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Impact of Recession on the employment in Catalonia from a gender and age perspective

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Impact of recession on the youth employment in Catalonia from a gender and age

perspective

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Summary:

In Catalonia, between 2008 and 2014, the rate of youth unemployment has exponentially

increased and it has turned into a structural problem: when the fourth quarter of 2014 ended,

among the people under the age of 30, the number of unemployed people was 1495600,

645000 more than in the first quarter of 2008. In addition, with the data provided by the

Spanish Tax Agency, the average wage of wage earners over 25 years in 2014 is 3.4 times

superior to the young people and the reduction of the average wage of these is 2.8 times

bigger.

Moreover, during this period, the annual income of women has shortened the distance in

relation to men, mainly the employed group, from a ratio of 1.40 to 1.30, but in contrast, the

number of women receiving minimal resources (MW and MP) has worsened: in relation to

employees, 31.7% of the total number within this subgroup.

In order to highlight the uneven impact of recession on the labor market in Catalonia, this

study examines the evolution of its main variables in the period 2008-2014 from a gender and

age perspectives delving into the structure wages and analyzing the distribution of inter and

intra group inequality between men and women.

Key words: *labor market, wages, gender inequality*

1. Introduction

One of the most important challenges that the European countries must approach is the youth employment, especially in those where, approximately, one of every four young people between 16 and 24 years old neither are employed, neither study nor receive any kind of formation.

The current economic and financial recession with unemployment exceeding even the highest levels of the early 1990s (close to 22%), and since the number of households with all their members unemployed is growing rapidly (at the end of the year 2012, the percentage of Catalan households with all their working-age members unemployed was 13%, when at the end of year 2007 it was 2.4%) results in the fact that groups such as women and young people¹, who have traditionally been the victims of major differences in the labor market (in salary, position of responsibility...). The increasing unemployment and the labor precariousness is the young people group are factors of disconnection of the society and of distrust towards the political system and, at the same time, of a new limited levels of autonomy, of fear of the unknown or brain drain.

The decrease of the unemployment rate is therefore, one of the challenges which is facing Catalonia, which is not capable of creating enough jobs, firstly, due to a productive network with little or void null capacity to contract and, secondly, to the measures imposed by the Government based on the budgetary austerity and on a labor reform, which are increasing precarious and temporary occupation among the young people. It is necessary to add a set of structural weaknesses that directly affect young unemployment figures in Catalonia, such as high rate of school abandonment, the polarization of the labor market with young people under qualified young people and other highly qualified who are underemployed, the high rate of temporary and part-time employment, the difficulty in accessing the labor market for young people at risk of social exclusion and the necessity of more entrepreneurship spirit.

Facing this situation, this article analyses the labor precariousness which currently affects young people. Furthermore, the impact of the current recession on the labor market in Catalonia from a gender perspective and quantifying the gender wage inequality between woman and men.

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¹ Gradin and Del Rio, 2013.

2. Labor market development in Spain

After a long and intense cycle of 12 years of economic expansion (1995-2007), with an average yearly growth rate of 3.5% the Catalan economy began a phase of slowdown starting in the summer of 2007. Recession has intensified more than initially expected, mainly due to a strong decline in the housing sector worsened by persistence of liquidity restrictions in the financial systems, generating high rates of unemployment and precarious employment².

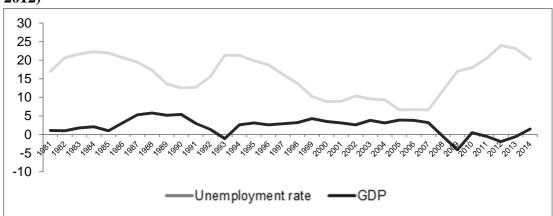


Figure 1. GDP growth at constant prices and unemployment rates in Catalonia (1981-2012)

Source: INE and self-elaboration

The cycles of economic recession impact negatively on the labor market in Catalonia, as the evolution of unemployment rates in the periods 1981-1995 and 1996-2012 show, (both with periods of expansion and recession) mainly due to the lack of adjustment mechanism to adverse economic conditions: an economic structure with preponderance of low-productivity sectors, duality in hiring, rigidity in collective negotiations, low training level of a high percentage of workers and active polices which did not focus on the individual adaptation of the workers.

In Spain, in recent years, the rate of youth unemployment of people under 25 years old has grown alarmingly³, raking in the fourth quarter of 2014 at 51.8%, 30.5 pp above the EU-28 average. The latest annual data provided by the Statistical Office of the European

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² Bank of Spain, 2009

³ Since it is revealed in the National, approved Plan of Implantation of the Juvenile Guarantee on December 20th, 2013, pages 4-5, http://www.empleo.gob.es/ca/garantiajuvenil/home.html

Communities (EUROSTAT) shows that unemployment among young people is a structural problem and not exclusively due to the crisis, as it shows in table 1.

Table 1. Young people unemployment rate (in %)

	Age	UE-28	Spain
2008	From 16 to 24	15.3	23.7
2008	From 16 to 29	11.8	17.4
2012	From 16 to 24	23.5	55.5
2013	From 16 to 29	18.8	42.4

Source: EUROESTAT (revision date 31/01/2015)

In 2008, young people under 30 years old had an unemployment rate of 17.4%, which currently has been multiplied for 2.4, and some studies warned of the vulnerability of this group in the labor, educational, residential and reproductive systems. Nowadays, the "mileurista" generation (a well prepared young person earning less than 1,000 euros per month and therefore struggling to emancipate themselves from their parents), is the generation that has a future with fewer opportunities than their parents having attained higher levels of education, condemned to unemployment or in best cases to precarious employment (Cabasés and Pardell, 2014: 63-82). This experience rose the rate of part-time employees (of which 68.2% in 2013 were involuntarily).

Another aspect that should be added is the increasing number of young people under 30, who are unemployed with a lower secondary education level between 2008 and 2014: from 595,900 (25% of this group) to 918,000 (52.4% of the group).

