quarter of 2017 there are 18.4 million employed people. In other words, at the worst moment of the latest crisis, there were 3.6 million more people employed than at the best moment in previous decades. The other side of the coin is the increase in unemployment during recessions. Since the mid-seventies, the unemployment rate has risen above 20% during successive crises (almost 25% in the mid-nineties, and 27% in 2013).

The second change in the Spanish labour market in recent decades is related to flexibility. Spain can be characterised by its high number of fixed-term contracts. The root of this phenomenon dates back to the economic crisis that occurred between the mid-seventies and the mid-eighties in Spain. During those years, the unemployment rate reached 21%. The first socialist government, which came to power in 1982, initiated a series of economic reforms. One of its "star measures" was the 1984 labour reform, whose impact on the labour market continues to be felt today. This reform changed the significance of fixed-term contracts with the aim of promoting employment. Until then, the number of fixed-term contracts in Spain was low and strongly linked to the temporary nature of the occupation. The 1984 reform broke this causality: someone could be hired on a short-term basis even if the nature of their activity was indefinite.

The consequence of the 1984 labour reform was a rapid increase in fixed-term contracts. Since then, when employers hire someone, they predominantly opt for a contract with a fixed end date due to the lower cost of laying off the employee, and for the incentive that a temporary worker supposedly has to try and make their contract permanent, instead of becoming unemployed. In 2006, 34% of employees were hired for a fixed-term period. The economic crisis meant that this rate fell to 24% in 2015. The fall was not due to an increase in permanent contracts, but rather to the increase in unemployment, given that in periods of crisis fixed-term employees are the first to be laid off – or simply not have their contracts renewed. This figure makes Spain the country with the second highest rate of fixed-term contracts in the OECD, only behind Poland.

The third great transformation in the Spanish labour market concerns the occupational structure. The evolution of the occupational structure in the world has, for decades, been a subject of debate among scholars of social stratification and the sociology of work (Autor, Katz and Kearney, 2006; Goos and Manning, 2007; Goos, Manning and Salomons, 2009). Basically it is argued that the incorporation of

new information technologies into production systems has led to a polarisation of the occupational structure and to an increase of both good and bad jobs. On the other hand, some researchers have highlighted the fact that the evolution of production systems has not followed a uniform pattern among the different countries. Therefore, during the period of highest job creation in recent decades (1995-2007), polarisation has been clearer in central European countries like Holland, France, Germany and Belgium, as well as the United Kingdom. In other countries, such as some in northern Europe (Finland, Denmark and Sweden), plus Ireland and Luxembourg, the occupational structure has clearly improved. In southern European countries an asymmetric polarisation has predominated, in which good jobs have grown further. This is the case of Italy, Spain, Portugal and Greece (Bernardi and Garrido, 2008; Fernández-Macías, 2012; Fernández-Macías and Hurley, 2008).

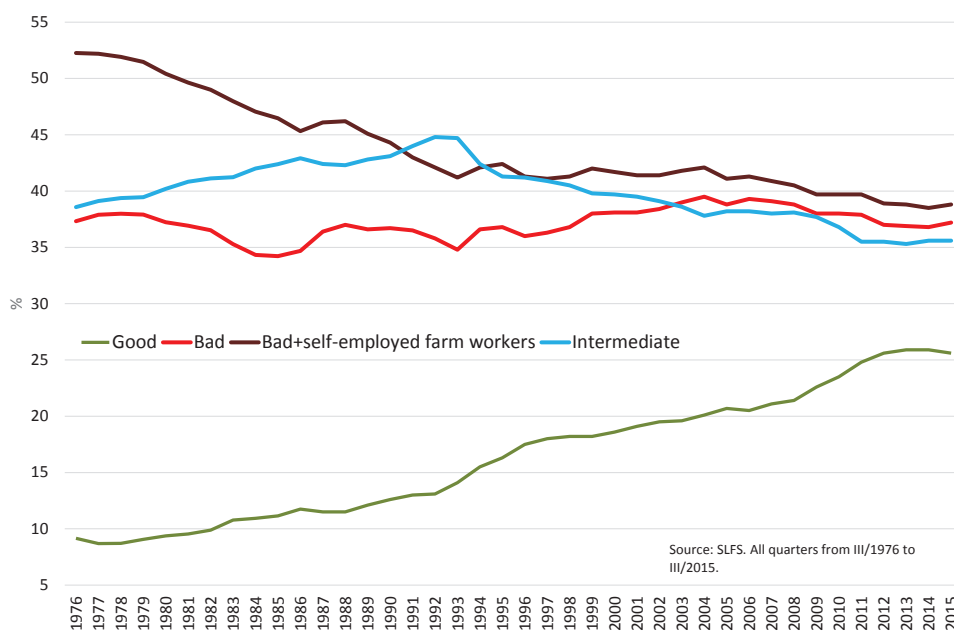
If we consider a broader time range, in the mid-seventies Spain was a society with a large number of employees who were considered semi-unskilled. Graph 1 shows the proportion of good, bad and intermediate jobs. In order to distinguish between them, Erikson, Goldthorpe and Portocarero's<sup>3</sup> (1979) classification (EGP) was used. Good jobs were considered those pertaining to classes I and II (high and low-level professionals and managers), while low-level routine non-manual workers (IIIb), semi-unskilled manual workers (VIIa) and agricultural workers (VIIb) were included in bad jobs. The other classes, IIIa (high-level routine non-manual workers), classes IVa, IVb and IVC (small owners,

small employers and the self-employed), and class V (lower technicians and supervisors) and those in class VI, (skilled manual workers) were considered intermediate jobs. According to the classification, 37% of those employed had a job that required a low level of qualification. If self-employed workers in the primary sector are added to that, the proportion reaches 53% (see graph 1). On the other hand, only 9% of those employed had a professional or technical job. In 2015, the proportion of workers with jobs that required a low level of qualification continued to be around 37%; if we include self-employed agricultural workers, the figure is 39%, 14 points less than in the mid-seventies. On the other hand, the proportion of those employed in professional or technical jobs increased from 9 to 25%.

The proportion of intermediate jobs varied between 45 and 35% between the mid-seventies and 2015, falling mostly since the start of the nineties; at the same time, the number of worst and best jobs went up in the third sector. This evolution in employment in Spain confirms the asymmetric polarisation where the number of intermediate jobs goes down while at the same time the number of best and worst jobs goes up – although in relative terms, the number of best jobs goes up the most.

From an international perspective, it is worth emphasising that despite the increase in the proportion of people employed in good jobs in Spain, the proportion of workers in management, professional and technical occupations is lower than in the majority of European countries. Specifically, according to the ILO, the proportion of workers in

**Gráf 1** ▶ % of people working in good jobs, bad jobs and intermediate (EGP classification)



Spain in these jobs in 2014 was 34%, while the proportion for other countries such as Austria, Belgium, France, Germany, Holland, Sweden, the United Kingdom and Denmark was between 40 and 50%. As complementary data, it is interesting to note that the proportion of workers in elementary occupations in Spain was 13%, a higher figure than for all the countries mentioned above (ILO, 2015).

