# IMSEE
Monaco Statistics

# Measuring the gender pay gap
in the private sector and
the Civil Service in 2019

## ACKNOWLEDGEMENTS

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# INTRODUCTION

Following the recommendations of international bodies, the Principality of Monaco has set up a Committee for the Promotion and Protection of Women's Rights under the Minister of State. Its purpose is to ensure the coordination, implementation, monitoring and evaluation of national policies and measures taken to promote equality between women and men and to prevent and combat all forms of violence and discrimination against women.

In December 2018, the Minister of State requested Monaco Statistics to carry out a study on gender pay gaps in the private and public sector.

The measurement of the gender pay gap can be understood in different ways. The wage gap as defined by the Organisation for Economic Co-operation and Development (OECD), for example, corresponds to the difference between the median wages of men and women. Taking this indicator into account, Monaco would be among the 10 most egalitarian countries in the ranking with a gap of 5.9% in favour of men. If the Principality were an OECD member, it would be ahead of France, the EU average and the OECD average (Figure 1).

Another approach to measuring pay inequality is to compare directly the average wage of men to the average wage of women without taking into account working time, age, seniority or occupation.

However, Monaco Statistics has tried to go further in analysing the pay of private sector employees. Indeed, these methods, although useful in a transitory way in the analysis of gender inequalities, do not make it possible to explain what would contribute to the wage gap. The average wage, in particular, could be structurally disadvantaged for one of the sexes simply because of the composition of the employed population (if women were less represented for example).

Figure 1: Wage gap in 2018 as defined by the OECD
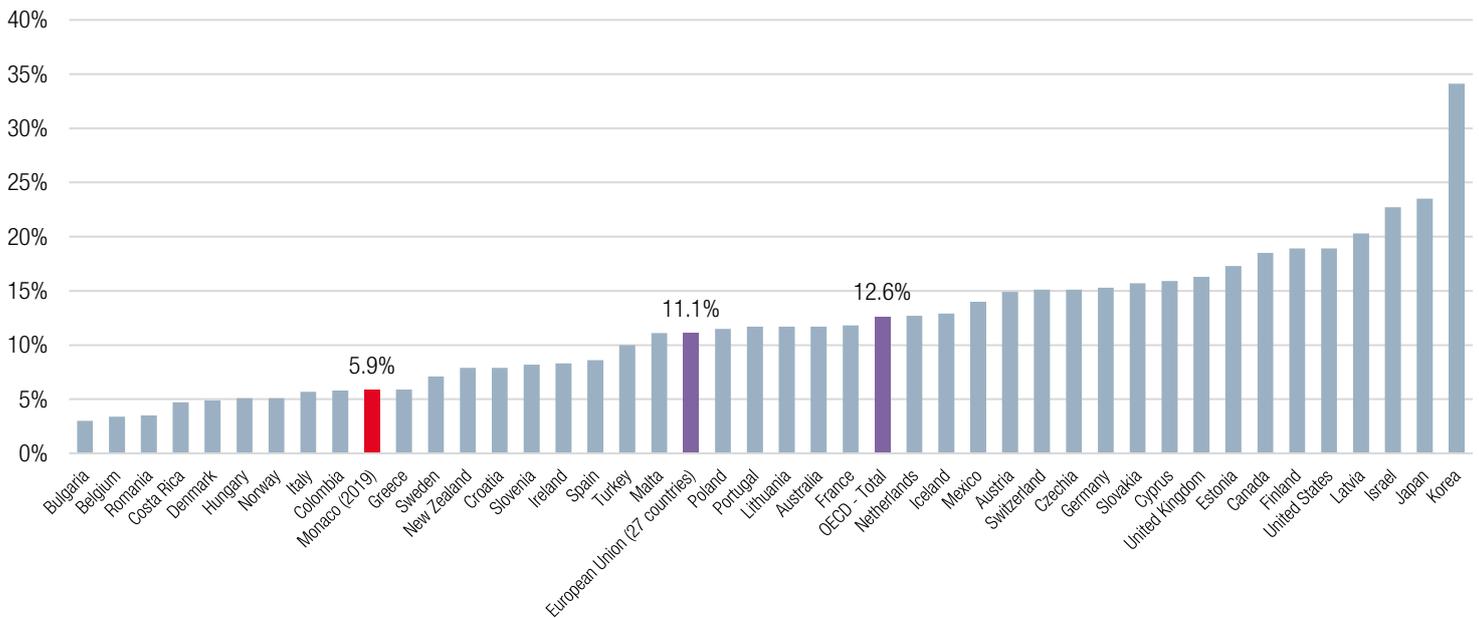


Sources: OECD, Monaco Statistics

The territory of Monaco has many geographical, demographic and economic specificities, which are reflected in the labour market. Thus, the salaried workforce, of which more than 90% work in the private sector, and most often in small structures, is predominantly male. Workers of French nationality are the most numerous, and the place of residence of employees is mainly outside the Principality. Furthermore, the weight of temporary work (a sector that is clearly male in Monaco) is notable in Monegasque employment, as is that of domestic staff (where there are more women).

In the context of this study on wage inequalities between women and men, the first of its kind in the Principality, Monaco Statistics has endeavoured to build a solid methodology tending to an analysis "all things being equal" in order to take into account the specific context of Monaco and the structure of its employed population.

Monaco Statistics has mainly relied on information provided by the Caisses Sociales de Monaco and relating to private sector employees with, in addition, an analysis of the remuneration index of public sector employees carried out thanks to information from the Human Resources and Training Department.

# 1. ASSESSMENT OF GENDER PAY GAP IN THE EMPLOYED POPULATION

The presentation of the structure of the employed population and its specificities is a prerequisite to the study of wages by gender.

## 1.1 Employees in the Civil Service

- **Characteristics of the employed population of the Civil Service in 2019[1]**

The Monegasque Civil Service had almost 600 additional employees between 2013 and 2019, an increase of 14%. At the end of 2019, there were 4,776 employees, 42.6% of whom were women. As in the private sector, the proportion of female employees in the public sector has changed little over the period (Figure 2). However, women are slightly more represented in the public sector than in the private sector (about 2.5 points more).

Figure 2: Evolution of the number of Civil Service employees and the share of women in the population
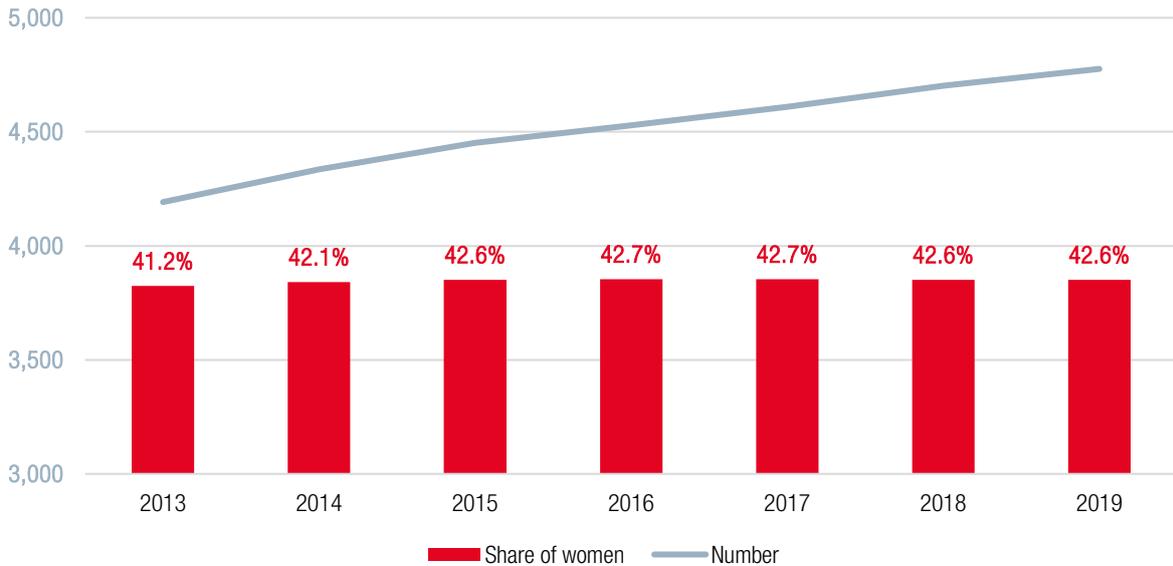


*Sources: Human Resources and Training Department, Monaco Statistics*

While the average age is equivalent between men and women in the Civil Service (43.7 years in 2019), there are notable differences between the two sexes, particularly in terms of nationality and employment category. People of Monegasque nationality are clearly more represented among women (Figure 3). Female civil servants are also more often employed in category A positions than their male counterparts (Figure 4).

Figure 3: Monegasque-Non-Monegasque distribution of Civil Service employees by gender in 2019
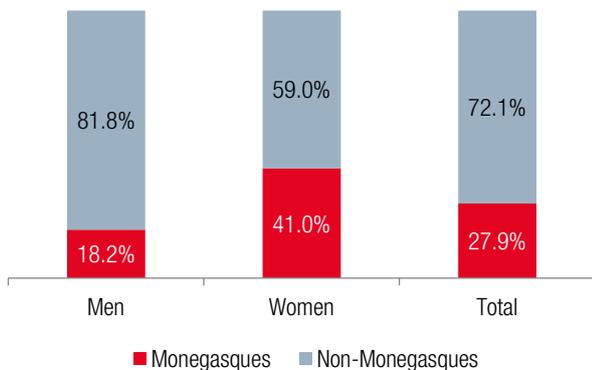


*Sources: Human Resources and Training Department, Monaco Statistics*

Figure 4: Distribution of Civil Service employees by category and gender in 2019
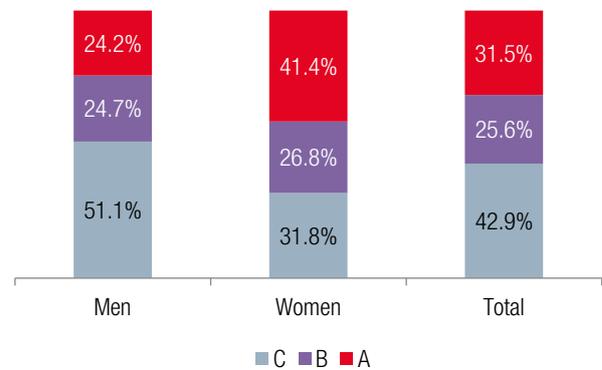


*Sources: Human Resources and Training Department, Monaco Statistics*

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[1] The data presented in this section are as of December 31.

Furthermore, the gender distribution in the Civil Service varies greatly from one Ministry to another, particularly due to the activities of these authorities (Figure 5). The Ministry of Health and Social Affairs has the highest proportion of women, with around three quarters of its staff being women. The Ministry of Public Works, the Environment and Urban Development, on the other hand, has by far the lowest representation of women, with more than 8 out of 10 men.

These findings, observed among Civil Service employees at the end of 2019, are similar for the previous years available.

