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Gender Wage Gap in Barcelona

Ma Jesús Calvo and Cristina Mora

Department of Programming and Research. Technical Office of Programming

Wage is the principle source of income for workers and the main influence on their spending capacity. The average wage statistics of the employed population living in Barcelona in 2014, obtained from the Continuous Working Life Sample (Spanish initials, MCVL)¹ allows for information on the wage differences between men and women in the city to be compiled for the first time. In 2014, the annual average wage for women was 25.1% lower than men's. This difference, called the gender wage gap, was widespread: women earned less than their counterparts in all age groups, on all educational levels, nationalities and professional groups, in almost all of the sectors and with all types of contracts and number of working hours.

Introduction

This report seeks to analyse the unequal earnings of men and women using the detailed statistics of the average wages for workers residing in Barcelona during 2014.

Traditionally, a scarcity of data hasn't allowed for a proper analysis of the structure and detailed evolution of wages, especially at local level. Barcelona City Council's Technical Office of Programming exploited the Continuous Working Life Sample to provide statistics of wages in Barcelona unavailable until now, displaying personal features of workers (age, nationality), type of occupation, type of contract (permanent or fixed-term; full or part-time job) and employment sector, among other aspects.

The information presented here has been obtained from the gross annual earnings of workers (whole payments and in-kind payments), that is, before income tax and Social Insurance tax is deducted.

Included are the earnings of every employed person with a valid contract on the 31st December 2014. Pensions, unemployment benefit or other income derived from conferences, seminars, awards or financial activities are not included.

The information refers to the gross annual earnings of employees who pay taxes and contribute to the Spanish National Insurance, with the exception of domestic employees. Other earnings coming from special economic regimes (self-employed or workers in the farming or fishing sector) are not included.

1. MCVL obtained from social contributions registers and data from the Municipal Continuous Census, along with the annual income tax from the Personal Income Tax of the Spanish Agency of Public Administration (AEAT).

The study is focused on the average earnings in 2014 of employed men and women residing in Barcelona, regardless of where their workplace is located. Nevertheless, some references to the wages of people working in Barcelona –wherever they live– and wages in Catalonia and Spain are also included.

All data presented in this article can be found in the report “Average wages in Barcelona. 2014”, from the Technical Office of Programming, available on the Barcelona Economy website <http://barcelonaeconomia.bcn.cat/ca/estudis-i-publicacions>

Principle results

The average gross annual wage of Barcelona residents in 2014 was 28,649 euros. This wage was higher than the average wage in Catalonia (14.5%) and Spain (22.8%). It was also higher (3.4%) than the average income of employees whose workplace is Barcelona, regardless of their place of residence. Wages for the city residents, for both genders, were higher than in other areas, with differences slightly higher for women.

The gender wage gap was significant and widespread. In 2014 the average annual wage for women was 24,618 euros, 25.1% lower than men’s, which was 32,864 euros. That way, the employed women of Barcelona earned, on average, 8,250 less than men.

The wage gap occurring in the city was less than that of employees with a workplace in Barcelona, which was of 28.1%. Wage gaps in Catalonia (26.6%) and Spain (25.8%) were also slightly higher. In the European Union², in the same year, the gap was 16.1%.

Figure 1. Average earnings in Barcelona and other areas (2014).

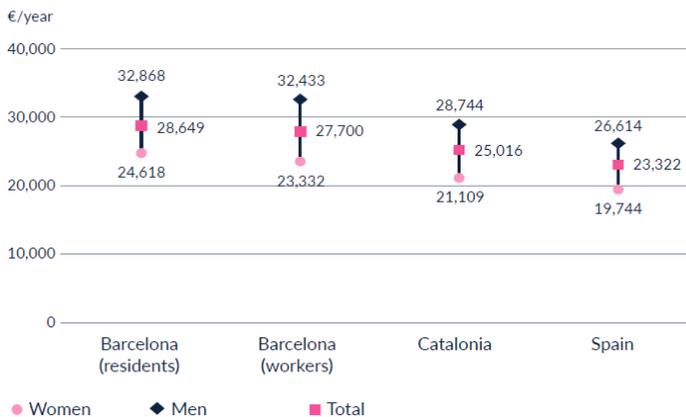


Figure 2. Wage gap between women and men (2014).



