



BY INSTITUTIONAL SECTOR, ONLY THE PRIVATE SECTOR RECORDED REAL YEAR-ON-YEAR INCREASES IN EARNINGS IN THE 1ST QUARTER OF 2023

The total gross monthly earnings per employee (per job¹) increased by 7.4%, to €1,355, in the quarter ended in March 2023 (1st quarter of the year), compared to the same period of 2022. The regular and the base components of those earnings increased by 7.3% and 7.6%, reaching €1,211 and €1,138, respectively. In real terms, considering the Consumer Price Index change, the total and regular gross monthly earnings decreased by 0.6%, while the base monthly earnings decreased by 0.4%. These results cover 4.5 million jobs, corresponding to Social Security beneficiaries and to *Caixa Geral de Aposentações* subscribers, an increase of 4.2% from the same period of 2022.

Compared to March 2022, the largest increases in total gross monthly earnings were observed in the “Activities of extraterritorial organisations and bodies” (section U; 13.2%), in enterprises of 1 to 4 employees (8.6%), in the private sector (8.3%), and in enterprises in “Knowledge-intensive market services” (10.5%). There were no decreases in total gross monthly earnings and the lowest year-on-year changes were observed in the “Public administration and defence; compulsory social security” (section O; 3.6%), in enterprises of 250 to 499 employees (4.4%), in the public sector (5.4%) and in the “Financial and insurance activities” (4.2%).

1. Gross monthly earnings per employee and by earnings components

In March² 2023, the total gross monthly earnings per employee (per job¹) increased by 7.4% (Figure 1), from €1,262 in March 2022 to €1,355 one year after. This change is higher than the one observed in December 2022.

The regular gross monthly earnings per employee exclude, among other earnings components, the Christmas, and Holidays allowances and, thus, have a less seasonal behaviour³. In March 2023, it stood at €1,211, while in March 2022 it had been €1,128, corresponding to an increase of 7.3%. This growth was 3.0 pp higher than in December 2022.

¹ 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.

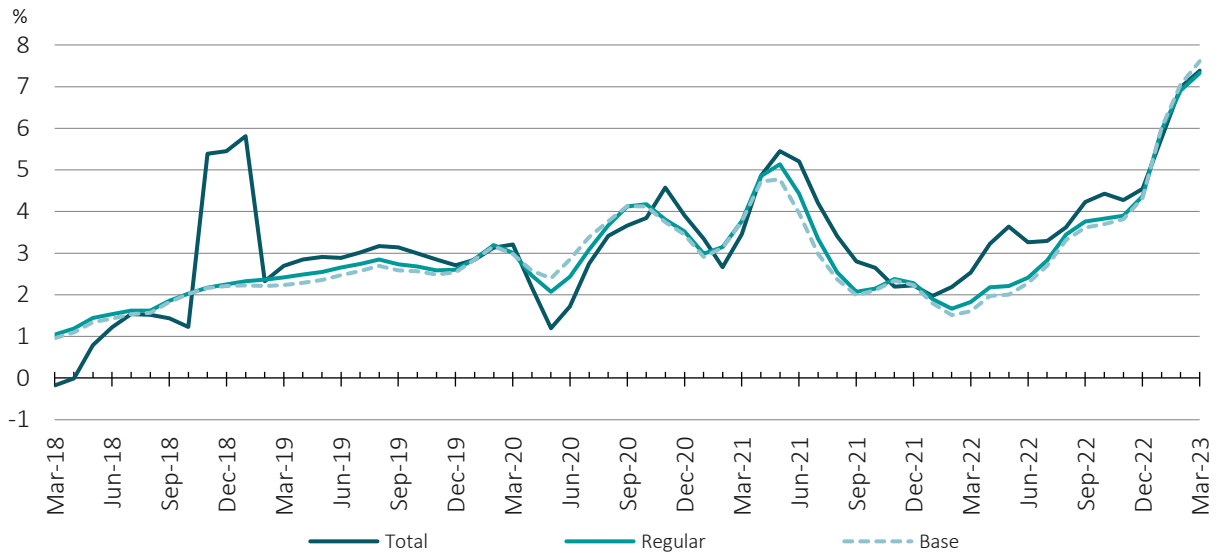
² The monthly data analysed in this Press Release refer to moving quarters ended in the reference month (for example, the March 2023 estimate corresponds to the 1st quarter of 2023), and the series starts in March 2014. The last three reference months are subject to regular revisions as stated in the Technical Note.