Figure 5: Distribution of Civil Service employees by administrative affiliation and gender distribution in 2019

| | Weight | | Share of women |
|---|---|---|---|
| Governmental administration, including: | 76.0% | | 40.0% |
| *Ministry of Interior* | *40.9%* | | *37.5%* |
| *Ministry of Public Works, the Environment and Urban Development* | *15.3%* | | *15.9%* |
| *Ministry of Finance and Economy* | *6.3%* | | *64.5%* |
| *Ministry of State* | *6.2%* | | *52.9%* |
| *Ministry of Health and Social Affairs* | *5.4%* | | *75.6%* |
| *Ministry of Foreign Affairs and Cooperation* | *1.9%* | | *64.4%* |
| Municipality | 15.0% | | 54.1% |
| Prince's Palace | 4.1% | | 33.2% |
| Department of Justice | 3.1% | | 54.7% |
| Committees, assemblies and constitutional bodies | 1.3% | | 54.0% |
| Foundations | 0.3% | | 42.9% |
| Civil servants appointed in public organisations | 0.2% | | 70.0% |
| TOTAL | 100% | | 42.6% |

*Sources: Human Resources and Training Department, Monaco Statistics*

While the gender distribution of the Civil Service population has changed little over the period 2013-2019, the representation of women has increased more markedly in the case positions with a very high level of responsibility. These 'senior positions' have accounted for around 2% of the Civil Service workforce since 2013, or 90 to 100 people each year.

The proportion of women in senior Civil Service positions has risen from less than 43% in 2013 to over 47% in 2019 (Figure 6). Senior positions have thus moved closer to parity over the period.

Figure 6: Change in the gender distribution among the senior Civil Service positions
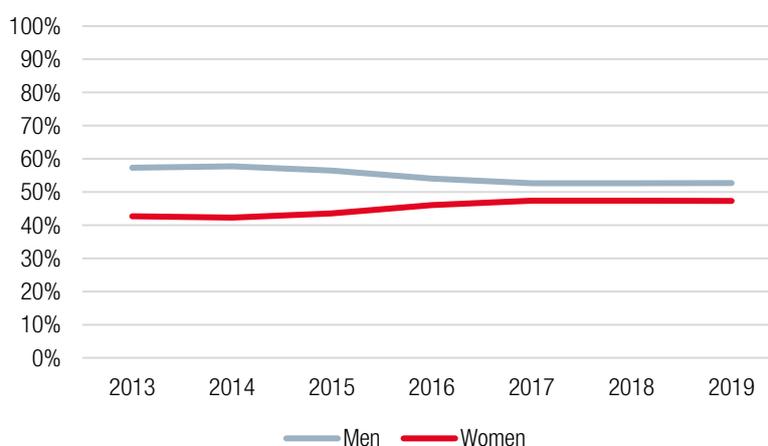


*Sources: Human Resources and Training Department, Monaco Statistics*

| In brief | Women are in the minority in the employed population of the Civil Service (although slightly more represented than in the private sector). They are more often in category A positions than men. Although their presence among the "senior Civil Service positions" has increased in recent years, they are still slightly less numerous than men in these high positions. |
|---|---|

- **Distribution of remuneration in the Civil Service in 2019[2]**

The various jobs in the Monegasque Civil Service are classified hierarchically in salary grades, established by a sovereign ordinance issued after the advice of the Civil Service Commission. The basic salary of civil servants and employees of the state and the municipality is set by ministerial decree each year. In addition, allowances or other remuneration may be added to the basic indexed pay.

In 2019, the remuneration indexes for civil servants range from a minimum of 210 to over 1 000. The first band of the grouped remuneration grade, which has slightly more men than women (Figure 7), is also the one with more category C employees, which is known to be mainly composed of more male occupations such as police officers, gardeners or technical staff. Similarly, the remuneration indices above 511, in which women are over-represented, correspond mainly to category A positions, which are more often occupied by women. The distribution of the indices by gender nevertheless shows an almost equal distribution in the Civil Service.

Figure 7: Distribution of remuneration indexes in the Civil Service by gender in 2019
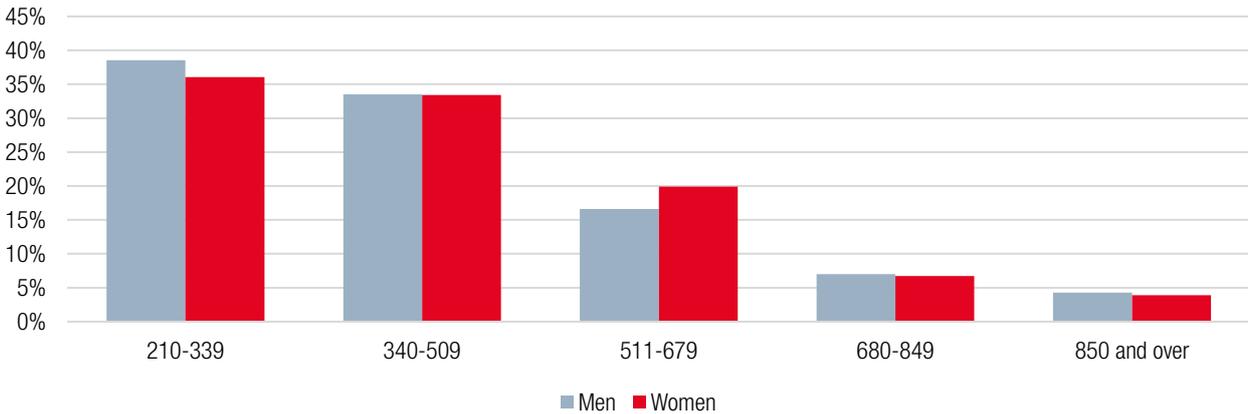


Reading: in 2019, 38.6% of male Civil Service employees have a remuneration index between 210 and 339; this proportion is 36.0% for women.
Scope: Civil Service employees, excluding military personnel in the Civil Service
*Sources: Human Resources and Training Department, Monaco Statistics*

The average pay gap between men and women in the Civil Service was less than 1% at the end of 2019, in favour of women. The average and median remuneration indices are slightly higher for women, while the 1st decile is a few points higher for men (Figure 8). In contrast to private sector salaries, the dispersion of wages is equivalent, with a median salary 15% lower than the average salary for men compared to 10% for women.

In addition, working time has no impact on the remuneration index of civil servants. Moreover, almost all employees work full time.

Figure 8: Distribution of Civil Service remuneration indexes by gender in 2019



Men    Women    Total
◆ 1st quartile  ■ 1st decile  — Median  ▲ 9th decile  ■ Mean  ● 3rd quartile
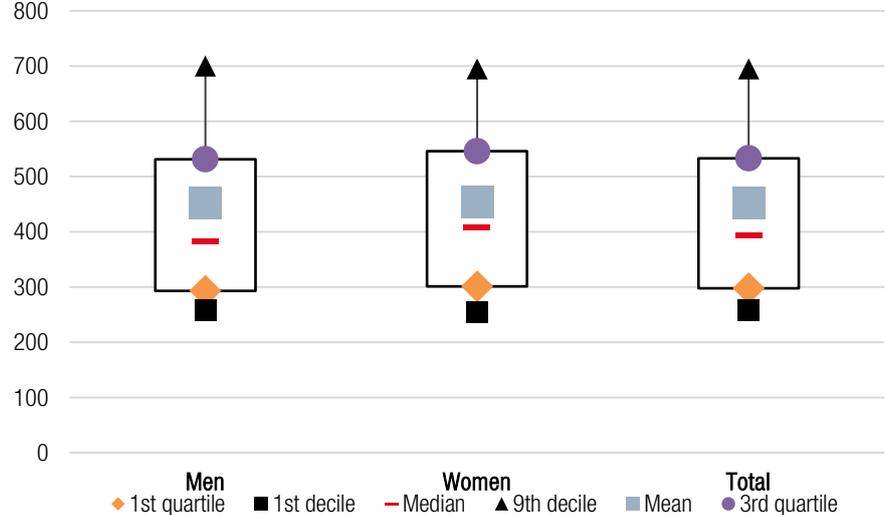
Reading: in 2019, 50% of male Civil Service employees have a remuneration index between 293 and 531: 25% of men have an index below 293 (1st quartile) and 25% have an index above 531 (3rd quartile). Half of the men have an index below 382 and half above (median).
Scope: Civil Service employees, excluding military personnel
*Sources: Human Resources and Training Department, Monaco Statistics*

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[2] Considered in this section are the remuneration indexes of civil servants and employees of the state and the municipality as of December 31, 2019, excluding military personnel of the Civil Protection Services (totally male population constituted by the Palace Guards and the Fire & Emergency Service).

The remuneration of Civil Service employees in category A positions is logically higher than those in category B, itself higher than category C. Whatever the category of post, men's remuneration exceeds that of women on average: the average index gap between the two sexes varies from 8% in category B to 15% for category A (Figure 9). Male employees in category C, who are in the majority (over 65%), have a salary grade that is on average 9% higher than their female counterparts. Category A, which has the largest gender pay gap, is also the most feminised category (57% female).

Figure 9: Average indexed remuneration in the Civil Service by position category and gender gap in 2019
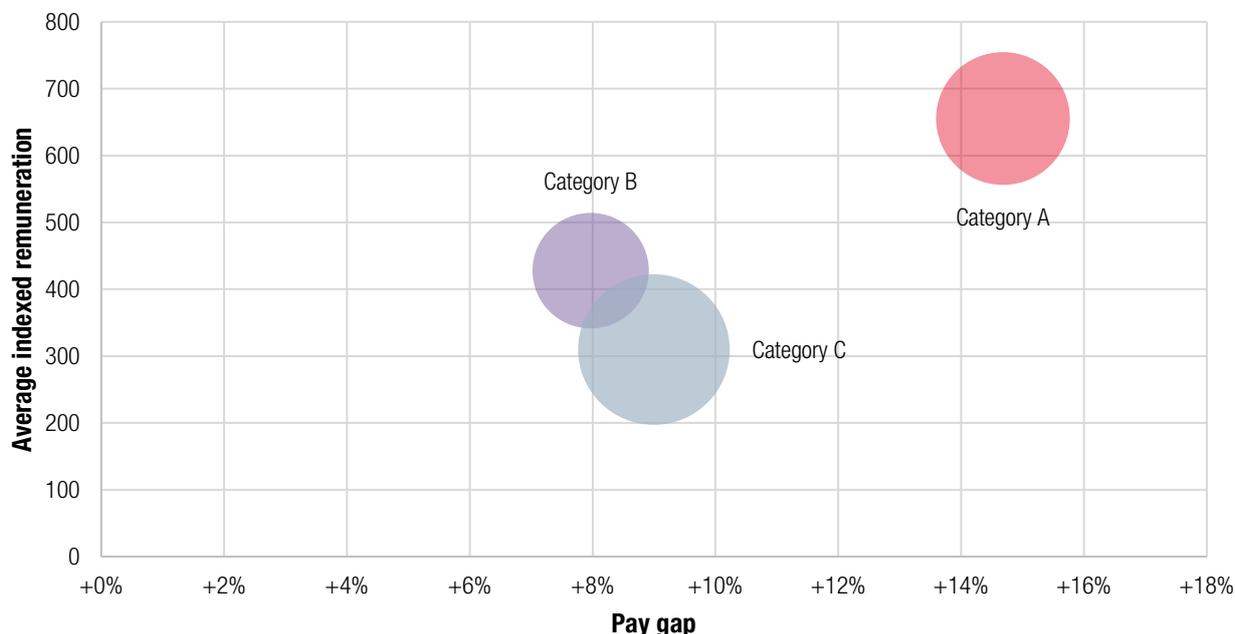


Reading: in 2019, the remuneration index for employees in category A is 655.4 on average; in this category, the index for men is on average 14.7% higher than that for women.
Scope: Civil Service employees, excluding military personnel
Note: the size of the bubbles is proportional to the number of employees in each category
*Sources: Human Resources and Training Department, Monaco Statistics*

While men and women in the Civil Service had similar average pay in terms of index over the period 2013-2019, the gender gap appears, once again, to be more marked according to the category of post held. Thus, in category A, while men had a remuneration index 12.5% higher than women did in 2013, this difference is 13.9% at the end of 2019 (Figure 10). The situation is similar for category C employees, with a gap that has widened over the seven years. For employees in category B (which is the closest to parity in terms of numbers), the pay gap has, on the other hand, narrowed, showing -2 percentage points in 2019 compared to 2013.

