

9 February 2023 GROSS MONTHLY EARNINGS PER EMPLOYEE December 2022

## GROSS MONTHLY EARNINGS PER EMPLOYEE INCREASED 4.2%, TO €1,575, IN THE 4<sup>TH</sup> QUARTER OF 2022, HAVING DECREASED 5.2% IN REAL TERMS. IN 2022, THEY INCREASED 3.6% IN NOMINAL TERMS AND DECREASED 4.0% IN REAL TERMS.

The total gross monthly earnings per employee (per job<sup>1</sup>) increased by 4.2% in the quarter ended in December 2022 (4<sup>th</sup> quarter of the year), compared to the same period of 2021, to  $\leq 1,575$ . The regular and the base components of those earnings increased by 4.3% and 4.4%, reaching  $\leq 1,150$  and  $\leq 1,080$ , respectively. In real terms, considering the Consumer Price Index change, the total gross monthly earnings decreased by 5.2%, while the regular and the base monthly earnings decreased by 5.1% and 5.0%, respectively. These results cover 4.5 million jobs, corresponding to Social Security beneficiaries and to *Caixa Geral de Aposentações* subscribers, an increase of 4.8% from the same period of 2021.

Compared to December 2021, the largest increases in total gross earnings were observed in the "Accommodation and food service activities" (section I; 8.0%), in enterprises of 1 to 4 employees (6.1%), in the private sector (5.4%), and in enterprises in "High-technology services" (6.9%). There were no decreases in total earnings and the lowest year-on-year changes were observed in the "Public administration and defence; compulsory social security" (section O; 0.2%), in enterprises of 250 to 499 employees (1.1%), in the public sector (2.0%) and in the "Other knowledge intensive services" (2.5%).

In 2022, the gross monthly earnings per employee increased, compared to 2021, by 3.6%, to  $\leq$ 1,411. The regular component increased by 3.1%, to  $\leq$ 1,140, and the base monthly earnings increased by 3.0%, to  $\leq$ 1,070. The real rate of change decreased by: 4.0%, 4.4% and 4.5%, respectively.

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

In December<sup>2</sup> 2022, the total gross monthly earnings per employee increased by 4.2% (Figure 1), from  $\leq$ 1,511 in December 2021 to  $\leq$ 1,575 one year after. This change is the same as the one observed in September 2022.

<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 in annex.

 $<sup>^{2}</sup>$  The monthly data analysed in this Press Release refer to moving quarters ended in the reference month (for example, the December 2022 estimate corresponds to the 4<sup>th</sup> quarter of 2022), and the series starts in March 2014. The last three reference months are subject to regular revisions as stated in the Technical Note.



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 2022, it stood at  $\leq$ 1,150, while in December 2021 it had been  $\leq$ 1,103, corresponding to an increase of 4.3%. This growth was 0.5 pp higher than in September 2022.

The base<sup>4</sup> gross monthly earnings per employee increased by 4.4%, from  $\leq$ 1,035 in December 2021 to  $\leq$ 1,080 in December 2022. This change was higher than the one observed in September 2022 (up 0.8 pp).

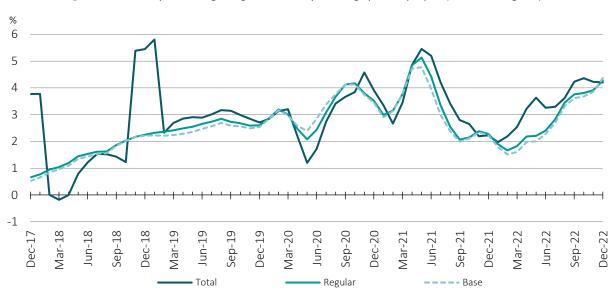


Figure 1. Year-on-year change of gross monthly earnings per employee (total and regular)

**Note:** The significant fluctuations registered in the end of 2017 and 2018 were due to the changes in the payment of the Christmas allowances in the public sector (50% in November 2017, 100% in November 2018), whereas in the previous years they were paid in one-twelfth over the year.

Adjusting for the inflation measured by the Consumer Price Index (CPI) rate of change, which was 9.9% in the quarter ended in December 2022, the year-on-year real rates of change of the gross earnings (total, regular and base) were, respectively, -5.2%, -5.1%, and -5.0% (Figures 2, 3 and 4).

