

15 February 2024 GROSS MONTHLY EARNINGS PER EMPLOYEE December 2023

# IN REAL TERMS, THE TOTAL GROSS MONTHLY EARNINGS PER EMPLOYEE INCREASED BY 4.0%. IN 2023 IT INCREASED BY 2.3%.

The total gross monthly earnings per employee (per job¹) increased by 5.7%, to €1,670, in the quarter ended in December 2023 (4<sup>th</sup> quarter of the year), compared to the same period of 2022. The regular and the base components of those earnings increased by 6.0% and 6.3%, reaching €1,220 and €1,148, respectively. In real terms, considering the Consumer Price Index change, the total gross monthly earnings increased by 4.0%, its regular component increased by 4.2% and the base monthly earnings increased by 4.5%. These results cover 4.7 million jobs, corresponding to Social Security beneficiaries and to *Caixa Geral de Aposentações* subscribers, an increase of 3.5% from the same period of 2022.

Compared to December 2022, the total gross monthly earnings increased in all dimensions of analysis (economic activity, enterprise size, institutional sector, use of technology and knowledge intensity). The largest increases were observed in the "Mining and quarrying" activities (section B; 10.0%), in enterprises of 1 to 4 employees (6.5%), in the private sector (6.3%), and in enterprises in "Knowledge-intensive market services" (9.5%).

In 2023, the gross monthly earnings per employee increased, compared to 2022, to  $\leq$ 1,505 (6.6%), the regular component increased to  $\leq$ 1,216 (6.6%), and the base monthly earnings to  $\leq$ 1,143 (6.8%). In real terms, the rate of change increased by 2.3%, 2.2% and 2.4%, respectively.

## 1. Gross monthly earnings per employee and by earnings components

In December<sup>2</sup> 2023, the total gross monthly earnings per employee (per job¹) increased by 5.7% (Figure 1), from €1,580 in December 2022 to €1,670 one year after. This change is lower than the one observed in September 2023 (6.2%).

The regular gross monthly earnings per employee exclude, among other earnings components, the Christmas, and Holidays allowances and, thus, have a less seasonal behaviour<sup>3</sup>. In December 2023, it stood at €1,220, while

<sup>&</sup>lt;sup>1</sup> Each employee is counted as many times as the number of jobs reported to the Social Security and to CGA (*Caixa Geral de Aposentações*), thus the total of employees corresponds to the total of jobs. For more details, see the Technical Note at the end of this Press Release.

<sup>&</sup>lt;sup>2</sup> The monthly data analysed in this Press Release refer to moving quarters ended in the reference month (for example, the December 2023 estimates correspond to the 4<sup>th</sup> quarter of 2023), and the series starts in March 2014 (1<sup>st</sup> quarter of 2014). The last three reference months are subject to regular revisions as stated in the Technical Note at the end of this Press Release.

in December 2022 it had been €1,151, corresponding to an increase of 6.0%. This growth was 0.2 percentage points (pp) lower than in September 2023.

The base<sup>4</sup> gross monthly earnings per employee increased by 6.3%, from €1,079 in December 2022 to €1,148 in December 2023. This change was also lower than the one observed in September 2023 (6.4%).

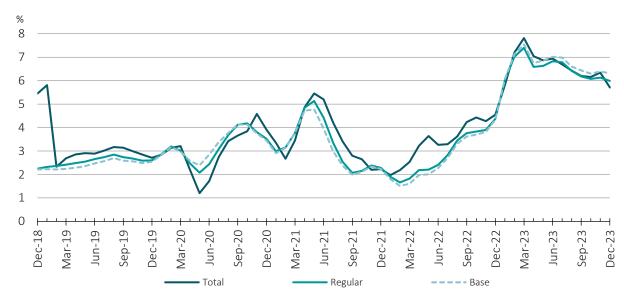


Figure 1. Year-on-year change of gross monthly earnings per employee (total and regular)

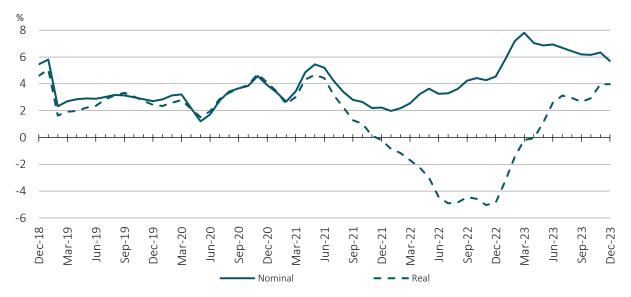
**Note:** The significant fluctuations registered in the end of 2018 were due to the changes in the payment of the Christmas allowance in the public sector in that year (100% in November 2018) compared to year before (50% in November 2017).

Adjusting for the inflation measured by the Consumer Price Index (CPI) rate of change, of 1.7% in the quarter ended in December 2023, the year-on-year real rates of change of the analysed gross earnings (total, regular and base) were, respectively: +4.0%, +4.2%, and +4.5% (Figures 2, 3 and 4). Compared to the quarter ended in September 2023, there was a deceleration in prices (from 3.5% to 1.7%) and an acceleration in real earnings (for instance, from 2.7% to 4.0% in the case of total earnings).

<sup>&</sup>lt;sup>3</sup> For a more detailed description of the earnings components included in the total and in the regular earnings, see the Technical Note at the end of this Press Release.