### *The education revolution*

The other great revolution that has taken place in Spain has been in education. This is important to take into account when analysing the employability of higher education graduates, both in quantitative and qualitative terms. Table 1 shows the evolution of levels of education by birth cohort. The table shows that very few people born in the second half of the nineteen thirties completed upper secondary education or went to university: only 13%. If we compare that figure to those born in the second half of the seventies, we can see the magnitude of the change: 58% have upper secondary education, higher vocational training or a university qualification. The table shows the gradual and sustained expansion of education cohort by cohort.

For these generations, the main effect of the expansion in education has been that in the current Spanish labour market there co-exist generations with a very large education gap. In fact, OECD data (2014) confirms that Spain is the third leading country with the largest gap among those who are 55-64 years old and those under 44. The proportion of individuals with higher education for the former is 19%, while the proportion for the latter is 39%. This gap of 20 points between generations is only

below that of France and Ireland, with 23 and 24 points respectively.

Focusing on recent years, graph 2 shows that one of the effects of the economic crisis has been an increase in the number of university graduates. In absolute terms, the progressive fall in the numbers of university graduates stops in the years of crisis, and then continues to fall when the recovery occurs. It is even more interesting to analyse the phenomenon in relative terms, given that it discounts the possible effect of the cohort sizes. The graph shows that the rate of individuals between 18 and 24 years old enrolled in university education increased during the crisis from 24 to 30%.

Table 2 shows that almost half of university students study Social Sciences and Law; a little more than 20% study Engineering and Architecture; 17% study Health Sciences and less than 10% study Arts, Humanities and Sciences. The evolution of these studies over the last 10 years shows a fall in the proportion of Engineering and Architecture students, and a marked increase in those who study Health Sciences. It is important to emphasise that the majority of those who obtain a higher education qualification are women: 57% in the 2013-14 academic year (Ministerio de Educación, Cultura y Deporte, 2015).

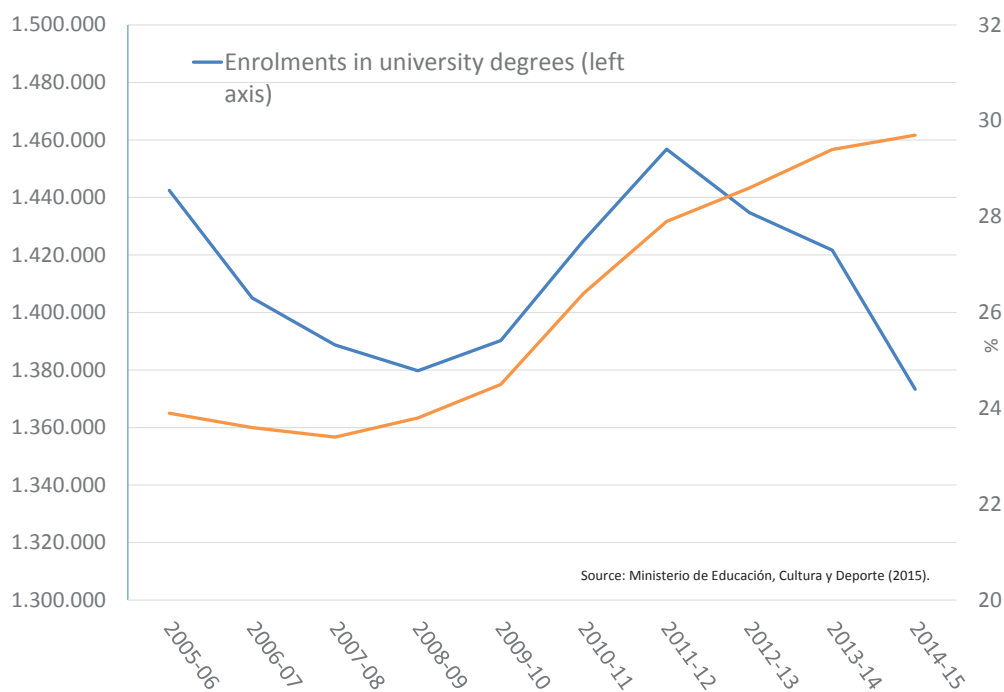
### *The employability of higher education graduates in Spain: the quantity of employment*

This section reviews the employment and unemployment rates of university graduates. In order to diagnose the social situation of a collective, it is useful to establish comparisons. In this

**Table 1** ▶ Levels of education by birth cohort

	Illiterate	Without studies	Primary	Lower secondary	VT1	Bach. Sup.	VT2	Univ.	Upper secondary or higher
<b>1936-40</b>	7.5	26.7	41.7	9.3	1.6	3.8	2.3	6.5	12,7
<b>1941-45</b>	3.4	18.9	40.6	15.9	2.3	5.7	2.9	9.6	18,2
<b>1946-50</b>	2.2	12.4	34.6	23.9	3.3	6.7	4.1	11.7	22,6
<b>1951-55</b>	1.4	6.9	25.9	29.2	4.7	11.1	4.8	14.7	30,6
<b>1956-60</b>	1.1	3.6	17.4	31.7	6.7	14.4	6.4	17.5	38,3
<b>1961-65</b>	1.0	2.5	12.7	31.4	9.1	13.8	8.9	19.3	42,0
<b>1966-70</b>	0.8	2.0	10.1	30.3	9.8	13.8	11.5	20.8	46,1
<b>1971-75</b>	0.7	1.4	7.1	26.5	8.9	13.6	13.9	27.0	54,5
<b>1976-80</b>	0.7	1.4	6.2	23.0	9.7	14.0	15.0	29.0	58,0
<b>1981-85</b>	0.6	1.3	9.0	23.7	11.1	13.8	12.8	27.2	53,7
<b>1986-90</b>	0.5	1.0	12.9	19.6	11.6	13.8	12.7	27.7	54,2

**Source:** Spanish Labour Force Survey 2015, Quarters 1-3.

**Graph 2.****Table 2** ▶ Distribution of students enrolled in degree courses and in the first and second cycle, by branch of teaching course 2003-2004 and 2013-14

	2003-2004	2013-2014
<b>Sciences</b>	7.3	5.8
<b>Health Science</b>	7.8	16.4
<b>Arts and Humanities</b>	9.5	9.6
<b>Engineering and Architecture</b>	26.5	21.1
<b>Social Sciences and Law</b>	48.9	47.2

Source: Ministerio de Educación, Cultura y Deporte (2015).

case, the situation of university graduates can be compared with that of individuals with other levels of education in Spain; or with university graduates who reside in other OECD countries.