Between 2008 and 2014 the impact on youth employment is recounted with a reduction in occupied people 2,160,500, of which 649,700 with higher level of education and together with 79,800 young people leaving the workforce. In relation to the wages⁴, the average wage of wage earners over 25 years in 2013 is 3.2 times superior to the young people and the reduction of the average wage of these is 20.5 times bigger. The intensive destruction of employment observed has been concentrated in groups of workers with lower levels of education and professional experience that on average, earn a lower wage than the average wage in the economy.

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⁴ Source: Spanish Tax Agency

2.1 Evolution of the main figures of the Catalan labor market

In the period under study, 2008-2014, Catalonia has decreased its populations at the age of 16 in 2500 citizens (212,500 foreign people whom representing 67.4% of whom are man).

As it shows in table 2 from 2008, with the start of recession, the decline is more pronounced for men, becoming negative as from 2009, while women have negative growth rates as from 2012, primarily due to a greater fall in foreign population. Summarizing, from 2008 to 2012 the male population over 16 years-olds has been reduced by 34,400 (with 143,300 foreign less) while the female population has increased by 31,900 (despite a reduction of 18,600 woman).

Table 2 Annual variation rates grouped by nationality, gender and population aged 16, in percentage (2008-2014)

Voor	Men			Women		
Year	Total	Spanish	Foreign	Total	Spanish	Foreign
2008	1.0	-0.5	9.0	1.2	0.6	5.1
2009	-0.3	0.2	-2.8	0.2	-0.1	2.0
2010	-0.4	0.0	-2.4	0.3	0.4	-0.3
2011	-0.8	0.4	-7.2	0.1	0.4	-1.9
2012	-1.9	-0.7	-8.8	-0.4	1.0	-8.8
2013	3.4	3.2	4.5	1.2	1.8	-2.3
2014	-1.0	1.3	-14.7	-0.4	0.2	-4.6

Source: INE (National Statistics Institute) and self-elaboration.

The same behavior is observed as far as labor force is concerned. (a) Variation rates are negative for men from the beginning of recession and for woman as from 2012 and (b) in both groups for the past year, the rates of variation of foreign workers are the most negative in recent years.

A greater incorporation of woman than of men to the workplace beginning with the start of the period of recession, specifically, during the 2008-2013 period, the male labor has fallen in 141,000 (93% of them of foreign people) while the female labor force has increased by 90,000 (instead the decreasing of 45,000 foreign labor force).

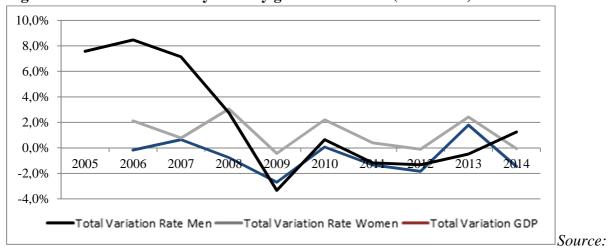
As for the participation rate by gender and age, less than 25 years are those that have suffered most marked fall, 13.3 pp men and 8.8 pp in women, being also the group with lower rates as shown in table 3.

Table 3 Activity rate by gender and age, in percentage (2008-2014)

		Man		Woman			
Years	Under 25 years	From 25 to 35 years	More than 35 years	Under 25 years	From 25 to 35 years	More than 35 years	
2008	60.6	94.5	67.8	53.0	85.7	47.0	
2009	57.8	93.8	66.6	50.9	83.6	48.9	
2010	55.1	94.1	67.1	50.1	86.1	49.7	
2011	51.5	94.3	67.3	51.2	87.7	51.0	
2012	50.3	94.5	66.2	47.4	86.7	52.0	
2013	51.0	94.5	65.8	46.5	87.0	52.6	
2014	47.3	93.6	65.6	44.2	88.7	52.9	
Variation 2008-2014	-13.3	-0.9	-2.2	-8.8	3.0	5.9	

As it is known, the activity rate⁵ decreases against growth rates of population rates than the Labor Force, as is the case for the male group from the year 2008 (of the men become inactive) and as shown in figure 2, is the group that suffers more deeply the effects of the crisis. However, for women the trend in rates has not been as negative.

Figure 2. Evolution of activity rates by gender and GDP (2008-2014)



INE (National Statistics Institute) and self-elaboration.

In relation to activity/employment rates by level of education, two things stand out. One the one hand, the group with higher education studies has the highest number of employed members, both in the male and female group, with employment rates above 85%. On the other hand, as shown in table 4, the major difference between male and female employment rates

⁵ Activity rate indicates the relationship between labor force and the total population of 16 older.

occurs at lower levels of education, while the difference is negative in the doctoral group showing a significant improvement in 2011. It is also observed that such difference has narrowed down during the recession period among all education levels. At the same period, woman activity rates with secondary education have been increased in 2.3 pp.

Table 4. Differences between male and female employment rates by educational level by percentage (2008-2014)

	Primary education and illiterate	First years of secondary education	Last years of secondary education	Higher education
2008	24.8	19.4	13.9	1.3
2009	24.1	18.3	9.6	-0.4
2010	22.5	17.2	9.3	-1.1
2011	19.9	13.6	9.6	-1.8
2012	16.8	14.5	8.3	0.3
2013	16.4	14.4	8.7	-0.1
2014	15.1	13.4	6.4	-0.8
Average difference 2008- 2014	-9.7	-6.0	-7.5	-7.0

Source: INE (National Statistics Institute) and self-elaboration.

The current working population⁶ decreasing trend (table 5) is similar for both groups, and it is more intense for people under 35. Although the loss of jobs is higher for men, in that from the beginning of recession, the male working population has been reduced in 419,000 workplaces and the female in 132,000 workplaces, it should be emphasized that from 2008 to 2014, women over 35's employment rate has increased 85,000 more women employed. Consequently, the employment rate⁷ shows a decreasing trend from 2008 is less intense for women, so the gap between male and female rates fluctuates from 16 pp in 2008 to 8 pp in 2014.

Table 5. Evolution working population by gender and aged, in millions (2008-2014)

		Man		Woman		
Years	Total	Under 35 years	More than 35 years	Total	Under 35 years	More than 35 years

⁶ The employed population includes employees of private and public sector, employers, freelance, member cooperatives, family and other adjustments professional status

⁷ The employment rate is the ratio between the employed population and the population aged 16 or older.