Wage differences between men and women

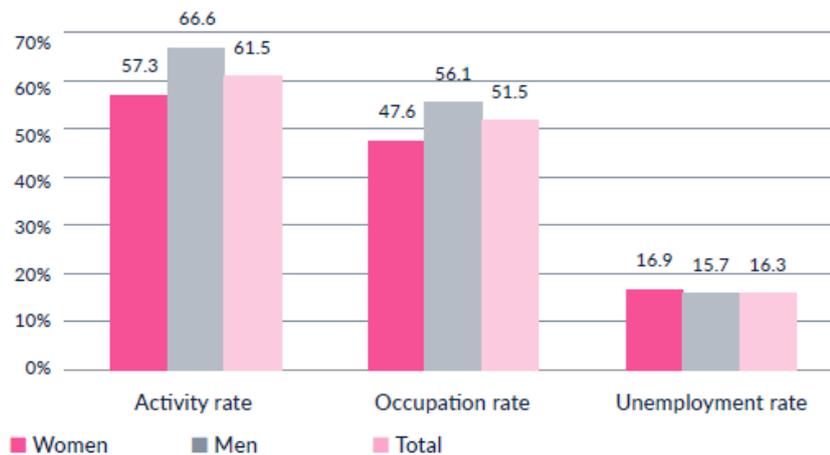
The wage gap is one of the indicators reflecting inequality between men and women. Women’s situation in the labor market still hasn’t reached a desirable level. In general, women are less present, with lower activity rates (68% men and 61.6% women) and occupation rates (60.3% men and 49.8% women) and suffer more unemployment, even if the rates at the end of 2016 tended to converge (11.3% men and 11.6% women). Women also have shorter job tenures and work part time more. According to the Active Population Survey (EPA), 10.6% of employed men work part time, in comparison to 16.8% of women³.

2. Source: Eurostat, from the gross earnings per hour according to the Structure of Income Survey. Independent results from Barcelona, Catalonia and Spain results, calculated from the MCVL.

3. Source: Active Population Survey, INE. 3rd term 2016 data.

The income differentials are due, in some cases, to occupational trends which are unequal for genders (differences in professions, activity and hours of work), while in other cases these differences occur between people with the same educational level, doing the same work. It is not only an economic issue therefore, but also a structural and social problem, stemming from cultural factors and traditions that have caused women to have more family responsibilities than men. As a consequence, women's talents are wasted in the labor market, which has a clear impact on their wage level, professional career development and access to management positions.

Figure 3. Activity, occupation and unemployment rates. Barcelona (2014).



Although it doesn't follow a strict pattern, in general higher wage gaps occur among older workers, with higher educational levels, higher professional positions and better-paid sectors, while the smallest gaps occur between young people with lower income.

If we examine the personal features of residents working in Barcelona, we can observe, looking at the average wage by nationality, that only Spanish citizens –87% of the total– earned an average wage higher than the median income. The wage gap in this group was notable, and Spanish women earned 26.7% less than their counterparts.

Citizens of the rest of the EU held the next position according to wage level and received around the average wage. The wage gap in this group was even broader (30.9%).

The rest of the groups ordered by geographical area were, at least, 41.8% under the average. Even further below the average were women from Latin America and the rest of the world, with an annual wage lower than 14,500 euros. While, for the first group, the wage differences with their counterparts reached 25%, the wage gap was smaller for the group with the lowest income, the rest of the world (8.3%).

Table 1. Average earnings according to nationality. Barcelona (2014).
€/year

	Women	Men	Total
Spain	25,511	34,784	29,946
EU	21,604	31,274	26,747
Rest of Europe	*16,461	*16,988	16,669
Latin America	14,476	19,293	16,670
Rest of the world	13,482	14,709	14,250
Total	24,618	32,868	28,649

* Number of observations below 10

Figure 4. Average wage according to nationality.



A great part of these wage differences can be explained by the connection between income according to nationality and level of studies or professional category. Thus, for example, among citizens from the rest of the EU, graduates, engineers and doctors predominated, both in the women and men category.

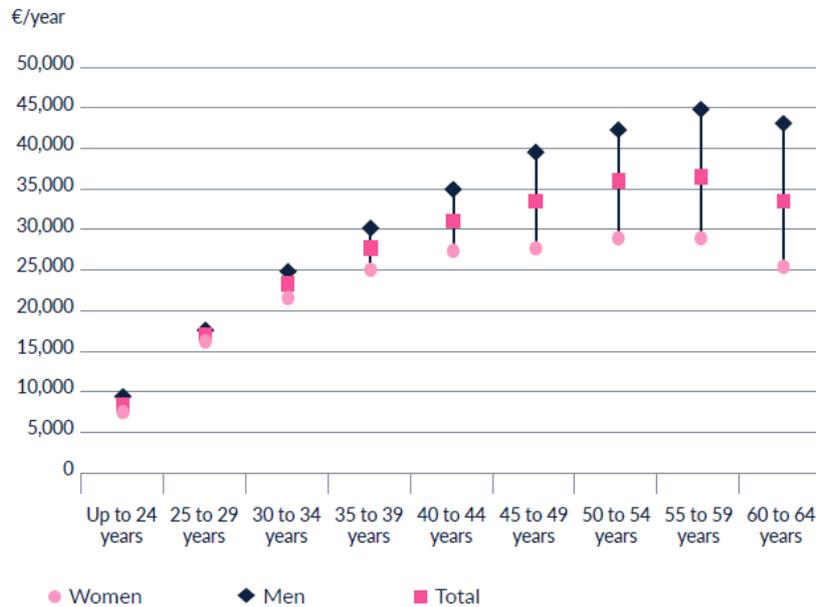
Focusing on income according to age, a positive relation is seen between age and income (see Figure 5). Earnings are normally higher as employees become more experienced and serve longer in their jobs.