<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.

<sup>&</sup>lt;sup>4</sup> For more information about the differences between the earnings components, see the Technical Note.



% 6 4 2 ~ 0 -2 -4 -6 Mar-18 Jun-18 Sep-18 Dec-18 Jun-19 Sep-19 Dec-19 Jun-20 Sep-20 Jun-22 Mar-19 Dec-20 Mar-21 Jun-21 Sep-21 Dec-21 Mar-22 Sep-22 Dec-22 Dec-17 Mar-20 Nominal - Real

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

**Note:** The significant fluctuations registered in the end of 2017 and 2018 were due to the changes in the payment of the Christmas allowances in the public sector (50% in November 2017, 100% in November 2018), whereas in the previous years they were paid in one-twelfth over the year.

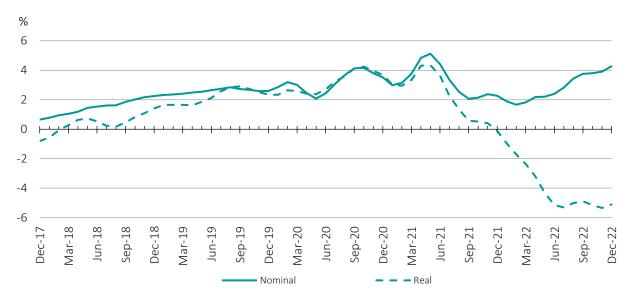


Figure 3. Year-on-year change of regular gross monthly earnings per employee (nominal and real)



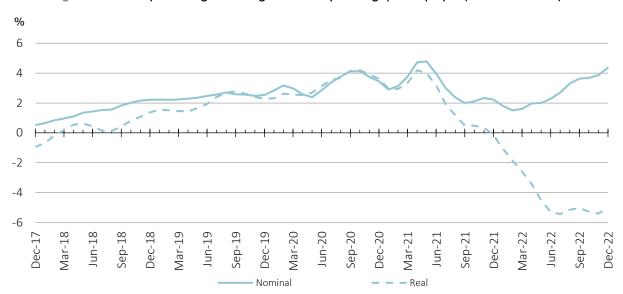


Figure 4. Year-on-year change of base gross monthly earnings per employee (nominal and real)

In 2022, the gross monthly earnings per employee stood at  $\leq 1,411$ , having increased 3.6% in nominal terms and decreased by 4.0% in real terms (in 2021, both had annual increases of 3.5% and 2.2%, respectively). In the same period, the annual average of the regular gross monthly earnings per employee was  $\leq 1,140$ , following a nominal increase of 3.1% and a real decrease of 4.4% (in 2021, it had increased by 3.1% and 1.8%, respectively). Still in 2022, the annual average of the base gross monthly earnings per employee stood at  $\leq 1,072$ , having increased by 3.0% in nominal terms and decreased 4.5% in real terms (3.0% and 1.7% in nominal and real terms, respectively in 2021). In 2022, the CPI had a positive rate of change of 7.8% (it had been 1,3% in 2021).

## 2. Gross earnings by economic activity

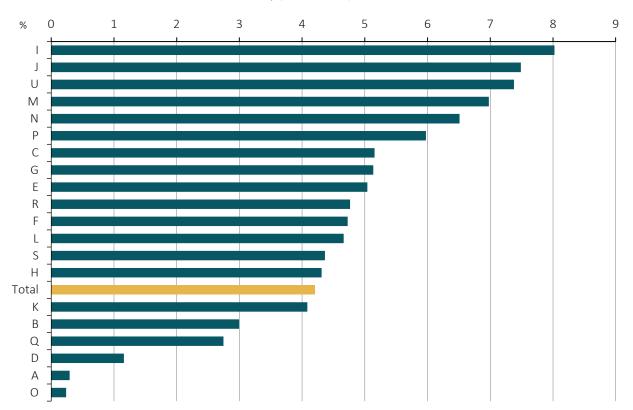
In December 2022, the total earnings ranged from  $\notin$ 933, in the activities of "Agriculture, farming of animals, hunting and forestry" (section A), to  $\notin$ 3,521, in the activities of "Electricity, gas, steam, cold and hot water and cold air" (D) (Table 2 of the Annex file). Similarly, the regular and base earnings registered the lowest value in section A ( $\notin$ 726 and  $\notin$ 703, respectively) and the highest in the activities of section D ( $\notin$ 2,574 and  $\notin$ 2,405; respectively).

