

# Salary Structure Survey 2022

Main results

INSTITUTO NACIONAL DE ESTADISTICA

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#### Introduction

The Salary Structure Survey 2022 (SSS 2022), the main results of which are presented in this document, was conducted in a harmonised manner across the European Union (EU) in accordance with Council Regulation (EC) No 530/1999.

This survey analyses the structure and distribution of salaries in all EU Member States and their regions. The sample is thus composed of work centres and workers belonging to those centres.

Compared to other similar surveys on the same subject, the main contribution in this case is that wages are collected individually in the questionnaire, along with a large number of worker-related variables. This makes it possible to establish relationships between salary and variables that may help to determine their level, such as level of education, length of service, type of contract and job, etc.

Another contribution of the survey is that it provides not only average earnings but also the distribution of earnings, thus providing a measure of salary inequality.

The objectives of the survey can therefore be summarised in two main categories:

Knowledge of salary levels, not only of average levels, but also of their distribution.

Determination of the salary structure, both in terms of its composition and the variables that have an impact on it and the extent to which they do so.

A total of 25,553 work centres and 240,490 salaried employees took part in the 2022 Salary Structure Survey. The survey is carried out every four years. The previous surveys were carried out in 1995, 2002, 2006, 2010, 2014 and 2018, also in a harmonised way with the other countries of the European Union. Details can be found in the <u>survey methodology</u>.

The main findings from the survey information are presented below. The publication also contains an extensive set of tables, which can be consulted directly on the web. However, the possibilities of this survey are very wide. It has the potential to be further exploited in the future by researchers interested in the labour market, as anonymised microdata files can also be accessed.

#### **1** Salary Distribution

The average annual gross salary in 2022 was 26,948.87<sup>1</sup> euros. In the case of women, 24,359.82 euros per worker and in the case of men, 29,381.84 euros per worker. The average annual salary for women was therefore 82.9% of the average annual salary for men, although this difference must be qualified according to other labour variables (type of contract, working hours, occupation, seniority, etc.) which have a significant impact on wages.

The salary distribution provided by the survey, shown in Figure 1, is asymmetric to the right, with a large dispersion. There are many more workers in the lower values than in the higher ones. This results in the average wage being higher than both the median wage and the most frequent wage.

Thus, the median salary (i.e. the salary that divides the number of workers into two equal parts, those with higher and those with lower salaries) registered a value of 22,383.11 euros in 2022.

The modal salary (the one with the highest frequency, with 4.2% of employees) was 14,586.44 euros, although similar frequencies of 16,495.84 euros (4.2% of total employees) and 18,494.32 euros (4.1%) were recorded.

The Minimum Interprofessional Salary (SMI) shifted low-paid workers to the 14,000-15,000 euro bracket, making this the most frequent one. The other two pay brackets mentioned also saw an increase in their number of wage earners, but to a lesser extent. In total, 20.5% of wage earners had annual earnings of between 14,000 and 19,000 euros.

The difference between the average salary (26,948.87) and the most common salary (14,586.44) explains the perception of users and public opinion that the results of traditional surveys are "high" because only average salaries are provided.

<sup>&</sup>lt;sup>1</sup> For an adequate interpretation of the earnings, we must take into account that earnings from the second and subsequent jobs of the same employee are not collected. We use the earnings of each worker in the company for which they have been selected. In addition, for a correct comparison between workers, an annual salary adjustment is made for those who did not work the whole year in the same workplace, either because they started or ended their contract, or because they were registered in the Social Security system but did not receive any remuneration from the company, as in the case of maternity/paternity leave, unpaid leave, ERTE, etc. In these cases, the annual salary corresponding to what they would have received if they had worked all year under the same conditions is allocated.



The Lorenz curve (Graph 2) allows us to observe salary inequalities graphically. The percentage of workers is shown on the abscissa and the cumulative percentage of their salaries in the total wage bill is shown on the ordinate.



The measure of inequality associated with the Lorenz curve is the Gini Index, which represents the distance between the curve and the bisector modelling a perfectly equal distribution (all people with the same salary). The Gini Index takes values between 0 and 100, with 0 corresponding to an equal distribution.

An analysis of this curve for the population as a whole shows that the 20% of workers with the lowest wages accounted for just over 7% of the total wage bill, while the 10% of workers with the highest wages accounted for 25% of it. The value of the Gini Index for 2022 was 33.1.

Graph 3 shows salary distribution by sex. The salary distribution of women is further to the left than that of men at all salary levels. Up to 17,000 euros, there are more women than men at the same salary level. Above this figure, the number of women at each salary level is always lower than the number of men with the same salary.



GRAPH 3. Distribution of gross annual wages by sex

Graph 4 shows the same data, but cumulatively. The bottom left-hand corner of the graph shows that almost 30% of women earned less than 15,000 euros per year in 2022, while for men this percentage is less than 14%. This difference is mainly explained by the fact that the majority of part-time workers within the scope of the survey were women. At the upper end of the salary range, 35% of men earned more than 30,000 euros a year, compared with 27% of women.



Graph 5 shows the distribution of employees according to their earnings with respect to the Interprofessional Minimum Wage (IMW), which was 14,000.00 euros in 2022.



It can be seen that 17.10% of workers did not reach the IMW in 2022, with the percentage being significantly higher for women than for men. This is because the majority of part-time workers fall into this interval. Considering only full-time workers, the percentage of workers with earnings below the IMW was 3.35%. This can be seen in Graph 6.



The comparison between the sexes by interval is made clearer in Graph 7, which shows the percentage of men and women whose salary was in each interval. It can be seen that the percentage of women was significantly higher in the lower salary intervals, namely 68.8% in the lower salary interval than in the IMW. The percentage of women decreases as the salary increases and reaches 23.39% in the range of salaries above 8 times the IMW.