³ For a more detailed description of the earnings components included in the total and in the regular earnings, see the Technical Note.



The base⁴ gross monthly earnings per employee increased by 7.6%, from €1,058 in March 2022 to €1,138 in March 2023. This change was higher than the one observed in December 2022 (4.3 pp).

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



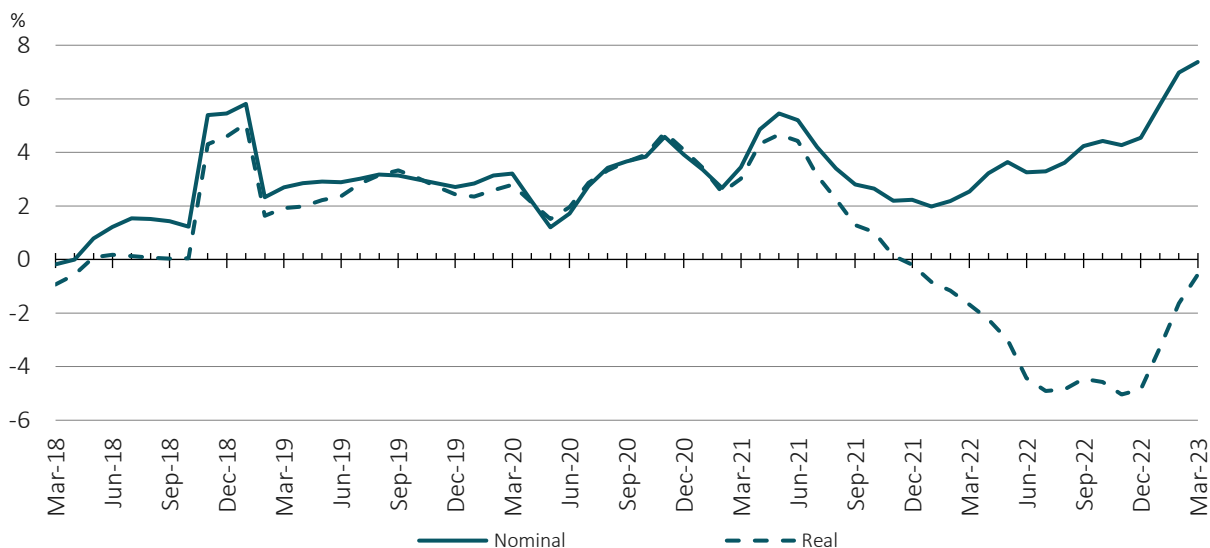
Note: The significant fluctuations registered in the end of 2017 and 2018 were due to the changes in the payment of the Christmas allowances in the public sector (50% in November 2017, 100% in November 2018), whereas in the previous years they were paid in one-twelfth over the year.

Adjusting for the inflation measured by the Consumer Price Index (CPI) rate of change, which was 8.0% in the quarter ended in March 2023, the year-on-year real rates of change of the gross earnings (total, regular and base) were, respectively, -0.6%, -0.6%, and -0.4% (Figures 2, 3 and 4).

⁴ For more information about the differences between the earnings components, see the Technical Note.



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)