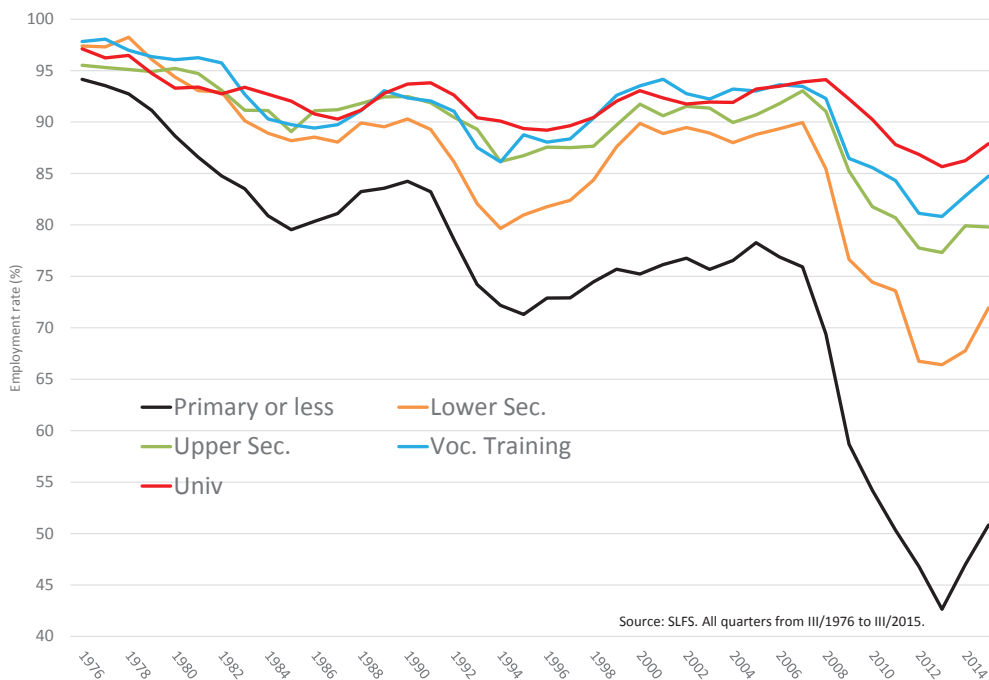
We will start with the former comparison. Graphs 3 and 4 reflect the employment rates by education level of men aged 30-39 (graph 3) and 40-49 years (graph 4) according to different levels of education between 1976 and 2015. The graphs highlight some relevant facts. The first is that employment rates differ between education levels. The rate for those who have primary education or less is a little lower than for other levels. There are also significant differences between those who have lower secondary education and the rest. Neverthe-

less, the differences between those who have upper secondary, vocational training or a university degree differ much less among themselves, except in the recent years of the crisis.

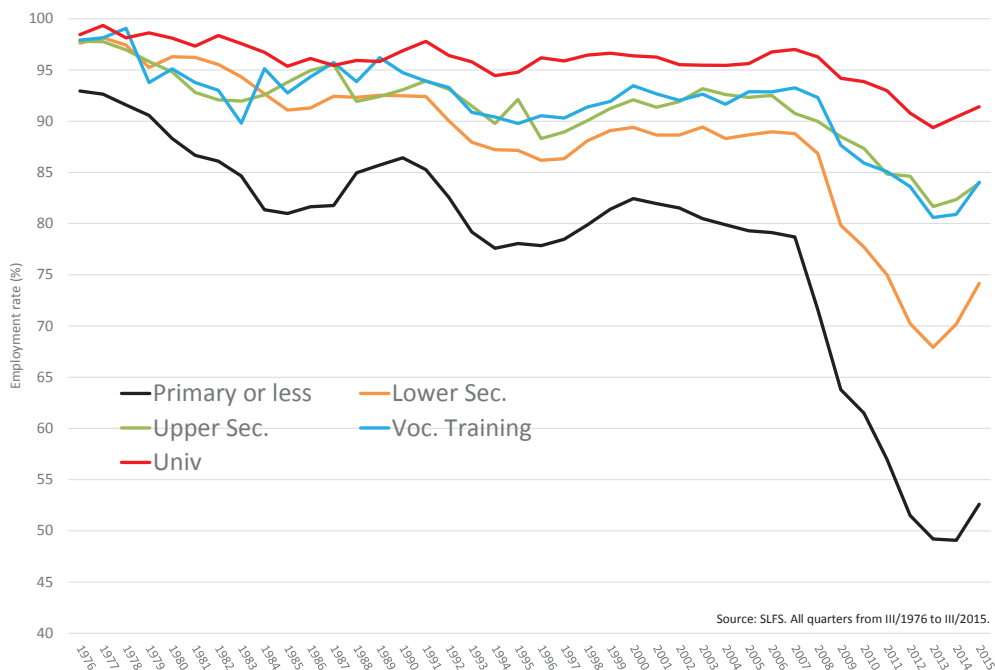
This leads to the second point worthy of note: economic cycles affect rates at all levels, but in varying ways. During periods of crisis the rates fall, but less so for those with a higher education level. In effect, the employment rate for those with lower education levels falls rapidly during a crisis, only partially recovering during bonanza periods. More striking are the effects of the most recent crisis. The rate of employment of those who have primary education or less falls dramatically to 43%, and for those who have lower secondary education it falls to 66%. On the other hand, that same crisis distinguished between the fate of those at other levels: the employment rates fell overall, but less so for university graduates. At the worst moment, their rate of employment fell to 85%; for those who had vocational training it fell to 80%, and for those with upper secondary education 77%. The pattern for those between 40 and 49 years old is similar, although the rates of employment are higher.

The following graphs represent the unemployment rates for men and women by level of education from the year after they stopped studying (or reached the minimum age for work) to those who finished their studies 10 years ago. Furthermore, each graph corresponds to the second quarter of

**Graph 3** ▶ Employment rates by education level. Men aged 30-39



**Graph 4** ▶ Employment rates by education level. Men aged 40-49



these years: 2000, 2007 (the best year in terms of employment); 2012 (the worst moment of the crisis); and 2015 (a symbolic year of recovery). Clearly, unemployment rates vary in each of these years depending on the economic cycle; but the trend is very similar between levels of education. The unemployment rate for university graduates is always lower compared to other levels. Therefore it is worth highlighting that if university graduates are compared with other levels of education, their employability is better, both in terms of employment and unemployment.

The second comparison that can be established to contextualise the employability of Spanish university graduates is with their equivalents in other countries. In Spain, the rates of employment for those with tertiary education among those who are 25-34 and 35-44 years old are the lowest in all OECD countries, both in periods of bonanza and of crisis. However, in the period of bonanza the figure was very close to the average. In 2005, the rate of employment for those aged 25-34 was 82% in Spain, while the OECD average was 85%. For those aged 35-44, the rates were 87% and 90% respectively. In 2014, Spain was third among the OECD countries with lower employment levels among the youngest university graduates, with a rate of 74% against the average of 82%, a very similar pattern to those aged 35-44, although with higher rates for the latter group.