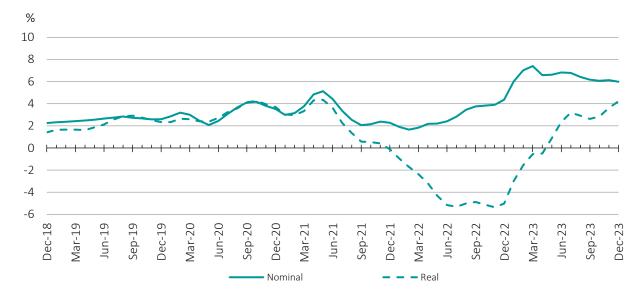
<sup>&</sup>lt;sup>4</sup> For more information about the differences between the earnings components, see the Technical Note at the end of this Press Release.

Figure 2. Year-on-year change of total gross monthly earnings per employee (nominal and real)



**Note:** The significant fluctuations, of the nominal and real earnings, registered in the end of 2018 were due to the changes in the payment of the Christmas allowance in the public sector in that year (100% in November 2018) compared to year before (50% in November 2017).

Figure 3. Year-on-year change of regular gross monthly earnings per employee (nominal and real)





% 8 6 4 -4 -6 -8 Dec-18 Jun-19 Sep-19 Jun-20 Dec-19 Dec-23 Dec-22 Mar-23 Sep-23

Figure 4. Year-on-year change of base gross monthly earnings per employee (nominal and real)

In 2023, the gross monthly earnings per employee stood at €1,505, increasing by 6.6% in nominal terms and by 2.3% in real terms (in 2022, the total earnings had increased by 3.7% in nominal terms and decreased by 4.0% in real terms). In the same period, the annual average of the regular gross monthly earnings per employee was €1,216, which corresponded to a nominal and real increase of 6.6% and 2.2% (in 2022, it had increased by 3.1% in nominal values and decreased by 1.8% in real values). Still in 2023, the annual average of the base gross monthly earnings per employee stood at €1,143, having increased by 6.8% in nominal terms and by 2.4% in real terms (it had had a 3.0% nominal increase and 1.7% real decrease, in 2022). In 2023, the CPI had a positive rate of change of 4.3% (it had been 7,8% in 2022).

#### 2. Gross earnings by economic activity

In December 2023, the total earnings per employee (per job) ranged from  $\in$ 975 in the activities of "Agriculture, farming of animals, hunting and forestry" (section A) to  $\in$ 3,674 in the activities of "Electricity, gas, steam, cold and hot water and cold air" (D) (Table 2 of the Annex file). Similarly, the regular and base earnings also registered the lowest value in section A ( $\in$ 766 and  $\in$ 744, respectively) and the highest in the activities of section D ( $\in$ 2,701 and  $\in$ 2,504).

Compared to the same period of 2022, the largest increases in total earnings were observed in the "Mining and quarrying" activities (B; 10.0%) and in the "Administrative and support service activities" (N; 8.3%). On the other hand, the lowest year-on-year increase was observed in the activities of "Electricity, gas, steam, cold and hot water and cold air" (D; 2.4%). In real terms, after adjusting for the Consumer Price Index (CPI) rate of change, in December 2023 all sections of the Statistical Classification of Economic Activities (NACE) had positive changes (Figure 5).

The largest increases of the regular earnings were recorded in the "Administrative and support service activities" (N; 9.1%) and in the "Water collection, treatment and distribution; sewerage, waste management and remediation activities" (E; 8.4%). The lowest year-on-year positive change was observed in the "Financial and insurance activities" (K; 3.9%).

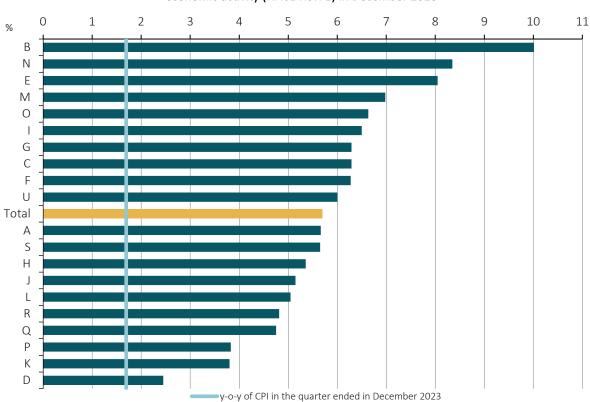


Figure 5. Year-on-year change of total gross monthly earnings per employee by economic activity (NACE Rev. 2) in December 2023<sup>5</sup>

Notes: Sections from NACE-Rev. 2: A: Agriculture, farming of animals, hunting and forestry; **B**: Mining and quarrying; **C**: Manufacturing; **D**: Electricity, gas, steam, cold and hot water and cold air; **E**: Water collection, treatment and distribution; sewerage, waste management and remediation activities; **F**: Construction; **G**: Wholesale and retail trade; repair of motor vehicles and motorcycles; **H**: Transportation and storage; **I**: Accommodation and food service activities; **J**: Information and communication activities; **K**: Financial and insurance activities; **L**: Real estate activities; **M**: Consultancy, scientific and technical activities; **N**: Administrative and support service activities; **O**: Public administration and defence; compulsory social security; **P**: Education; **Q**: Human health and social work activities; **R**: Arts, entertainment, sports and recreation activities; **S**: Other service activities; **T**: Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use; **U**: Activities of extraterritorial organisations and bodies.