In addition to the Gini Index (already discussed), there are other indicators of salary inequality, as shown in Table 1.

CHART	1. Indicators	of inequality
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33.1
11.6%
63.7%
2.11
1.53
3.22
9.0%

The proportion of workers with low earnings (low pay rate) measures the proportion of wage earners whose earnings per hour were less than 2/3 of the median earnings per hour. Information is also included on the proportion of women in total wage earners with low hourly earnings.

In 2022, according to the results of the Salary Structure Survey, 11.6% of wage earners perceived an hourly earnings below 2/3 of the median hourly earnings (low pay rate). Of this total number of employees, 63.7% were women.

Wage deciles provide another interesting measure of salary distribution. To calculate these deciles, all employees are ranked by the amount of their annual salary and divided into ten equal groups (10% of workers in each group). The first decile corresponds to the 10% of workers with the lowest earnings, the second decile corresponds to the 10% of workers with the next highest earnings, and so on up to the ninth decile, which corresponds to the 10% of workers with the highest earnings. The median salary corresponds to decile 5 (denoted by D5). The different ratios between the lowest (denoted by D1), the median (D5) and the highest decile (denoted by D9) give an idea of the breadth (inequality) between the different salary levels.

The values of these measures for the year 2022 are shown in Table 1. The annual salary of the highest paid 10% was twice the median salary and more than 3 times the salary of the lowest paid 10%.

Eurostat defines the unadjusted gender gap, which may explain part of the salary gap between men and women, as the difference between men's and women's gross hourly earnings expressed as a percentage of men's gross hourly earnings. Eurostat calculates this only for employees working in workplaces with 10 or more employees. Hourly earnings include overtime pay but exclude overtime bonuses.

In 2022, the salary gap was 9.0%.

### 2 Territorial Analysis

The highest salaries in 2022 corresponded to País Vasco (32,313.73 euros per worker per year), Comunidad de Madrid (31,230.73 euros) and Comunidad Foral de Navarra (29,189.52 euros). On the other hand, Extremadura (21,922.73 euros), Canarias (23,096.92 euros) and Castilla La Mancha (23,751.71 euros) recorded the lowest salaries.

Graph 8 is a map of the Autonomous Communities, showing the average salaries for each of them in 2022.



Graph 9 shows the differences in the average income of each community compared to the national group. In addition to the above-mentioned communities with the highest salaries, Cataluña, Illes Balears and the autonomous cities of Ceuta and Melilla recorded average annual earnings above the national average.





The differences between the sexes were not the same in all regions, as shown in Table 2. This difference is not always due to greater wage discrimination in one region or another, but rather to the different employment structures in each region. There are many factors that influence the salary gap between men and women: type of contract, type of working day, level of education and different occupations, among others.

The gender ratio is the percentage of the average female salary compared to the corresponding male salary. Thus, Canarias had the smallest sex gap, followed by the cities of Ceuta and Melilla and Illes Balears, while Región de Murcia, La Rioja and Aragón had the largest sex gaps. However, the results for Ceuta and Melilla in this survey should be treated with caution due to the small sample size, which leads to higher sampling errors.

In general, in almost all Autonomous Communities, the average salary for women was between 4% and 20% lower than the average salary for men.

	Gross Annual Wages		Ratio		
	Total	Women	Men	Woman/Man	Gini Index
TOTAL NATIONAL	26,948.87	24,359.82	29,381.84	82.9	33.10
Andalucía	24,041.96	21,649.50	26,159.02	82.8	32.69
Aragón	26,012.71	23,138.72	28,789.96	80.4	30.27
Asturias, Principado de	26,745.93	23,792.42	29,573.74	80.5	32.28
Balears, Illes	27,145.79	26,054.20	28,155.99	92.5	29.57
Canarias	23,096.92	22,574.98	23,588.70	95.7	30.38
Cantabria	25,291.14	22,564.11	27,820.83	81.1	31.82
Castilla y León	24,186.89	21,773.27	26,548.08	82.0	32.17
Castilla - La Mancha	23,751.71	21,312.65	25,813.23	82.6	30.52
Cataluña	28,774.55	25,659.03	31,878.42	80.5	32.66
Comunitat Valenciana	24,510.34	22,135.35	26,683.85	83.0	31.45
Extremadura	21,922.73	20,637.14	23,170.92	89.1	31.92
Galicia	24,169.68	21,912.75	26,626.89	82.3	31.29
Madrid, Comunidad de	31,230.73	28,123.47	34,113.40	82.4	34.86
Murcia, Región de	23,851.69	20,956.37	26,240.66	79.9	32.74
Navarra, Comunidad Foral de	29,189.52	26,033.30	31,959.85	81.5	29.66
País Vasco	32,313.73	29,314.69	35,095.67	83.5	31.13
Rioja, La	24,903.38	22,264.39	27,741.60	80.3	31.09
Ciudades de Ceuta y Melilla	27,370.56	26,535.81	28,168.62	94.2	33.80

#### CHART 2. Main results by Autonomous Community

Similarly, interregional inequality can be studied by means of Lorenz curves for annual wages and the corresponding Gini indices (also in Table 2) for each Autonomous Community. Graph 10 shows the Lorenz curves for the most extreme Autonomous Communities: the minimum (lowest inequality among its employees) was reached by Illes Balears, with an Index of 29.57, and the maximum (highest inequality) by Comunidad de Madrid, with a value of 34.86.