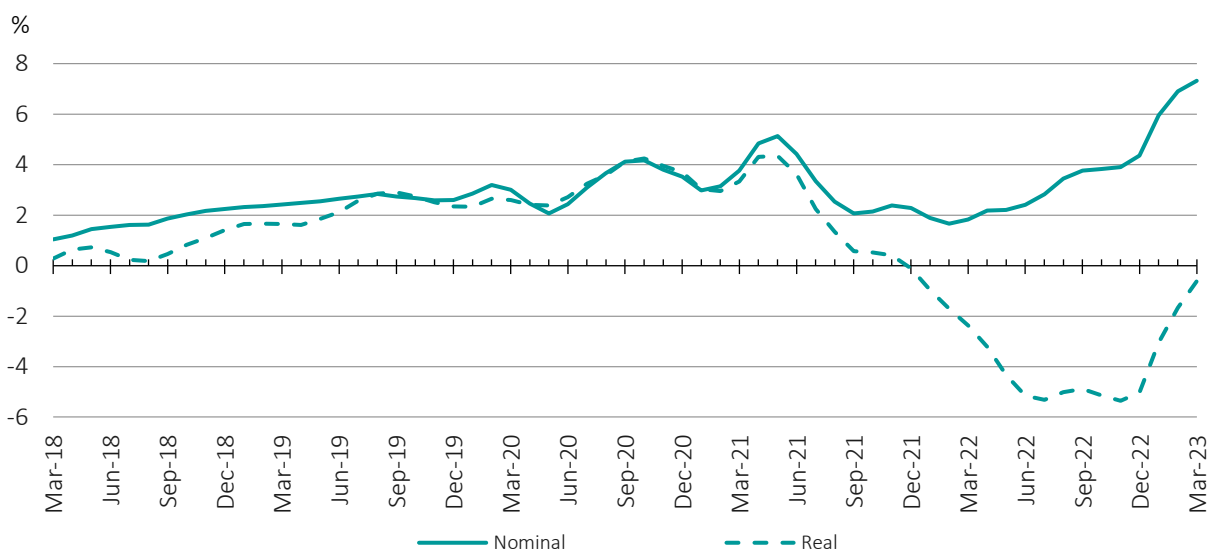
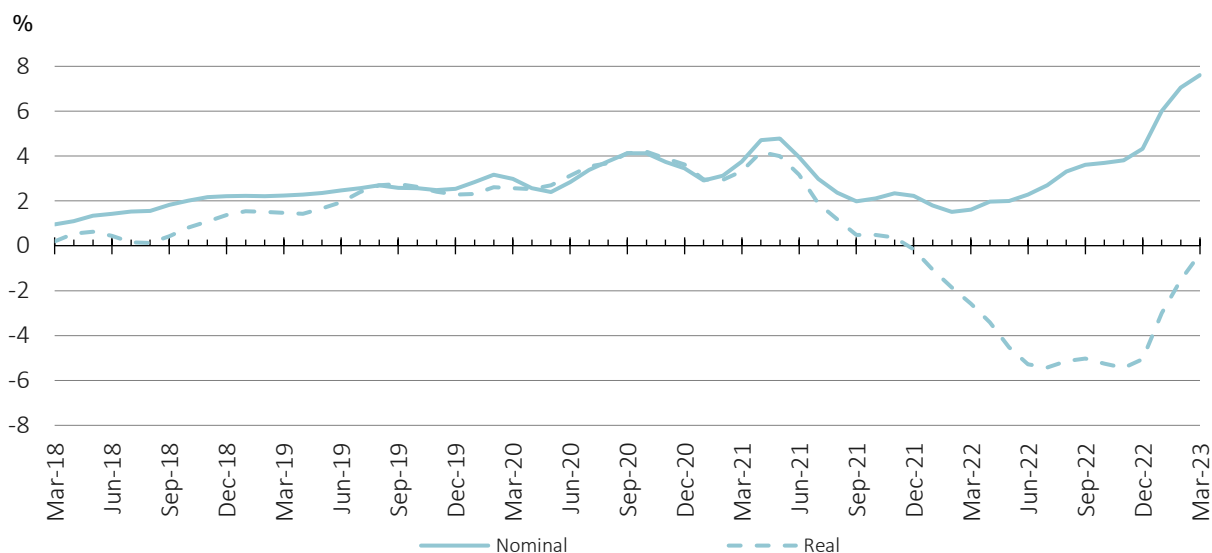




Figure 4. Year-on-year change of base gross monthly earnings per employee (nominal and real)



2. Gross earnings by economic activity

In March 2023, the total earnings ranged from €857, in the activities of “Agriculture, farming of animals, hunting and forestry” (section A), to €3,064, 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 (€773 and €752, respectively) and the highest in the activities of section D (€2,668 and €2,457; respectively).