<sup>&</sup>lt;sup>5</sup> The difference between the year-on-year change of the Consumer Price Index (vertical line) and the year-on-year change of earnings (horizontal bars), represented in this chart for quarters ending in the reference months, does not correspond exactly to the year-on-year change in earnings in real terms, given the way in which real changes are computed, which considers, in addition to the monthly evolution of prices, the relative weight of each month's earnings in the quarter's total. Even so, the figure makes it possible to identify, with a good approximation of the results, the economic activities that registered higher/lower real variations in earnings. The exact real changes are presented in the Annex files of this Press Release.



Regarding the base earnings, the activities with the largest year-on-year increases were in the "Administrative and support service activities" (N; 9.4%) and in the "Mining and quarrying" activities (B; 8.9%), while the lowest increase was observed in the activities of "Electricity, gas, steam, cold and hot water and cold air" (D; 3.6%).

In 2023, the gross monthly earnings were also higher in the "Electricity, gas, steam and air conditioning supply" activities (D; €3,315) and lower in the activities of "Agriculture, farming of animals, hunting and forestry" (A; €916). Compared to 2022, the highest increase occurred in the "Administrative and support service activities" (N; 9.0%) and the lowest in the activities of "Agriculture, farming of animals, hunting and forestry" (A; 3.8%). In real terms, the total earnings increased in almost all activities, except for the decreases of 0.4% in section A and of 0.2% in section K.

## 3. Gross earnings by enterprise size

In December 2023, the total gross earnings ranged from  $\le 1094$ , in enterprises with 1 to 4 employees, to  $\le 2,025$ , in enterprises with 250 to 499 employees (Table 3 of the Annex file). Similarly, the average values from the regular and the base earnings have also ranged from the size class of 1 to 4 employees ( $\le 884$  and  $\le 873$ , respectively) to the size class of 250 to 499 employees ( $\le 1,453$  and  $\le 1,357$ ).

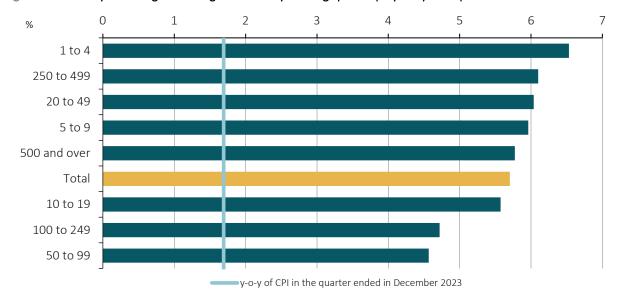
Comparing to the same period of the last year, total earnings increased in all enterprise sizes, having the largest year-on-year change been observed in enterprises with 1 to 4 employees (6.5%), while the lowest was observed in the size class of 50 to 99 employees (4.6%). The real total earnings had positive changes in all enterprise size groups (Figure 6).

Regarding regular earnings, the highest year-on-year positive changes were observed in enterprises with 250 to 499 employees and in those with 5 to 9 employees, 6.4% in both groups, having the smallest increase, of 5.0%, been observed in enterprises with 100 to 249 employees. The base earnings year-on-year nominal increases ranged from 5.1% in enterprises with 100 to 249 employees to 6.5% in enterprises with 250 and more employees.

In 2023, the gross monthly earnings ranged from €1,011, in enterprises with 1 to 4 employees, to €1,804, in enterprises with250 to 499 employees. These size classes were also the ones with the highest (7.4%) and the lowest (5.7%) year-on-year increases, respectively (it should be noted that the enterprises with 100 to 249 employees have also had an annual increase of 5.7%). In real terms, the total earnings increased in all enterprise size classes.



Figure 6. Year-on-year change of total gross monthly earnings per employee by enterprise size class in December 20236



## 4. Gross earnings by institutional sector

The total earnings per employee (per job) of the institutional<sup>7</sup> sector of Public Administration (PA) (as defined by the National Accounts)<sup>8</sup> increased by 5.1%, from €2,221 in December 2022 to €2,336 in December 2023. In the same period, the regular component increased by 5.7%, from €1,603 to €1,694, while the base earnings increased by 5.9%, from €1,508 to €1,596 (Figures 7 and 8). In real terms, in the PA, the total, regular and base earnings increased by 3.4%, 3.9% and 4.1%, respectively. All these increases are below those observed for the economy.

In the private sector, earnings have increased more significantly: the total earnings recorded a year-on-year change of 6.3%, from  $\le$ 1,453 in December 2022 to  $\le$ 1,544 one year after; the regular component increased by 6.5%, from  $\le$ 1,062 to  $\le$ 1,130; and the base earnings increased by 6.8%, from  $\le$ 995 to  $\le$ 1,063. In this sector, real year-on-year increases were observed in the three earnings components: 4.5% in total, 4.7% in regular and 5.1% in base, all above those observed for the economy.

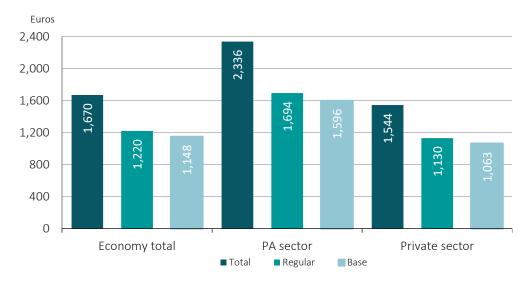
<sup>&</sup>lt;sup>6</sup> See footnote of Figure 5.

<sup>&</sup>lt;sup>7</sup> As defined in the Technical Note at the end of this Press Release.

<sup>8</sup> The universe of entities that compose the institutional sector of the Public Administration is subject to updates twice a year.