## 3 Salaries by Activity Branch<sup>1</sup>

As can be seen in Graph 11, the economic activity with the highest average annual salary was *Electricity, gas, steam and air conditioning supply*, with an average of 55,470.69 euros per worker per year, 105.8% higher than the total average. *Financial and insurance activities* also stand out, with 47,239.53 euros, 75.3% more than the average salary.

In the opposite direction are *Accommodation*, with an average of 16,274.71 euros, 39.6% lower than the total, and *Other services activities*, with an average of 18,269.96 euros, 32.2% less than the average for all activities.

- G. Wholesale and retail trade; repair of motor vehicles and motorcycles
- H. Transport and storage
- I. Accommodation

- K. Financial and insurance activities
- L. Real estate activities

- N. Administrative and support services activities
- O. Public administration and defence, compulsory social security

- Q. Human health and social work activities
- R. Arts, entertainment and recreation
- S. Other service activities

<sup>&</sup>lt;sup>1</sup> Description of the activity sections in the National Classification of Economic Activities 2009 (CNAE-09):

B. Extractive industries

C. Manufacturing industry

D. Electricity, gas, steam and air conditioning supply

E. Water supply, sewerage, waste management and remediation activities

F. Construction

J. Information and communication

M. Professional, scientific and technical activities

P. Education



#### GRAPH 11. Annual average earnings per worker by Activity Branch

Concerning the differences in salaries by sex and economic activity, it should be noted that the ranking of activities was maintained for each sex, with slight modifications. Thus, Electric energy, gas, steam and air conditioning supply received the highest salaries, both for men and for women, while Accommodation had the lowest.

Graph 12 shows that women were paid less than men in all sectors except Extractive industries and Construction. In both activities, the average salary of women was higher than that of men, reflecting the fact that the women in the sample were in higher-skilled jobs than men. However, this result should be treated with caution, as there are very few women working in these activities (especially in Extractive industries) and the sample size is small, so sampling errors are high.

At the other extreme, the activity with the largest gap between women's and men's salaries is Administrative and support service activities. The inequality is partly explained by differences in occupations and in the type of working day and contract.



GRAPH 12. Desviation of women's earnings over men's earnings in %

#### Salaries and Occupation<sup>1</sup> 4

Occupation was one of the variables that most influenced the wage level. Graph 13 allows us to observe the differences between the average salaries of each group and their deviation from the total.

<sup>1</sup> Description of Major Groups of the National Classification of Occupations 2011 (CNO-11)

<sup>1</sup> Directors and managers

Scientific and intellectual technicians and professionals

<sup>2</sup> 3 Technicians; support professionals

<sup>4</sup> Accountancy, administrative and other office employees

<sup>5</sup> Workers in catering, personal, and protection services and salespersons

<sup>6</sup> Skilled agricultural, livestock, forestry and fishing sector workers

<sup>7</sup> Craftspersons and skilled workers in manufacturing and construction (except installation and machinery operators)

<sup>8</sup> Installation and machinery operators and assemblers

Elementary occupations 9

<sup>0</sup> Military occupations

#### GRAPH 13. Annual average earnings per worker by occupation

Annual average earning per worker

	Desviation of average wages as a porcentage			
	Euros		-	
1. Directors and managers	59,478.63		120.7 1	
2. Scientific and intellectual	39,356.06	46.0	2	
3. Technicians and support	31,899.95	18.4	3	
All occupations	26,948.87	0.0	Total	
8. Installation and machinery operators	24,792.88	-8.0	8	
7. Craftspersons and skilled workers	24,318.03	-9.8	7	
4. Accountancy, administrative	24,198.08	-10.2	4	
6. Skilled agricultural, livestock	21,383.06	-20.7	6	
5. Workers in catering, personal,	18,992.66	-29.5	5	
9. Elementary occupations	17,017.06	-36.9	9	

It is worth noting the large salary difference between Major Group 1, *Directors and managers*, and the rest of the groups. Specifically, the salary for jobs in this group is 120.71% higher than the overall average salary.

For all other occupations, above-average salaries were found for *Scientific and intellectual technicians and professionals* (Major Group 2) and for *Technicians; support professionals* (Major Group 3). The other occupations had average salaries lower than the national average, with the lowest wages going to *Elementary occupations* (Major Group 9), followed by *Workers in catering, personal, and protection services and salespersons* (Major Group 5) and of *Skilled agricultural, livestock, forestry and fishing sector workers* (Major Group 6).

In the case of *Military occupations* (Major Group 0), only a small group met the study conditions, meaning there is not enough data to provide a reliable result.

The tables in the publication show not only the average salary but also certain percentiles for the occupations, which provides a more detailed picture of salary differences. In Major Group 1 of occupations, *Directors and managers*, as mentioned above, the average salary was 59,478.63 euros, but in addition 10% of them exceeded 95,455.95 euros; on the other hand, the average salary of workers in *Elementary occupations*, Major Group 9, reached 17,017.06 euros, and of these the most favoured 10% exceeded 26,525.21 euros.

This pattern is repeated when broken down by occupation and sex. The highest paid occupations were the same for men and women (Major Groups 1, 2 and 3) and in the same order. The groups with the lowest salaries were also the same for men and women (Major Groups 5, 6 and 9), but the order differed from the global results. It should be noted that for women in Major Group 6 the sample size is less than 100 workers, which makes the result unreliable, so the data are not shown.

Graph 14 shows that in all occupations women had a lower salary than men. The smallest difference was observed in Major Group 2, where it is on average 14.3% lower. The largest difference is in Major Group 9, where the average annual salary is 29.6% lower than for men.