Wages of women residents in Barcelona in 2014 were several steps under the men's in all age groups, the gap being bigger between older workers and smaller among younger groups, due to the fact that young men and women finish their studies and enter the labor market with very low wages, but relatively similar.

That way, the group of people aged between 25 and 29 registered the closest wage comparison in 2014, both in Barcelona and in Catalonia or Spain. Women residents of that age in the city received an annual average wage of 16,426 euros, 6.8% lower than the men. It must be also considered that the average wage for this age range (16,998 euros) was more than 40% under the average income in Barcelona.

Only young people aged up to 24 had lower wages (more than 70% under the average), because of the prevalence of short-time tenures that characterized this age group. Wages so low that it's difficult to be financially autonomous in Barcelona, and there's no margin for gender differences.

Figure 5. Average wage by age group.



What's surprising is that, although young women have better qualifications (both in terms of education and professional category) than older women, wage differences between men and women still exist today among people aged under 30.

Nevertheless, it's from that age, at a time when family life and work must often be conciliated, that wage differences become starker. The combined effect of age and educational level and professional group portrays a wider wage gap in older generations, where –on average– women have a lower level of studies and hold lower-skilled occupations, besides the fact that they have probably assumed more family responsibilities throughout their life.

According to 2014 data, women reached their highest wage aged between 50 and 54, and only women aged between 50 and 59 got higher wages than the average in the city, although with a difference in relation to men - their wages were at least 30% lower.

Table 2. Average income according to age group. Barcelona (2014).
€/year

	Women	Men	Total
Up to 24	7,753	8,961	8,336
25 to 29	16,426	17,617	16,998
30 to 34	21,687	24,907	23,333
35 to 39	25,169	30,207	27,719
40 to 44	27,224	35,069	31,049
45 to 49	28,097	39,579	33,543
50 to 54	29,439	42,570	35,896
55 to 59	29,103	45,130	36,706
60 to 64	25,407	43,254	33,386
65 and older	*20,351	*50,694	37,240
Total	24,618	32,868	28,649

* Number of observations below 10

In the group aged 60 to 64, women's wages were 41.3% lower than men's, and 11% lower than the average wage in Barcelona, evidencing, thus, that women were employed in lower-skilled and worse-remunerated positions, whereas positions of responsibility with higher incomes were reserved for men, who had, then, an extra incentive to keep on working beyond 65.

Looking at the future, and considering that there currently exists a gender gap in the academic field, where young women are achieving better grades⁴, it will be necessary to track the evolution of women's careers when they access the labor market, as with more equal conditions in relation to their counterparts and a more balanced distribution of family obligations, they should be able to access higher professional positions.

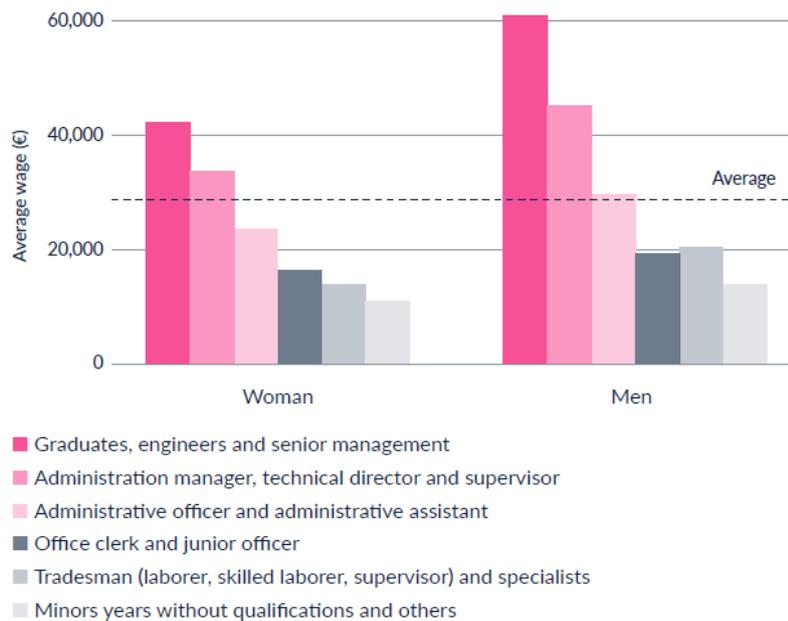
The relationship between women's wages and their occupation in certain tasks is often used to justify their lower earnings. In fact, one of the natural determining factors of an employee's level of income is the professional group he/she belongs to. Graduates, engineers and senior management groups led the wage classification in 2014, with an income 80.6% higher than average. Only the professional groups of administrative workers, apprentices and technicians were also above the average (35.7% in this case), whereas the rest of the groups were below.