Figure 10: Evolution of the indexed pay gap between men and women in the Civil Service from 2013 to 2019
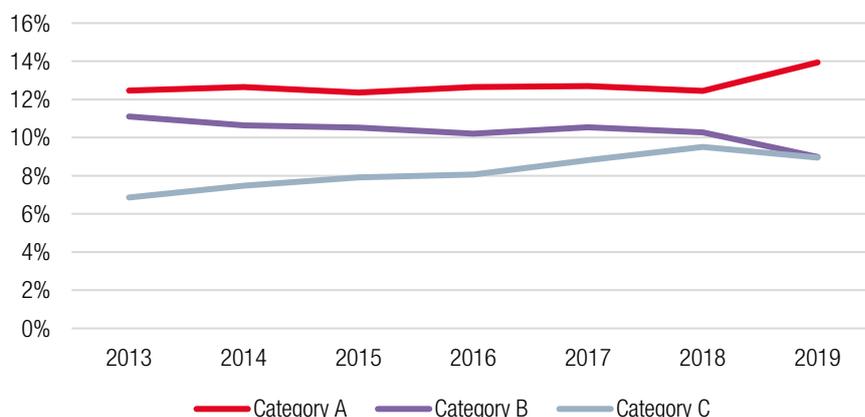


Reading: in 2013, men's salary grade was 12.5% higher than women's; in 2019, this gap is 13.9%.
Scope: Civil Service employees, excluding military personnel
*Sources: Human Resources and Training Department, Monaco Statistics*

**In brief** The distribution of remuneration indices is broadly similar between men and women in the Civil Service in 2019: on average, female employees have a salary grade 0.7% higher than that of men. However, male remuneration indexes are on average higher regardless of the category of the position held (A, B or C), and have been since 2013. However, the fact that women are both in the majority in category A and under-represented in category C jobs has a positive effect that offsets female pay overall.

- **Analysis of promotion mechanisms in the Civil Service[3]**

The study of promotion mechanisms complements the analysis of Civil Service remuneration in order to measure possible inequalities between men and women. The hierarchy can accelerate an employee's progression on the pay scale, which takes place automatically at intervals related to seniority and grade. These promotions (by "choice" or "grand choice") can thus reduce the time taken to reach the next step, resulting in different rates of progression between employees, even if they have an equivalent profile. As a result, over a period of seven years, a civil servant can be promoted up to six times, whether or not he or she has changed jobs in the meantime. It should also be noted in the context of this analysis that the mechanisms for promotion in the Civil Service, which depend in particular on seniority and grade, may also differ according to the profile of the position held (e.g. police officers, teachers), or the administrative attachment of the agent.

Between 2013 and 2019, women were more likely to have changed index once or twice: 12.6% of them have had one promotion over the period and 29.7% have had two, compared with 8.4% and 23.8% respectively for men (Figure 11). On the other hand, once three or more promotions have been made, the proportions are reversed and men are more represented than women: almost two-thirds (64.5%) of male employees have progressed three or more times, compared with just over half of women (54.7%).

Again, there are differences according to job category. The distribution of employees by number of index changes, depending on whether they belong to category A, B or C, may thus differ from the previous observation. In category A, the trend is similar to that of the overall workforce: more women than their male counterparts have experienced one or two index changes over the period 2013-2019, while men are in the lead after three index changes (Figure 12). Among category B employees, the opposite is true: although the proportions are close between the genders, the proportion of employees who have experienced one or two grade changes is slightly higher among men, while the proportion of employees who have moved up at least three times is slightly higher among women. The differences are most marked among staff occupying a C post, with three quarters of men having experienced at least three promotions over the period in this category, compared with less than 60% of women.

Figure 11: Distribution of men and women in the Civil Service by number of index changes between 2013 and 2019
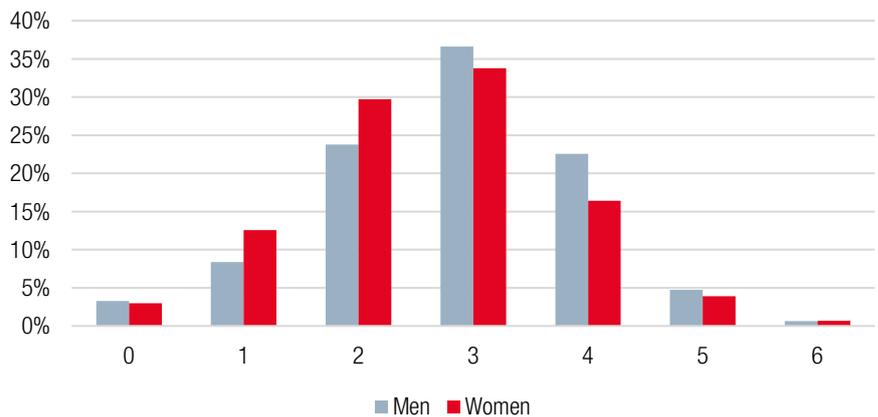


Reading: 8.4% of men changed grade only once between 2013 and 2019, compared to 12.6% of women.
Scope: Civil Service employees, excluding military personnel
*Sources: Human Resources and Training Department, Monaco Statistics*

Figure 12: Distribution of men and women in the Civil Service by number of index changes by category between 2013 and 2019
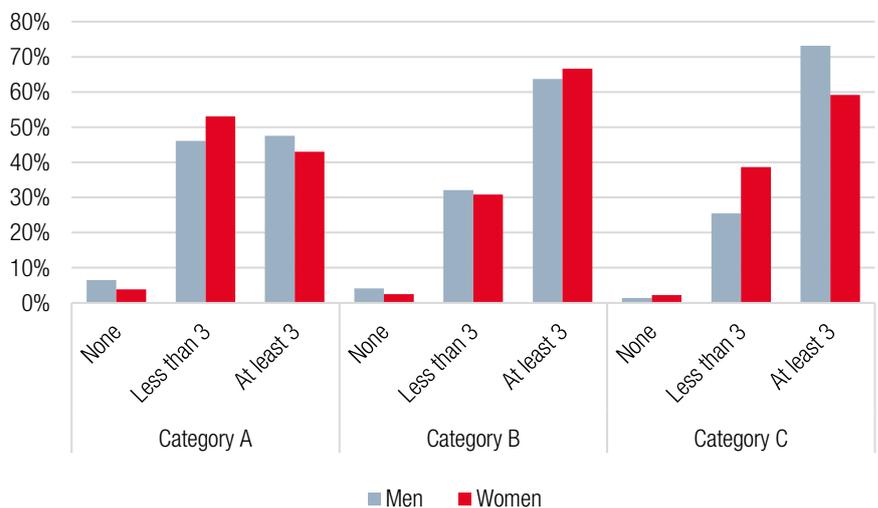


Reading: 47.5% of men in category A changed grade at least three times between 2013 and 2019, compared to 43% of women in the same category.
Scope: Civil Service employees, excluding military personnel
*Sources: Human Resources and Training Department, Monaco Statistics*

| In brief | Over the period 2013-2019, men overall recorded more promotions than women in the Civil Service. The differences in the rate of change of grade between men and women are more marked by category of post occupied, which show very different situations: close to the overall rate in category A, slightly in favour of women in category B and more clearly in favour of men in category C. |
|---|---|

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[3] Data from 2013 to 2019 have been taken into account in this section for an analysis over a period of several years.

- **In brief**

In the Civil Service, indexed salary is almost equal between men and women in 2019: on average, women's remuneration indexes are 0.7% higher than those of men.

In 2019, women held 47% of senior Civil Service positions, a proportion that has increased in recent years.

Moreover, men have experienced more promotions than women on average over the period 2013-2019. However, the situations are different when considering the category of post occupied (A, B or C).

**Women in the Civil Service have a remuneration index in 2019 that is on average**

**0.7%**

**higher**

**47%**

**of senior positions are occupied by women in 2019**

**54.7%** | **64.5%**
of women | of men
**have experienced more than 3 salary grade changes over the period 2013-2019**

▶ In France, the gender pay gap in full-time equivalent was 12.45% in favour of men in 2017 (source: INSEE).
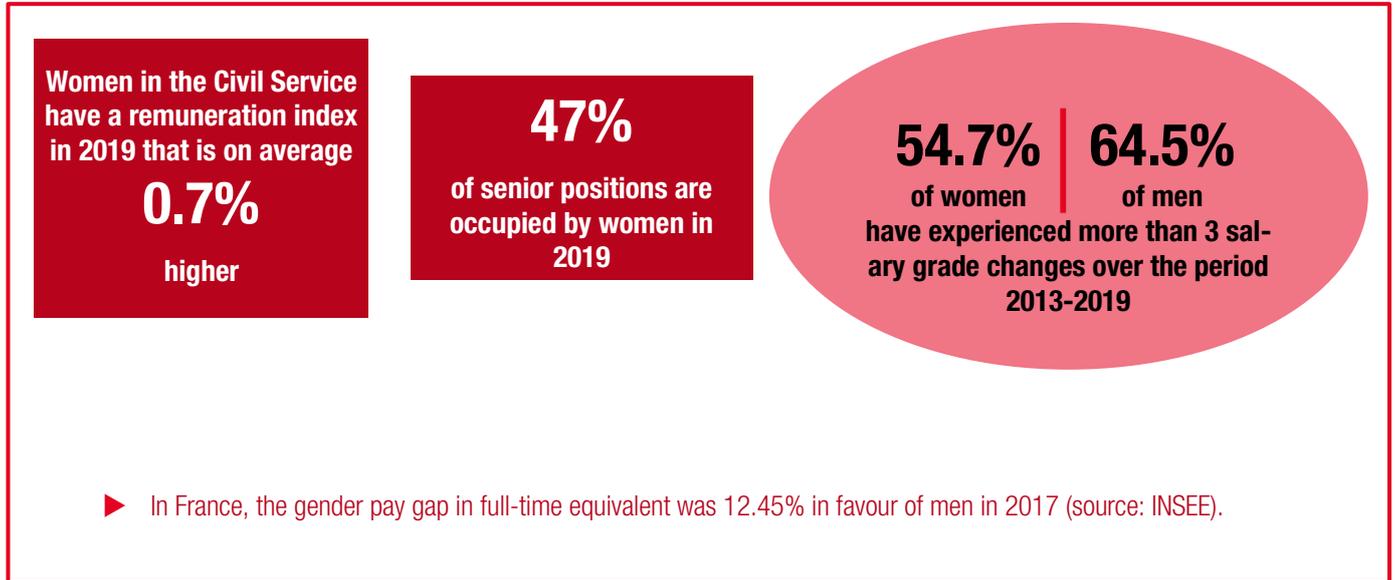
## 1.2 Employees in the private sector

- ### Characteristics of the employed population in the private sector in 2019[4]

Between 2011 and 2019, the population employed in the private sector increased in Monaco (+19% compared to 2011, i.e. 8,500 additional people). At the same time, the gender distribution has changed little over the period, with women accounting for between 40 and 41% of all employees each year (Figure 13). At the end of 2019, there are more than 53,000 employees in the private sector, 40% of whom are women.