GRAPH 14. Desviation of women's earnings over men's earnings in % by occupation

An important factor in occupation is knowing whether the worker is responsible for other workers or has supervisory responsibilities, and how these responsibilities affect salaries. Graph 15 shows how in each occupation having responsibility led to an increase in salary compared to the average salary for said occupation. In this case, the greatest responsibility-related differences in salary were in Major Group 5, *Workers in catering, personal, and protection services and salespersons*, while Major Group 1, *Directors and managers*, had smaller responsibility-related salary differences.



GRAPH 15. Comparison of average annual wages by occupation, with and without supervising responibility

It should be noted that the number of employees with responsibility in Major Groups 8 and 9 was very small, which is why they are not shown in the graph. There are not enough employees in Major Group 6 with supervisory responsibilities to be shown.

In any case, the Major Groups of occupations are still internally very heterogeneous, so that in order to better study wage discrimination it is necessary to deepen the classification of occupations and to include other variables in the study, such as the type of working day and the type of contract.

#### 5 Salaries and Type of Working Day

The type of working day is undoubtedly one of the variables determining the salary level. Indeed, the figures in Graph 16, which show the annual earnings of employees according to the number of hours they worked, show that the average annual earnings level of part-time employees was close to 50% of the average total earnings for both men (48.2%) and women (53.4%).



However, this comparison, which is valid from the point of view of employees' income, is misleading if we compare wages as the "price of labour", since full-time wages correspond to more working hours than part-time wages. Hourly earnings, which are analysed at the end of this section, are therefore the most relevant variable.

Before going on to describe the results obtained by type of working day, it should be noted that in the area studied 22.5% of employees had a part-time working day, which was higher for women (32.1%) than for men (13.5%).

The concentration of part-time wages is particularly striking. Graphs 17 and 18 show this in detail. Graph 17 shows that the wages of part-time workers are much more concentrated around the modal value, the maximum peak of the curve, and that this value is close for both sexes.



GRAPH 18. Distribution of annual wages by type of working day and sex



Graph 18 shows that around 40% of part-time employees of both sexes had a salary of less than 11,000 euros. Starting from this salary level, the differences between men and women were more marked, with women having lower salaries than men.

Regarding full-time workers, the distribution of salaries for women is always to the left of that of men, indicating lower salaries at all levels.

Hourly earnings are calculated as monthly earnings divided by the number of hours worked (normal and extraordinary) in the reference month. The reference month used is October 2022, which is not characterised by special payments, and the resulting hourly earnings are therefore lower than if annual data were used. The reason for using

this method is that estimating hours worked in the reference month is more accurate than estimating annual hours (see section on working time in the methodological note).



GRAPH 19. Comparison of the hourly wage by type of working day and sex

Graph 19 shows that the hourly earnings of part-time employees were almost 20% lower than the average hourly earnings for men and more than 28% lower for women. Among full-time employees, average hourly earnings were 6.1% higher for men and 2.3% higher for women.

Indeed, while, as mentioned above, women's average annual earnings were 17.1% lower than men's, this difference is almost halved (-8.1%) when the hourly earnings are taken into account.

Just as the distribution of annual salary by type of working day has been examined, the distribution of hourly salary by the same variable is examined below in Graphs 20 and 21.



GRAPH 21. Distribution of hourly wages per worker by type of working day and sex



Comparing graphs 17 and 20, i.e. the density functions of annual and hourly salaries respectively, we can see that the peaks of the hourly earnings per employee curves are much closer together for both full-time and part-time employees than for annual earnings. This suggests that in terms of labour prices, salary differentials by gender and type of hours worked were not as large as when comparing annual earnings.

Graph 21 shows that almost 70% of part-time women had hourly earnings of less than 10 euros, while the same percentage of full-time women had earnings of less than 15 euros. For men, around 73% of those working part-time earned less than 12 euros, compared with 16 euros for full-time men.

When looking at the type of working day, women are paid less for both full-time and parttime work. However, when looking at hourly earnings, the differences between men and women are greater for part-time work than for full-time work.

#### 6 Salaries and Type of Contract

For the purposes of the survey, two types of contract were considered: permanent contracts and fixed-term contracts.

In order to compare employees with permanent contracts with those with fixed-term contracts, the salary of employees who did not stay at the same workplace for the whole year has been adjusted. This was done by assigning them the equivalent annual salary that they would have received if they had worked under the same conditions for the whole year.

The average annual salary of employees with fixed-term contracts was 7.7% lower than that of employees with permanent contracts, and about 6.9% lower than the overall average salary.

By sex, men with permanent contracts had a salary 11.0% higher than the average annual salary, while those with fixed-term contracts had a salary 8.6% lower. For women, regardless of the type of contract, salaries were lower than average: 10.2% lower for permanent contracts and 5.5% lower for fixed-term contracts. This analysis is shown in Graph 22.





There has been a very significant increase in the average salary of fixed-term contracts. It should be noted that the entry into force of Royal Decree-Law 32/2021 of 28 December on Urgent Measures for Labour Reform, the Guarantee of Employment Stability and the Transformation of the Labour Market has resulted in a significant number of temporary contracts becoming permanent through the figure of the discontinuous permanent

contract. As a result, the average salary for women on fixed-term contracts is higher than for women on permanent contracts.

Graph 23 first shows that the densities by type of contract are very uneven. The lowest annual earnings were mostly for women and fixed-term contracts for men. On the other hand, men with a permanent contract were the least likely to have low earnings and the most likely to have high earnings.



GRAPH 23. Density functions of annual wages by type of contract and sex

Graph 24 shows that the leftmost curves (lower earnings) are those of women with permanent contracts and men with fixed-term contracts, which are intertwined, while the rightmost curve is that of men with permanent contracts.