4. By post-compulsory degree level in Catalonia, according to data of the Education System's Evaluation Council. 2014.

Table 3. Average earnings according to profession. Barcelona (2014).
€/year

	Women	Men	Total
Graduates, engineers and senior management	41,759	60,540	51,743
Administration manager, technical director and supervisor	33,809	44,763	38,866
Administrative officer and administrative assistant	23,415	29,596	26,084
Office clerk and junior officer	16,186	19,193	17,315
Tradesman (laborer, skilled laborer, supervisor) and specialists	13,788	20,385	18,455
Minors without qualifications and others	10,997	13,967	12,476
Total	24,618	32,868	28,649

Figure 6. Average wage according to professional group.



Women followed the same income scale as men, but in all categories they were situated some steps behind.

Dividing by categories, the wage gap increased at both ends of the classification: the biggest gap was in the group of tradesmen (laborer, skilled laborer, supervisor) and specialists –32.4%–, whereas the group of senior management, engineers and graduates registered a 31.0% gap. As for the rest of the professions, the gap was under the average.

In the most qualified professional group (graduates, engineers and senior management), the proportion of women and men was almost equal: 46.8% of the employees were women, while 15% of women and 18% of men belonged to this professional section. In other words: women had a similar presence to men, but they earned 31% less.

To summarize, it is shown that, with a similar qualification, women that hold more responsible positions earn less than their counterparts, and the difference between their wages is bigger than in lower categories, with the exception of specialists and tradesmen.

A great disparity can be seen in incomes with regards to the sector. According to 2014 data, the finance and insurance sectors led the income ranking with an average wage of 54,158 euros, more than trebling the hospitality industry staff income, who occupied the lowest ranking with 15,055 euros.

Table 4. Average income according to work activity. Barcelona (2014).
€/year

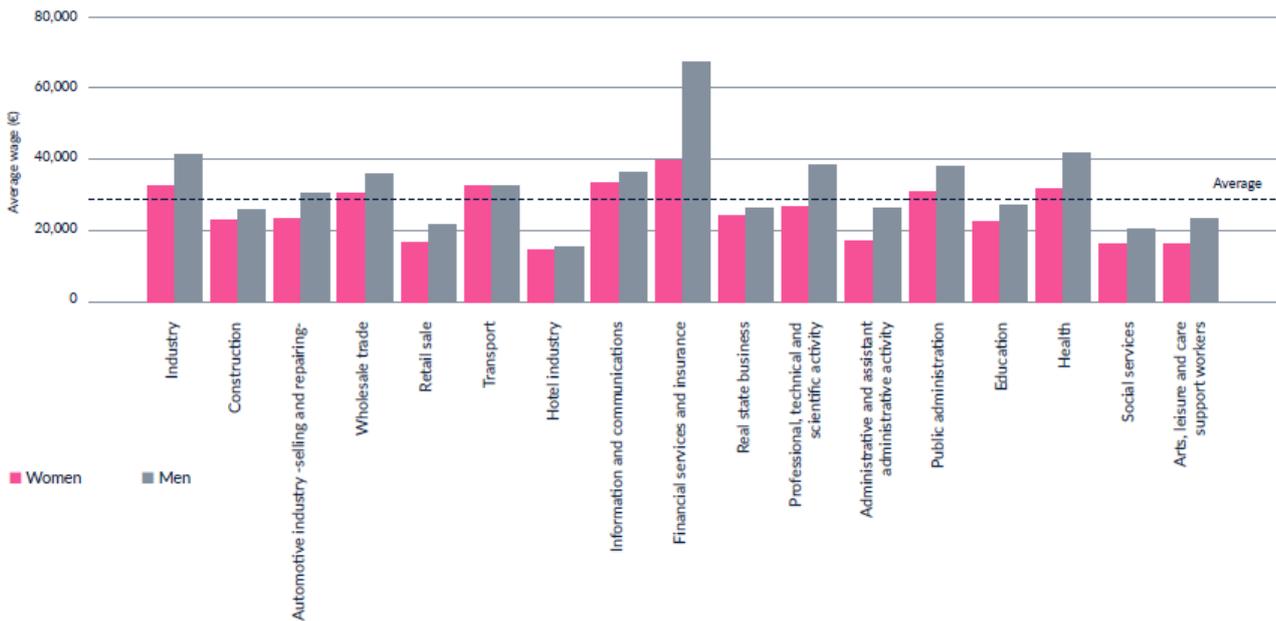
	Women	Men	Total
01. Industry	32,861	41,597	38,632
02. Construction	22,627	25,991	25,199
03. Automotive industry –selling and repairing	*23,548	30,312	29,239
04. Wholesale trade	30,449	36,142	33,793
05. Retail sale	16,765	21,957	18,845
06. Transport	32,698	32,665	32,674
07. Hospitality industry	14,493	15,461	15,055
08. Information and communications	33,174	36,281	35,177
09. Financial services and insurance	39,547	67,236	54,158
10. Real estate business	23,995	26,136	24,825
11. Professional, technical and scientific activity	26,401	38,248	31,528
12. Administrative activity and assistants	16,791	26,460	21,156
13. Public administration	30,714	38,408	33,893
14. Education	22,322	27,264	24,009
15. Health	31,695	42,197	34,607
16. Social services	16,308	20,887	17,593
17. Arts, leisure and care support workers	16,251	23,546	19,507
Total	24,618	32,868	28,649