This pattern is also reflected in the unemployment rates. The unemployment rate for those with tertiary education in Spain is among the highest in OECD countries in any period of the economic cycle. The differences are particularly acute in the period of crisis. This data provides one example: 20% of 25-34 year olds who have tertiary education are unemployed, while the OECD average is 7%.

Now that the rates have been reviewed, Table 3 shows a series of multivariate analyses on the probability of being unemployed in a period of bonanza (2006) and of crisis (2013). The succession of models helps show why university graduates have a lower level of unemployment than those with other levels of education. In the period of bonanza, the first model, whose only independent variable is the level of education, shows that there are significant differences between university graduates and other levels (the average marginal effects vary between 14 and 8 points). As variables are introduced, the difference falls, although in the last model, which includes 14 control variables, there continue to be statistically significant differences. The differences between university graduates and others vary between 9 and 5 points; that is, being a university graduate reduces the possibility of being unemployed between 9 and 5% – even when controlling for all the variables included in the table.

During the crisis, the differences between university graduates and the rest are a lot greater in the first model. Controlling only for levels of education, these differences come to between 38 and 7 points, depending on the level. Nevertheless, once occupation and sector of activity in particular are controlled for, the differences fall considerably, to the point where they are not significant between university graduates, those with vocational training and those with upper secondary education. In line with the models, it can be said that the mechanism that protects university graduates from unemployment in periods of crisis in comparison with those that have other education levels, is to work in sectors and occupations that are less exposed to the destruction of jobs. Lastly, interactions have been undertaken to understand if the difference of coefficients between university graduates and others in the period of bonanza and crisis is significant. The most striking point is that the crisis has a significant and differential effect in that it widens the gap between those who have primary studies and university graduates.

### *The employability of higher education graduates in Spain: the quality of employment*

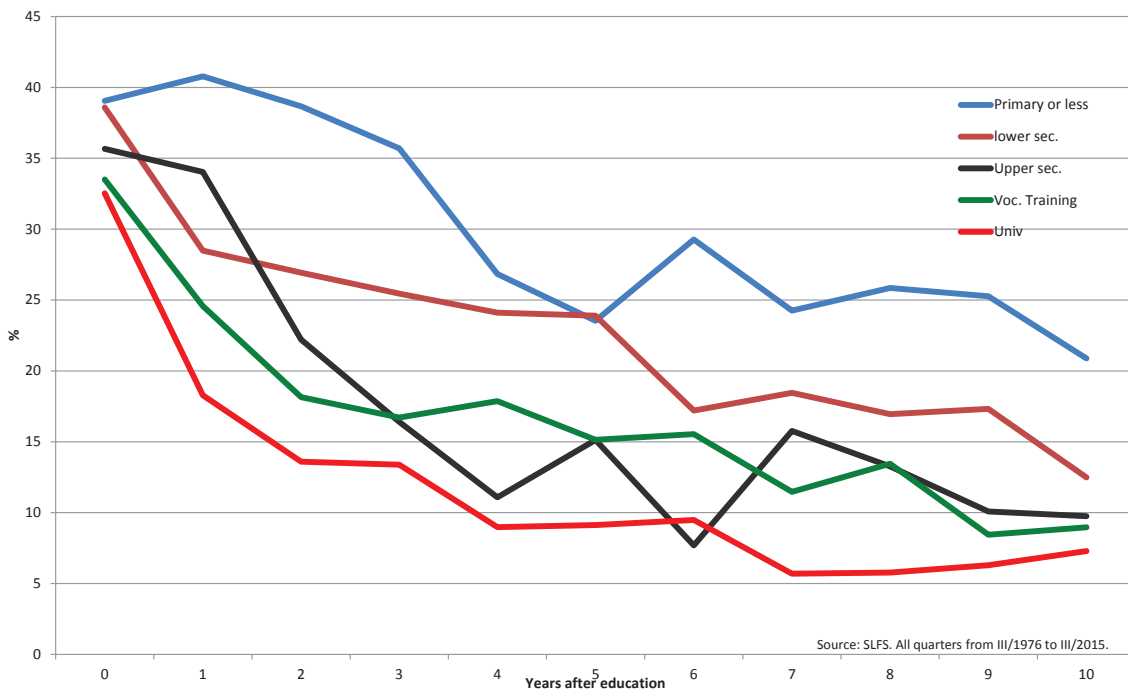
This summary is divided into three sections that analyse the quality of university graduates' jobs. The first section reviews the extent to which they are hired on fixed-term contracts. The second section considers one of the main structural problems in the Spanish labour market: overeducation. The last section focuses on the incomes that university graduates obtain in comparison with those who have other levels of education.

#### Temporality

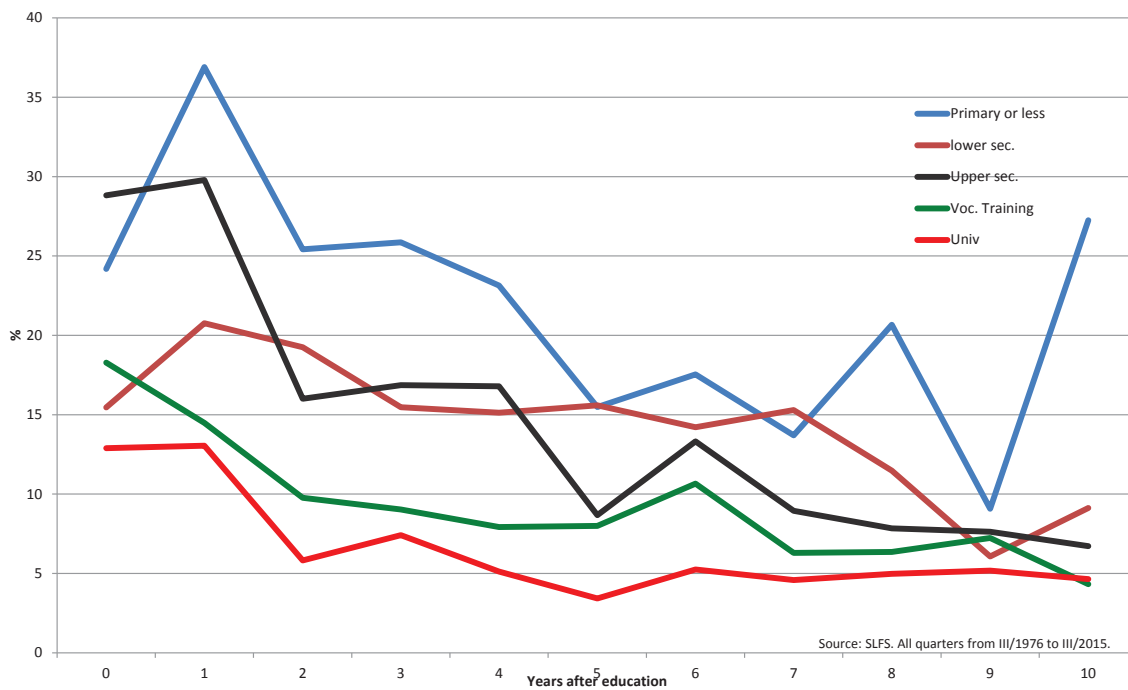
As mentioned in the first section Spain has one of the highest rates of temporality among OECD countries. The key difference between fixed-term and permanent workers lies in the cost of laying off a particular worker, which is much lower for the former. Being so, there are a series of clear advantages for those with a permanent contract. Firstly, they are a lot more protected from redundancies. Although temporality is for many a transitory state, around 20% of those on salaries continue having a fixed-term contract at ages that are very distant from their period of work insertion (Martínez-Pastor and Bernardi, 2011). This concerns individuals with unstable employment trajectories, who combine phases of unemployment with temporary jobs, and who are generally subject to worse work conditions in terms of promotion, security and salaries (Muñoz Comet and Martínez-Pastor, 2017).