2008	2,013	745	1,268	1,568	631	938
2009	1,805	611	1,194	1,486	545	941
2010	1,767	569	1,198	1,482	529	953
2011	1,727	525	1,201	1,480	506	974
2012	1,615	466	1,149	1,417	440	977
2013	1,570	435	1,136	1,400	411	989
2014	1,594	419	1,176	1,437	414	1,023
Variation 2008-2014	-419	-326	-93	-132	-217	85

The numbers of employed population by type of working day, table 6, continue showing the existence of gender differences, in which the percentage of female part-time employees is almost four times the male rate, and adds yet a new element, i.e. an increase in part-time employees in both groups from 2010.

Table 6. Evolution of the working population by type of contract in thousands (2008-2014)

		Man		Woman			
Years	Total	Under 35 years	More than 35 years	Total	Under 35 years	More than 35 years	
2008	1,928.8	84,4	1,237.1	331,0	4,2	21,1	
2009	1,720.3	84,6	1,187.8	297,6	4,7	20,0	
2010	1,682.4	84,8	1,168.6	313,3	4,8	21,1	
2011	1,629.1	97,6	1,149.4	330,7	5,7	22,3	
2012	1,512.4	102,4	1,100.2	316,7	6,3	22,4	
2013	1,443.7	126,4	1,072.1	327,3	8,1	23,4	
2014	1,468.8	125,5	1,099.1	337,4	7,9	23,5	
Variation 2008-2014	-460,0	41,1	-13,0	6,4	3,7	2,4	

Source: INE (National Statistics Institute) and self-elaboration.

As for the labor day, one of every five 35 years old minor young people occupies a part-time working place (20.1%), and one of every ten obtains a temporary contract with part-time (10,9%), as it is showed in table 7. It stands out the fact that 78% of the part-time employed young people have chosen to work part-time.

Table 7. Working day (in %)

	Full-time	Part-time	Part time and temporal relation	Involuntary part-time	Voluntary part-time
From 16 to 34	79.9	20.1	10.9	78.0	3.8
From 35 to 50	85.4	14.6	4.8	59.5	6.7
From 50 to 65	88.4	11.6	2.5	60.2	12.1

From 2008-2014 has decreased by 477,300 employees (4% of the collective male), of which 299,700 were contract employees indefinitely. To highlight, approximately 1 in 5 temporary contracts are formalized with young people under 25 as it is shown in Table 8. The type of temporary majority contract is this group is of the one of circumstances of the production (20.6%) and for labor and service (36.6%), being the time length of the contracts lower than a month, some of 37 days in length and 7 months for those with minimal duration of one month.

The labor reform has facilitated the increase of temporary contracting, serving to the distribution of the existing occupation at the cost of minor wages and with limited effects in the creation of quality occupation for young people.

Table 8. Evolution of employees population by type of contract in thousands and percentage (2008-2014)

		Man		Woman			
Years	Indefinite	Temporal	% Temporal under 25 years	Indefinite	Temporal	% Temporal under 25 years	
2008	1,282	322	22.8	1,068	315	24.4	
2009	1,195	252	19.1	1,060	250	22.1	
2010	1,182	235	19.9	1,053	263	20.9	
2011	1,132	258	21.9	1,028	289	20.3	
2012	1,063	224	19.5	1,010	244	17.4	
2013	1,012	232	18.6	999	228	18.4	
2014	1,031	222	18.9	1,021	238	17.9	
Variation 2008-2014	-252	-100	-3.9	-48	-77	-6.4	

Source: INE (National Statistics Institute) and self-elaboration.

Employees mostly work in the private sector. However, it is noteworthy that from 2009, the ratio or percentage of employees in the public sector in relation to the total number of employees in the female group has increased at the expense of the percentage of self-employed workers and employees in the private sector. In contrast, in the male group, the weight of self-employed workers has increased, although in absolute terms, the number of male employees, from 2008 to 2014 has fallen by 418,900 (the 73% of the private sector) against the fall by 131,500 of female employees (el 100% of private sector, despite an increase of employees in the public sector by 31,000).

Table 9. Rate of employees by gender and professional status, in percentage (2008-2014)

		Man		Woman			
Years	Self- employed workers	Public sector employees	Private sector employees	Self- employed workers	Public sector employees	Private sector employees	
2008	20.3	8.0	71.7	11.7	13.9	74.3	
2009	19.8	9.7	70.4	11.8	15.8	72.4	
2010	19.8	9.2	70.9	11.2	17.2	71.6	
2011	19.5	9.6	70.9	11.1	17.0	71.9	
2012	20.3	9.2	70.5	11.4	18.6	69.9	
2013	20.7	9.2	70.0	12.3	17.8	69.9	
2014	21.4	9.6	68.9	12.4	16.7	70.9	

Source: INE (National Statistics Institute) and self-elaboration.

The analysis of the effects of recession on employees by type of contract, table 10, shows that the effects have been deeper for employees with an indefinite contract in the private sector, since the public sector has increased the number of new indefinite contracts in the female group in 38,000 new jobs.

Table 10. Difference of employed population by gender and type of contract (2008-2014)

2000 2014	Ma	an	Woman		
2008-2014	Indefinite contract	Temporal contract	Indefinite contract	Temporal contract	
Total	-251,800	-100,200	-47,900	-77,400	
Private Sector	-247,200	-96,600	-85,900	-60,700	
Public Sector	-4,600	-3,600	38,000	-16,700	

Source: INE (National Statistics Institute) and self-elaboration.

If the market allows it, the woman would have to work 36% with a permanent contract, to achieve the same average annual profit, and 12% if the contract is temporary, as shown in table 11.