GRAPH 24. Distribution of annual wages by type of contract and sex

Another interesting observation from Graph 24 is the difference in salary levels according to contract type and sex. For example, in the case of fixed-term contracts, 50% of men had a salary of less than 22,000 euros, while for women the figure was 23,000 euros, i.e. women had higher earnings than men. However, in the case of permanent contracts, 50% of employees have an annual salary of less than 25,000 euros for men and 20,000 euros for women.

For the highest salaries, 10% of workers with permanent contracts had a salary of more than 55,000 euros for men, compared with 5.6% for women. In the case of fixed-term contracts, the percentage was close to 4.5% in both cases.

In terms of hourly earnings, as shown in Graph 25, the differences between men and women, and between permanent and fixed-term contracts, are smaller than for annual salaries. This can be seen not only in the mean values but also in the distributions shown in Graphs 26 and 27, which are the density and distribution functions respectively.







GRAPH 26. Density functions of hourly wages per worker by type of contract and

GRAPH 27. Distribution of hourly wages per worker by type of contract and sex



## 7 Salaries and Level of Education

Together with the occupation variable, education is one of the most important characteristics when examining the earnings of employees. Salary differences between workers with different formal qualifications are very pronounced. As can be seen in Graph 28, the annual salary increases with the level of education. Workers with no education or who have not completed Primary Education were paid 35.7% less than the

average salary, while university graduates received an annual salary 65.8% higher than the average. For those with a higher level of education and above, remuneration was above the average salary.

Gross annual per work	(er	Desviation from the average wages as a porcentage			
	Euros	65.8	VII		
VII. University graduates,	44,672.13	25.1	VI		
VI. Univestity diploma	33,722.61	2.1	v		
V. Intermediate-level	27,514.54	0.0	• Total		
All studies	26,948.87	-12.0	IV		
IV. Secondary education II	23,727.05	-24.9	III		
III. Secondary education I	20,225.81	-29.7			
II. Primary education	18,934.60	-35.7			
I. Without studies	17,333.57		•		

GRAPH 28. Average annual wages by level of studies

When comparing employees with the same level of education, the difference between men and women becomes clear in Graph 29. The average salary of women was 17.1% lower than that of men at all levels of education. The greatest relative differences between men's and women's salaries were observed at the level of *Primary Education* and *Less than Primary*, while the smallest differences were in the groups of *Higher Level Degree Holders and University Graduates*.



GRAPH 29. Desviation of women's earnings over men's earnings by level of studies as a porcentage

Graphs 30, 31 and 32 show the distribution of salaries according to the level of education attained. Here we can see the large differences between low and high levels of study. In the case of men, Graph 31 shows how more than 50% of university graduates exceeded a gross salary of 45,000 euros in 2022. 0.7% of male workers with no education earned more than that amount. In the case of women, 50% of female graduates earned more than 37,000 euros gross per year, while none of the female workers with no education managed to exceed this income.



#### GRAPH 30. Distribution of gross annual wages by level of studies

GRAPH 31. Distribution of gross annual wages by level of studies. Men





### 8 Salaries and Age

As can be seen in Graph 33, there is a positive relationship between worker age and salary level. While there is no salary supplement for age, there is one for company seniority. Seniority is discussed in the next section, but it should be noted that age and seniority are closely related, as older workers tend to be those with the longest tenure. In addition, workers change jobs over time, in most cases with an improvement in their economic conditions, due to the higher value placed on experience acquired with age.



The graph shows how the lines for men and women fade with age. With the exception of the last group, the gender salary gap increased with the age of the employee. In the lower and upper age groups, the curve is somewhat erratic, due to the small sample size in these age groups, which reduces the statistical reliability of the results.

	Gross annual wages			
	Total	Women	Men	Women/Men Ratio
ALL AGES	26,948.87	24,359.82	29,381.84	82.9
Under 20 years of age	10,597.24	*8.875,09	*12.436,56	71.4
20 to 24 years old	15,181.24	13,789.84	16,337.24	84.4
25 to 29 years old	20,459.60	19,343.03	21,445.91	90.2
30 to 34 years old	24,114.17	22,361.32	25,682.23	87.1
35 to 39 years old	25,745.84	23,237.09	28,111.80	82.7
40 to 44 years old	27,713.56	24,734.92	30,671.43	80.6
45 to 49 years old	29,293.69	26,507.49	31,900.79	83.1
50 to 54 years old	29,381.29	25,939.04	32,660.09	79.4
55 to 59 years old	30,196.33	26,928.34	33,190.54	81.1
64 to 64 years old	29,646.98	27,217.22	32,125.91	84.7
65 years old and over	30,496.85	25,437.34	35,612.02	71.4

#### CHART 3. Main results by age in complete years

the number of sample observations is between 100 and 500 therefore, the figure is subject to great variability

#### 9 Salaries and Company Seniority

As noted in the previous section, it makes sense to examine the relationship between salary and seniority. This is partly because there is a salary supplement specifically linked to seniority, but also because it is assumed that with experience gained in the company, employees are promoted within the scale of responsibilities and remuneration. Graph 34 shows this trend in salary increases with seniority.



GRAPH 34. Average annual wages by company seniority in complete years and sex

It should be noted that the sample gradually shrinks with age, so the results at the end of the graph should be interpreted with caution.