Figure 7. Gross monthly earnings per employee (total, regular and base) by institutional sector of the economy in December 2023



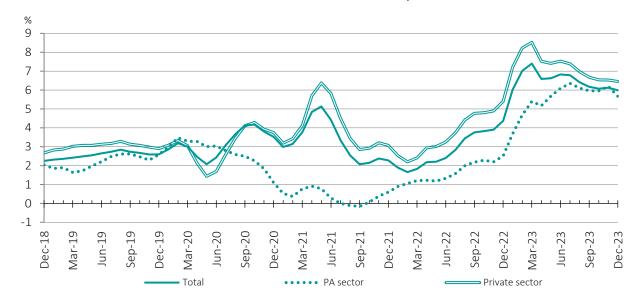
The average earnings differences between the public and private sector reflect, among others, differences in the tasks performed, in the employees' age composition (with an impact on the accumulation of human capital and professional experience) and qualifications. Thus, it is observed that employees in the public sector have, on average, a higher educational level9: in the public sector, 55.6% of the employees had completed tertiary education (24.9% in the private sector), 26.8% had conclude an upper secondary or post-secondary non-tertiary education (32.3% in the private sector), and 17.6% had, at most, the lower secondary education (42.7% in the private sector).

In 2023, the total earnings of the PA increased by 5.9%, from  $\le$ 1,957 in 2022 to  $\le$ 2,072 a year after. This increase was higher than a year before (2.2%), but below the increase observed in the private sector of the economy (7.2%, from  $\le$ 1,302 to  $\le$ 1,396). Taking into account the effect of inflation, in real terms, the total earnings of PA increased by 1.7% from 2022 to 2023, having decreased by 5.3% between 2021 and 2022. In the private sector, the real annual increase in 2023 was more pronounced (2.9%), while in 2022 it had observed a real decrease of 3.1%.

<sup>&</sup>lt;sup>9</sup> These results are the most recent at the date of dissemination of this Press Release. For the public sector, data released by the Directorate General for Administration and Public Employment (<u>DGAEP</u>) is mentioned, whose coverage is close to the public sector defined here, referring to 30 June 2023 and covering the entire country. For the private sector, the percentages were calculated based on the "<u>Lists of Personnel</u>, for 2021 excluding the employees with unknown educational level, made available by the Strategy and Planning Office of the Ministry of Labour, Solidarity and Social Security.



Figure 8. Year-on-year change of regular gross monthly earnings per employee by institutional sector of the economy



## 5. Earnings by use of technology and knowledge intensity

By using the economic activity classification of enterprises, it is possible to create groups according to their technology intensity (high, medium, and low, for "Manufacturing industries") and the intensity of knowledge (knowledge intensive and less-knowledge intensive, for "Services") (see note of Figure 9).

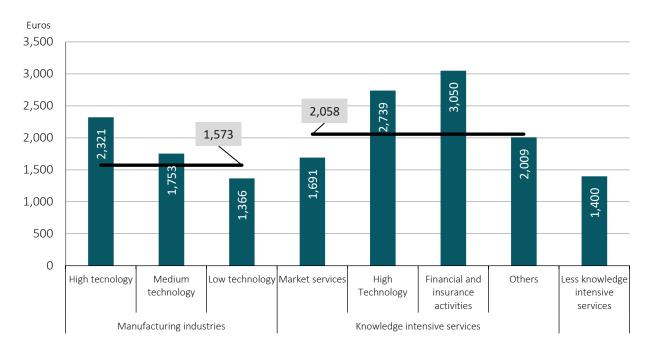
In December 2023, the total gross monthly earnings per employee (per job) in the "Manufacturing industries" (Section C of NACE Rev. 2) was €1,573, corresponding to a year-on-year increase of 6.3%. In this section, the highest total gross earnings were observed in the "High-technology manufacturing industries" (€2,321), to which corresponded a year-on-year increase of 4.8%. However, the highest year-on-year rate of change in the section (6.4%) was observed in the "Low-technology manufacturing industries", whose total earnings averaged €1,366.

In the same month, the total gross monthly earnings per employee in "Knowledge intensive services enterprises" was  $\{2,058,$  being higher among "Financial and insurance activities" ( $\{3,050\}$ ) and lower in the "Market services" enterprises ( $\{1,691\}$ ). These earnings have increased, in the year-on-year comparison, by 5.8%, 3.8% and 9.5%, respectively.

Compared to December 2022, the average total gross earnings of the "Less knowledge intensive enterprises" increased 5.7%, slightly above the total observed in Services (5.6%), reaching €1,400.



Figure 9. Number of employees and gross monthly earnings per employee (total) by technology intensity and knowledge intensity in December 2023



Notes: High-technology manufacturing industries: includes the NACE Rev. 2 divisions: 21 and 26; Medium-technology manufacturing industries: includes the NACE Rev. 2 divisions: 19, 20, 22 to 25, 27 to 30 and 33; Low-technology manufacturing industries: includes the NACE Rev. 2 divisions: 10 to 18, 31 and 32; Knowledge intensive services: includes the NACE Rev. 2 divisions: 50, 51, 58 to 63, 64 to 66, 69 to 75, 78, 80 and 84 to 93; Market services: includes NACE Rev. 2 divisions: 50, 51, 69 to 71, 73, 74, 78 and 80; High-technology services: includes NACE Rev. 2 divisions: 59 to 63 and 72; Financial and insurance activities: includes NACE Rev. 2 divisions: 64 to 66; Other knowledge intensive services: includes NACE Rev. 2 divisions: 58, 75 and 84 to 93; Less knowledge intensive services: includes the NACE Rev. 2 divisions: 45 to 47, 49, 52, 53, 55 to 56, 68, 77, 79, 81, 82, 94 to 99.