Compared to the same period of 2021, the major increases in total earnings were observed in the "Accommodation and food service activities" (I; 8.0%) followed by "Information and communication activities" (J; 7.5%). On the other hand, the lowest increases were observed in the "Public administration and defence; compulsory social security" (O; 0.2%) and in the "Agriculture, farming of animals, hunting and forestry" (A; 0.3%) (Figure 5). In real terms, after adjusting for the Consumer Price Index (CPI) rate of change, there were decreases in all sections of the Statistical classification of economic activities (NACE), between 1.7% in section I and 8.8% in section O.



The largest increases of the regular earnings were recorded in "Activities of extraterritorial organisations and bodies" (U; 9.5%) and in the "Information and communication activities" (J; 8.2%). The lowest year-on-year change was observed in the activities of "Agriculture, farming of animals, hunting and forestry" (A; 0.2%). Considering the inflation rate, decreases were recorded in all activities, between 0.4% of section U and 8.8% of section A.

Regarding the base earnings, the activities with the largest year-on-year increases were those in "Information and communication activities" (J; 8.6%) and in "Activities of extraterritorial organisations and bodies" (U; 7.7%), while the lowest increase was observed in the "Agriculture, farming of animals, hunting and forestry" (A; 0.2%). In real terms, base earnings decreased in all NACE sections, between 1.2% of section J and 8.8% of section A.



# Figure 5. Year-on-year change of total gross monthly earnings per employee by economic activity (NACE Rev. 2) in December 2022

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 2022, the gross monthly earnings were higher in "Electricity, gas, steam and air conditioning supply" (D;  $\in$ 3,151) and were lower in the activities of "Agriculture, farming of animals, hunting and forestry" (A;  $\in$ 885). Compared to 2021, the highest increased had occurred in the "Consultancy, scientific and technical activities" (M; 7.0%) and the lowest in the activities of "Public administration and defence; compulsory social security" (O; 0.8%). In real terms, the total earnings decreased in all activities, between 0.9% of section M and 6.7% of section O.

## 3. Gross earnings by enterprise size

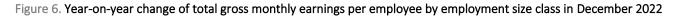
In December 2022, the total gross monthly earnings per employee ranged from  $\leq 1,027$ , in enterprises with 1 to 4 employees, to  $\leq 1,909$ , in enterprises with 250 to 499 employees (Table 3 of the Annex file). Similarly, the average values from the regular and the base earnings ranged from the size class of 1 to 4 employees ( $\leq 831$  and  $\leq 820$ , respectively) to the size class of 250 to 499 employees ( $\leq 1,370$  and  $\leq 1,276$ , respectively).

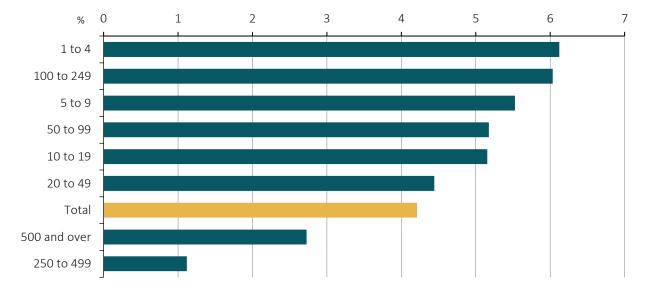
Comparing to the same period of the last year (December 2021), the largest positive changes of total earnings were observed in enterprises of 1 to 4 employees (6.1%) and of 100 to 249 employees (6.0%), while the lowest year-on-year change was observed in the size class of 250 to 499 employees (1.1%; Figure 6). Taking into account the inflation, the total earnings decreased in all enterprises' sizes, between 3.4% of those with 1 to 4 employees and 8.0% of those with 250 to 499 employees.