The average age is slightly lower for women (41.6 years compared to 42.2 years for men). The 45-54 age group is the one with the most employees of any gender. The distribution of workers by nationality varies little between men and women (the French are the most represented in the private sector with more than 6 out of 10 employees). As regards place of residence, while the majority of employees live beyond the border municipalities, regardless of gender, women are more likely than their male counterparts to live in Monaco or neighbouring towns.

Beyond socio-demographic characteristics, there are clear and lasting structural disparities between women and men within the employed population of the private sector. These differences are notably linked to the nature of the Principality's economic activities.

Figure 13: Evolution of the number of employees in the private sector and of the share of women in the population
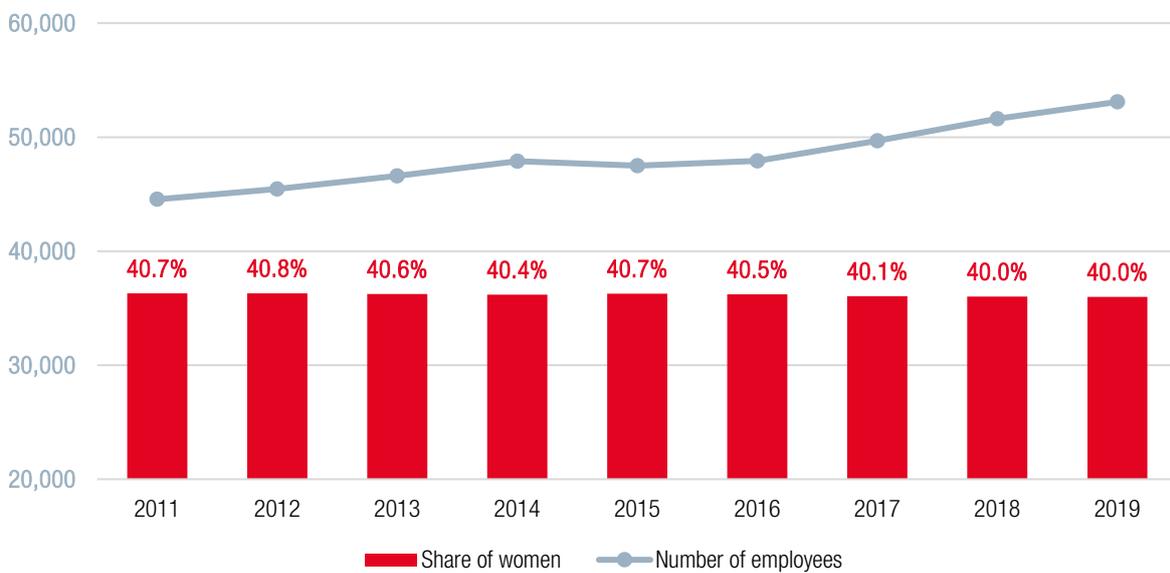


Sources: Caisses sociales de Monaco, Monaco Statistics

As the Principality of Monaco is a service economy, its employment market is dominated by activities in the service sector. Nearly 46,000 private sector employees (86%) were employed in the service sector (market and non-market) at the end of 2019. Scientific and technical activities, administrative and support service activities major economic sector (MES) (which includes, for example, chartered accountants, notaries, architects, travel agencies, temporary employment agencies, etc.) is the largest industry (23% in 2019).

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[4] The data presented in this section are as of December 2019.

The gender distribution within the MES reflects differences in the nature of the activities that fall within these sectors (Figure 14). Construction, for example, is by far the least female-dominated sector, with over 90% of the workforce being male. Public administration, education, human health and social work activities is the industry with the highest proportion of women (more than 7 out of 10 women), followed by Other service activities, which includes a very diverse population, such as domestic work, games and sports activities at all levels.

Figure 14: Distribution of private sector employees by major economic sector (MES) and gender distribution in 2019

| | Weight | | Share of women |
|---|---|---|---|
| Scientific and technical activities, administrative and support service activities | 23.0% | | 34.1% |
| Accommodation and food service activities | 15.4% | | 31.2% |
| Other service activities | 11.5% | | 60.0% |
| Construction | 9.8% | | 8.8% |
| Public administration, education, human health and social work activities | 7.9% | | 71.3% |
| Financial and insurance activities | 7.5% | | 52.4% |
| Retail trade | 5.5% | | 53.6% |
| Manufacturing, mining and quarrying, and others industries | 4.9% | | 36.5% |
| Wholesale trade | 4.9% | | 48.8% |
| Transportation and storage | 4.0% | | 28.8% |
| Real Estate activities | 3.1% | | 35.9% |
| Information and communication | 2.6% | | 25.2% |
| Total | 100% | | 40.0% |

*Sources: Caisses sociales de Monaco, Monaco Statistics*

More than three quarters of the Principality's employers (75.8% in 2019) are small-scale economic agents, with fewer than 5 employees. More than half of these are private individuals employing domestic staff.

Women are much more present in the very small structures and are under-represented in all the others (Figure 15). This is also the case when considering the entities excluding domestic staff.

Figure 15: Distribution of private sector employees by gender by employer size in 2019



■ Men ■ Women
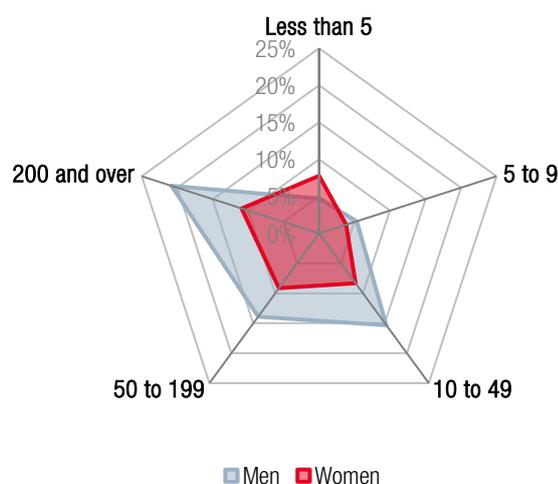
Reading: 8% of female employees work for an employer with less than 5 employees compared to 5% of men in 2019.
*Sources: Caisses sociales de Monaco, Monaco Statistics*

**In brief** Overall, there are fewer women than men in the employed population of the private sector. They are more frequently employed in companies with fewer than 5 employees and their jobs are more often in administration or service activities.

- **Distribution of remuneration in the private sector in 2019[5]**

If we consider a "monthly salary" (which for an individual corresponds to the total gross pay received in 2019 divided by the number of months worked in the year), half of private sector employees in Monaco received more than 2,386 euros per month in 2019. The first three salary brackets (less than €1,000 to €3,000) account for two-thirds of the employed population, with almost 30% in the €2,000 to €3,000 bracket. 29.3% of men earn between €2,000 and €3,000 in gross monthly earnings in 2019, compared with 28% of female employees (Figure 16). Women are more likely to be found in the lower earnings range of 2,000 euros and in the 3,000 to 5,000 euros salary category. Above 5,000 euros per month, they are systematically under-represented. The shape of the distribution thus reflects a higher concentration of women's wages at the lower end of the pay scale. Furthermore, of the 100 highest paid employees in 2019, more than one-third of whom are male professional sportsmen and who account for 7% of the total wage bill for the year, only six are women.

Figure 16: Distribution of monthly wages in the private sector by gender in 2019
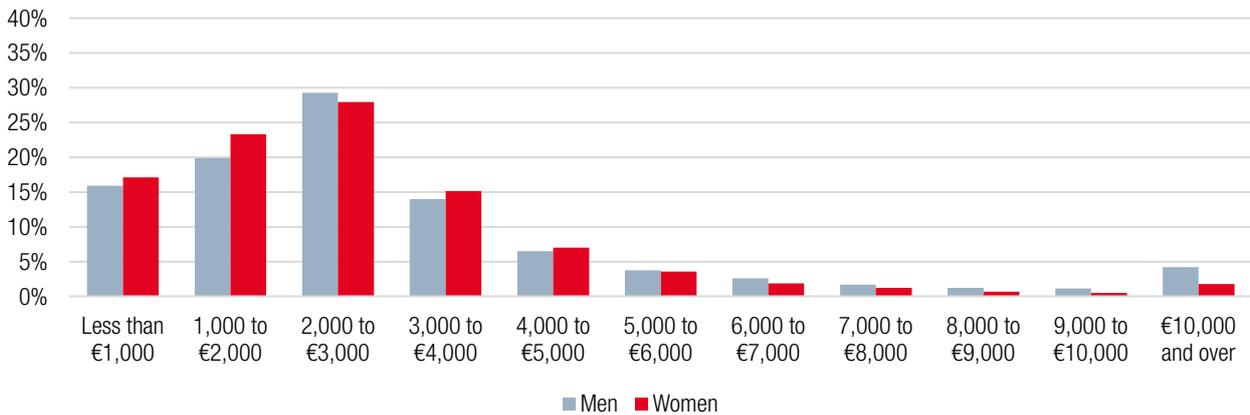


*Reading: in 2019, 15.9% of male employees in the private sector earn less than 1,000 euros in monthly wages; this proportion is 17.1% for women.*
*Sources: Caisses sociales de Monaco, Monaco Statistics*

The gross pay of female employees in the private sector in 2019, on a monthly basis (total annual pay divided by the number of months worked), is 2,783 euros on average, compared with 3,891 euros for men, i.e. a 28.5% pay gap to the detriment of women. However, the average wage, which is strongly influenced by the extreme values, is not sufficient to describe the wage situation as a whole. The share of very high salaries as well as low salaries can thus cause this indicator to vary greatly under the effect of only small groups of individuals. Since the Monegasque context shows strong disparities within its employed population, particularly among men, it is necessary to look in more detail at the distribution of earnings of both sexes.

Thus, the 9th decile of monthly salaries (the threshold for the 10% highest salaries in the population) is over 6,000 euros for men, compared with less than 5,000 for women (Figure 17). At the other end of the distribution, the first decile of women's wages (the lowest 10% of the population) is lower than that of men.

The median wage, which divides the employed population into two equal groups (half earn less, half earn more), is €2,443 for men and €2,300 for women. This median wage is 17% lower than the average wage for women and 37% lower for men, again showing the wide dispersion of wages in the male population.

Figure 17: Distribution of monthly private sector wages by gender in 2019
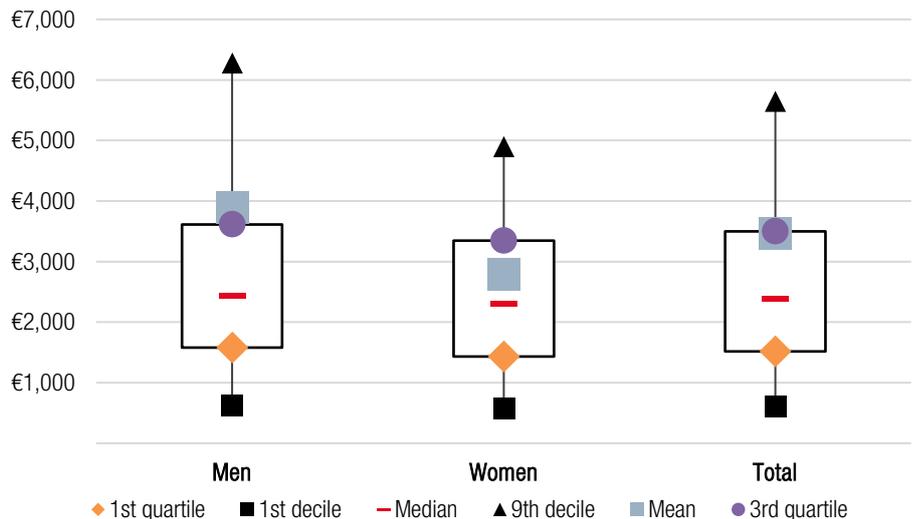


*Reading: in 2019, 50% of male private sector employees earn between 1 581,3 euros and 3,612.7 euros in monthly wages: 25% of men earn less than 1,581.3 euros (1st quartile) and 25% earn more than 3,612.7 euros (3rd quartile). Half of the men earn less than 2,443.1 euros in monthly wages and half earn more (median).*
*Sources: Caisses sociales de Monaco, Monaco Statistics*

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[5] This section considers all hours worked and wages received in 2019 over the period January to December by private sector employees. The total annual salary has been prorated to the number of months worked during the year in order to obtain a monthly salary.