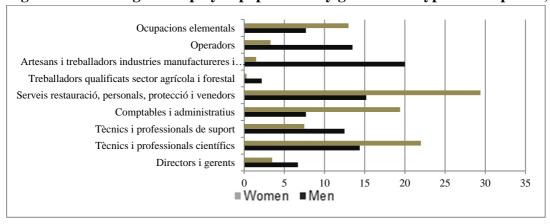
Table 11. Evolution of half year gains by type of contract in euros (2008-2013)

		Indefinite	contract		Temporal (Contract
	Men	Women	Relation men/women	Men	Women	Relation men/women
2008	28,238	20,924	1.35	18,056	15,263	1.18
2009	28,679	21,106	1.36	17,788	17,126	1.04
2010	29,638	22,018	1.35	17,905	16,543	1.08
2011	29,968	21,752	1.38	17,818	16,050	1.11
2012	29,828	22,040	1.35	16,960	14,958	1.13
2013	29,857	21,905	1.36	15,776	14,097	1.12

Source: INE (National Statistics Institute) and self-elaboration.

By type of employment, and in reference 2014, woman stand out in areas related to accounting and administrative task, personal services and protection in basic task, and as technicians and professional scientists. In occupations as direction and management, are still mostly men, while in the group of men representing 6.7% of women in 3.5%.

Figure 3. Percentage of employed population by gender and type of occupation, 2014



Source: INE and self-elaboration.

The analysis of the employment and under 35 year-old, as it can be seen in table 12, 28.4% and 39.5% of those who have reached top studies are technical and professional scientist, and

42.7% and 37% of those who possess secondary studies of second cycle are service workers. So, more than 50% of them are employed with works for which minor education is needed.

Table 12. Occupations of young people depending on the educational level reached in %

	High ed	lucation	Superior S Educ	
	Younger than 25	From 25 to 34	Younger than 25	From 25 to 34
Military occupations	0.6	0.4	0.9	1.3
Directions and managers	1.0	2.4	0.2	1.0
Technical and professional scientist	28.4	39.5	3.9	1.4
Technical and administrative officers	17.5	15.4	9.3	1.4
Service workers	25.5	17.2	42.7	37.0
Accountants and administrative officers	12.0	13.5	6.1	8.9
Qualified workers in the agrarian sector	0.7	0.6	0.7	1.5
Craftsmen and workers qualified in the industry	6.9	5.4	11.0	15.1
Operators	1.8	2.5	11.0	15.1
Elementary occupations	5.7	3.1	14.1	11.7

Source: INE and self-elaboration.

The loss of employment between 2008 and 2014, has concentrated mainly in the segment of workers with secondary education studies. However, employment among woman with higher education levels has increased by 244,000 jobs, thus coinciding with the group that presents the highest employment rates.

Table 13. Evolution of employed population by gender and level of formation in thousands (2008-2014)

		Men		Women			
Years	Primary and no schooling	Secondary Education	High Education	Primary and no schooling	Secondary Education	High Education	
2008	378	995	609	227	739	564	
2009	331	842	572	208	670	565	
2010	315	831	554	209	649	579	

2011	240	864	544	175	659	599
2012	202	792	533	155	614	592
2013	185	744	547	136	596	609
2014	26	791	777	18	611	809
Variation 2008-2014	-352	-204	169	-209	-129	244

By economic sector, the sector with the highest degree of occupation is the service sector, to the extent that, in 2014, it employed 62% of men and 88% of women. In all sector, as shown in table 14, the decline in jobs has been staggered: building industry in 2007, the industrial sector in 2008 and the service sector at the beginning of 2012 (despite the negative peak in 2009). We can also observe a greater impact on the male group, so that the total amount of workplaces lost during the recession are distributed as follow: 225,000 in the building industry, 209,100 in the general industry, 95,000 in services and 23,000 in the agricultural sector.

Table 14. Evolution of employed population by gender and level of formation in thousands (2008-2014)

	Agriculture		Ind	ustry	Building		Service	
	Men	Women	Men	Women	Men	Women	Men	Women
2008								
2009	-3.1	-11	-20.5	-5.1	-18.6	0.9	-2.3	-5.4
2010	14.9	14.1	-0.9	-8.4	-15.0	-13.4	0.5	1.3
2011	-18.1	6.8	-2.4	-11.2	-13.3	-21.5	1.4	1.9
2012	-4.8	-9.6	-3.3	-7.6	-20.2	-16.0	-4.9	-3.6
2013	5.1	-36.2	-2.9	-3.0	-5.9	-15.8	-2.4	-0.4
2014	-10.1	-33.3	-0.8	9.7	-1.4	-1.9	3.6	2.1
Variation 2008-2014	-8.6	-8.4	-157.1	-52.0	-208.3	-16.7	45.0	-54.4

Source: INE (National Statistics Institute) and self-elaboration.

For activity of the establishment, table 15, young people are those who in minor degree work in the public administration (17.6%) and in major degree in the trade sector (30.3%). On the one hand it is possible to infer and for the next year, a worrying deficit in the generational relief of the public sector. On the other hand, taking into account the major weight of the trade

sector, there is a possible loss of talent and knowledge of those young people with a major training level and few low wages.

Table 15. Activity of the establishment (in %)

	From 16 to 34	From 35 to 34	From 50 to 65
Agriculture	5.5	5.2	4.9
Food industry	5.4	6.1	4.8
Extractive industry and of supplies	4	4.5	3.6
Building	6	6.4	5.8
Trade	30.3	23.2	20.5
Transport	6.9	7.5	6
Intermediation	11.7	13.3	10.7
Civil service	17.6	22.4	30.5
Others	8.4	6.9	7

Source: INE (National Statistics Institute) and self-elaboration.

From the professional situation information, it is clear that of the set of employees (public and private sector) 26.9% are under 35 years old, and as it is showed in table 16, 78% of them are employed at the private sector and 9.6% at the public sector. In addition to this, in this group the percentage of businessmen and self-employed workers is small.

Table 16. Professional situation (in %)

	From 16 to 34	From 35 to 50	From 50 to 65
Businessmen	2.2	5.7	7.6
Self-employed	9	12.1	16.1
Cooperative member	0.1	0.2	0.2
Help in company	0.9	0.4	0.6
Wage-earning public sector	9.6	17.3	26.9
Wage-earning private sector	78	64.2	48.7

Source: INE (National Statistics Institute) and self-elaboration.