The same pattern was observed for the regular earnings, the year-on-year positive changes ranged between 6.4% in the smallest enterprises (1 to 4 employees) and 1.2% in enterprises of 250 to 499 employees. In real terms, a negative year-on-year rate of change was observed in those enterprise size groups: 3.2% and 7.9%, respectively. The base earnings year-on-year nominal increases ranged from 6.6% in enterprises with 100 to 249 employees and 0.5% in those with 250 to 499 employees. In real terms both decreased, 3.0% and 8.5%, respectively.

In 2022, the gross monthly earnings ranged from  $\notin$ 941, in enterprises of 1 to 4 employees, to  $\notin$ 1,706, in enterprises of 250 to 499 employees. These size classes were the ones with the highest year-on-year increase (6.3%) and decrease (1.1%), respectively. In real terms, the total earnings decrease, regardless of the enterprise size class, between 1.5% in the smallest enterprises (1 to 4 employees) and 6.3% in the enterprises with 250 to 499 employees.







## 4. Gross earnings by institutional sector

The total earnings of the institutional<sup>5</sup> sector of Public Administration (PA) (as defined by the National Accounts)<sup>6</sup> increased by 2.0%, from  $\leq 2,154$  in December 2021 to  $\leq 2,198$  in December 2022. In the same period, the regular component increased by 2.1%, from  $\leq 1,564$  to  $\leq 1,597$ , while the base earnings increased by 2.2%, from  $\leq 1,474$  to  $\leq 1,507$  (Figures 7 and 8). In real terms, in PA, the total, regular and base earnings decreased 7.2%, 7.1% and 7.0%, respectively.

In the private sector, earnings have increased more significantly: the total earnings recorded a year-on-year increase of 5.4%, from  $\leq$ 1,378 in December 2021 to  $\leq$ 1,452 a year after; the regular component also increased by 5.4%, from  $\leq$ 1,007 to  $\leq$ 1,062; and the base earnings increased by 5.5%, from  $\leq$ 943 to  $\leq$ 995. Taking into consideration the inflation, the year-on-year decreases in the three types of earnings were lower than in the PA: 4.1% in the total and regular earnings and 4.0% in the base earnings.

The average earnings differences between the public and private sector reflect, among others, differences in the tasks performed and in the employees' qualifications. Thus, it is observed that the employees in the public sector have, on average, a higher educational level<sup>7</sup>: in the public sector, 55.2% of the employees had completed the

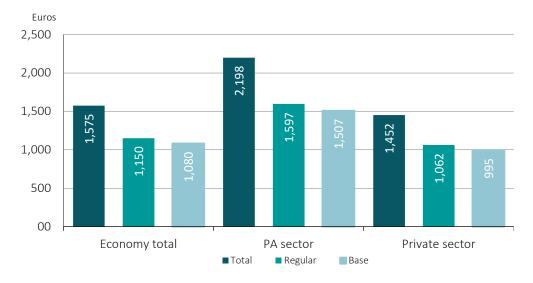
 $<sup>^{\</sup>scriptscriptstyle 5}$  As defined in the Technical Note.

<sup>&</sup>lt;sup>6</sup> The universe of entities that compose the institutional sector of the Public Administration is subject to updates twice a year.

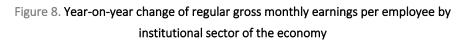
<sup>&</sup>lt;sup>7</sup> These results are the most recent at the date of disclosure of this Press Release. For the public sector, we mention the data released by the Directorate General for Administration and Public Employment (DGAEP), whose coverage is close to the public sector defined here, referring to 30 June 2022 and covering the entire country. For the private sector, the percentages were calculated based on Table 36 of the "Lists of Personnel 2021 (Annex A) from "*Relatório Único*" report", made available by the Strategy and Planning Office of the Ministry of Labour, Solidarity and Social Security. The data of this report relate to October 2021 and cover Mainland Portugal.

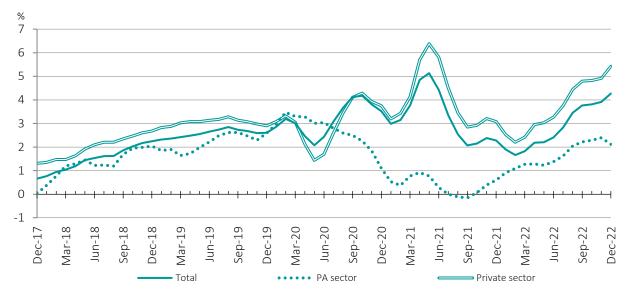


tertiary education (22.7% in the private sector), 26.6% had the upper secondary or post-secondary non-tertiary education (32.4% in the private sector), and 18.3% had, at most, the lower secondary education (44.9% in the private sector).