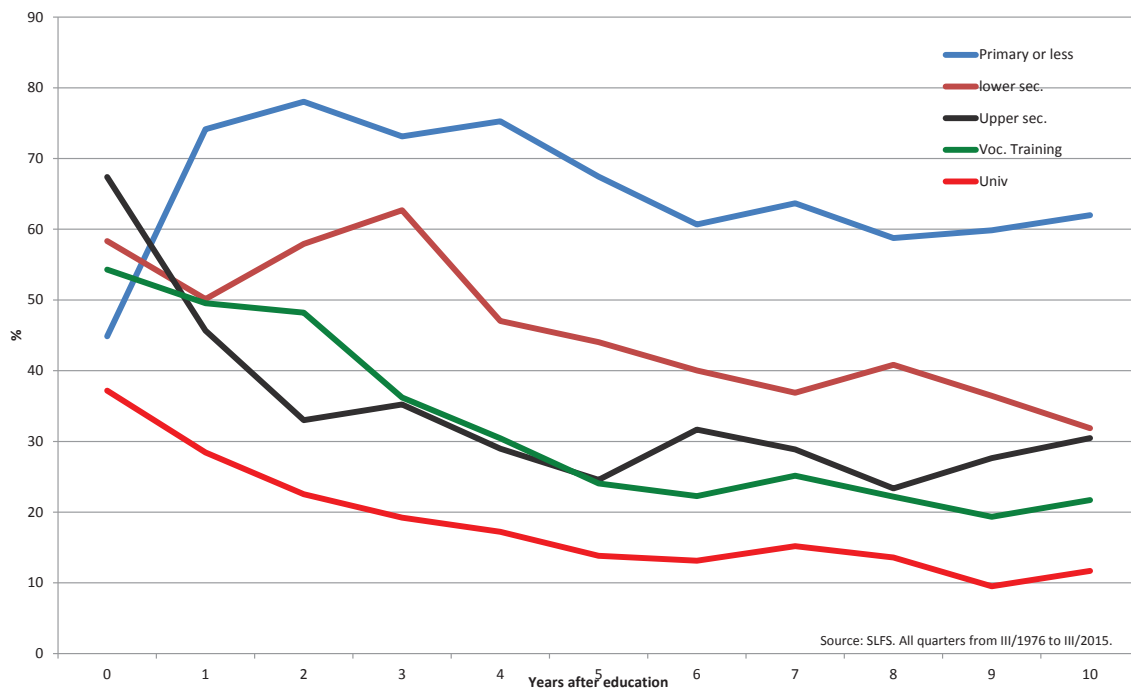
**Graph 5** ▸ Unemployment rate by educational attainment (II/2000)



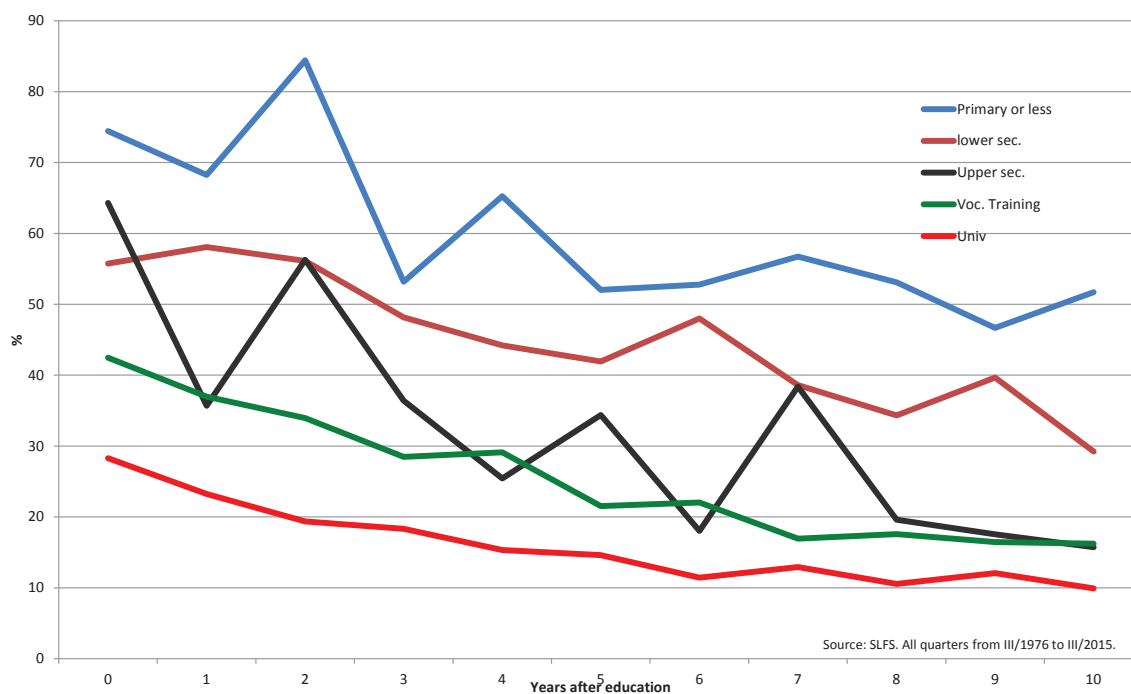
**Graph 6** ▸ Unemployment rate by educational attainment (II/2007)



**Graph 7** ▸ Unemployment rate by educational attainment (II/2012)



**Graph 8** ▸ Unemployment rate by educational attainment (II/2015)



**Table 3** ▶ Logit regression. Dependent variable: being unemployed in times of bonanza and crisis. Average marginal effects

Bonanza	Model 1	M2	M3	M4	M5	M6
primary or less	0.14***	0.13***	0.11***	0.10***	0.11***	0.09***
lower secondary	0.11***	0.11***	0.07***	0.07***	0.06***	0.06***
upper secondary	0.10***	0.10***	0.06**	0.07***	0.07***	0.06**
vocational training	0.08***	0.08***	0.06**	0.05**	0.05**	0.05**
university (ref.)						
Crisis						
primary or less	0.38***	0.34***	0.25***	0.20***	0.15***	0.13***
lower secondary	0.23***	0.20***	0.12***	0.09***	0.07**	0.06**
upper secondary	0.07**	0.06*	-0.00	-0.02	-0.03	-0.02
vocational training	0.15***	0.13***	0.07**	0.05*	0.04	0.04
university (ref.)						