Compared to the same period of 2022, the major increases in total earnings were observed in the “Activities of extraterritorial organisations and bodies” (U; 13.2%) followed by “Electricity, gas, steam, cold and hot water and cold air” (D; 12.2%). On the other hand, the lowest increases were observed in the “Public administration and defence; compulsory social security” (O; 3.6%) and in the “Financial and insurance activities” (K; 4.2%) (Figure 5). In real terms, after adjusting for the Consumer Price Index (CPI) rate of change, in contrast to December 2022, in March 2023 some sections of the Statistical classification of economic activities (NACE) had positive changes, being the highest in the “Activities of extraterritorial organisations and bodies” (U; 4.8%). Nonetheless, 11 sections registered negative rates of change in total earnings, the highest real decrease was in the section O (4.1%).

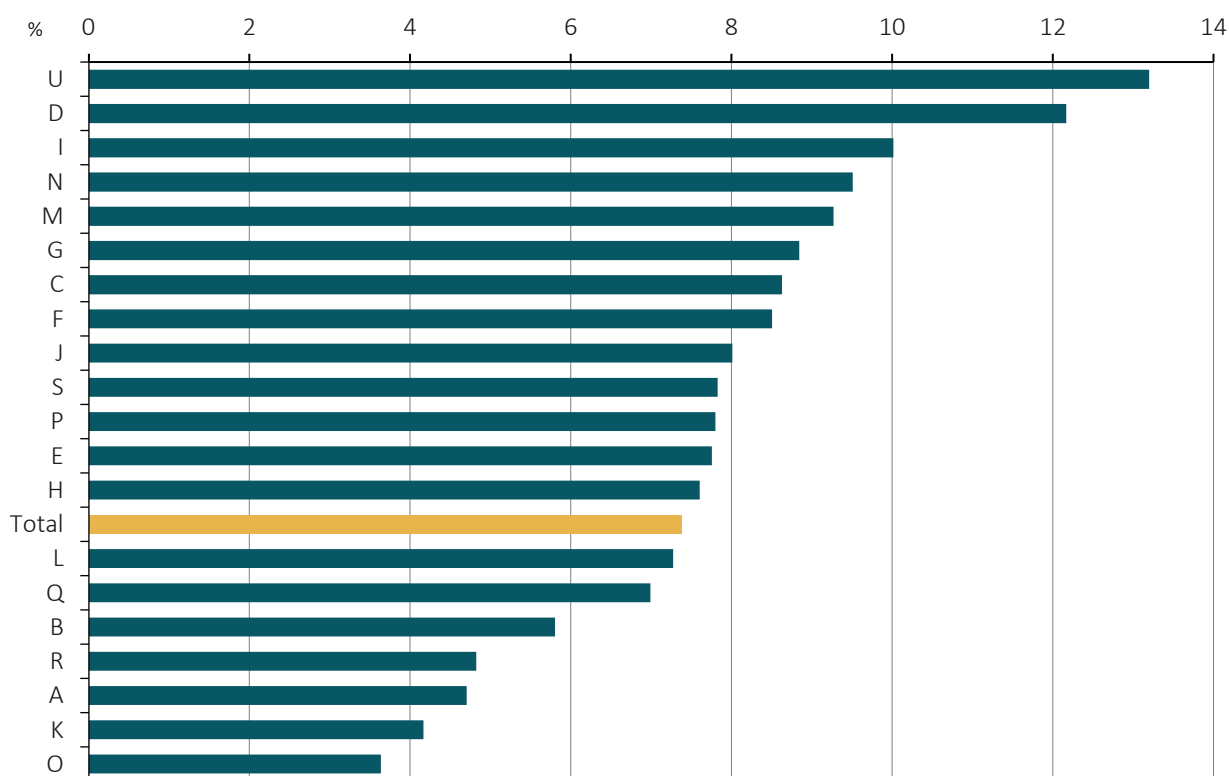
The largest increases of the regular earnings were recorded in “Activities of extraterritorial organisations and bodies” (U; 11.2%) and in the “Administrative and support service activities” (N; 10.2%). The lowest year-on-year change was observed in the activities of “Public administration and defence; compulsory social security” (O; 3.4%). Considering the inflation rate, positive relative changes between 0.3% in section F (“Construction”) and 3.0% of section U were observed, and the negative relative changes ranged between 0.2% in section P (“Education”) and 4.2% in section O.