Regarding the unemployment, in 2008, just before recession started, the total amount of unemployment people was 349,600 (200,100 men and 149,500 women). By the end of 2014 the figure has increased to 773,100, that is to say 2.2 times higher (424,600 men and 358,700 women) in five years. The effect of the recession have been hasher on men, primarily because of the masculine nature of the hardest hit sectors, for instance the building sector (in 5 years 225,000 jobs have been lost, 92.6% of which were occupied by men).

Table 17. Variation of unemployment population rates by gender and aged in percentage (2008-2014)

		Men		Women			
	Under 25 years	From 25 to 35 years	More than 35 years	Under 25 years	From 25 to 35 years	More than 35 years	
2008	75.7	92.8	45.5	21.3	46.1	4.4	
2009	75.1	97.9	87.2	68.0	69.3	82.2	
2010	1.2	-2.8	18.2	-2.4	12.0	17.9	
2011	0.0	-4.0	13.3	18.0	4.0	18.8	
2012	2.2	11.6	20.8	15.2	14.9	19.7	
2013	1.8	-10.1	4.6	-7.9	2.0	6.8	
2014	-17.3	-19.0	-13.0	-6.7	-22.7	-7.3	

Source: INE (National Statistics Institute) and self-elaboration.

The unemployment rate⁸, as shown in table 18, has increased from 5.6% for men and 8.1% for women in 2007 to 24.6% and 23.2%, respectively, in 2014, that is to say, they have more than doubled in a 5 years recession period, with a major impact on those under 25, exceeding the 48%. In conclusion, before recession started the unemployment rate for women was higher and after 5 years of recession, it is just the opposite.

Table 18. Unemployment rates by gender and aged in percentage (2008-2014)

	Men			Women			
	Under 25 years	From 25 to 35 years	More than 35 years	Under 25 years	From 25 to 35 years	More than 35 years	
2008	22.1	9.7	6.7	17.7	8.8	7.0	
2009	41.5	19.9	12.4	31.5	15.6	12.1	
2010	45.2	20.3	14.3	320	17.5	13.8	
2011	49.4	20.6	15.9	37.8	18.5	15.7	

⁸⁸ The unemployment rate is the ratio between the unemployed and the labor force.

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2012	52.6	24.7	19.3	47.9	22.6	18.1
2013	53.9	24.1	20.1	45.9	24.4	19.0
2014	48.5	21.3	17.5	45.6	19.6	17.3
Average between 2008-2014	26	12	11	28	11	10

In short, in Catalonia from 2008 to 2014, the employment trend is different according to gender. As shown in table 19, the male working population has declined in 419,000 men, while the number of unemployment has increased by 215,000. The difference between the two figures is because 170,100 people dropped out their activity since the number of people over 16 had fallen by 34,000. In contrast, unemployment of women is reduced to a lesser extent, 132,000, and the number of unemployment women increases by 209,000. In short 45,500 women entered the labor force, since the number of working women increased by 78,000 while the growth of women over 16 of 32,000.

Table 19. Yearly variation in absolute values of the population aged 16 and over in relation to economic activity by gender (2008-2014)

		Men		Women		
	Unemployed	Employed	Working force	Unemployed	Employed	Working force
2008						
2009	+175,000	-208,000	-33,000	+112,000	-83,000	+30,000
2010	+29,000	-38,000	-9,000	+31,000	-4,000	+28,000
2011	+22,000	-41,000	-19,000	+42,000	-2,000	+40,000
2012	+62,000	-112,000	-50,000	+59,000	-63,000	-5,000
2013	+1,000	-45,000	-43,000	+11,000	-17,000	-6,000
2014	-74,000	+24,000	-50,000	-46,000	+37,000	-9,000
Total in 6 years	+215,000	-419,000	-204,000	+209,000	-132,000	+78,000
Population of 16 and over		-34,000			+32,000	

Source: INE (National Statistics Institute) and self-elaboration.

Considering only those aged under 35, the structure is similar, 19,700 men abandon the activity while 25,200 women leave inactivity. One should note the loss of populations in both groups, as shown in table 20.

Table 20. Yearly variation in absolute values of the population from 16 to 35 years and over in relation to economic activity by gender (2008-2014)

		Men			Women	
	Unemployed	Employed	Working force	Unemployed	Employed	Working force
2008	-			-		
2009	+96,300	-134,300	-38,200	+54,000	-85,700	-31,700
2010	-2,400	-41,700	-43,900	+8,200	-15,800	-7,700
2011	-4,800	-43,600	-48,400	+12,900	-22,700	-9,900
2012	15,100	-59,000	-44,100	+23,100	-66,700	-43,500
2013	-11,200	-31,900	-43,000	-3,500	-28,600	-32,100
2014	-37,000	-15,700	-52,800	-28,800	+2,800	-26,000
Total in 6 years	+56,000	-326,200	-270,400	+65,900	-216,700	-150,900
Population of 16 and over		-250,700			-176,100	

The analysis of the level of education reached is revealing as it is observed in table 21. The major percentage of under 35 years old people with top education corresponds to he employed ones (42.2%), whereas the major percentage with an education lower than the primary one is related to the inactive ones (8.6%) and those that achieve secondary education present a major percentage between the unemployed people (63,8%). Having in mind the previous analyses, of the contractual entail and the wages, the most qualified young people would occupy task that need less qualifications (over qualification) and a bias would take place in favor of the university education to the detriment of the secondary one.

Table 21. Level of education (in %)

	Without primary education	Primary education	Secondary education	Higher education
	Employ	yed		
From 16 to 34	0.4	3.8	53.6	42.2
From 35 to 50	0.8	3.2	51.1	44.9
From 50 to 65	2.8	11.4	53.8	32.1
	Unemple	oyed		
From 16 to 34	1.3	9.7	63.8	25.2

From 35 to 50	2.9	8.5	64.9	23.7				
From 50 to 65	7.9	20.4	59.0	12.7				
Inactive								
From 16 to 34	8.6	12.0	57.2	22.1				
From 35 to 50	7.6	8.6	61.3	22.5				
From 50 to 65	9.6	24.8	52.8	12.7				

2.2 The situation of juvenile unemployment in 2014

Since it has been revealed in the previous analyses, the precarious situation of the young people on the labor market has been characterized by the high rates of unemployment in comparison with the Global Spanish Rate, because of the high percentage of young people who work with temporary contracts without wishing it and for law wages. This is a situation that has been aggravated with the Labor Reform of 2012 and its later reforms of 2013 and 2014, which have supposed an additional twist in the temporality and the precariousness. On having finished the year 2014, this situation persists as it exposed later, through the analysis of all Universities in Catalonia.