*Number of observations below 10

It must be highlighted, though, that income according to sectors can be biased due to the outsourcing and subcontracting of technical tasks, which is becoming more and more frequent, though not uniformly across the sectors. The implementation of informal work is not applied uniformly across the sectors either, with this practice broadly extended in sectors such as the hospitality industry or construction and non-existent in Public Administration.

Industry was the work activity with the second-highest level of income, with a wage 34.8% above the average. The fact that this sector where men are the majority –after decades of transformation and losing influence in favour of services– registers a relatively high average wage can be linked to the fact that a great part of the industry remaining in the city has a strong strategic component linked to advanced industries, that attract highly specialized and well remunerated profiles, as well as the fact that many chief executive officers of big companies located in the metropolitan region live in Barcelona.

Figure 7. Average wage according to sectors of activity.



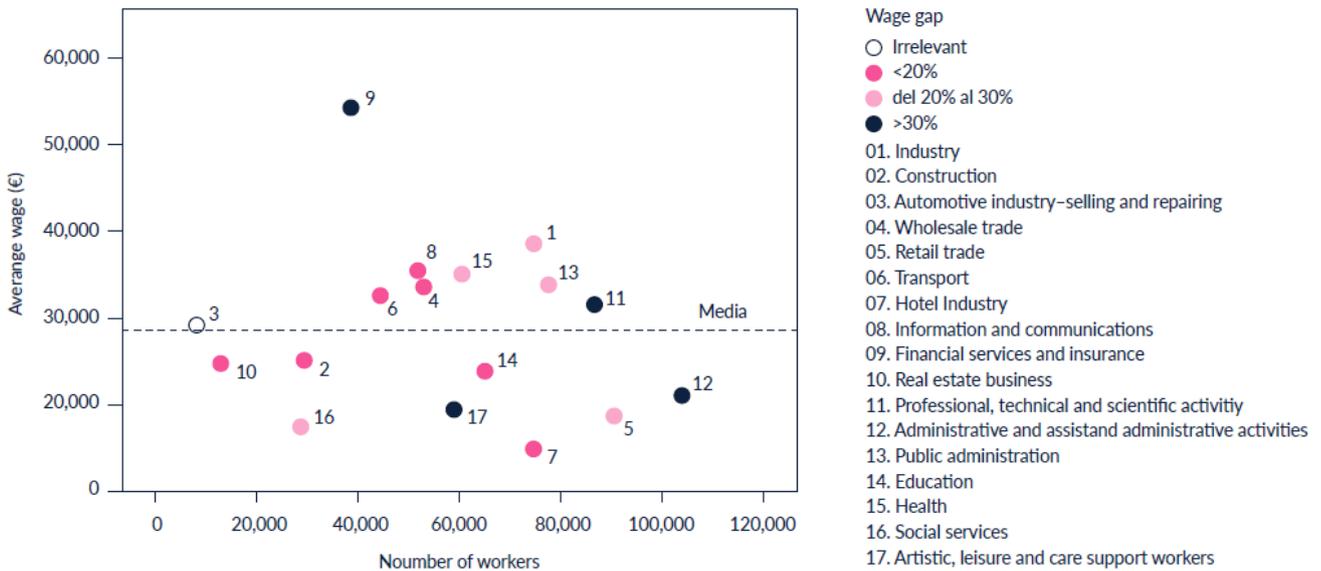
The sectors which fall under the 20,000 euros barrier and register along with the hospitality industry the lowest positions are the artistic and leisure activities, care assistants, retail sales and social services.