Regarding the base earnings, the activities with the largest year-on-year increases were in the “Administrative and support service activities” (N; 10.3%) and in the “Accommodation and food service activities” (I; 9.7%), while



the lowest increase was observed in the “Electricity, gas, steam, cold and hot water and cold air” (D; 3.4%). In real terms, the highest positive base earnings relative change was in the section N (2.1%) and the largest decrease in section D (4.3%).

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



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.

3. Gross earnings by enterprise size

In March 2023, the total gross earnings ranged from €940, in enterprises with 1 to 4 employees, to €1,591, in enterprises with 500 or more employees (Table 3 of the Annex file). The average values from the regular and the base earnings ranged from the size class of 1 to 4 employees (€878 and €867, respectively) to the size class of 250 to 499 employees (€1,428 and €1,329, respectively).

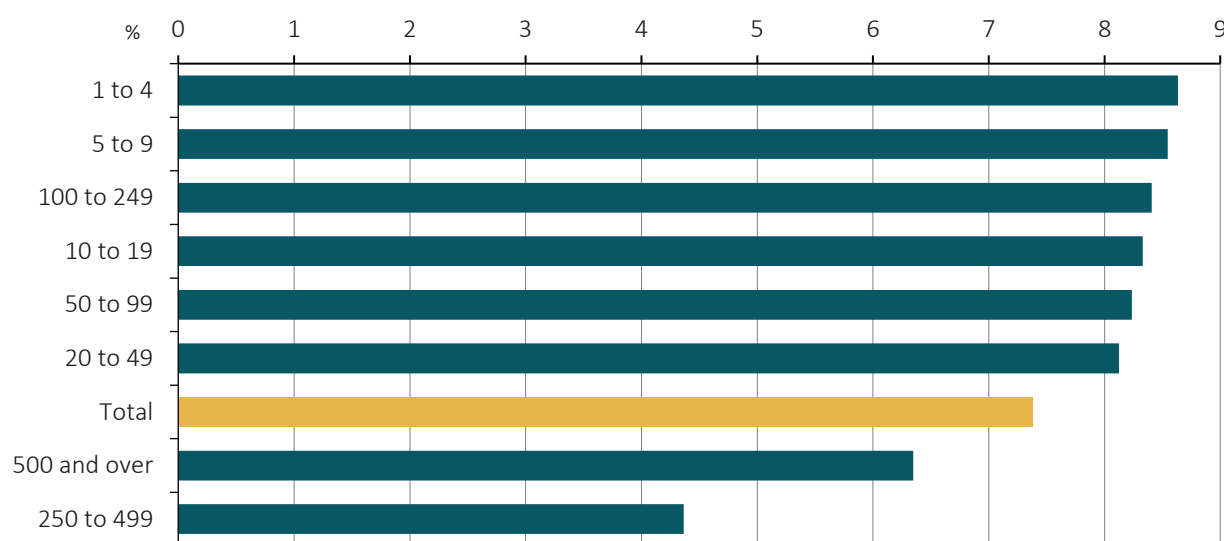


Comparing to the same period of the last year (March 2022), the largest positive changes of total earnings were observed in enterprises of 1 to 4 employees (8.6%) and of 5 to 9 employees (8.5%), while the lowest year-on-year change was observed in the size class of 250 to 499 employees (4.4%; Figure 6). The real total earnings increased in enterprises with 1 to 4 employees (0.6%) but decreased 1.5% in those with 500 or more employees and 3.4% in those with 250 to 499 employees.

Similarly, regarding regular earnings, the year-on-year positive changes ranged between 3.9% in enterprises with 250 to 499 employees and 8.9% in the smallest enterprises (1 to 4 employees). In real terms, a negative year-on-year rate of change was observed in the largest enterprises (250 to 499 employees and 500 or more employees; 3.8% and 1.8%, respectively), while in the smallest enterprises (1 to 4 employees) there were an increase of 0.8%.