The survey of graduate employment University 2014 (EILU) incorporates interesting elements regarding university students employed in 2014, which were obtained a university degree in the academic year 2009-2010. As shown in table 22, graduates in fields of education, engineering, manufacturing and construction and health and social services are those that have a higher employment rate, however, graduates in the fields of arts and humanities services are those with higher percentages of unemployment. And one interesting fact is, in this cohort of graduates, what kind of jobs. Highlighted that the largest percentage of employed corresponds to technical and scientific professionals (52.9% of men graduates and 64.2% of women graduates).

Table 22. Employment situation of graduated students from 2009-2010 percentage

	Education	Art	Social sciences	Science	Engineering	Agriculture	Health	Services
				Men				
Employed	84.7	66.9	82.7	81.4	87.6	77.2	85.4	80

Unemployed	11.8	17.9	12	10.8	8	10.8	10.2	14.6
Inactive	3.5	15.3	5.3	7.8	4.4	12	4.4	5.3
Unemployment rates	12.2	21.1	12.6	11.7	8.4	12.3	10.7	15.4
			1	Women				
Employed	88.8	72.7	81.8	83.4	84.4	85.7	82.2	85.3
Unemployed	5.9	18	12.5	12.7	11.4	7.5	10.2	6.7
Inactive	5.3	9.3	5.7	3.9	4.2	6.8	7.6	8
Unemployment rates	6.3	19.8	13.3	13.2	11.9	8.1	11	7.3

Table 23, it appears that most graduates are exclusively dealing in places of their area of study, are those of the health sector, followed by education level. Just the opposite is happening from graduates in the field of arts and humanities and social sciences.

Table 23. Graduates by field of study most appropriate for their work in 2014 in percentage

		Men				Wom	ien	
	Exclusive in their field	In their field or associate	Different field	Any field	Exclusive in their field	In their field or associate	Different field	Any field
Education	27.6	61.1	11.3	0.0	38.2	51.8	5.1	5.0
Art and Humanity	15.2	41.5	26.4	17.0	13.6	49.1	22.1	15.2
Social sciences and business education and law	11.5	60.3	16.4	11.8	20.8	51.9	15.3	12.0
Science	23.5	63.6	9.4	3.5	15.5	63.5	11.1	9.8
Engineering, manufacturing and construction	18.7	68.0	7.4	5.9	17.6	65.0	8.9	8.4
Agriculture and veterinary	33.2	47.4	14.2	5.1	31.7	47.6	20.7	0.0
Health and social services	63.0	28.4	7.2	1.4	73.7	16.4	6.6	3.3
Services	28.6	56.6	14.9	0.0	22.0	41.1	25.8	11.1

Source: INE (National Statistics Institute) and self-elaboration.

2.3 Wage recipients, pensions and unemployment benefits in Catalonia

From the database provided by the Inland Revenue⁹, the labor market analysis is complemented by studying the recipients of wages, pensions and unemployment benefits (excluding those who receive funds through other means). In 2014 (latest data available), 54.6% (51.5% men and 44% woman) were paid a salary, 31% were paid pensions and 14.4% were paid unemployment benefit, out of a total of 5,575.420 citizens who receive some remuneration in Catalonia. These percentages change the distribution of 2005 before recession, so that, respectively, the distribution was respectively of the 60.3%, 27.9% and 11.8%.

By gender, as shown in table 24, from 2008 to 2014, the percentage of employed men has decreased while they have become recipients of unemployment benefit in a larger proportion than women. It is draw the attention to women employees before 35 years.

Table 24. Proportion of all remuneration recipients by gender in percentage (2008 - 2014)

Desinients	Men			Women		
Recipients	2008	2014	Variation	2008	2014	Variation
Employees	62.6	56.0	-6.6	57.6	53.1	-4.5
Employees under 35 years	41.7	32.8	-8.9	44.5	34.9	-9.7
Pensioners	25.2	29.2	4.0	31.0	32.9	1.9
Recipients of benefits	12.2	14.8	2.7	11.4	14.0	2.6

Source: Inland Revenue and self-elaboration.

The average income of the groups studied, as shown in table 25, highlights two aspects: a) the difference between the types of return and also, that between 2008 and 2014 the level od income increased; b) the average income difference between men and women in the three modalities.

Moreover, women who have received a salary have shortened the salary distance regarding men, from ratio of 1.40 to 1.30; the ratio of women recipients of benefits has worsened instead. Male recipients of benefits, which in 2014 accounted for 14.8% of the total average, received an average of 3,952 euros per year, whereas female recipients of this very same

⁹ Reserch based on census and that takes into account the Recipient Ratio of Salaries, Pensions and unemployment benefits when employers submit their Tax Return (Model 190). [Declaració Annual de Retencions I Ingressos a Compte sobre Rendiments de Treball]

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group, representing 14% of the total average, received an average of 3,481 euros per year. These quantities are below the thresholds that establish the minimum wage (MW: is stood at 9,034.2 euros in 2011 p.a.), and the minimum pension (MP: 8,300.6 euros p.a.).

Table 25. Average annual return per gender

	Men				Wome	Ratio M/W		
	2008	2014	Variation	2008	2014	Variation	2008	2014
Employees	24,312	23,271	-1,041	17,365	17,839	474	1.40	1.30
Pensioners	13,988	16,296	2,308	9,217	11,270	2,053	1.52	1.45
Recipients of benefits	3,827	3,952	125	3,414	3,481	67	1.12	1.14

Sources: Inland Revenue and self-elaboration.

Also, considering the information grouped by MW and MP income levels that table 26 shows, 29.4% of wages recipients and 32.4% of pensioners have received remuneration below the minimum threshold and, if they are calculated by gender, the percentage is higher in the group of women than of men.