# Figure 7. Gross monthly earnings per employee (total, regular and base) by institutional sector of the economy in December 2022





In 2022, the total earnings of PA increased by 2.0%, from  $\leq$ 1,914 in 2021 to  $\leq$ 1,951 a year after. This increase was higher than a year before (0.8%), but below the increase observed in the private sector of the economy (4.6%, from  $\leq$ 1,245 to  $\leq$ 1,302). Taking into account the effect of inflation, in real terms, the total earnings of PA



decreased by 5.6% from 2021 to 2022, having decreased by 0.5% between 2020 and 2021. In the private sector, the real annual decrease was less pronounced (3.1%), it observed a real increase of 3.0% in 2021.

## 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 Figure 9).

In December 2022, the total gross monthly earnings per employee in the "Manufacturing industries" (Section C of NACE Rev. 2) was  $\in$ 1,477, corresponding to a year-on-year increase of 5.2%. In this section, the highest total gross earnings were observed in the "High-technologic manufacturing industries" ( $\leq$ 2,196), to which corresponded a year-on-year increase of 4.7%. In the "Low-tech manufacturing industries", the total earnings averaged  $\leq$ 1,283 and registered the highest year-on-year rate of change in the section (5.1%) tied with the "Medium-technology manufacturing industries", which total earnings stood at  $\leq$ 1,654.

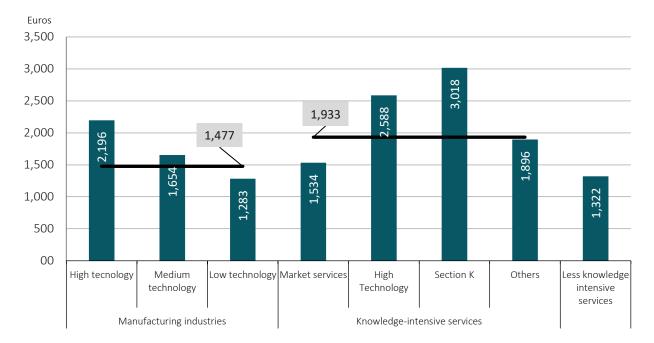
In the same month, the total gross monthly earnings per employee in "Knowledge intensive services enterprises" was  $\leq 1,933$ , being higher among "Financial and insurance activities" ( $\leq 3,018$ ) and lower in the "Market services enterprises" ( $\leq 1,534$ ). These earnings have increased, when compared to December 2021, by 3.8%, 4.1% and 6.9%, respectively.

Compared to December 2021, the average total gross earnings of the "Less knowledge intensive enterprises" increased above Services' total (5.1% vs. 4.1%), reaching €1,322.

Taking into account the inflation, year-on-year decreases were observed in all groups under analysis: considering the technology intensity, the highest decrease was among the "High-technologic manufacturing industries" (4.7%); whereas with regard to knowledge intensity, the "Other knowledge intensive services" recorded the highest real decrease (6.7%).



Figure 9. Number of employees and gross monthly earnings per employee (total) by technology intensity and knowledge intensity in December 2022



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 2022, total gross monthly earnings per employee in the activities of "Manufacturing industries" ranged between  $\leq 1,146$  in the "Low-technology manufacturing industries" and  $\leq 1,951$  in the "High-technology manufacturing industries", with an average value of  $\leq 1,316$ . The annual increase of total earnings in these enterprises was, respectively, 5.0%, 4.3% and 4.5%.

In "Knowledge-intensive services", the total earnings were, on average, €1,720, ranging between €1,376 in enterprises of "Market services" and €2,657 in enterprises of "Financial and insurance activities". Between 2021 and 2022, these earnings increased, respectively, by 2.9%, 4.6% and 2.0%. At last, the total gross earnings of enterprises of "Less knowledge intensive services" stood at €1,190, having increased by 4.6% compared to 2021.