In these branches, strongly dominated by women, the underground economy has a certain presence, which can explain a part of the low earnings. However, it's important to point out that this work has a significant influence on the productive structure of Barcelona and a high index of specialization in relation to the Catalan economy; particularly both the retail sale and hospitality industry show an important position both in number of workers (between them they account for 17% of workers in Barcelona) and in the city GVA (around 13% in total).

The income differentials between men and women for activity sectors are considerable. They range from 41.2% in financial and insurance sector to -0.1% in transport, the only sector where wages are equal.

That the best remunerated sector registers, at the same time, the biggest wage gap, can be partially explained by the fact that the proportion of women working in administrative and assistant tasks in this sector is higher than men. Nevertheless, independent of this fact, women who work in finance and insurance in a graduate, engineer or senior manager position earned 48% less than their male counterparts; that is, the wage gap is growing in the highest occupational categories.

Figure 8. Average wage according to sector of activity, number of workers and wage gap.



On the contrary, the hospitality industry displays, leaving out transport, the smallest wage gap (6.3%). As happens in other work sectors, when salaries are very low, the margin for wage inequality decreases.

As can be seen in Figure 8, administrative and assistant administrative activities, along with professional, scientific and technical activities are two of the activities that hired the most employees and where the wage gaps were more significant (36.5% and 31% respectively). Sectors of activity like education, health or public administration are interesting. In these three cases, women are the majority and earn less, with wage gaps ranging from 18 to 25%. Not only that: they are also the majority in the highest professional group: graduates, engineers and senior management, but, even then, they still earn less than their male counterparts: 11.6% in education, 10.9% in health and 21% in public administration.

Other sectors where women are the majority and earn less are retail sales (23.6%) or social services (21.9%), whereas industry, where men represent two thirds of the occupation, women's wages were 21% lower than men's.

The wage level is also strongly determined by the type of contract, and the current lack of job stability creates a sharp divergence of incomes.

The average wages for workers with permanent contracts in 2014 (30,581 euros annually) surpassed by nearly 90% the wages of workers with temporary jobs (16,188 euros). The wage difference between these two types of contract was smaller in the case of women, where the average wages for permanent contracts were 66% more than the wages for fixed-term contracts.

The salary of workers with fixed-term contracts was 43% under the average. This type of contract, with a high presence of young people, represented a sixth of the total according to MCVL, whereas permanent contracts represented more than three quarters of the sample. Other contractual situations –6.5% of observations– that include groups like city servants contributing to the national insurance, had an average wage of 36,352 annual euros, 27% higher than the average earnings of the city residents.

Table 5. Average income according to type of contract. Barcelona (2014).

€/year

	Women	Men	Total
Permanent contract	25,832	35,335	30,581
Fixed-term contract	15,559	16,920	16,188
Other situations ¹	32,840	41,196	36,352
Total	24,618	32,868	28,649

¹ Civil servants contributing to Social Insurance and others who are not obliged to inform about their contract

Women's income was 26.9% lower than men's in relation to permanent contracts. At the highest range of average income, women with permanent contracts in the finance and insurance sector – 47% representation– earned an average salary of 40,642 euros, 41% below their counterparts (69,415 euros in 2014). At the lowest range, the hospitality industry, the average wage for women with permanent contracts was 15,930 euros, and the wage gap was only 6.9%.

The biggest wage equality occurred in fixed-term contracts, where the wage gap was only 8%. But, even for these types of contracts, wage differences between men and women were higher in sectors of activity with the highest earnings. Likewise, education and health, where the average wage of women with fixed-term contracts exceeded 24,000 annually, wage gaps reached 12.8% and 20.1%, respectively.

Along with the type of contract, the amount of hours in a working day is another determining feature of the salary. The average earnings for full-time workers, 33,029 euros annually, were more than double those of part-time workers (14,353 euros), especially in the case of men, whose average wage was 2.5 times higher.

Table 6. Average earnings according to working day. Barcelona (2014).

€/year

	Women	Men	Total
Full-time	29,210	36,316	33,029
Part-time	14,278	14,504	14,353
Total	24,618	32,868	28,649

The wage gap concerning full-time jobs was nearly 20%, whereas the wage gap in part-time jobs was very narrow, almost non-existent (1.6%).