Table 26. Percentage of employees and pensioners under MW and MP (in %)

Year	Year 2008							
	Men	Women						
Wage recipients under 1 MW	20.1	29.0						
Pensioners under 1 PM	23.8	36.0						
Year	2014							
	Men	Women						
Wage recipients under 1 MW	27.4	31.7						
Pensioners under 1 PM	24.9	39.4						

Source: Inland Revenue and self-elaboration.

3. Gender wage structure in Catalonia (2008-2014)

Looking at the most important areas in the study of the labor market in the period between 2008-2014, it is clear that its evolution by gender is different and that it manifests inequalities in the average yearly income despite legislative and social progress in labor matters. However, in this period, woman's wages have grown at an average rate higher that men's, a 0.5% against a -0.7% ¹⁰ (with similar figures in Catalonia as well as Spain globally).

¹⁰ Recent contributions on wage structure are the following: Del Rio i Alonso-Villar (2008), Simon (2009), Merino, Aguado, et al (2010), Pazos (2010), Pijuan and Sánchez (2010), Lacuesta and Izquierdo (2012), Bonhome and Hospido (2012) and Arranz and García-Serrano (2012) among others.

Then based on the survey "labor market and pensions in tax sources", and the survey "wage structure", we can delve into the structure of wages in Catalonia in order to detect and quantify the differences due to gender difference and to analyze the distribution¹¹ of intergroup and intragroup inequality between men and women. The conclusions of this study, in line with other studies¹², confirm that the overall wage dispersion has shown a countercyclical behavior, although, a major incorporation of women with a higher level of education and qualification in the labor market can be observed in the recession period.

3.1 Evolution of the average wage

During the period under study the increased presence of women in the labor market is evident, with an increase from 45% in 2008 to 47.1% in the percentage of the total employed in 2014, as shown in table 27. Also their workforce volume increased from 37% to 40.6% respectively. Despite the improvement, the figures already indicate a wage gap of reason of gender: the 52.9% of total of employees reaches 59.4% of salary costs.

Table 27. Percentage of recipients of wages and workforce by gender (2008-2014)

Year	Recipient	ts of wages	Work	force
1 ear	Men	Women	Men	Women
2008	54.9	45.1	63.0	37.0
2009	54.4	45.6	61.6	38.4
2010	54.1	45.9	61.1	38.9
2011	53.7	46.3	60.6	39.4
2012	53.2	46.8	60.1	39.9
2013	52.9	47.1	59.6	40.4
2014	52.9	47.1	59.4	40.6
Total average 2008-2014	-324,552	-155,315	-9,564,763,868	-2,015,738,104

Source: Inland Revenue and self-elaboration.

This result is a consequence of an increase in the average wage of women as opposed to men, in that before recession the ratio was 1.40 while after the recession period it was 1.30 mainly due to the increase experienced in the years 2009 and 2010 as evidenced in table 28. Moreover, from 2011, men's average salary is maintained and even slightly reduced, leading

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¹¹ The differences in absolute values that can be observed in relation to those presented in the previous section is mainly due to statistical sources, ones proceeding from a EPA survey and the others, used to calculate inequality, from a census.

¹² Bonhomme and Hospido, 2012.

to a clear loss of disposable income due to the fact that the increase in consumer prices exceeded the average wage variation 3.3%.

Table 28. Evolution of the average wage by gender (2008-2014)

Year	Average salary men	Average salary women	Relation Men wage rate M/W variation		Women wage rate variation
2008	24,312	17,365	1.40		
2009	24,079	17,898	1.35	-1.0	3.1
2010	24,103	18,120	1.33	0.1	1.2
2011	24,087	18,164	1.33	-0.1	0.2
2012	23,686	17,858	1.33	-1.7	-1.7
2013	23,408	17,878	1.31	-1.2	0.1
2014	23,271	17,839	1.30	-0.6	-0.2

Source: Inland Revenue and self-elaboration.

This wage adjustment has been more severe for people less 35 years, according to table 29, although the relationship between the average salaries of men to women is slightly lower, with wage inequality in 2014 from 1,689 euros.

Table 29. Average annual wages by sector (NACE) and gender (2014)

	M	[en	Wo	men
	Average annual	% of total workforce	Average annual	% of total workforce
Agriculture, forestry and fishing	9,191	2.5	9,410	0.6
Extractive industries, energy and water	29,446	1.5	22,896	0.6
Industry	29,406	17.5	22,334	9.0
Construction and real estate	18,714	9.8	17,553	3.2
Trade, transportation and repairs	23,155	22.8	15,813	21.4
Information and communication	29,925	3.8	22,308	2.5
Financial and Insurance institutions	34,141	3.8	26,230	3.7
Business services	21,154	13.6	14,695	17.4
Social services	26,836	13.6	22,410	28.3
Other personal services and entertainment	12,432	11.1	9,530	13.4

Source: Inland Revenue and self-elaboration.

Also, by activity sector and in 2014, the concentration of women in activities related to social services is verified (28.3%), and to a high percentage of activities with lower average wages (52.7%), as shown in table 29.

Regarding Spain, the average wage is higher in Catalonia. In particular, the differential for women stood at 1,272 euros per year in 2005 and 1,900 in 2011, while for men it stood at 2,348 and 2,665, respectively. Also, it follows from table 30, firstly, that Catalan women are the group whose average salary has increased the most between the two periods, with an average of 4,092 euros and, second, that the salary gap between men and women in 2011 (as average salary in absolute values) in Catalonia has been of 5,923 euros and, in Spain of 5,128 euros. That is, the wage gap in Catalonia is 15% higher when compared in Spain.

Table 30. Evolution of the average wage by gender (2005 and 2011)

Year Men		Women		Total		
i ear	Catalonia	Spain	Catalonia	Spain	Catalonia	Spain
2005	20,669	18,321	14,072	12,800	17,778	16,018
2011	24,087	21,422	18,164	16,264	21,348	19,102
Difference	3,418	3,101	4,092	3,464	3,570	3,084

Source: Inland Revenue and self-elaboration.