In 2023, total gross monthly earnings per employee in the activities of "Manufacturing industries" ranged between €1,227 in the "Low-technology manufacturing industries" and €2,074 in the "High-technology manufacturing industries", with an average value of €1,412. The annual increase of total earnings in these enterprises was, respectively, 7.1%, 6.1% and 7.2%.

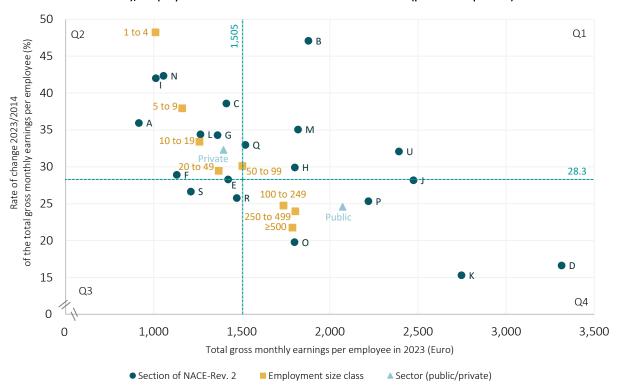
In "Knowledge-intensive services", the total earnings were, on average, €1,839, ranging between €1,518 in enterprises of "Market services" and €2,747 in enterprises of "Financial and insurance activities". Between 2022 and 2023, these earnings increased, respectively, by 6.7%, 10.1% and 4.2%. At last, the total gross earnings of enterprises of "Less knowledge intensive services" stood at €1,272, having increased by 6.8% when compared to 2022.



## 6. Summary of annual results

Figures 10 and 11 show, respectively, the total gross and real monthly earnings per employee in 2023 and the rate of change in earnings in the period from 2014 to 2023. In this period, total earnings increased by 28.3%, from €1,173 to €1,505 and the Minimum Wage increased by 56.7%, from €485 to €760 $^{10}$ . In real terms, the total earnings increased by 8.4%, while the Minimum Wage increased by 32.5% $^{11}$ .

Figure 10: Total gross monthly earnings per employee in 2023 and rate of change since 2014 by economic activity (NACE-Rev. 2), employment size class and the institutional sector (public and private).



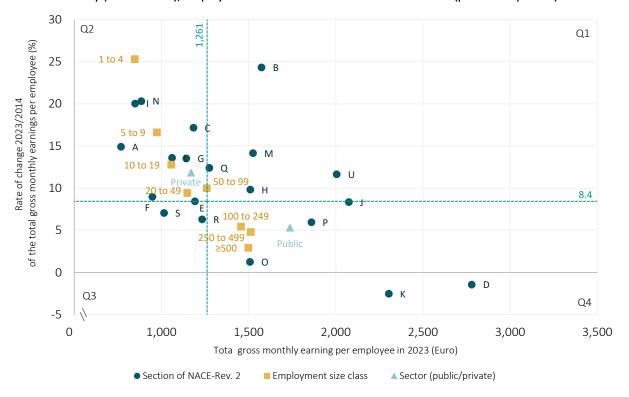
Sections from NACE-Rev. 2: A: Agriculture, farming of animals, hunting and forestry; B: Mining and quarrying; C: Manufacturing; D: Electricity, gas, steam, cold and hot water and cold air; E: Water collection, treatment and distribution; sewerage, waste management and remediation activities; F: Construction; G: Wholesale and retail trade; repair of motor vehicles and motorcycles; H: Transportation and storage; I: Accommodation and food service activities; J: Information and communication activities; K: Financial and insurance activities; L: Real estate activities; M: Consultancy, scientific and technical activities; N: Administrative and support service activities; O: Public administration and defence; compulsory social security; P: Education; Q: Human health and social work activities; R: Arts, entertainment, sports and recreation activities; S: Other service activities; T: Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use; U: Activities of extraterritorial organisations and bodies.

<sup>&</sup>lt;sup>10</sup> In 2014, the Minimum Wage was €485 from January to September and €505 from October to December.

 $<sup>^{\</sup>rm 11}\,\text{The}$  Minimum Wage was deflated to the mean prices of 2014.



Figure 11: Total gross monthly earnings per employee in 2023 and rate of change since 2014, in real terms, by economic activity (NACE-Rev. 2), employment size class and the institutional sector (public and private).



Sections from NACE-Rev. 2: A: Agriculture, farming of animals, hunting and forestry; B: Mining and quarrying; C: Manufacturing; D: Electricity, gas, steam, cold and hot water and cold air; E: Water collection, treatment and distribution; sewerage, waste management and remediation activities; F: Construction; G: Wholesale and retail trade; repair of motor vehicles and motorcycles; H: Transportation and storage; I: Accommodation and food service activities; J: Information and communication activities; K: Financial and insurance activities; L: Real estate activities; M: Consultancy, scientific and technical activities; N: Administrative and support service activities; O: Public administration and defence; compulsory social security; P: Education; Q: Human health and social work activities; R: Arts, entertainment, sports and recreation activities; S: Other service activities; T: Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use; U: Activities of extraterritorial organisations and bodies.