However, part-time jobs don't really have more balanced wages. What occurs, instead, is that there is a high proportion of women with part-time jobs with very low wages, little more than 14,200 euros annually, half the city average. According to the MCVL assessment, the resident population employed in part-time jobs was 23% of the total, a percentage that reached 30.8% in the case of women, compared to 15.8% for men. On the other hand, women occupied two out of three part-time jobs (67%), a type of working day –not always chosen willingly– often linked to cheaper and more flexible contracts.

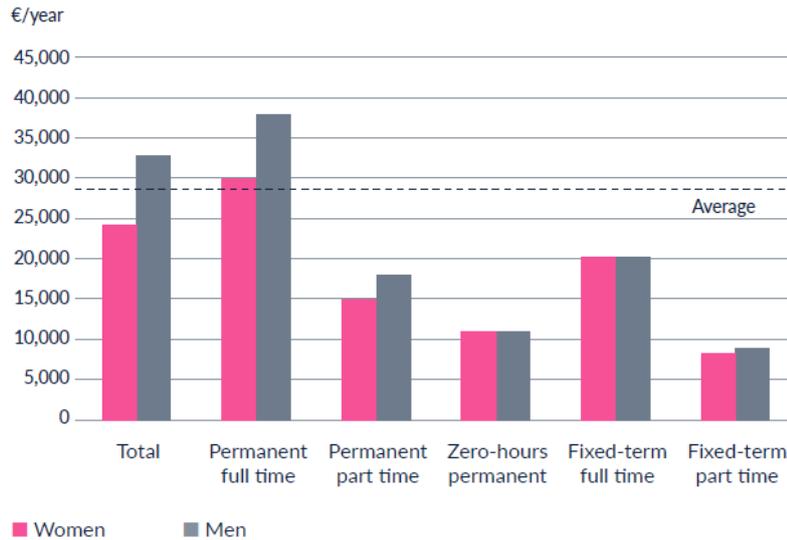
In that sense, the administrative and assistant administrative sector, one of the lowest in terms of salary, registers a part-time occupancy that reached 38%. The wage of part-time administrative officers and assistants (10,962 euros annually) was slightly above their counterparts, but it should be pointed out that, of the total of female workers in this sector, 50.9% were part-time workers

(compared to 22% of men) and that part-time occupancy in this sector was dominated by women, who were hired in almost three out of every four jobs (74%).

Nevertheless, sectors like education, which also had a high prevalence of part-time jobs but with relatively higher earnings, the wage gap for part-time jobs grew up to 25%.

After assessing all the array of contracts, the highest wages (20% above the average) belonged to full-time workers with permanent contracts (34,289 euros), whereas at the lowest range, the average wage of part-time workers with fixed-term contracts (8,614 euros), was a long way from the average (70% below), representing only a quarter of the first group.

Figure 9. Average wage for type of contract.



The biggest wage gaps were found in modalities of permanent contracts –both full time (21.8%) and part-time (19%)–, with the exception of zero-hours contracts, where women got salaries slightly above their counterparts. Regarding the two most precarious types of indefinite contract, women represented two thirds of the total of workers. The biggest wage equality occurred in full-time fixed-term contracts (0.5%), whereas the modality with the lowest earnings –part-time fixed-term contracts–, where women occupancy was 60%, there was a 7.1% gap.

Figure 10 highlights the wage differences between men and women in absolute terms, and at the same time reveals the women workers who are facing the most vulnerable situations in terms of wage, drawing a profile of non-European young women aged up to 24 (from Latin America and the rest of the world), with a level of studies lower than Secondary School, administrative assistants and junior officers working part-time and hospitality industry occupancy with fixed-term contracts.