3.2 Wage gap or gender pay gap (GPG)

The gender pay gap (GPG) or wage gap¹³ is a measure that allows a global vision of gender inequality in terms of pay between men and women as the source of information¹⁴ to make comparisons in Europe. As shown in table 31, the latest data provided by NSI, the wage gap between men and women in Catalonia in 2014 was higher than in the rest of Spain and the whole of the 28 European Union member states. In contrast, it was the same as the Netherlands and inferior to Germany and Great Britain.

Table 31. Wage gap (GPG) (2008-2014)

Year	Catalonia	Spain	U-27	Netherlands	Germany	Great Britain
2008	19.8	16.1		18.9	22.8	21.4
2009	18.5	16.7		18.5	22.6	20.6
2010	16.9	16.2	16.1	17.8	22.3	19.5
2011	19.8	17.9	16.4	17.9	22.2	20.1
2012	20.2	19.3	16.5	16.9	22.4	19.1
2013		19.3	16.4	16.0	21.6	19.7
2014	17.8	14.9	16.2	17.8	22.3	19.5

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¹³ The wage gap is measured by the "gender pay gap" (GDP), which represents the difference between the average gross revenue per hour of male and female employees as the average percentage of the gross revenue per hour of men employees.

¹⁴ It is estimated from the Harmonized Labor Cost Index, one of the euro indicators that member states, at the request of Eurostat, use to calculate the convergence of labor costs.

Source: Eurostat, INE and self-elaboration.

By type of employment in Catalonia, as shown in table 32, the largest wage gap in 2010 is located between catering workers, staff and sellers. Then, the operators of facilities and equipment, assemblers, masculinized professions, as well as technical and support staff, directors and managers, the latter being the ones which the gap has been reduced since 2008.

Table 32. Wage gap by type of employment in Catalonia (GPG) (2008-2013)

	2008	2009	2010	2011	2012	2013
Directors and managers	28.7	20.9	20.9	20.7	16.3	12.5
Professional scientists and intellectuals	10.7	16.2	16.2	13.6	17.2	16.4
Technical and support staff	21.1	21.6	21.6	17.2	17.5	18.5
Office staff, Accounting and administrative	21.9	19.8	19.8	20.8	17.6	19.0
Restaurant workers, personal and sellers	26.2	26.8	26.8	28.5	27.3	23.5
Artisans, workers and construction industries	23.0	18.5	18.5	21.1	26.0	25.8
Facilities and machinery operators and assemblers	28.2	23.5	23.5	24.1	25.4	22.1
Elementary occupations	17.7	15.9	15.9	20.4	19.1	17.7

Source: Eurostat, INE and self-elaboration.

The latest figures provided by Eurostat, and also referring to 2010, show the difference between the members of EU, as shown in Figure 4. There are different reasons that explain the difference between countries in GPG¹⁵ (the type of jobs held by women, the consequences of career breaks or part-time jobs due to maternity and parental decisions in favor of family life. However, it should also be added that the institutions and attitudes that govern the balance between work and private life differ significantly among them. Consequently, the wage gap is linked to number of legal, social economic factors well beyond the single issue of equal pay. It is also noteworthy that, on average, women earn 16% less than men in the European Union (UE-27), that 17% of employees received the lowest wages and that countries which the highest proportion of women with low salaries were Cyprus and Estonia (over 30%), while at the other end, there are Sweden, France, Finland and Denmark (10%)

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¹⁵ Global Employment Trends, 2011

less). These figures can be complemented with those provided by the last study of the World Economic Forum¹⁶, which quantifies gender inequalities in education, heath, economy and politics and, together with the analyses of the last seven years. It ranks Iceland, Finland, Norway and Sweden in the best positions.

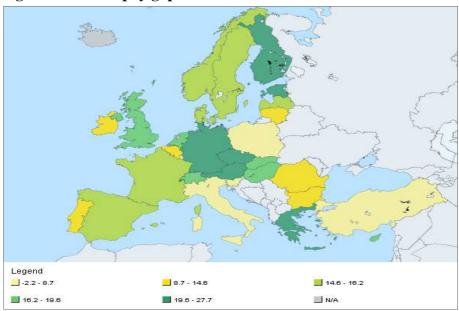


Figure 4. Gender pay gap GPS 2010

Source: Eurostat

4. Conclusions

A retrospective vision of the information shows that, in Catalonia the high juvenile unemployment is not an exclusive situation of the current economic conjuncture, nevertheless, it has reached unprecedented levels. Nowadays there are serious doubts about if young people can have a project of life perceiving, in many cases, the guaranteed minimum wage of 648.60 euros/ month.

The analysis done along the article allows summarizing the problematic that concerns the rapid growth of juvenile unemployment: a) deficiencies of the own labor market and b) of the educational system.

Among the first ones the high temporary contracting and part-time together with low wages are emphasized, which perpetuates them in a circle of temporality unemployment and scanty

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¹⁶ Hausman, Tyson and Zahidi, 2012

opportunities of formation and, in consequence, labor precariousness. The majority of contracts signed by people under 35 years old were temporary with low wages. On having finished 2014, 78% of the above mentioned group was employed at the private sector, 46% with temporal contract of which 36.6% for labor and service, one of every five part-time young people and one of every ten with part-time temporary contract.

In reference to the second deficiencies, the imbalance between the offer and the demand of work for educational level, a bias has taken place in favor of the university education to the detriment of the higher secondary education that has caused an over qualification university students occupied in tasks who need minor qualification and a fall of the wage premium of the education.

The balance from 2008 to 2014 the women had an important role. They increased in the workforce of 44,400 million over 16 and, therefore, with the possibility to enter the labor market. In fact, the destruction of job has been more intense in group men than women mainly because of the type of sector worst hit by recession (the construction sector). During this period, the annual income of women has shortened the distance in relation men, mainly the employment group, from ratio of 1.47 to 1.33, but in contrast, the number of women receiving unemployment benefits has worsened.

Finally, the education is revealed as a positive factor in the labor market for young people who are under 35 years old people because a higher educational allow them to improve their employability and, in consequence, the possibility of being unemployment.

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