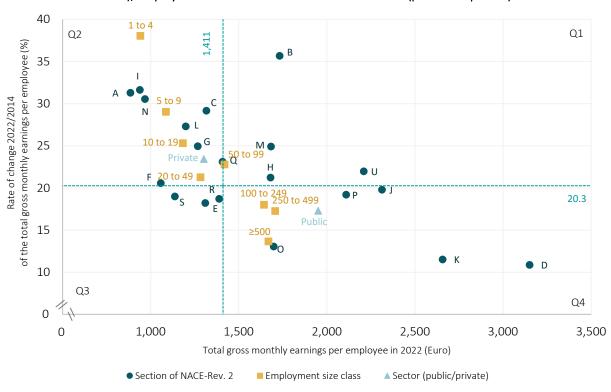
In real terms, decreases were observed regardless of the technological or knowledge intensity, the largest decreases were registered in the "Medium-technology manufacturing industries" (3.6%) and in the "Financial and insurance activities" and in "Other knowledge intensive services" (5.4% in both).



## 6. Summary of annual results

Figures 10 and 11 show, respectively, the total gross and real monthly earnings per employee in 2022 and the rate of change in earnings in the period from 2014 to 2022. In this period, total earnings increased by 20.3%, from €1,173 to €1,411 and the Minimum Wage increased by 45.4%, from €485 to €705<sup>8</sup>. In real terms, the total earnings increased by 5,9%, while the Minimum Wage increased by 28.2%<sup>9</sup>.

## Figure 10: Total gross monthly earnings per employee in 2022 and rate of change since 2014 by economic activity (NACE-Rev. 2), employment size class and the institutional sector (public and private).



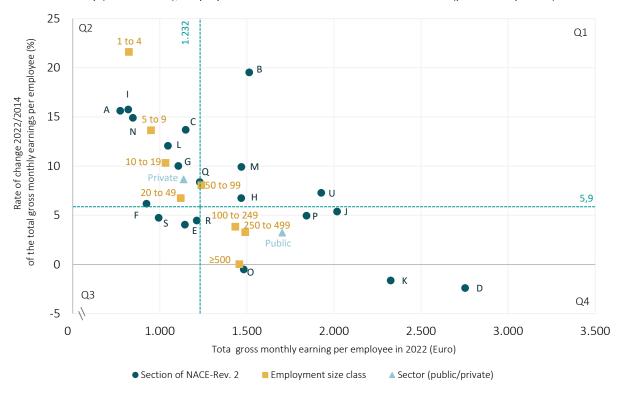
Sections from NACE-Rev. 2: A: Agriculture, farming of animals, hunting and forestry; B: Mining and quarrying; C: Manufacturing; D: Electricity, gas, steam, cold and hot water and cold air; E: Water collection, treatment and distribution; sewerage, waste management and remediation activities; F: Construction; 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>8</sup> In 2014, the Minimum Wage was €485 from January to September and €505 from October to December.

<sup>&</sup>lt;sup>9</sup> The Minimum Wage was deflated to the mean prices of 2014.



Figure 11: Total gross monthly earnings per employee in 2022 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 grew below the average of the economy (Q3); and those with above-average earnings, but which grew below the average of the economy (Q4):

- In Q1 (above-average earnings and change ), in 2022, the activities of "Mining and quarrying" (B) stand out, with total gross earnings of €1,732 and an increase of 35.7% compared to 2014 (19.5% in real terms), and the "Activities of extraterritorial organisations and bodies" (U), with total earnings of €2,209 which corresponds to an increase of 22.0% compares to 2014 (7.3% in real terms).
- In Q2 (below-average earnings and above-average change) we can find the smaller enterprises (up to 49 employees), those with 1 to 4 employees recorded the largest increase in earnings from 2014 to 2022



(38.0% in nominal terms and 21.6% in real terms), to  $\notin$ 941, stands out. This quadrant also includes the private sector with total earnings of  $\notin$ 1,245 in 2022, a nominal increase of 23.4% (8.7% real).

In Q3 (below-average earnings and change ), the enterprises in "Other service activities" (S) stand out, with the lowest earnings of the group (€1,138 in 2022) having increased nominally 19.0% and 4.8% in real terms. The "Arts, entertainment, sports and recreation activities" (R) were the closest to the economy's total earnings (€1,389 vs. €1,411) having registered an increase, since 2014 of 18.7% (4.5% in real terms).