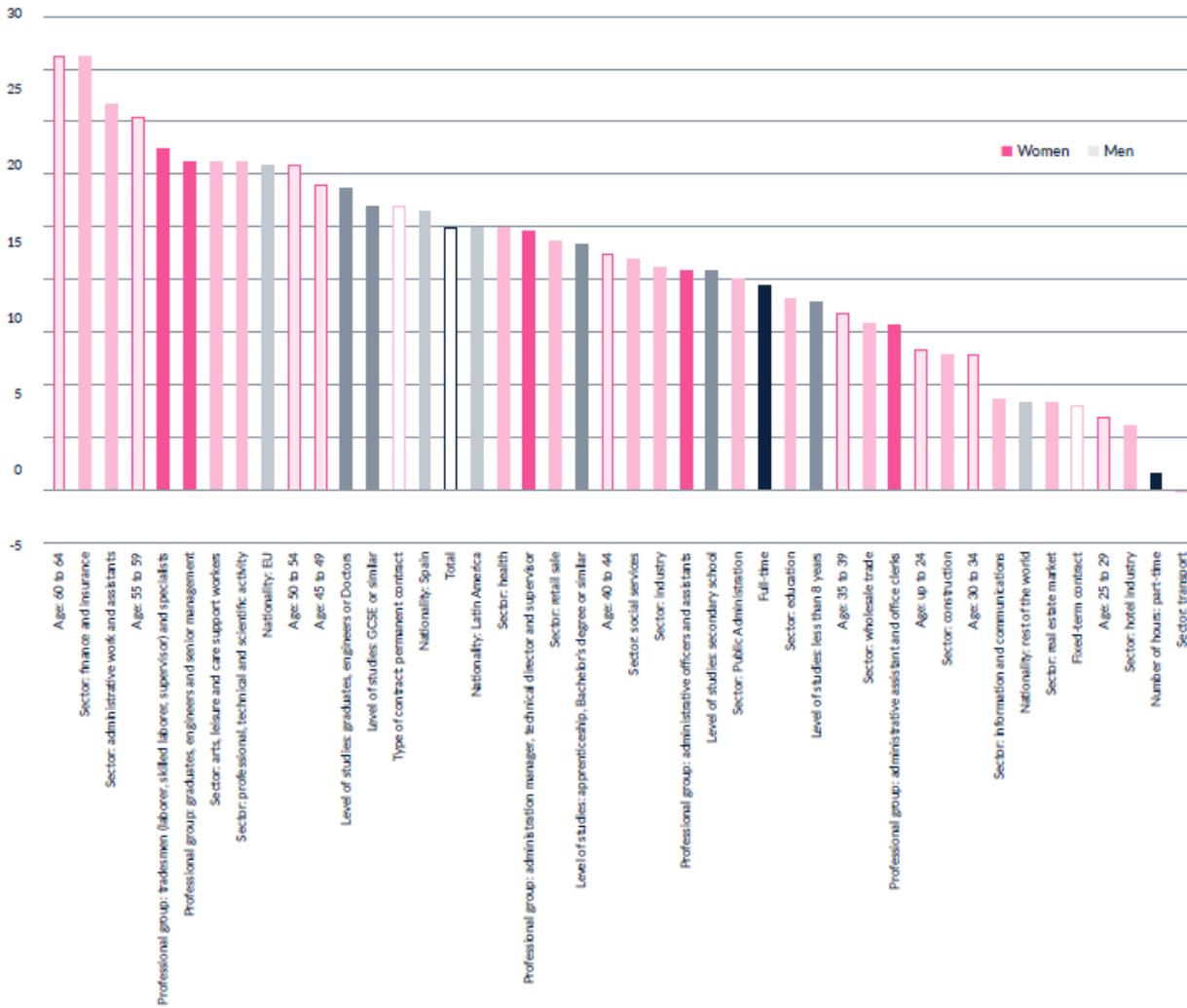
The biggest wage differences in absolute terms were found in the two groups with the highest average income: the finance and insurance sector, where men earned an average of 27,700 euros gross more than women annually, and the professional group of graduates, engineers and senior management, where women earned 18,800 euros less than their counterparts. Also noticeable were the wage differences for the groups of people aged 60 to 64, where women earned an average of 17,800 euros less.

Figure 10³. Average wages for women and differences with men's wages.
Annual gross euros



5. Wages in this figure related to age groups, level of studies, nationality, activity sector, professional group, type of contract and number of hours for workers residing in Barcelona with data source from 2014.

Figure 11⁶. Wage gap.
Wage difference between men and women (%)



6. Wage difference between men and women calculated from differences between average annual income of men and women according to percentage with respect to men's average gross income.

Figure 11 shows the wage differences between men and women in relative terms. As we have seen, the wage gap is widespread and occurs in all the age ranges, on all educational levels, nationalities and professional groups, in almost all sectors and all types of contracts and working days, regardless of the relative presence of women and men in all these categories.

But the higher amount of one or other gender in the type of working day and other contractual modalities (such as the zero-hours workers) did have a direct impact on the wage gaps.

In conclusion, both wages and wage differences between men and women were higher in advanced ages and increased when people had higher levels of studies, whereas between young people and in the categories with lower wages is where smaller wage gaps were seen. Without considering the transport sector, the lowest –8% or less– belonged to part-time jobs, the hospitality industry, young people aged 25 to 29 and fixed-term contracts. In these four cases, wages were situated 40 to 50% under the average; that is, they are so low that there's little margin for differences between men and women.