In fact, there are more extreme values among men's salaries, which pull the average upwards, whereas the distribution of women is more concentrated (Figure 17). Thus, the specificities of some very high paid male profiles distort the male representation. For women, on the other hand, the distribution reflects a classic distribution with an average value between the median and the third quartile.

Working time is a decisive element to be taken into account when studying salaries and may partly explain the differences. As the number of hours worked or the salary in FTE (full-time equivalent) is not available, the number of hours worked has been taken into account in the analysis. In 2019, while the legal monthly duration is 169 hours in the private sector in the Principality, employees worked 136 hours per month on average (considering for each individual the total number of hours worked in 2019 divided by the number of months worked in the year). Women worked fewer hours than men did on average: 132 hours compared to 139 hours per month. This volume of hours is even lower in the domestic staff population: women in this category worked 103 hours per month on average (137 hours for men). In the private sector as a whole, the proportion of women who worked more than 169 hours was 12%, whereas this proportion exceeded 25% for their male counterparts (Figure 18). Given these disparities in working hours between women and men, an analysis of hourly wages (ratio of gross wage to number of hours paid) allows us to understand the pay gap by attenuating the effect of working time.

Figure 18: Distribution of monthly hours worked in the private sector by gender in 2019
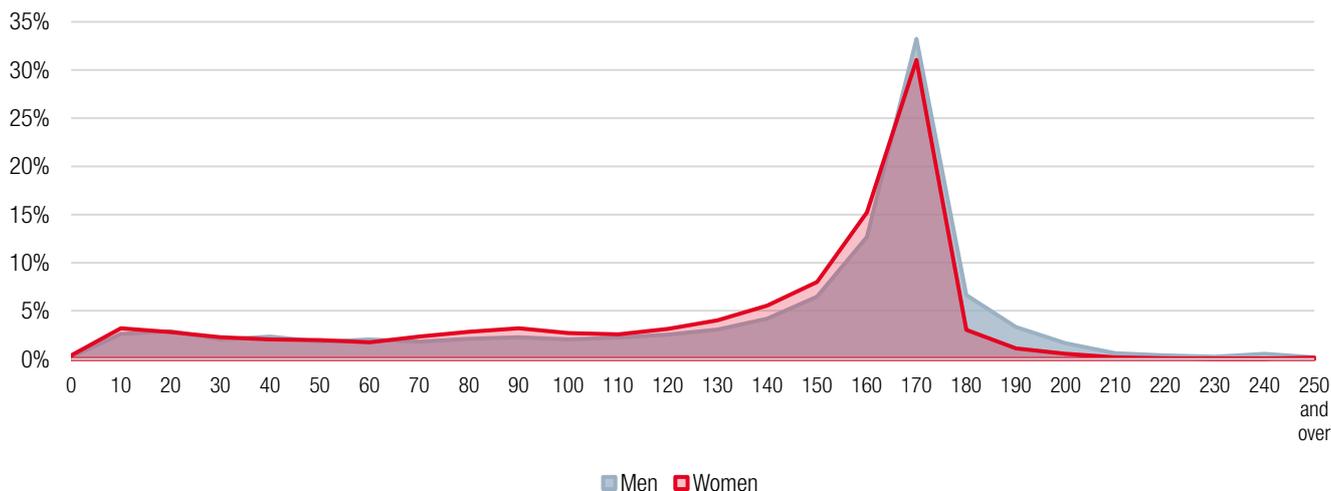


Reading: in 2019, 31.1% of female employees work 170 hours per month compared to 33.2% of male employees.
*Sources: Caisses sociales de Monaco, Monaco Statistics*

The average hourly wage (total remuneration over the year divided by the total number of hours worked and then weighted by working time) was 25.2 euros for all private sector employees in 2019 (including domestic staff, who represent around 4% of the population). Again, men's hourly earnings are on average higher than women's at 27.3 euros compared to 21.6 euros (Figure 19). The latter earn 5.7 euros less than men on average for each hour worked, i.e. a gap of almost 21% between the two sexes.

The median wage is more or less the same, although slightly higher for women: half of them earn less than 17 euros per hour, while the median is 16.9 euros for men. The wide dispersion of male wages is also reflected in hourly earnings, with the 9th decile at over 43 euros, compared to 34 euros for women.

Figure 19: Distribution of hourly wages* in the private sector by gender in 2019
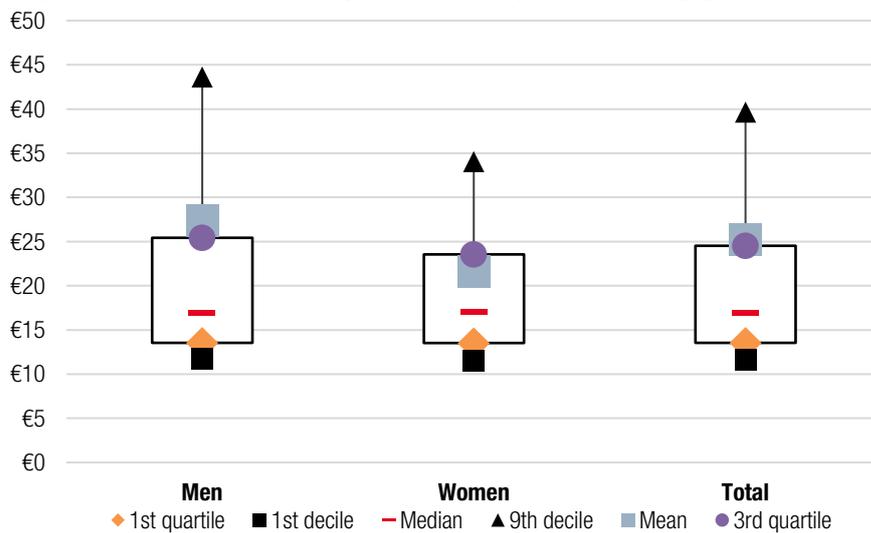


*\* weighted by the number of hours worked*

Reading: in 2019, 50% of male private sector employees earn between 13.5 euros and 25.4 euros per hour worked: 25% of male private sector employees earn less than 13.5 euros (1st quartile) and 25% earn more than 25.4 euros per hour (3rd quartile).
Half of the men earn less than 16.9 euros per hour and half earn more (median).
*Sources: Caisses sociales de Monaco, Monaco Statistics*

The sectoral distribution of wages is very heterogeneous in the private sector, ranging from simple to triple depending on the employer's major economic sector (MES). The average monthly salary ranges from 2,300 euros in Scientific and technical activities, administrative and support service activities (the leading sector for employment in the Principality, which includes various activities such as higher professions and temporary work) to 8,200 euros for Financial and insurance activities.

Furthermore, some atypical MES show a very wide intra-sectoral dispersion of salaries: this is particularly the case for Other service activities, which includes both domestic staff (less remunerative domestic jobs) and employees in leisure, artistic or high-level sports activities (which can generate very high salaries). In this sector, the median monthly wage is 60% lower than the average wage, mechanically increased by very high wages.

In terms of hourly earnings, Financial and insurance activities remain at the top of the ranking with an average of 52.2 euros, while the lowest average hourly wage is found in Construction (17.8 euros).

The hourly pay gap between men and women also differs significantly between MES, with a difference of up to 32 euros per hour worked (Figure 20). Logically, it is in Other service activities, a sector that is itself very heterogeneous, that we find the largest gender gap. In two sectors out of twelve, Real Estate activities and Construction, the hourly wage is on average higher for women, who are more often employed in higher or intermediate level jobs in proportion. It is mainly the weight of blue-collar workers, a predominantly male population in the sector, which results in a lower average hourly wage for men in Construction.

As far as real estate is concerned, although men are in the majority in MES, women are more present in proportion in the highest paid jobs.

With regard to the size of the employer, disparities in pay between the sexes also appear, particularly in very small and very large companies. While the average hourly wage for men is higher than that for women, regardless of size, it is in companies with fewer than five employees that the gender gap is widest: men earn an average of 25.8 euros per hour worked compared with 18.3 euros, i.e. 7.5 euros more (Figure 21). Women working in large entities (200 employees and more) also have a significantly lower average hourly wage than men (21.8 and 28.7 euros respectively).

Figure 20: Average hourly earnings and gender gap in the private sector by employer's major economic sector (MES) in 2019
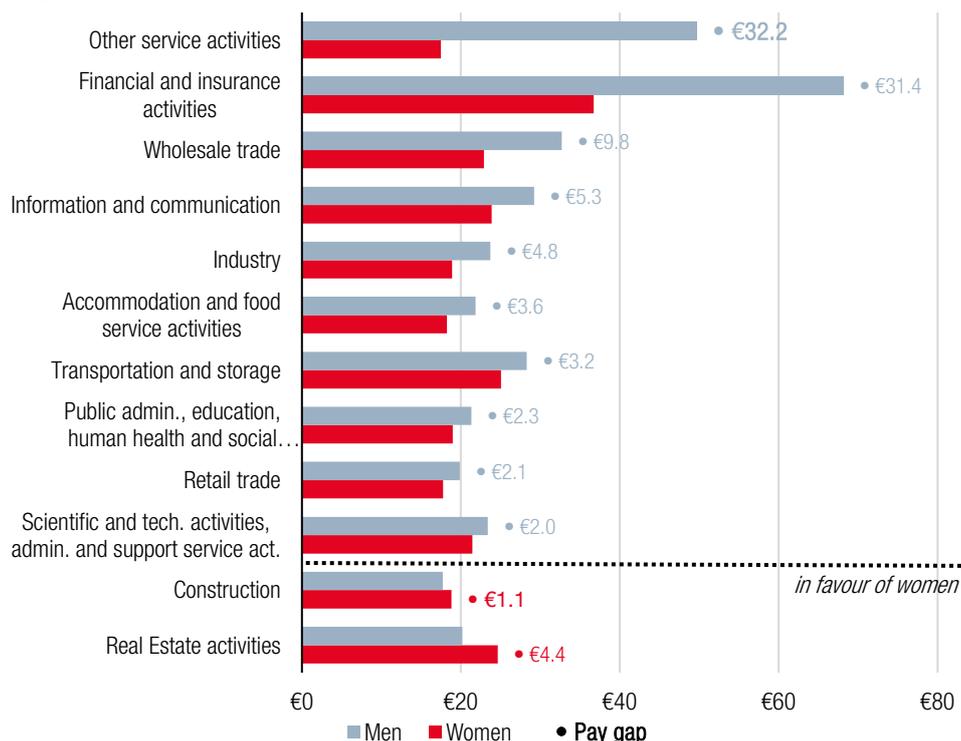


Reading: in 2019, the average hourly wage of men working in Real Estate activities is 20.2 euros against 24.6 euros for women, i.e. a gap of 4.4 euros in favour of women; in Other service activities, the average hourly wage of men is 32.2 euros higher than that of women.
*Sources: Caisses sociales de Monaco, Monaco Statistics*