	Gro			
	Total	Women	Men	Women/Men Ratio
ALL	26,948.87	24,359.82	29,381.84	82.9
Less than 1 year	18,940.80	16,491.75	21,099.30	78.2
1 to 3 years	22,041.00	19,774.10	24,005.91	82.4
4 to 10 years	26,254.05	23,503.14	28,707.24	81.9
11 to 20 years	31,046.89	27,548.84	35,113.70	78.5
21 to 29 years	36,514.86	33,922.92	38,828.33	87.4
30 years and over	40,116.37	37,624.29	42,428.65	88.7

#### CHART 4. Main results by seniority in complete years

Only 9.1% of the sample have a foreign nationality, so the results in this section should be treated with caution, especially those concerning workers from other countries.

As can be seen in Graph 35, only national workers had a salary above the average. The other workers in the European Union had a salary 7.7% below the average, while the other nationalities had a salary more than 30% below the average.



Graph 36 shows the distribution of salaries by nationality, Spanish or foreign, and sex. The most favoured group are male workers of Spanish nationality, while foreign women are the lowest paid. It can be seen that the curves for Spanish women and foreign men intersect.



Around 50% of Spanish working men earned more than 25,000 euros in 2022. At this average reference salary, 37.7% of women with Spanish nationality reached or exceeded this level, as did 24.7% of men and 17.4% of women with foreign nationality.

On the contrary, 5% of male workers of Spanish nationality had a salary of more than 65,000 euros. This percentage decreases in other cases and is close to 2.5% for men with a foreign nationality, 2.9% for Spanish women and 1.5% for non-Spanish women workers.

#### **11** Composition of Monthly Salary

The usual accrual period is the month. However, the existence of payments with a duration of more than one month (extraordinary payments) means that it should not be used as the only reference, especially when comparing salary levels.

In this survey, the monthly salary has been used to analyse composition according to remuneration items (base salary, salary supplements). The analysis of salary differences according to the different variables, as seen in the previous sections, was carried out on annual salary.

The amount and frequency of so-called "extraordinary payments" varies from one employee to another. The most common case is that of two extra payments per year, one for the summer and one for Christmas, but in certain sectors of activity three, four or even six extraordinary bonuses are paid during the year, and these may have different names (benefits, agreements, results, etc.).

On the other hand, certain occupations include "irregular" pay in the sense that the amount is not known in advance. These include salesperson bonuses, supplements for night, weekend or shift work, and overtime pay.

The range of salary supplements, and net salary in general, is enormous and the survey cannot isolate all possibilities. Therefore, from a statistical point of view and in order to facilitate the comparison of monthly salaries, the following four categories of payments were considered sufficient:

- The fixed part of the monthly salary: base salary.
- Salary supplements, showing the total of supplements and bonuses for night, shift and holiday work.
- Overtime payments.
- Extra payments received in the month of October.

Table 5 shows the breakdown of the average monthly salary.

\* By the worker

	(euros)
Base wage	1,401.80
+ Wage supplements	587.37
+ Overtime payments	8.61
Ordinary wage	1,997.78
+ Extraordinary payments	41.36
Gross wage	2,039.14
- Social Security contributions *	130.01
- Income tax withholdings	310.44
Net wage	1,598.69

## CHART 5. Composition of monthly wages

(euros)

Graph 37 shows the composition of the average salary for the total and by sex in the month of October 2022. The base salary was the main component of the total salary. It is 70.26% for women and 67.56% for men. This difference is related to the salary differences between men and women. In fact, the composition of salary tends to vary

with salary level. The higher the salary, the greater the weight of salary supplements.



Extraordinary payments had a weight of 1.8% for women and 2.2% for men. The month of October was chosen to obtain the monthly salary because, as already mentioned, it is not characterised by payments or seasonal absences, which makes it possible to determine "normal or ordinary" monthly earnings.

Overtime payments were the least important in the composition of salaries; as can be seen from the results tables in the publication, they accounted for more than 1% in few activities, with the exception of security and research, where they accounted for 5.4% of gross salaries.

The breakdown between gross and net salaries is shown in Graph 38. The differences in the percentages of net and gross salaries between men and women are explained by the different average salaries of the two groups and by the logical effect of income tax, which is progressive with salary.



## 12 Composition of Annual Salary

The composition of the annual salary has been examined in terms of the periodicity of payments, distinguishing between monthly payments, or ordinary salary, and payments of more than one month, or extraordinary payments. Payments in kind were also distinguished.

As can be seen in Graph 39, the main component of gross annual salary is the regular salary, while payments in kind are of minor importance.

In terms of sex, extraordinary payments and payments in kind are more important for men than for women, which means that the ordinary salary is more important for women (90.5%) than for men (89.2%).



#### 13 Other Variable

So far, the variables examined have been those that characterise the employee. However, there are other variables in the survey that affect salaries that are directly related to the company or workplace in which employees carry out their activities. The results for the four main variables are presented below:

- 1. Size of the work centre
- 2. Scope of the collective agreement
- 3. Target market
- 4. Type of control

For these variables, in addition to the usual analysis, certain information of interest is added, such as the Gini Index.

<sup>13.1</sup> SIZE OF THE WORK CENTRE

With regard to the size of the work centre, Graph 40 shows the differences in relation to the total. The relationship is clear: salaries increased with the size of the unit, and this increase was greater for men than for women.



#### GRAPH 40. Comparison of average annual wages by size of the work centre

Both sexes Men Women

Graph 41 allows us to better observe the differences between men's and women's salaries according to the size of the work centre. The graph shows how the sex gap narrows as the size of the work centre increases. In other words, the greater the number of employees, the smaller the difference in average salary between men and women.



Table 6 shows various measurements of interest regarding the annual gross salary, according to the size of the work centre. The Gini Index decreased with the unit size, showing that there is less inequality in the largest companies.