\*p>0.1; \*\*p>0.05; \*\*\*p<0.01

Model 2: + social class of origin

M3: M2+own social class

M4: m3+sector of activity

M5: M4+civil status, nationality, gender, private/public school, public/private firm, firm size, part/full time, city/town size, age.

M6: M5+fixed-term/permanent contract

**Source:** Microdata from surveys 2634 (year 2006) and 2975 (year 2013) from the Centre for Sociological Research (Spain).

#### Interactions education level\*crisis (model 6)

	M6
primary or less	0.06**
lower secondary	0.05**
upper secondary	0.06**
vocational training	0.05**
univ (ref.)	
primary or less*crisis	0.09**
lower secondary*crisis	0.04
upper secondary*crisis	-0.04
vocational training*crisis	0.00
Crisis	0.14***

\*p>0.1; \*\*p>0.05; \*\*\*p<0,01

**Source:** Microdata from surveys 2634 (year 2006) and 2975 (year 2013) from the Centre for Sociological Research (Spain).

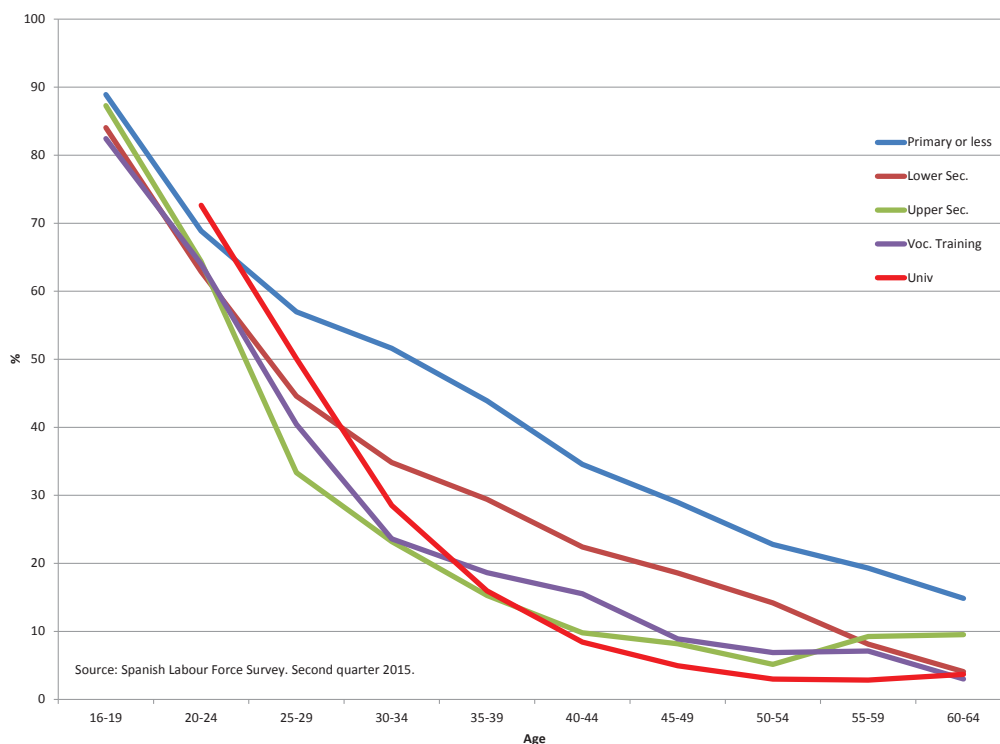
Graph 9 shows the temporality rate according to age and education level in the second quarter of 2015. Before the age of 30, the temporality rate of university graduates is even higher than that of other education levels, except those with primary level. The data makes sense, bearing in mind that at that age, university graduates have been in the labour market less time than those who have lower levels of education, who finish their education stage at a younger age and who have had more time to move on from fixed-term contracts. For those between 30 and 40 years old, temporality rates are the same as those between university graduates and those who

have vocational training or upper secondary education.

The author has carried out calculations with the Spanish Labour Force Survey according to the time that people stopped studying in these four years: 2000, 2007, 2012 and 2015. These calculations, which are not presented here due to lack of space, show that the rate of temporality is very high for all levels in the early post-study years. However, in general, regardless of the cycle, the temporality rate for university graduates is clearly less than for those who have lower secondary education or less, and slightly less than for those who have upper secondary or vocational training education. Taken together, the data indicates that being a university graduate also reduces the possibility of having a fixed-term contract, although the differences from those who have vocational training and upper secondary education are not as clear as when the unemployment rate is analysed.

#### Overeducation

Measuring the quality of the jobs of university graduates inevitably involves the analysis of overeducation. This is not a minor point, given that university graduates invest time and money in achieving a level of education that, in ideal terms, should lead to a job that is commensurate with that level. As outlined above, there has been extraordinary expansion in the education system in Spain, as well as improvement in the occupational structure. But

**Graph 9** ▸ Fixed-term contracts rate by educational attainment and age

has the increase in good jobs, typically for university graduates, been sufficient to absorb the large quantity of qualified workers?

Before commenting on the data, it is worth highlighting that there are diverse ways of measuring overeducation. Each has its advantages and disadvantages (ILO, 2014). One method may be described as normative or objective. Basically, this method consists in assigning to each occupation a specific level of education required to adequately carry out a particular job. Workers are considered overeducated when they have a higher level of education than necessary to 'correctly' carry out their occupation. A second way of measuring overeducation – statistics – consists in calculating the average education level (or the average years of study) of workers in each occupation. The workers who have higher levels of education, or those who deviate by one standard from the average years of study, are considered overeducated. Finally, another way of measuring overeducation – the subjective method – consists in using surveys, with the workers themselves stating whether they feel they have an appropriate level of education to carry out their jobs.

According to the normative definition and taking into account all workers, in 2012 Spain had a rate of overeducation of 10% – a figure that is

very close to the average of the main European countries. Nevertheless, if we take into account only the population under 29 years of age who have notably high education levels, the proportion soars to 20%, far above the main European countries except for the United Kingdom, whose rate is very close to this (ILO, 2014).

According to the definition of overeducation based on the average level of education that workers have in each occupation, the proportion of overeducated individuals, including all workers, is 15%. As with the previous measure, this figure is not far from the average of the main European countries. On the other hand, if we only take into account young people, the proportion of overeducated workers reaches 24%, a figure well above those of other countries.