In both figures, it is possible to identify four quadrants/groups of enterprises: those with above-average earnings and with increases above the average of the economy (Q1); those with below-average earnings, but with increases above the average of the economy (Q2); those with below-average earnings and which have grown below the average of the economy (Q3); and those with above-average earnings, but which have grown below the average of the economy (Q4):

- In Q1 (above-average earnings and rate of change), in 2023, the activities of "Mining and quarrying" (B) stand out, with total gross earnings of €1,878 and an increase of 47.1% when compared to 2014 (24.3% in real terms), and the "Activities of extraterritorial organisations and bodies" (U), with total earnings of €2,392 which corresponded to an increase of 32.1% when compared to 2014 (11.7% in real terms).
- In Q2 (below-average earnings and above-average rate of change) the smaller enterprises (up to 49 employees) can be found, those with 1 to 4 employees recording the largest increase in earnings from



2014 to 2023 (48.2% in nominal terms and 25.3% in real terms) and reaching 1,011. This quadrant also includes the private sector with total earnings of 1,396 in 2023, which corresponded to a nominal increase of 32.3% (11.8% considering the inflation).

- In Q3 (below-average earnings and rate of change), the enterprises in "Other service activities" (S) stand out, with the lowest earnings of the group (€1,211 in 2023), having increased nominally by 26.7% and by 7.1% in real terms. The "Arts, entertainment, sports and recreation activities" (R) were those closest to the economy's total earnings (€1,471 vs. €1,505), having registered an increase, since 2014, of 25.8% (6.3% in real terms).
- In Q4 (above-average earnings and below-average rate of change), are the Public Administration enterprises (€2,072; with a nominal increase of 24.6% and a real increase of 5.3%), enterprises with 100 or more employees, of which the ones with 500 or more employees stand out (€1,788; up 21.8% in nominal terms and up2.9% in real terms), and those in "Financial and insurance activities" (K; €2,747; up by 15.3% in nominal terms and down by 2.5% in real terms) and in the activities of "Electricity, gas, steam and air conditioning supply" (D; €3,315; up 16.6% nominal and down 1.4% in real terms).

Table 1. Number of employees and gross monthly earnings per employee (total, regular and base)

	Quarter ended in the month				Year-on-year change			
Portugal	Number of employees	Total gross earnings	Regular gross earnings	Base gross earnings	Number of employees	Total gross earnings	Regular gross earnings	Base gross earnings
	Thousands	Euro			%			
2023								
December	4,676.1	1,670	1,220	1,148	3.5	5.7	6.0	6.3
November	4,685.8	1,590	1,217	1,145	3.6	6.3	6.1	6.4
October	4,673.4	1,384	1,218	1,146	3.9	6.2	6.1	6.3
September	4,674.2	1,441	1,216	1,144	4.0	6.2	6.2	6.4
August	4,671.0	1,602	1,215	1,142	4.1	6.4	6.4	6.6
July	4,656.6	1,593	1,214	1,141	4.3	6.7	6.8	7.0
June	4,619.1	1,542	1,215	1,142	4.4	6.9	6.8	7.0
May	4,575.8	1,384	1,216	1,142	4.5	6.9	6.6	6.9
April	4,533.4	1,367	1,215	1,141	4.6	7.0	6.6	6.8
March	4,502.6	1,361	1,211	1,138	4.6	7.8	7.4	7.5
February	4,489.6	1,414	1,193	1,120	4.5	7.2	7.0	7.1
January	4,509.6	1,605	1,169	1,097	4.7	5.8	6.0	6.1
2022								
December	4,519.3	1,580	1,151	1,079	4.8	4.5	4.4	4.3

**Source:** Calculations by Statistics Portugal using the DMR/SS and the RC/CGA.

Table 1a. Number of employees and gross monthly earnings per employee (total, regular and base)

	Number of	Total gross	Regular gross	Paca grass	Annual change			
Portugal	employees	earnings	earnings	Base gross earnings	Number of employees	Total gross earnings	Regular gross earnings	Base gross earnings
	Thousands	Euro			%			
2023	4,618.0	1,505	1,216	1,143	4.1	6.6	6.6	6.8
2022	4,436.3	1,412	1,141	1,070	5.4	3.7	3.1	3.0
2021	4,207.7	1,362	1,106	1,039	2.2	3.5	3.1	3.0
2020	4,118.1	1,315	1,073	1,009	- 1.0	3.0	3.3	3.3
2019	4,161.3	1,277	1,039	976	3.5	2.8	2.6	2.5
2018	4,018.8	1,241	1,012	953	3.7	2.1	1.7	1.6
2017	3,876.7	1,216	996	938	4.8	1.6	1.3	1.2
2016	3,700.5	1,196	983	926	3.2	1.5	1.2	1.1
2015	3,585.6	1,179	972	916	2.3	0.5	0.4	0.3

**Source:** Calculations by Statistics Portugal using the DMR/SS and the RC/CGA.



#### **TECHNICAL NOTE**

The statistics on "Gross monthly earnings per employee" published with this Press Release are the result of the calculations and analysis performed by Statistics Portugal on the information from the Monthly Statement of Earnings (*Declaração Mensal de Remunerações*) from Social Security (DMR/SS), following a protocol celebrated between Statistics Portugal and the Instituto de Informática, I.P., and the Contributory Relation (*Relação Contributiva*) of *Caixa Geral de Aposentações* (RC/CGA). Initially classified as statistical information under development (published in the StatsLab area of the Statistics Portugal website), it was considered as official statistics as of September 2021.

The gross monthly earnings per employee correspond to the ratio between the sum of all earnings paid by the enterprises and the total number of employees in those enterprises. Hence, its evolution reflects changes in the amount of earnings paid (for example, the payment of bonuses, holiday allowances or overtime work), but also in the number of employees and its composition, namely in terms of non-observed characteristics in this dataset (part-time versus full-time workers; educational level; occupation; years of experience; hours worked; among others).