Size of the work						
	Total	1 to 49	50 to 199	more than 200		
Gini Index	33.10	31.54	31.06	30.73		
Average	26,948.87	21,652.02	28,022.53	33,317.76		
Median	22,383.11	18,667.60	23,998.30	29,325.73		
Range	6,349,520.80	1,135,086.32	6,349,520.80	3,695,488.76		
% workers	100.00	27.61	26.30	46.10		

CHART 6. Summary measures of gross salary by size of the work

Below we can see the distribution of wages broken down by size of the work centre and by sex. The following graphs show the density functions, and the following points stand out:

Graph 42.1 for small work centres (1-49 workers): on the one hand, the asymmetry of the distribution of women's salaries to the right is striking, which means that there were many more women in workplaces with low salaries than with high salaries. For men, the distribution shows a large concentration around the modal value (maximum peak), so there was little variability in men's salaries in these centres.

Graph 42.2 for medium-sized work centres (50-199 workers): the distributions for men and women are very similar, except that the distribution for women is slightly shifted to the left, i.e. towards lower salary values. Both are asymmetric to the right.

Graph 42.3 for large work centres (more than 200 workers): there is much more variability than for the other sizes. Although there are fewer differences between the sexes when comparing average salaries in these centres, looking at the distributions we can see that there was a large difference between men and women. It can be seen that for below-average salaries the frequencies are much lower for men than for women, while for above-average salaries the opposite is true.



GRAPH 42.1. Densitiy functions of annual wages by sex for size of the work centre for 1 to 49 workers


GRAPH 42.2. Densitiy functions of annual wages by sex for size of the work centre for 50 to 199 workers

GRAPH 42.3. Densitiy functions of annual wages by sex for size of the work centre for more than 200 workers



In order to give a clearer picture of the differences due to size, the corresponding distribution functions are shown in Graph 43. What has already been mentioned can be observed: salaries increase with the size of the unit.



### 13.2 SCOPE OF THE COLLECTIVE AGREEMENT

Collective bargaining also affects workers' salaries. The survey includes the type of regulation governing the employment relationship between the employee and the workplace. It notes whether there is a collective agreement, and if so, which one (public sector, sub-sector, company or workplace); or whether, on the contrary, the employment relationship is governed by some other form of regulation.

Graph 44 shows that the vast majority of labour relations between employees are governed by collective agreements and that the proportion is slightly higher for men.



As can be seen from Graph 45, of all types of collective agreement, the highest salaries for both men and women were achieved in *company or workplace agreements*. However, the highest average salary was found in workplaces under other *Another form* 

*of regulation*. The most unfavourable agreements, for both men and women, were those that fell under *Sub-state level* agreements, which include interprovincial, provincial and county agreements, among others.



Table 7 shows the summary measures for this variable. Of all the agreements, both the mean and the median are highest for a *company or workplace agreement*, and the Gini Index is lowest (less inequality) for the same type of agreement.

Overall, *Another form of regulation* was the agreement type with the highest average salary, the highest median salary and the lowest Gini Index, although this result should be treated with caution because of the small number of employees: 9.6% of the total.

	Gini Index	Average	Median	Range	% range	
Total	33.10	26,947.39	22,382.02	6,349,520.80	100.0	
All agreements	33.07	25,907.77	21,459.89	3,695,530.46	90.4	
State	34.03	25,481.75	20,724.33	3,695,530.46	33.3	
Smaller than State	30.86	23,207.89	20,072.17	2,582,867.37	35.2	
Company or workplace	31.32	33,840.03	29,004.49	1,910,512.62	21.9	
Another form of regulation	27.61	36,140.45	34,261.51	6,349,274.43	9.6	

CHART 7. Summary measures of gross salary by form of regulation of labour relations

#### 13.3 TARGET MARKET FOR PRODUCTION

Another variable included in the survey that is important for salary analysis is the target market for the company's production. Graph 46 shows how the different types of market included in the variable are distributed among employees.



From the data collected in the survey, we can infer a positive relationship between market type and salary: the broader the market, the higher the salary. Thus, if the company's production is destined for the whole world, the global average salary is 35.9% higher than the global average, while if it is limited to the local or regional market, it is 10.6% lower than the average.

The breakdown of men and women by type of market compared with the overall average is shown in Graph 47.



INE. National Statistics Institute

Graph 48 shows the deviation of women's earnings from men's earnings in each type of target market. The smallest gender sex was found in the local and regional market, where women's salaries were 11.07% lower than men's salaries. Once again, it should be noted that, as shown in Figure 46, the number of employees for the European Union and world markets is small, so these results should be treated with caution.





Table 8 shows the summary salary measures by target market. The larger the target market, the higher the increase in both mean and median.

target market of the production					
	Total	Local o region	aNational	EU	World
Gini Index	33.10	33.05	32.70	30.40	29.10
Average	26,948.87	24,093.31	28,035.78	31,408.84	36,621.36
Median	22,383.11	20,187.19	23,128.22	25,800.40	31,613.76
Range	6,349,520.80	560,865.32	6,349,520.80	1,013,959.98	2,582,490.29
% workers	100.0	36.2	45.2	6.1	12.5

CHART 8. Summary measures of gross salary by type of

Graphs 49.1, 49.2, 49.3 and 49.4 show the annual salary density functions by market type. It can be seen that at the lowest salaries the group with the highest frequencies were women, especially those belonging to the local or regional target market, while the group with the lowest frequencies were men belonging to the global market. At higher salaries, almost all curves are very close to each other, with the exception of the one for men on the world market, which is clearly above all the others, i.e. this group is most represented in the high salary curves.



Graph 50 shows the distribution functions for each type of market. It can be clearly seen how in 2022 the global market dominated among the highest salary earners and the local and regional market with the lowest salary earners.