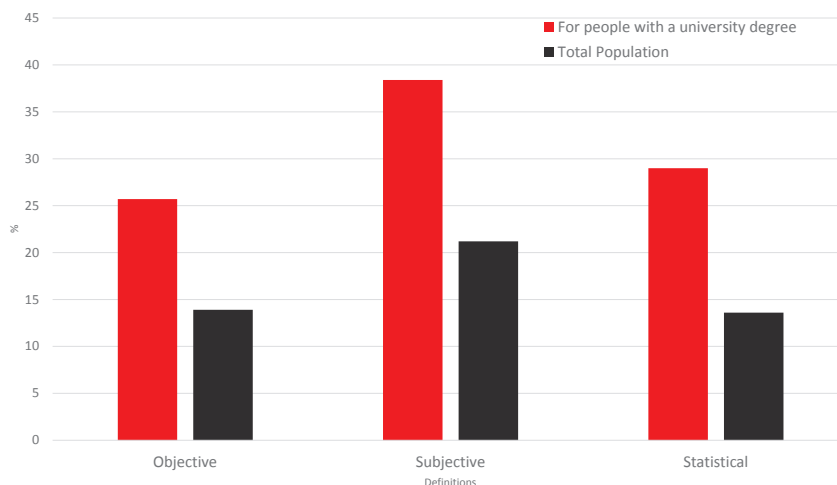
Focusing on university graduates, Martínez García (2013) has calculated the proportion of overeducated people according to three definitions: the normative and objective; the subjective; and the statistical. Graph 10 shows that depending on the definition, the proportion of overeducated university graduates is between 26 and 38%, which are very high figures. Another question also addressed by Martínez García (2013) is whether overeducation is a temporary phenomenon or whether it persists throughout the work careers of individuals. His

calculations show that the proportion falls as work experience increases; but the figures are still very high, even for those with nine years of experience or more: between 23 and 34% are overeducated, depending on the definition.

available. The quantities have been measured in 2014 euros, taking into account inflation between each one of those years and 2014.

The table is very illustrative and the following points are worth highlighting. The first is that between

**Graph 10** ▶ Overeducation rate in Spain (2013). Several measures



Source: Martínez García (2013: 127). Population between 25-65 years. PIAAC. OECD 2013.

Graph 11 helps to better understand the dynamics of overeducated university graduates according to the evolution of educational expansion, and of the occupational structure between 1976 and 2015. Three lines can be seen on the graph. One represents the number of employees who are typically university graduates (managers, professionals, and technicians of the EGP class schema). The second line indicates the number of university graduates who are economically active. The third line provides the ratio between the two figures. The number of employees who are typically university graduates grew from 1.1 to 4.5 million, while the number of active university graduates increased from 0.7 to 5.9 million. The ratio shows that the point of equilibrium was reached in 1983. While before that year there was a deficit of university graduates in Spain, in 1983 there was one graduate for every job that was commensurate with that of a university graduate. Currently the ratio is 1.3, which means that 30% of active university graduates occupy a job that requires less education than they have, or are unemployed.

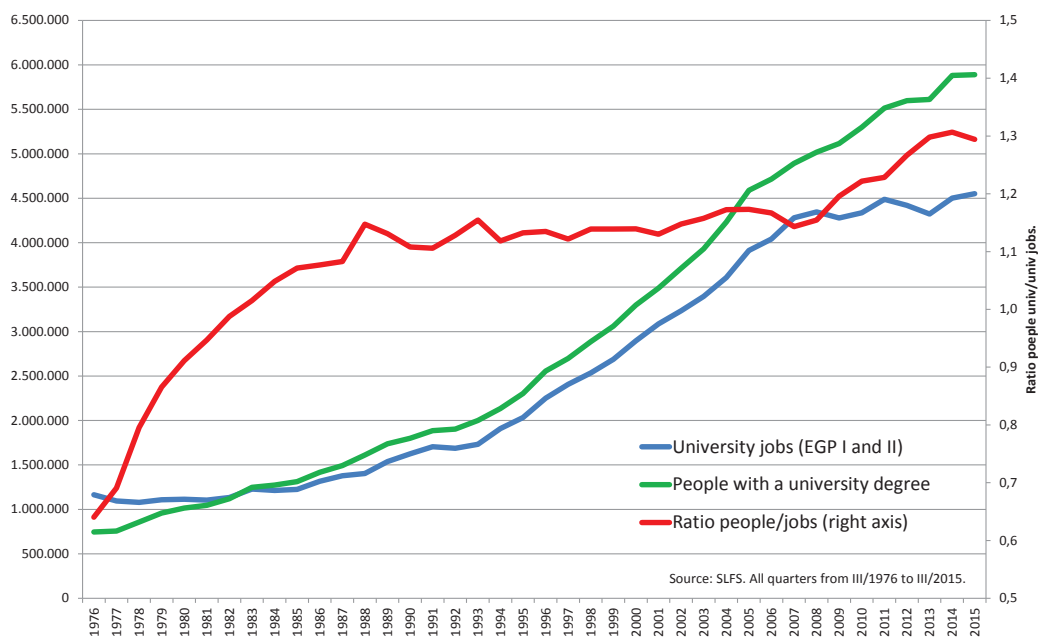
### Salaries

A third indicator of the quality of university graduate jobs relates to salaries. Table 4 draws together average salaries in Spain for various levels of education and age groups from the Wage Structure Survey in 1995, 2006, 2010 and 2014, the last one

1995 and 2014 the average salary fell by 19%. The fall was greater among university graduates, namely 24% for those aged 20-29 and 38% for those aged between 30 and 39. The falls are similar to those for people with an upper secondary education level.

The second point is that almost all of the fall occurred between the mid-nineties and 2006; that is, right in the middle of the period of economic growth. During those years the average salary of the youngest university graduates fell by 25%, and for those aged 30-39 years it fell by 34%. As has been shown in the second section, during those years there was unprecedented growth in employment, with several million more employees in the labour market. This had a lot to do with the labour insertion of immigrants and uninterrupted access for women to the world of paid work. The growth in university graduates also continued in those years.

The third fact is that during the crisis the average salary remained at relatively the same level. While the number of unemployed people increased, those who worked did not see their incomes reduced; and those incomes actually grew between 2006 and 2010 – by 7% for the general population, by 20% for university graduates aged 20-29 years, and by 5% for those aged 30-39. In broad terms, it can be said that the salaries of university graduates significantly lost value; but that loss occurred during the period of economic growth, not during the crisis.