In the calculations by **enterprise's economic activity** (NACE Rev. 2), the records where it was not possible to match the enterprise with its record on the enterprises' economic activity file compiled by Statistics Portugal (FUE – *Ficheiro de Unidades Estatísticas*) were excluded, which corresponds to 0.4% of enterprises and 0.1% of employees in 2023.

Each employee is counted as many times as the **number of jobs** reported to the SS and CGA. For example, an employee with two jobs in two different enterprises is counted twice. Therefore, the total number of employees corresponds to the total number of jobs. Besides, in the information from the SS besides employees, ship-owners, teachers that own educational institutions, members of statutory bodies, and domestic workers are also included.

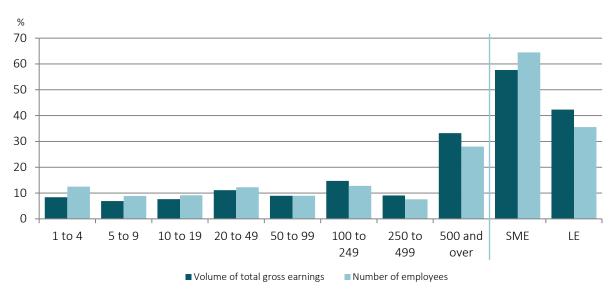
In the figures below, it is shown the percentage distribution of total gross monthly earnings (volume) and the number of employees by economic activity sector (NACE Rev. 2) and enterprise size class in 2023.

#### Distribution of the total gross earnings (volume) and the number of employees by economic activity (NACE Rev. 2) in 2023



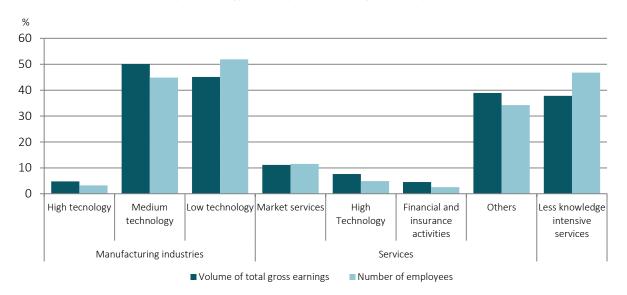
Notes: Sections from NACE-Rev. 2: A: Agriculture, farming of animals, hunting and forestry; **B**: Mining and quarrying; **C**: Manufacturing; **D**: Electricity, gas, steam, cold and hot water and cold air; **E**: Water collection, treatment and distribution; sewerage, waste management and remediation activities; **F**: Construction; **G**: Wholesale and retail trade; repair of motor vehicles and motorcycles; **H**: Transportation and storage; **I**: Accommodation and food service activities; **J**: Information and communication activities; **K**: Financial and insurance activities; **L**: Real estate activities; **M**: Consultancy, scientific and technical activities; **N**: Administrative and support service activities; **O**: Public administration and defence; compulsory social security; **P**: Education; **Q**: Human health and social work activities; **R**: Arts, entertainment, sports and recreation activities; **S**: Other service activities; **T**: Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use; **U**: Activities of extraterritorial organisations and bodies.

## Distribution of the total gross earnings (volume) and the number of employees by enterprise size in 2023



Note: SME: Small and Medium-size Enterprises (up to 249 employees); LE: Large-size Enterprises (250 employees and over).

## Distribution of the total gross earnings (volume) and the number of employees by technology intensity and knowledge intensity in 2023



Notes: High-technology manufacturing industries: includes the NACE Rev. 2 divisions: 21 and 26; Medium-technology manufacturing industries: includes the NACE Rev. 2 divisions: 19, 20, 22 to 25, 27 to 30 and 33; Low-technology manufacturing industries: includes the NACE Rev. 2 divisions: 10 to 18, 31 and 32; Knowledge intensive services: includes the NACE Rev. 2 divisions: 50, 51, 58 to 63, 64 to 66, 69 to 75, 78, 80 and 84 to 93; Market services: includes NACE Rev. 2 divisions: 50, 51, 69 to 71, 73, 74, 78 and 80; High-technology services: includes NACE Rev. 2 divisions: 59 to 63 and 72; Financial and insurance activities: includes NACE Rev. 2 divisions: 64 to 66; Other knowledge intensive services: includes NACE Rev. 2 divisions: 58, 75 and 84 to 93; Less knowledge intensive services: includes the NACE Rev. 2 divisions: 45 to 47, 49, 52, 53, 55 to 56, 68, 77, 79, 81, 82, 94 to 99.

The information received from the DMR/SS includes the sum of earnings by "Social Security Contributory Scheme" and "Earnings Components". The information received from the RC/CGA includes the sum of earnings of the subscribers by "Type of earnings". Despite the name differences, both the "Earnings components" and the "Type of earnings" refer to the earnings components paid to employees.