Figure 21: Average hourly earnings and gender gap in the private sector by employer size in 2019
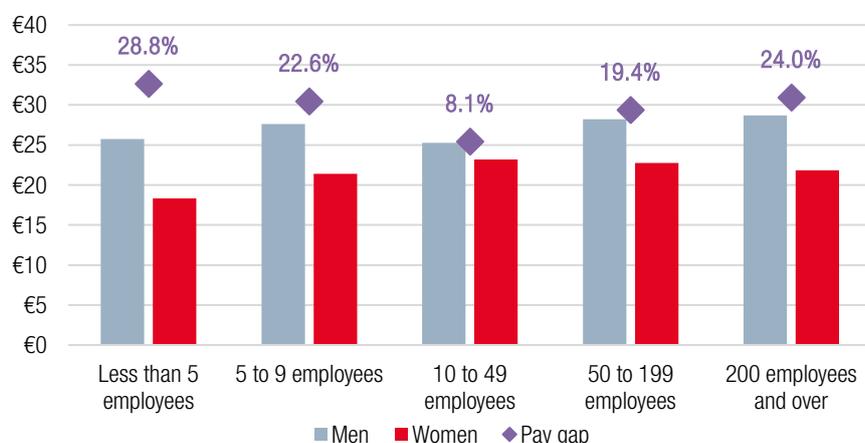


Reading: in 2019, the average hourly wage of men working in a company with less than 5 employees is 25.8 euros compared to 18.3 euros for women employed in a company of the same size, i.e. a gap of 28.8% in favour of men.
*Sources: Caisses sociales de Monaco, Monaco Statistics*

The socio-professional category of the job is one of the characteristics that generate the greatest differences in pay between employees. As this is not clearly defined in the sources available in Monaco, the study of private sector qualifications, which were provided for 85% of individuals in 2019, led to a categorisation of the position held according to four levels: manual workers, white-collar workers, intermediate occupations and managers and higher occupations (see 2.3 Principles and methodological choices used for the analysis). This classification allowed private sector jobs to be broken down into names close to the socio-professional categories. This classification was then broken down by gender for the analysis of gender pay gaps in the private sector.

In Monaco, managerial positions are paid twice as much as intermediate professions (including medical, technical and commercial professionals) and three times as much as white-collar workers, with an average of 51.5 euros per hour compared with 24.2 and 17.2 euros respectively (Figure 22). With an average hourly wage of slightly less than 15 euros, manual workers appear at the bottom of the pay scale. This category of employees is also by far the most male, with over 92% of men having this level of employment in 2019. At the same time, female workers are on average better paid than their male counterparts are: the average hourly wage for men is 3.2% lower than for women. In the other categories, male earnings are on average higher. The white-collar population, which accounts for the largest share of the total private sector workforce (40%), also has the smallest gender pay gap: on average, men in white-collar-level jobs earn 1.2% more than women in hourly wages. This gap is 23.2% for intermediate occupations (the category closest to parity, although 51% of them are women) and as much as 40% for managers and higher occupations (36.2% of which are women).

Figure 22: Average hourly earnings in the private sector by job level and gender gap in 2019
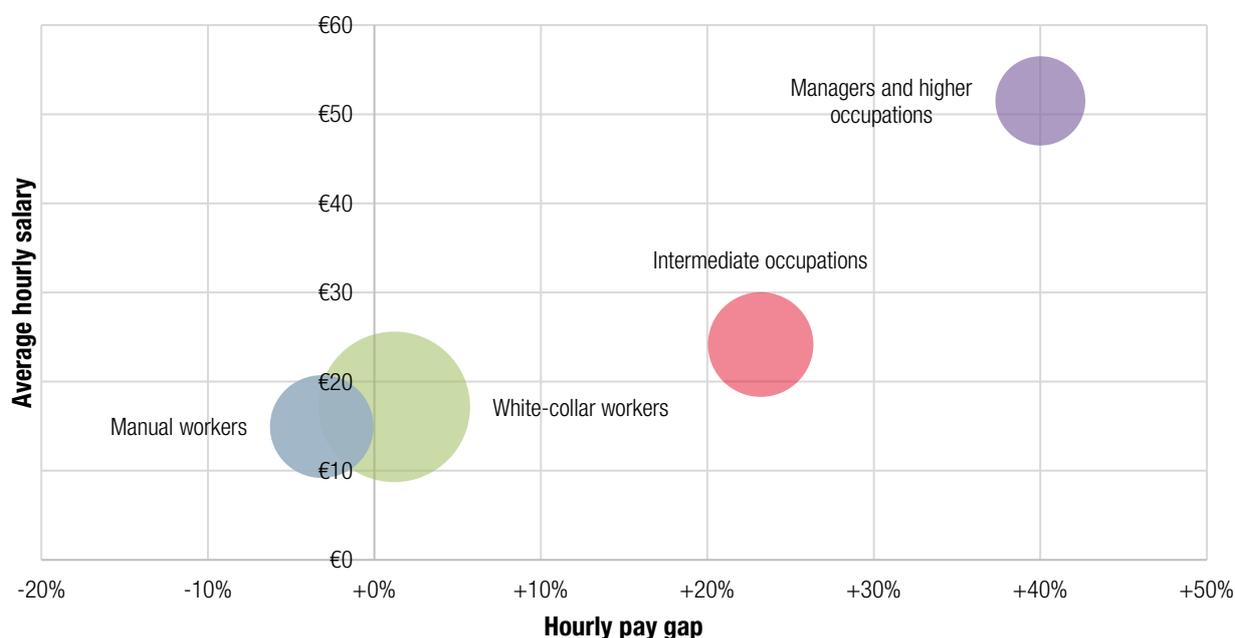


Reading: in 2019, the average hourly wage of employees with a management level is 51.5 euros; in this category, men earn on average 40% more than women per hour worked.
Note: the size of the bubbles is proportional to the number of employees in each category.
*Sources: Caisses sociales de Monaco, Monaco Statistics*

In brief — Women's gross monthly earnings are 28.5% lower on average than men's in 2019. This difference is due in particular to working hours: men work more hours. In terms of hourly earnings, the gap between the two sexes is narrowing, but it persists, with women's average hourly earnings 20.9% lower than those of men. In addition, women are over-represented in certain less remunerative contexts: apart from working hours, they are more often employed in small structures or in sectors of activity with higher rates of low pay (domestic staff in particular).

- **Explaining the gender pay gap in the private sector in 2019[6]**

In order to obtain an "all things being equal" measure, statistical methods must be used to try to explain the observed gender pay gap by taking into account the specific structural effects of the employed population.

The average gender pay gap can be broken down into a part explained by average characteristics that are not the same for women and men, and an unexplained part (which lies in the difference in valuation of these characteristics). The decomposition of the wage gap thus makes it possible to identify its structural determinants.

It was previously mentioned that in 2019 men earn on average 28.5% more than women. Considering the most characteristic position for each employee in 2019, i.e. the job that gave rise to the highest pay over the year, the difference in monthly pay between the sexes is 26.7%

The composition effect accounts for 47% of this difference.

In other words, almost half (12.6%) of the observed gender wage gap can be attributed to different average characteristics between the sexes.

Working time plays a major role in this gap, as does the level of the job held. Indeed, while 'white-collar' level jobs strongly contribute to widening the wage gap between men and women, on the other hand, manual workers contribute to reducing this difference in the same proportions (Figure 23). As a reminder, the latter category is almost entirely made up of men with lower pay than elsewhere (Figure 22). To a lesser extent, the profile of temporary employees also contributes to reducing the gender pay gap. The unexplained gap, given the variables of interest defined, accounts for 53% of the total difference (i.e. 14.1% of 26.7%). The level of employment is the component that contributes most strongly to differences in the valuation of characteristics between men and women.

Figure 23: Decomposition of the explained gender pay gap in the private sector in 2019
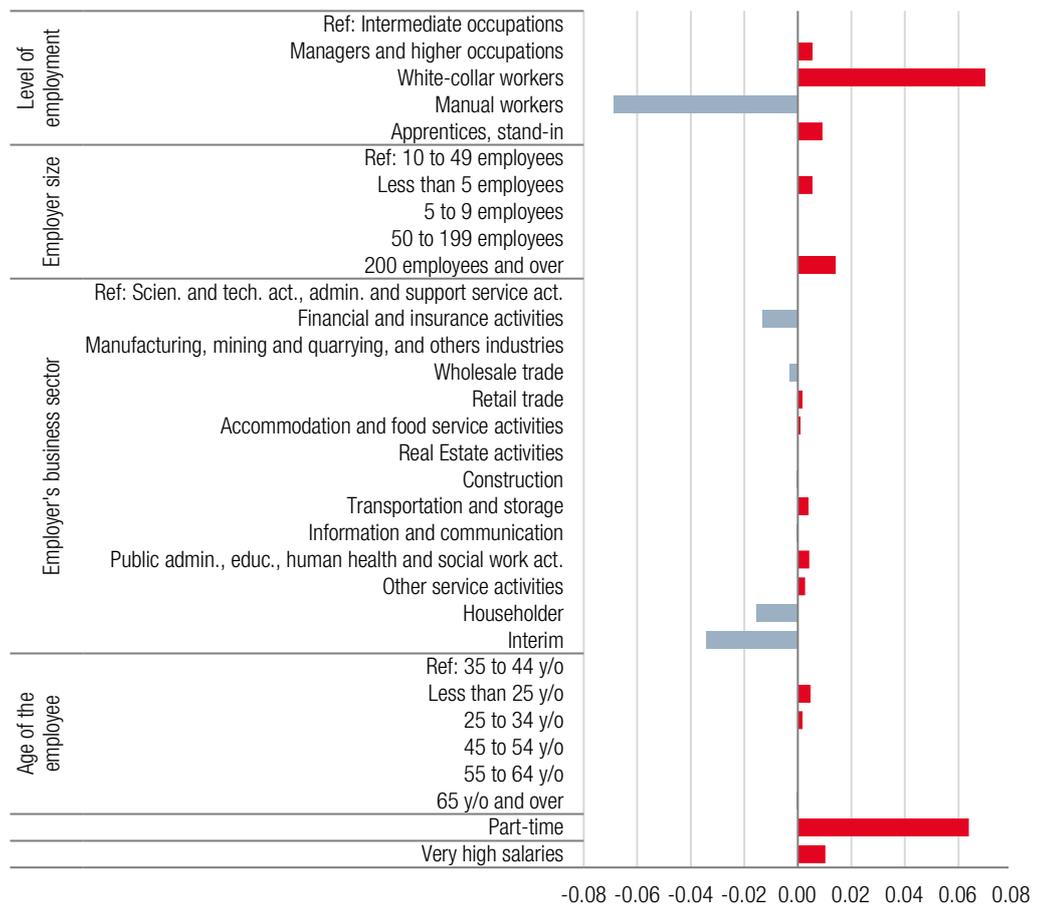


Reading: the variable that contributes most to the explained wage gap in 2019 is the level of employment, with a contribution of 0.07 for the 'White-collar workers' modality.
*Sources: Caisses sociales de Monaco, Monaco Statistics*

The unexplained gap, given the variables of interest defined, represents 53% of the total difference (i.e. 14.1% out of 26.7%). The level of job is the component that contributes most strongly to differences in the valuation of characteristics between men and women.

While men earn on average 28.5% more than women in monthly wages in 2019, this difference drops to 26.7% when the highest paid position of the year for each employee is taken into account. About half of this gender pay gap, or 12.6%, can be explained by different characteristics in terms of working time, job level or business sector. 14.1% of the difference remains unexplained, according to the available elements taken into account in the modelling.