### 13.4 CONTROL OF THE COMPANY

Finally, with regard to the ownership or control of the company (public or private sector), it should be noted that public control does not include officials assigned to the Special Civil Service System, but does include employees of public companies. Graphs 51 and 52 show that when the control was public, the average salary level was higher and the



sex gap was smaller. On the other hand, the different occupational structure and the different economic activities carried out by workers in the two sectors should also be noted.

GRAPH 52. Desviation of women's earnings over men's earnings by Company control



Women received a salary 25.8% higher than the overall average when the control was public and where the difference with the male salary was the smallest (8.1%). However, given the small sample of public sector employees (18.4%), these results should be interpreted with caution.

Table 9 shows the summary salary measures by type of control. It can be seen that both the mean and the median were higher in the case of public control. Also noteworthy is the large difference in the range of salaries; the range was much higher for private control, as the minimum salary was much lower than the minimum for public control, just as the maximum salary for private control was much higher than the maximum for public

control. This result is consistent with the Gini Index values, where the value is much lower in the case of public control, i.e. there was less inequality than in the case of private control. In fact, the difference is so striking that Graph 53 plots the Lorenz curves for both cases and shows that the one corresponding to public control is closer to the diagonal (perfectly equal distribution).

salary by Company control					
	Total	Public	Private		
Gini Index	33.10	27.5	33.1		
Average	26,948.87	35,212.32	24,751.40		
Median	22,383.11	32,544.96	20,475.36		
Range	6,349,520.80	449,662.66	6,349,520.80		
% workers	100.0	18.4	81.6		

# CHART 9. Summary measures of gross salary by Company control





Graphs 54 and 55 below show the annual salary density and distribution functions respectively. In both graphs it is very clear that the biggest differences between public and private control were at the lower end of the salary scale, where there were very few employees in public control and many more, mostly women, in private control.







On the one hand, it should be noted that at the lowest salaries (below 16,000 euros per year) there were very few employees in the public sector (10%), while there were many in the private sector (around 29.3%). Moreover, both inequality and the range of salaries are higher in the private sector than in the public sector. This means that there were both much lower and much higher salaries in the private sector.

### 14 Comparison with Previous Survey Results

Since the first publication of the Salary Structure Survey, the scope of the survey has been gradually extended. In 2010, the contribution centres of the General Social Security Scheme whose economic activity is included in Sections B to S of the CNAE-

09 were included, i.e. the inclusion of public employees in Section O of the CNAE-09, Public administration and defence; compulsory social security, included in the said scheme.<sup>1</sup>

Below are the results of the comparison with the most recent surveys, which are comparable as there have been no changes. It can be seen that the overall growth from 2010 to 2018 is 18.2%, which is significantly higher for women (23.4%) than for men (15.3%).

Annual profit per worker. Euros					
	2010	2014	2018	2022	Growth rates
Both sexes	22,790.20	22,858.17	24,009.12	26,948.87	18.2
Men	25,479.74	25,727.24	26,738.19	29,381.84	15.3
Women	19,735.22	19,744.82	21,011.89	24,359.82	23.4

# CHART 10. Comparison EES 2010 a 2022

Graph 56 shows the evolution of the average annual salary between 2018 and 2022 by industry. Growth was observed in all sections, with the highest growth in Section P



(Education) and the lowest in Section R (Arts, entertainment and recreation).

To summarise this information, the activities have been grouped by sector and we can see their four-year evolution from 2018 to 2022 in Graph 57.

<sup>&</sup>lt;sup>1</sup> Officials assigned to the Special Civil Service System are not included

in any edition of the SSS. Employees of public companies are included.



In terms of sectors, the highest growth between 2018 and 2022 was in the *Services* sector while *Industry* showed a lower growth of 8.6%. In terms of sex, women's salaries grew significantly more than men's. This was the case both overall and in each sector.

The evolution in each type of working day is analysed below. Graph 58 shows an increase in salaries for both types of contract. This increase was most marked for part-time contracts. Within part-time work, there was a notable increase of 18.7% for female employees.



#### GRAPH 57. Growth rates from 2018 to 2022 of the average annual salary by sector of activity

As regards the type of control, Graph 59 shows that salaries increased for both types between 2018 and 2022, but the increase was more significant for private control. The annual salary for private control increased by 11.5%, compared with an increase of 8.6% for public control. In all cases, women's salaries increased more than men's.



The Gini index shows a slight decrease between 2018 and 2022, from 34.3 to 33.1. This means that the inequality in the distribution of salary has decreased between these two years.

The salary gap also decreased, from 11.3% to 9.0%, which means that the wage differences between men and women decreased.

## **15 Conclusions**

Finally, the main conclusions are presented.

There was a higher proportion of women in the lower salary brackets, while the situation almost reverses as salaries increase, with a higher proportion of men in the higher brackets.

According to CNO-11, annual salary decreases with increasing professional level.

In terms of annual salary, salaries are lower for fixed-term contracts than for permanent contracts, depending on the type of contract. However, women's salaries are lower than the overall average for both fixed-term and permanent contracts.

In turn, annual salaries generally increase with level of education, age, length of service, as well as the size of the work centre and the size of the company's target market.

Inequality is higher in private control, but similar to overall inequality, while in public control there is a much more equal distribution of salaries.

Compared to the previous quadrennial Salary Structure Survey conducted in 2018:

- In terms of sectors of activity, there has been positive growth in all sectors and it is worth noting that this growth has always been greater for women than for men.
- There are considerable differences in salaries according to the type of working day, with full-time salaries always being higher. However, there was a very significant increase in part-time salaries.
- There was a significant increase in annual salaries in private control for both men and women, which was higher than in public control.