**Graph 11** ▸ Typical university jobs and economically active people with a university degree**Table 4** ▸ Annual average earnings per worker (in 2014 euros)

	1995	2006	2010	2014	06/95	14/06	14/10	10/06	14/95
whole population	28,287.09	22,674.74	24,248.77	22,858.16	0.80	1.01	0.94	1.07	0.81
<b>20-29 years old</b>	17,440.25	15,306.67	17,402.07	15,180.28	0.88	0.99	0.87	1.14	0.87
without studies	17,885.77	11,731.08	14,806.83	13,492.30	0.66	1.15	0.91	1.26	0.75
primary	15,455.14	13,661.69	14,932.37	12,137.33	0.88	0.89	0.81	1.09	0.79
lower secondary	14,562.74	13,842.13	15,336.76	13,587.66	0.95	0.98	0.89	1.11	0.93
upper secondary	19,018.03	13,687.02	15,393.23	13,862.84	0.72	1.01	0.90	1.12	0.73
Intermediate VT	17,637.75	15,378.88	16,524.21		0.87			1.07	
advanced VT	20,541.28	16,834.29	18,198.94	16,748.17	0.82	0.99	0.92	1.08	0.82
university	25,428.52	18,980.96	22,847.98	19,370.22	0.75	1.02	0.85	1.20	0.76
<b>30-39</b>	27,526.10	22,103.31	23,668.52	21,713.49	0.80	0.98	0.92	1.07	0.79
without studies	21,448.40	14,424.43	16,458.64	13,553.51	0.67	0.94	0.82	1.14	0.63
primary	21,125.68	16,892.34	17,387.75	14,848.67	0.80	0.88	0.85	1.03	0.70
lower secondary	20,739.93	17,322.66	18,530.57	17,438.16	0.84	1.01	0.94	1.07	0.84
upper secondary	31,954.45	21,129.08	21,808.25	18,994.89	0.66	0.90	0.87	1.03	0.59
FP medio	25,004.64	20,558.71	20,280.48		0.82			0.99	
Intermediate VT									
FP superior	30,234.72	23,097.69	23,727.99	22,716.70	0.76	0.98	0.96	1.03	0.75
advanced VT									
university	46,893.32	30,736.44	32,302.83	29,254.59	0.66	0.95	0.91	1.05	0.62
<b>uni/upper sec 20-29</b>	1.34	1.39	1.48	1.40	1.04	1.01	0.94	1.07	1.05
<b>uni/upper sec 30-39</b>	1.47	1.45	1.48	1.54	0.99	1.06	1.04	1.02	1.05

Source: Wage Structure Survey 1995, 2006, 2010 and 2014.

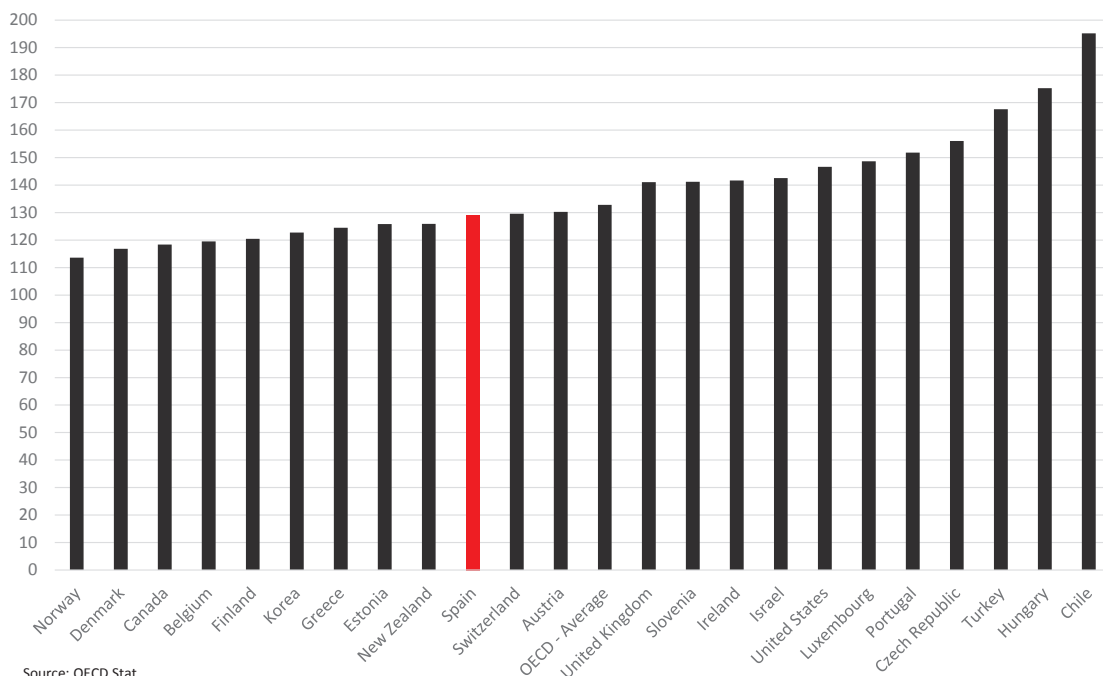
Lastly, it is worth addressing the following question: is it worth more or less to be a university graduate in Spain than in other countries? One way of measuring this is to compare the relative incomes of university graduates with the incomes of those who have another level of education, like for example, that of upper secondary. Utilising another distinct source to the one used in the previous paragraphs but which allows for international comparison (OECD, 2014), if we compare the earnings of Spaniards aged 25-34 who have tertiary education with those of people with an upper secondary education, it can be seen that in 2013 university graduates in Spain earned 29% more, a figure very close to the OECD average (33% more, see graph 12).

unemployment to a greater extent than having other education levels.

From a job quality perspective, three points have been confirmed. The first is that temporality rates for university graduates are usually lower than for other education levels, although not much lower than the rates of those who have vocational training or upper secondary education. The second point is that not all university graduates work in jobs that are 'typical university jobs'. Depending on how it is measured, the proportion of university-educated underemployed is between 26 and 38%, which is a very high figure.

The third significant point is that the salaries of university graduates are higher than those of

**Graph 12** ▶ Relative earnings for people with tertiary education in 2013 (25-34 years old). ISCED=100



Source: OECD Stat.

## Conclusions

This chapter has identified the fundamental changes in the Spanish labour market and the evolution of the employability of university graduates in recent decades. From a quantitative perspective, the employment rate of university graduates is higher, and their unemployment rate is lower, than that of people with lower levels of education. This is true both in periods of bonanza and – even more so – during a crisis. A large part of this phenomenon is due to the fact that university graduates work in jobs and sectors that are less exposed to unemployment. Therefore it can be said that being a graduate protects against

people who have other levels of education. However, they have fallen substantially in the last two decades, especially in the last period of bonanza. This might be expected, bearing in mind the quantity of university graduates working in jobs below their education level.

As a whole, the data indicates that there are at least two challenges for the employability of Spanish university graduates. The first concerns the unemployment rate. If it is true that university graduates have less unemployment than those with other levels of education, the rate is relatively high in times of crisis, particularly among those under 35 years old. The proportion of unemployed people with tertiary education aged 25-34 in 2014 was almost





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