The Oaxaca-Blinder econometric model makes it possible to measure the influence of so-called 'explanatory' variables on the wage gap and thus to obtain a gender gap for other equivalent characteristics in terms of age, socio-professional category or sector of activity. However, this method remains dependent on the information available in the source used. Thus, some variables that potentially have a strong impact on wages may be omitted from the modelling (notably seniority, level of education or type of employment contract). Only the available variables can thus be considered in the search for a "all things being equal" result.

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[6] In this section, the highest paid position for each employee was considered for the decomposition of the gender pay gap.

- **In brief**

In 2019, the average pay gap between male and female private sector employees, on a monthly basis, is 28.5% in favour of men.

Taking the highest paid position of the year for each individual, men earn on average 26.7% more than women do. This difference can be broken down into a part explained by the structure of the employed population (different average characteristics between men and women) and an unexplained part. Almost half of this 26.7% difference can be explained by the effect of the composition of the population, i.e. 12.6%, while 14.1% remains unexplained with regard to the available elements taken into account in the breakdown.

Furthermore, in terms of hourly pay (weighted by the number of hours worked), men receive on average 20.9% more wages than women for each hour worked.

**Gender gap in gross monthly pay in the private sector in 2019**

**28.5%**
in favour of men

**Gender gap in hourly pay (weighted) in 2019**

**20.9%**
in favour of men

**Gender gap in gross monthly salary considering the highest paid position in 2019**

**26.7%**
in favour of men

**Share of the gap that is explained by different average characteristics\* between men and women**

**12.6%**

\* Job level, Size of employer, Major Economic Sector (MES) of employer, Age of employee, Working time

**Share of the gap that remains unexplained \***

**14.1%**

\* based on the available elements taken into account; variables not available: level of diploma, type of employment contract, seniority, etc.

▶ By way of comparison, in 2019, the hourly wage gap between men and women was 17.1% in favour of men in the Alpes-Maritimes, 17.3% in the Provence-Alpes-Côte d'Azur region and 15.4% in mainland France, according to INSEE, which notes that the wage gaps between genders are higher in metropolitan areas and border territories, where the highest income levels are concentrated.

▶ Furthermore, based on the difference between the median salary of men and women (an indicator of salary inequality defined by the OECD), Monaco would show a gap of 5.9% in favour of men in 2019.

## 1.3 In summary

### In the Civil service*

Women in the Civil Service have a remuneration index in 2019 that is on average

# 0.7%

**higher**

# 47%

of senior positions are occupied by women in 2019

*Governmental administration, Municipality, Prince's Palace, Department of Justice, Committees, assemblies and constitutional bodies, Foundations and civil servants appointed in public organisations

### In the private sector

**Warning:** The following results do not allow for a comparison of equal positions and equal qualifications. Indeed, it is not possible to analyse two strictly identical situations in terms of gender, degree, age, occupation and career path.

**Median wage gap in 2019**
*(OECD indicator)*

# 5.9%

in favour of men

**Gender gap in hourly pay (weighted) in 2019**

# 20.9%

in favour of men

**17.3%** PACA region

**17.1%** Alpes-Maritimes

**15.4%** mainland France

*Source: INSEE*

**Gender gap in gross monthly salary considering the highest paid position in 2019**

# 26.7%

in favour of men

**Share of the gap that is explained by different average characteristics\* between men and women**

# 12.6%

\* Job level, Size of employer, Major Economic Sector (MES) of employer, Age of employee, Working time

**Share of the gap that remains unexplained \***

# 14.1%

\* based on the available elements taken into account; variables not available: level of diploma, type of employment contract, seniority, etc.

The gender pay gap as defined by the OECD is the difference between the **median wage** of men and women compared to the median wage of men.
The "**monthly salary**" corresponds to the total gross earnings of an individual in 2019 divided by the number of months worked in the year.
The "**average hourly salary**" was weighted by the number of hours worked for each employee.

## 2. PRELIMINARY WORK AND METHODOLOGY

### 2.1 Context and legal framework

The Principality of Monaco covers an extremely small area of 2 square kilometres and its territory is enclosed within France. It has approximately 38,000 inhabitants on the national territory but only a quarter of them are Monegasque. More than 50,000 people are employed in Monaco, the vast majority of whom do not live there. Moreover, the Principality has no national accounts and there is no income declaration. Moreover, no household survey is conducted.

As regards the legal basis, in the Principality, several fundamental texts are devoted to the exercise of an employed activity and lay down the main principles:

- The Constitution clearly states the principle of freedom of work and its regulation by law and introduces the notion of priority access for Monegasques to public and private jobs, as well as the defence of their rights and interests through trade union action;

- *Law n. 629 of 17/07/1957* regulating the conditions of recruitment and dismissal in the Principality sets out the obligation to hold a work permit to work in Monaco and defines, among other things, the procedure for recruitment in the private sector, giving an order of priority linked to the domicile of the candidate;

- *Ministerial Order n. 58-150 of 24/04/1958*, while linked to *Law n. 636 of 11/01/1958* aimed at instituting the control of payment and declaration of salaries, clearly sets out the information that must be included on pay slips and makes it compulsory to keep personnel and pay registers;

- *Law No. 739 of 16/03/1963* on wages defines the notion of remuneration and introduces the notion of "equal pay for equal work"[7].

At the same time, other texts are important in defining the framework of labour relations, in particular *Ordinance-Law no. 677 of 02/12/1959* on working hours, which defines working time on a weekly basis (there is no notion of annualisation of working time).

Furthermore, in various business sectors, pay scales are missing or are no longer applied. However, a minimum wage, based on the French hourly minimum wage (SMIC) and revalued on the same basis, is set. In addition to this salary, there is a compulsory exceptional bonus, commonly known as the "Prince's bonus", amounting to 5%, which is not subject to contributions.

In summary, the following legal elements should be taken into account in a salary study:

- The clear and precise statement in law of the principle of equal pay;
- The notion of a work permit, which entails a registration of the parameters of the job (position held, employee, salary, start date, end date);
- The existence of a precise recruitment procedure, starting with the submission of a duly completed job offer, registered by the Employment Service;
- The definition of compulsory information to be included on the pay slip;
- The concept of the payroll and the personnel register;
- The definition of wages, the existence of a minimum hourly wage;
- The difficulty of basing oneself on salary scales, except in a few activities (hotel industry).

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[7] Article 2-1 and article 2-2

## 2.2 Approach

- **Identification of available information and relevant services**

  The sources of data on workers and wages are multiple and not harmonised: different management systems exist, with their own specificities.

  Three main entities holding information on employees were quickly identified:

  - The Department of Employment / Employment Office, which issues work permits for employees in Monaco and records the characteristics of the job and the worker at the time of employment;

  - The Caisses sociales de Monaco, which collects information on the employee (characteristics, presence of beneficiaries), wages and hours worked, as well as elements of the employee's work permit, in particular the qualification (occupation);

  - The Human Resources and Training Department, which is the preferred source of data for the analysis of the employed population in the public sector.

  In addition, Monaco Statistics sought input from various government bodies and other entities as part of the study. Thus, Monaco Statistics also met with:

  - The Commission de Contrôle des Informations Nominatives (CCIN) regarding the legal and confidentiality aspects, which thus confirmed the legitimacy of Monaco Statistics to collect data in the framework of its missions;
  - The Digital Services Department for technical issues;
  - The National Institute of Statistics and Economic Studies (INSEE) for the methodological part.

- **Initial conclusions and warnings**

  In view of the Monegasque context and the elements required to measure wage differentials, a study based on the analysis of administrative files proved to be more appropriate than a survey of companies and/or individuals.

  After an overview of the information contained in the information systems of the entities holding the data, it became apparent that the most complete and reliable source of data to date is that emanating from the Caisses sociales de Monaco for private sector employees, and the database of the Human Resources and Training Department for the public sector. The information on wages and hours paid in the private sector is provided on a monthly basis and reflects what was actually paid by the employer.

  Moreover, as the year 2020 is atypical in more than one way, it seemed more appropriate to use 2019 as the reference year for the analysis of wages.

  In parallel with these initial choices, several obstacles were identified in the sources used for this study.

  Indeed, some elements relevant to the analysis are not collected and are therefore not available in the management systems, such as the employee's level of diploma or socio-professional category. Other information, although recorded in the databases, may be incomplete or unreliable, and therefore unusable for the analysis (type of employment contract or number of hours worked, for example).

  Furthermore, most of the data entered at the time of the work permit is not updated afterwards, even if the employee changes position or personal situation.

  Finally, there is no integrated nomenclature maintained in the management systems, particularly with regard to job qualification, which makes it difficult to use the level of occupation performed.

  In order to overcome these difficulties, Monaco Statistics had to do a lot of work in preparing the data and adapting its methodological choices before being able to carry out an analysis of salaries "all things being equal" as such.

## 2.3 Principles and methodological choices used for the analysis

- **Public sector**

The scope of the public sector component of the study is the Civil Service workforce present on 31 December of the year in question according to the management rules defined by the Human Resources and Training Department and Monaco Statistics. The analyses relating to the public employee population and the distribution of salaries concern the year 2019.

The processing of the Civil Service workforce database also involved the creation of analysis variables, in particular with the identification of "senior jobs" as defined in Ordinance n. 6.364 of 17/08/1978 determining the senior positions referred to in Article 4 of Law n. 975 of 12 July 1975 on the status of State employees.

Data from 2013 to 2019 were taken into account in order to analyse the promotion mechanisms of agents over a period of several years. A weighting was also applied to employees according to their number of years in the Civil Service over the period. Thus, a person present for the 7 years from 2013 to 2019 was assigned a weight of 1.

- **Private sector**

All employees who worked at least one paid hour in the private sector during 2019 are considered in the analysis.

The monthly private sector data, once compiled, required extensive processing, particularly the "qualifications" that were entered into the system by hand and therefore had a variety of different names. After cleaning, recoding and prioritising these labels, the qualifications were grouped by Monaco Statistics into four levels: manual workers, white-collar workers, intermediate occupations and managers and higher occupations.

At the same time, analytical variables were constructed from the raw data, relating in particular to the number of hours worked and the size of the company. In addition, a variable concerning very high wage jobs was also created.

For the analysis in terms of hourly pay, the weighted average hourly wage was used: for each employee, it corresponds to the annual wage in relation to the total number of hours worked, weighted by the ratio of hours worked in the year to the theoretical number of hours in a full-time position. Thus, a weight equal to 1 was assigned to individuals who worked 2,028 hours during the year.

In terms of statistical method to explain the possible wage gap between men and women 'all things being equal', the Oaxaca-Blinder decomposition was applied. This procedure, commonly used in the analysis of discrimination (particularly in terms of pay), consists of a decomposition of the observed difference in pay between men and women. The model thus breaks down the gap into a part explained by the characteristics of the two populations (on average) and an unexplained part. However, it remains dependent on the information available, so only known explanatory variables can be taken into account in the decomposition.

For the wage gap decomposition, the highest paying job in 2019 was considered for each individual. In fact, in the case of workers who have held positions with different employers during the year, it is the job that generated the highest pay over the year that is retained, in order to take into account the most characteristic position for these employees. It should be noted that a specific treatment was applied to staff employed by "housekeepers": for these employees, who are most often multi-employer and hold several part-time jobs, the sum of hours and wages over the year was considered.