The base earnings year-on-year nominal increases ranged from 3.1% in enterprises with 250 to 499 employees and 9.0% in those with 1 to 4 employees and of 100 to 249 employees. In real terms, these changes corresponded to a decrease of 4.5% and an increase of 0.9%, respectively.

Figure 6. Year-on-year change of total gross monthly earnings per employee by enterprise size class in March 2023



4. Gross earnings by institutional sector

The total earnings of the institutional⁵ sector of Public Administration (PA) (as defined by the National Accounts)⁶ increased by 5.4%, from €1,676 in March 2022 to €1,765 in March 2023. In the same period, the regular

⁵ As defined in the Technical Note.

⁶ The universe of entities that compose the institutional sector of the Public Administration is subject to updates twice a year.

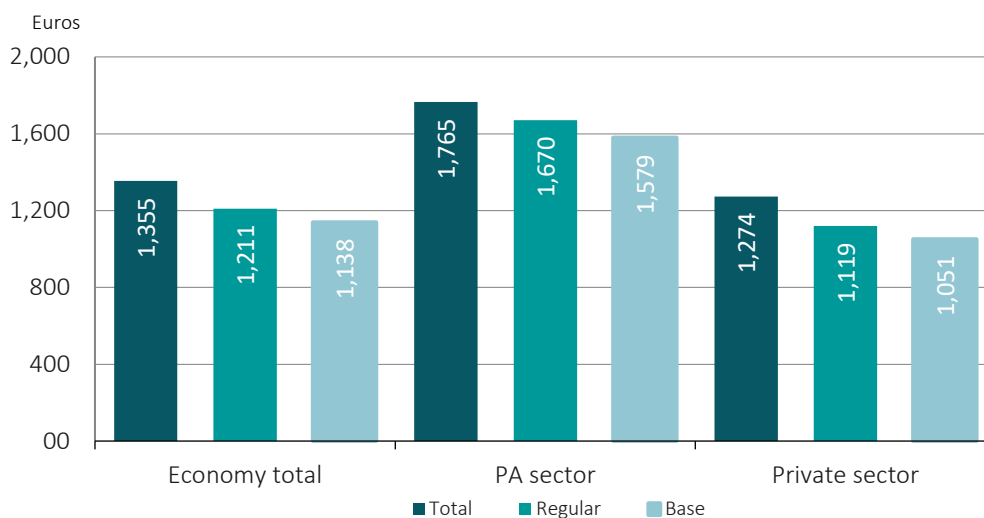


component increased by 5.0%, from €1,591 to €1,670, while the base earnings increased by 5.4%, from €1,499 to €1,579 (Figures 7 and 8). In real terms, in PA, the total, regular and base earnings decreased 2.5%, 2.8% and 2.4%, respectively.

In the private sector, earnings have increased more significantly: the total earnings recorded a year-on-year increase of 8.3%, from €1,176 in March 2022 to €1,274 a year after; the regular component increased by 8.5%, from €1,031 to €1,119; and the base earnings increased by 8.8%, from €966 to €1,051. The real year-on-year increases in the private sector were 0.3% in total, 0.5% in regular and 0.7% in 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 employees in the public sector have, on average, a higher educational level⁷: in the public sector, 55.2% of the employees had completed tertiary education (22.7% in the private sector), 26.6% had conclude an 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).