**Earnings components (SS):** correspond to the classification of earnings of Social Security according to its nature, which cover the following:

- Transport and daily allowances
- Bonuses and other monthly benefits
- Commissions
- Compensations owed for termination of the employment contract
- Holiday allowance
- Fees for rendering services due to the accumulation of positions/duties
- Compensation in intermittent employment contracts
- Regular monthly allowances
- Christmas allowance
- Bonuses and other non-monthly benefits
- Base salary



- Meal allowance
- Overtime work
- Night-time work
- Regular non-monthly allowances
- Armed forces
- Variable earnings
- Paid untaken holidays
- Earnings statements corrections
- Temporary work in higher positions
- Promotions

**Type of earnings (CGA):** correspond to the classification of earnings of *Caixa Geral de Aposentações*, which cover the following:

- Base earnings
- Compensation in intermittent employment contracts
- Seniority payments
- Permanent earnings
- Bonuses and other monthly benefits
- Regular monthly allowances
- Variable earnings
- Transport and daily allowances
- Compensations owed for termination of the employment contract
- Night-time work
- Overtime work
- Meal allowance
- Commissions
- Fees for rendering services due to the accumulation of positions/duties
- Bonuses and other non-monthly benefits
- Holiday allowance
- Paid untaken holidays
- Christmas allowance



#### SOME CONCEPTS

Note on the taxable income applicable to the earning of this Press Release

The total, regular ana base gross monthly earnings of this Press Release only consider the taxable earnings, i.e., the amount of earning that are subject to income tax and contributions to SS or CGA. Thus, is excludes the amounts such as the meal allowance up to €6.00 (from January 2023 onwards) or €9.60, if paid in cash or a meal card.

#### **Gross earnings**

Gross income, in cash or in kind, paid to workers for the hours of work performed or for the work performed during the normal and overtime periods, including the payment of hours not worked (holidays, public holidays and other paid absences) and regular allowances such as those related to food, job position, accommodation or transport, seniority, productivity, attendance, exemption from working hours, painful, dangerous, dirty, shift and night work.

Note: The "gross monthly earning per employee" includes all components of variables Earning components (SS) and Type of earnings (CGA).

#### Regular gross monthly earnings

Gross monthly earnings that correspond to the sum of the basic remuneration with other regular earnings components, namely meal allowances, seniority allowances, bonuses, and other regular monthly payments.

#### Notes:

- From Nature of earnings (SS) only includes the components "Base salary", "Meal allowance", "Regular monthly allowances" and "Bonuses and other monthly benefits". From Type of earnings (CGA) it includes the components "Base earnings", "Seniority payments"; "Permanent earnings", "Bonuses and other monthly benefits" and "Meal allowance"
- In 2023, it corresponded to 80.8% of the total gross monthly earnings.



#### Base earnings

The gross amount, before deduction of taxes and social security contributions, in cash or in kind, paid regularly in the reference period and corresponding to the normal working period.

#### Notes:

- Only includes the component "Base salary" of variable Nature of earnings (SS) and the component "Base earnings" if variable Type of earnings (CGA).
- In 2023, it corresponded to 75.9% if the total gross monthly earnings.

### **Employee**

Person who carries out an activity under the authority and direction of another under the terms of an employment contract, whether subject to written form or not, which entitles him/her to a remuneration that does not depend on the results of the economic unit for which he/she works.

#### Institutional sector

The variable "institutional sector" uses the classification "economic sector (public sector/private sector)", corresponding the S13 sector to the Public Administration (PA) sector as defined in the National Accounts, using as reference the list of entities that belong to the Public Administrations – S13. The private sector corresponds to the total of economy excluding the PA.

#### On year change

The year-on-year change compares the level of the variable in the current quarter with that of the corresponding quarter of the previous year. This change considering a seasonal stable pattern is not affected by this type of fluctuation but may, however, be influenced by specific effects in a given quarter.

#### **REVISIONS**

The data base of DMR is in continuous updating, always existing some share of non-delivered earnings statements, mainly in the last 4 months. The information received from RC/CGA has a definitive character.

The information published with this Press Release that regards the last three reference months (moving quarters ended in those months) will be subject to revisions in the next months. The impact of these revisions, measured by the difference between the estimates now released and the ones published in the last Press Release, are the following:



Revision of the estimates disclosed in the previous Press Release - main indicators -							
	Unit	July 2023	August 2023	September 2023			
Number of enterprises	Thousands	0.1	0.7	2.3			
Number of employees	Thousands		- 0.4	10.3			
Total gross monthly earnings per employee Regular gross monthly earnings per employee Base gross monthly earnings per employee	Euros	1 0 1	1 1 0	3 0 - 1			
, , , , , ,							
Number of enterprises (y-o-y)		0.0	0.1	0.6			
Number of employees (y-o-y)		0.0	0.0	0.2			
Total gross monthly earnings per employee	рр	0.1	0.1	0.3			
Regular gross monthly earnings per employee		0.1	0.0	0.0			
Base gross monthly earnings per employee		0.1	0.0	- 0.2			

Note: y-o-y - Year-on-year rate of change.

#### TREATMENT OF NON-RESPONSES

In order to reduce the level of revisions of the values published for the most recent months, the DMR/SS data were imputed in two situations: 1) of enterprises that are systematically late in sending the information; and 2) of enterprises that, also systematically, do substantial corrections the values reported in previous months.

In the first case, the detection process for missing enterprises only targets those with 10 or more employees. An enterprise is considered as missing if there was an answer in month M-1, but not in month M (M being the last reference month).

In the second case, it is considered that an enterprise has made a substantial correction of the values already reported when the correction is worth €10,000 or more. The detection of these enterprises is ensured by a combination of two methods: 1) an ad hoc criterion; 2) through a supervised Machine Learning algorithm in the form of the Support Vector Machine (SVM).

For a more detailed description of the treatment of non-response and other methodological characteristics of this statistical operation, it is suggested to see the respective <u>methodological document</u>, available on the Statistics Portugal website (only in Portuguese).

Due to rounding, the totals in tables and figures do not always match the sum of parts.

The present Press Release includes data received up until the 18<sup>th</sup> January 2024.

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