# APPENDICES

## Methodological clarifications for the analysis of pay gap

| | Private sector | Public sector |
|---|---|---|
| **Scope of the study** | All employees having worked at least one hour during 2019 with a remuneration and a number of hours >0 | Civil Service staff present on 31 December according to the management rules defined by the Human Resources and Training Department and Monaco Statistics with a pay index ≥100 |
| **Treatments applied to raw data** | Compilation of data from the twelve monthly files of 2019 and creation of a "remunerative job" base for the decomposition of the gap for each employee, selection of the job that gave rise to the highest sum of wages over the year<br><br>Note: specific treatment for MM: all hours and wages for all different MM jobs are cumulated (by replacing the job id by the employee id) in order to compensate for the "multi-employer" effect and multiple part-time jobs<br><br>Recoding of "qualification labels" and classification into three levels (based on existing nomenclatures ROME, PCS-ESE, FAP + internal arbitrations) | Compilation of data from the seven annual files from 2013 to 2019 and creation of an "evolution" base for each employee, salary grade on 31 December of the year concerned<br><br>Recoding |
| **Creation of variables** | Categorisation into "job level" according to the table of recoded qualification labels<br><br>Calculation of a "Working time" variable (available but not usable in the original data): from the number of monthly hours of the job selected (when there is only one line per person) by taking Nb hours total / Nb of months > 150<br><br>Entry date: for the same job, if the date is empty for one line and completed for another, the known value is kept. Otherwise, 01/01/2000 seniority is assigned to more than 8 years<br><br>Company size: calculated from the average number of employees per month: less than 5 employees, 5 to 9, 10 to 49, 50 to 199 and over 200<br><br>Very high wages: addition of an indicator for all jobs with an hourly wage in the 9th decile = "very high wage job"<br><br>Calculation of an hourly wage weighted by the number of hours worked | Identification of senior posts as defined in Ordinance n. 6.364 of 17/08/1978 determining the senior posts referred to in article 4 of law n. 975 of 12 July 1975 on the status of State employees<br><br>Maximum number of evolutions over the period 2013-2019 for each employee<br><br>Calculation of weights according to the number of years of presence between 2013 and 2019 for the average index evolution and application of the weighting to each employee |
| **Statistical method used** | Oaxaca-Blinder decomposition (Oaxaca 1973, Blinder 1973): decomposition of the observed wage differentials between men and women into a part explained by the characteristics of the two populations (structural effect) and an unexplained part (with identical characteristics / all things being equal), a model commonly used in the statistical analysis of discrimination (particularly wage discrimination)<br><br>Variable of interest: logarithm of the salary<br><br>Definition of explanatory variables within which "reference modalities" are defined (close to the average monthly salary): | |

| Explanatory variables | Reference modalities |
|---|---|
| Level of employment<br>Age of the employee<br>Major economic sector (MES) of the employer<br>Working time<br>Size of the company<br>Salary level (very high, normal)<br>Contributor status (trade and industry or householder) | Level "Intermediate occupations"<br>Age "35 to 44 years".<br>MES "Scientific and technical activities, administrative and support service activities"<br>"Full" time.<br>Size "10 to 49 employees"<br>Level "normal"<br>"Trade and Industry" status |

A way to decompose the gap between $\overline{Y_B}$ (average salary for men) and $\overline{Y_A}$ (average salary for women) is written:

$$\overline{Y_B} - \overline{Y_A} = \hat{\beta}_{B0} + \sum_{k=1}^{K} \overline{X_{Bk}}\hat{\beta}_{Bk} - \hat{\beta}_{A0} - \sum_{k=1}^{K} \overline{X_{Ak}}\hat{\beta}_{Ak}$$

$$= \underbrace{\sum_{k=1}^{K} \left( \overline{X_{Bk}} - \overline{X_{Ak}} \right) \hat{\beta}_{Bk}}_{\hat{\Delta}_X \quad \text{(explained)}} + \underbrace{\left( \hat{\beta}_{B0} - \hat{\beta}_{A0} \right) + \sum_{k=1}^{K} \overline{X_{Ak}} \left( \hat{\beta}_{Bk} - \hat{\beta}_{Ak} \right)}_{\hat{\Delta}_S \quad \text{(unexplained)}},$$

## Additional tables and figures

### Median salary in the private sector by employer size in 2019
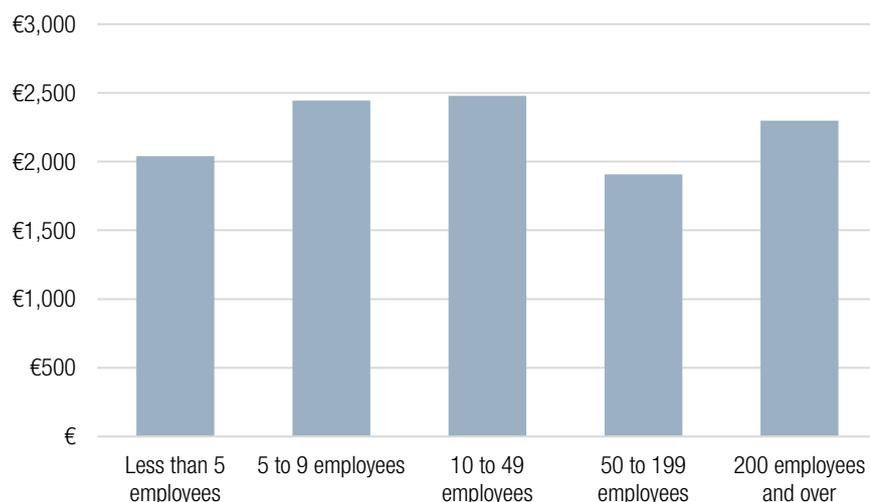


Unit: euros
Interpretation: in 2019, among employees in a company with less than 5 employees, half earn less than 2,040 euros in monthly wages and half earn more.
*Sources: Caisses sociales de Monaco, Monaco Statistics*

### Average monthly and hourly salary in the private sector by employer size in 2019



■ Average monthly salary    ● Average hourly salary
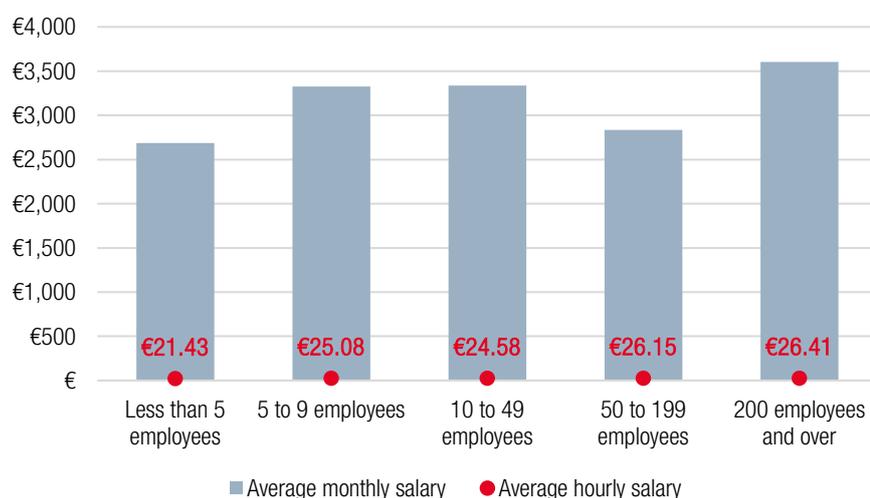
Unit: euros
*Sources: Caisses sociales de Monaco, Monaco Statistics*

### Monthly and median hourly salary in the private sector by employer MES in 2019

| | Median monthly salary | Median hourly salary |
|---|---:|---:|
| Financial and insurance activities | 4,956.2 | 32.3 |
| Information and communication | 3,292.6 | 23.4 |
| Wholesale trade | 3,028.0 | 20.2 |
| Transportation and storage | 2,838.3 | 19.8 |
| Manufacturing, mining and quarrying, and others industries | 2,699.8 | 17.2 |
| Real Estate activities | 2,645.1 | 15.6 |
| Public administration, education, human health and social work activities | 2,539.4 | 17.1 |
| Construction | 2,384.7 | 15.4 |
| Accommodation and food service activities | 2,293.2 | 16.8 |
| Retail trade | 2,239.0 | 14.9 |
| Other service activities | 1,795.3 | 16.1 |
| *Excluding householders* | 1,941.4 | 18.0 |
| Scientific and technical activities, administrative and support service activities | 1,656.4 | 15.3 |
| *Excluding interim* | 2,323.8 | 19.0 |
| **TOTAL** | **2,385.7** | **17.0** |

Unit: euros
*Sources: Caisses sociales de Monaco, Monaco Statistics*

Evolution of the average remuneration index in the Civil Service by gender from 2013 to 2019
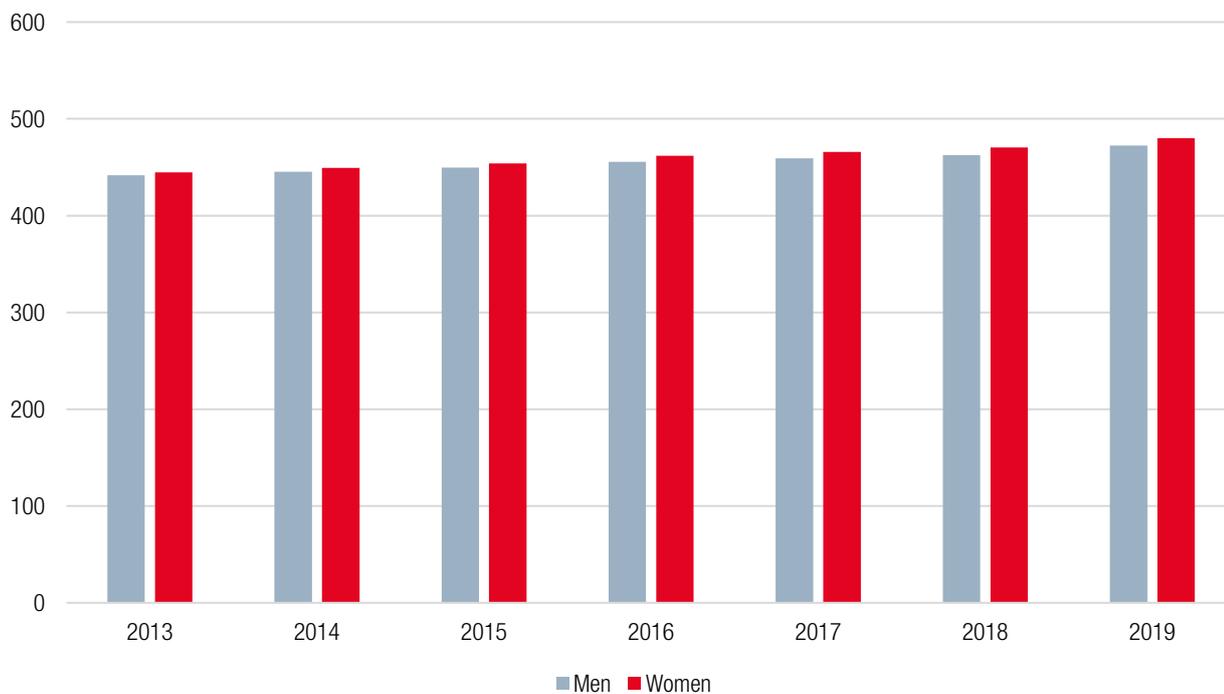


Note: data weighted by the number of years of presence over the period 2013-2019
Scope: Civil Service employees, excluding military personnel
*Sources: Human Resources and Training Department, Monaco Statistics*

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