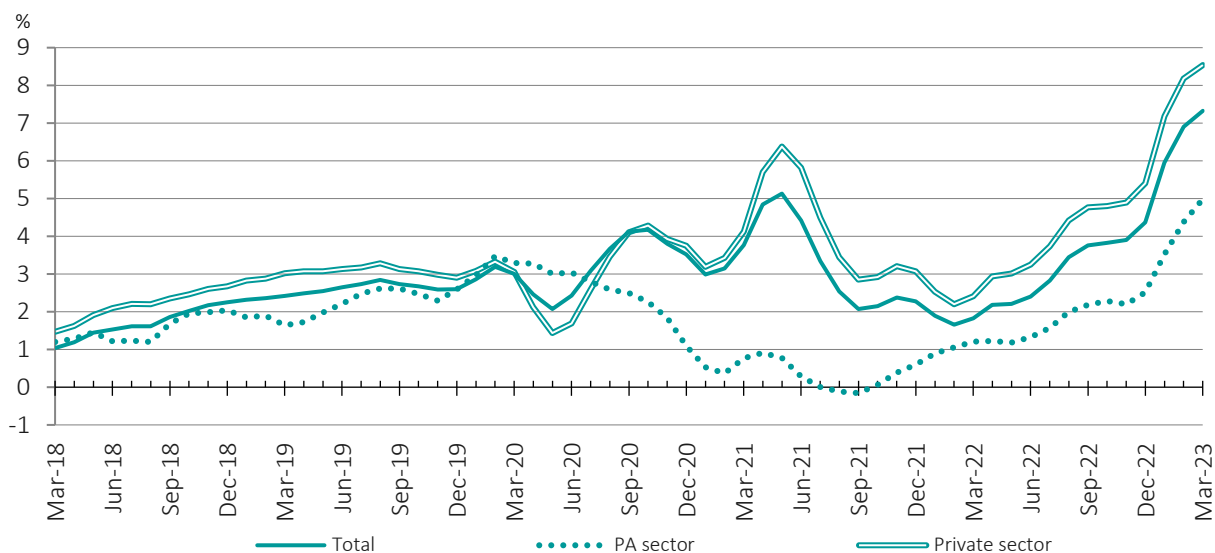
Figure 7. Gross monthly earnings per employee (total, regular and base) by institutional sector of the economy in March 2023



⁷ 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.



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 Figure 9).

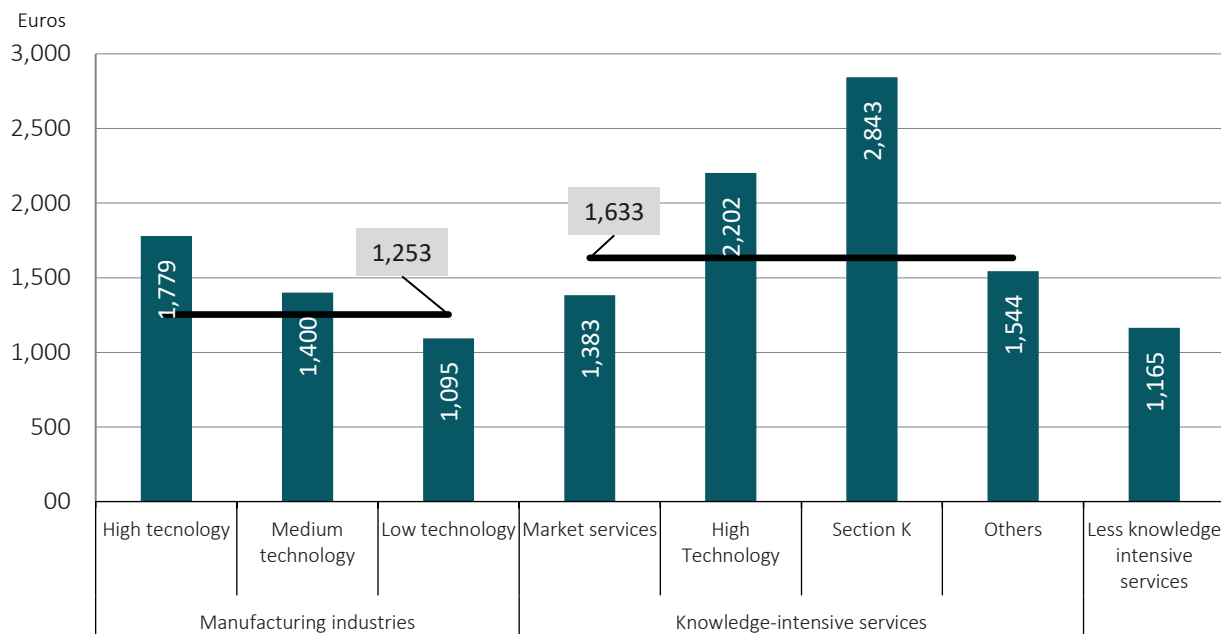
In March 2023, the total gross monthly earnings per employee (per job) in the “Manufacturing industries” (Section C of NACE Rev. 2) was €1,253, corresponding to a year-on-year increase of 8.6%. In this section, the highest total gross earnings were observed in the “High-technologic manufacturing industries” (€1,779), to which corresponded a year-on-year increase of 7.2%. In the “Low-tech manufacturing industries”, the total earnings averaged €1,095 and registered the highest year-on-year rate of change in the section (8.6%).