In Q4 (above-average earnings and below-average change), are the Public Administration enterprises ( $\leq$ 1,951; nominal increase of 17.3% and a 3.2% real increase), with 100 or more employees, of which the ones with 500 or more employees stand out ( $\leq$ 1,669; 13.7% in nominal terms and a null real change), and those in "Financial and insurance activities" ( $\leq$ 2,657; nominal change of 11.5% and -1.6% real change) and in the activities of "Electricity, gas, steam and air conditioning supply" ( $\leq$ 3,151; 10.9% nominal and -2.4% real).



Table 1. Number of employees an	d gross monthly ear	nings per employee (	total, regula	r 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			9	6	
2022								
December	4,516.7	1,575	1,150	1,080	4.8	4.2	4.3	4.4
November	4,519.1	1,495	1,147	1,076	5.1	4.2	3.9	3.9
October	4,499.5	1,303	1,148	1,078	5.4	4.4	3.8	3.7
September	4,495.3	1,357	1,145	1,075	5.5	4.2	3.8	3.6
August	4,485.5	1,506	1,142	1,071	5.7	3.6	3.4	3.3
July	4,465.8	1,493	1,137	1,066	5.8	3.3	2.8	2.7
June	4,424.7	1,442	1,137	1,067	6.0	3.3	2.4	2.3
May	4,377.0	1,295	1,140	1,069	6.0	3.6	2.2	2.0
April	4,335.8	1,277	1,140	1,069	5.8	3.2	2.2	2.0
March	4,305.7	1,262	1,128	1,058	5.4	2.5	1.8	1.6
February	4,294.9	1,319	1,114	1,045	4.9	2.2	1.7	1.5
January	4,307.9	1,517	1,103	1,034	4.4	2.0	1.9	1.8
2021								
December	4,310.5	1,511	1,103	1,035	4.2	2.2	2.3	2.2

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

	Number of	Total gross earnings	Regular gross earnings	Base gross earnings	Annual change			
Portugal	Number of employees				Number of employees	Total gross earnings	Regular gross earnings	Base gross earnings
	Thousands	Euro			%			
2022	4,435.6	1,411	1,140	1,070	5.4	3.6	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

## $\label{eq:table_$

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).

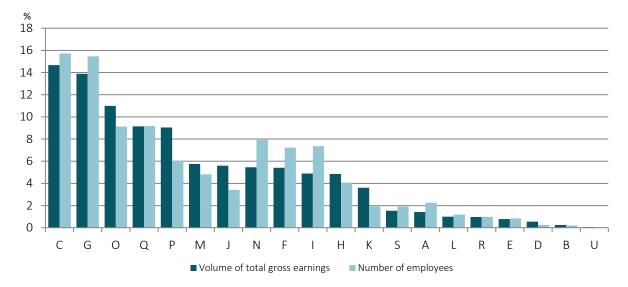
In the calculations by **enterprise's economic activity** (NACE Rev. 2), the records where it was not possible to match the enterprise with its record on the enterprises' economic activity file compiled by Statistics Portugal (FUE – *Ficheiro de Unidades Estatísticas*) were excluded, which corresponds to 0.4% of enterprises and 0.1% of employees in 2022.

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 2022.



Distribution of the total gross earnings (volume) and the number of employees by economic activity (NACE Rev. 2) in 2022



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 2022

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



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 €5.20 (from October 2022 onwards) or €7.63, 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 2022, 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 2022, it corresponded to 75.8% 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 3 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 2022	August 2022	September 2022				
Number of enterprises	Thousands	- 0.3	- 0.3	1.3				
Number of employees	mousanus	- 1.8	0.3	14.4				
Total gross monthly earnings per employee		1	3	4				
Regular gross monthly earnings per employee	Euros	1	1	0				
Base gross monthly earnings per employee		0	0	- 1				
Number of enterprises (y-o-y)		- 0.1	- 0.1	0.3				
Number of employees (y-o-y)		- 0.1	0.0	0.3				
Total gross monthly earnings per employee	рр	0.1	0.1	0.2				
Regular gross monthly earnings per employee		0.0	0.0	0.0				
Base gross monthly earnings per employee		0.0	0.0	- 0.1				

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 available 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 on 24<sup>th</sup> January 2023.

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