In the same month, the total gross monthly earnings per employee in “Knowledge intensive services enterprises” was €1,633, being higher among “Financial and insurance activities” (€2,843) and lower in the “Market services enterprises” (€1,383). These earnings have increased, when compared to March 2022, by 6.7%, 4.2% and 10.5%, respectively.

Compared to March 2022, the average total gross earnings of the “Less knowledge intensive enterprises” increased above Services’ total (8.3% vs. 7.1%), reaching €1,165.

Considering the inflation, despite the year-on-year increase in the “Manufacturing industries” (0.6%) the “High-technologic manufacturing industries” registered a decrease (0.7%) in total earnings. Considering the knowledge intensity, highlight to the decrease of 3.6% in the “Financial and insurance activities” and the increase of 2.3% in the “Market services”. Globally, there were a real decrease in total earning among enterprises in “Services” (0.8%).

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



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

Portugal	Quarter ended in the month				Year-on-year change			
	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								
March	4,486.8	1,355	1,211	1,138	4.2	7.4	7.3	7.6
February	4,488.2	1,412	1,191	1,119	4.5	7.0	6.9	7.1
January	4,511.2	1,604	1,168	1,096	4.7	5.8	6.0	6.0
2022								
December	4,519.3	1,580	1,151	1,079	4.8	4.5	4.4	4.3
November	4,522.0	1,495	1,147	1,076	5.1	4.3	3.9	3.8
October	4,499.0	1,304	1,148	1,078	5.3	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

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).

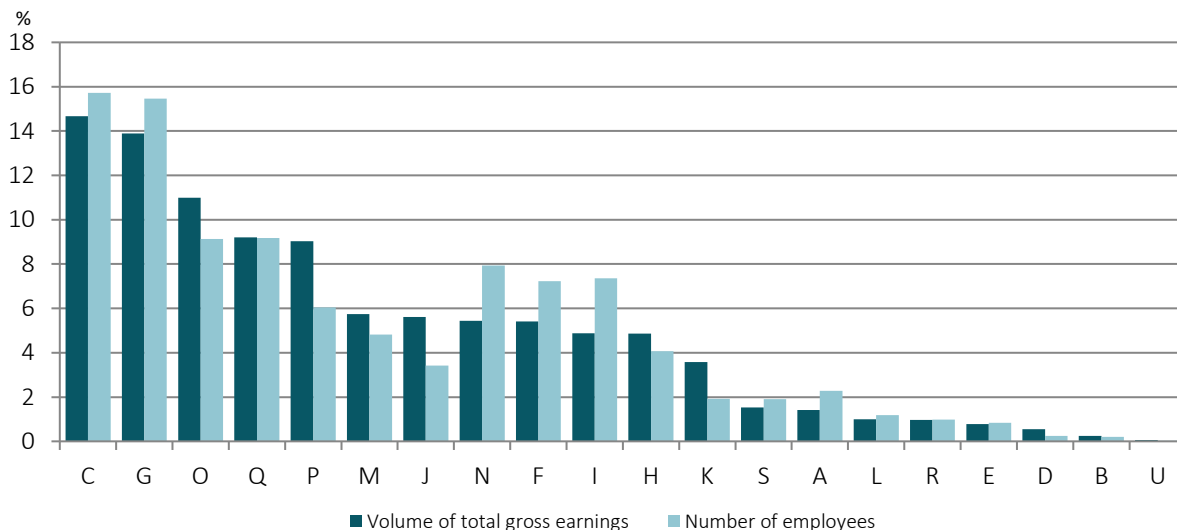
In the calculations by **enterprise’s economic activity** (NACE Rev. 2), the records where it was not possible to match the enterprise with its record on the enterprises’ economic activity file compiled by Statistics Portugal (FUE – *Ficheiro de Unidades Estatísticas*) were excluded, which corresponds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

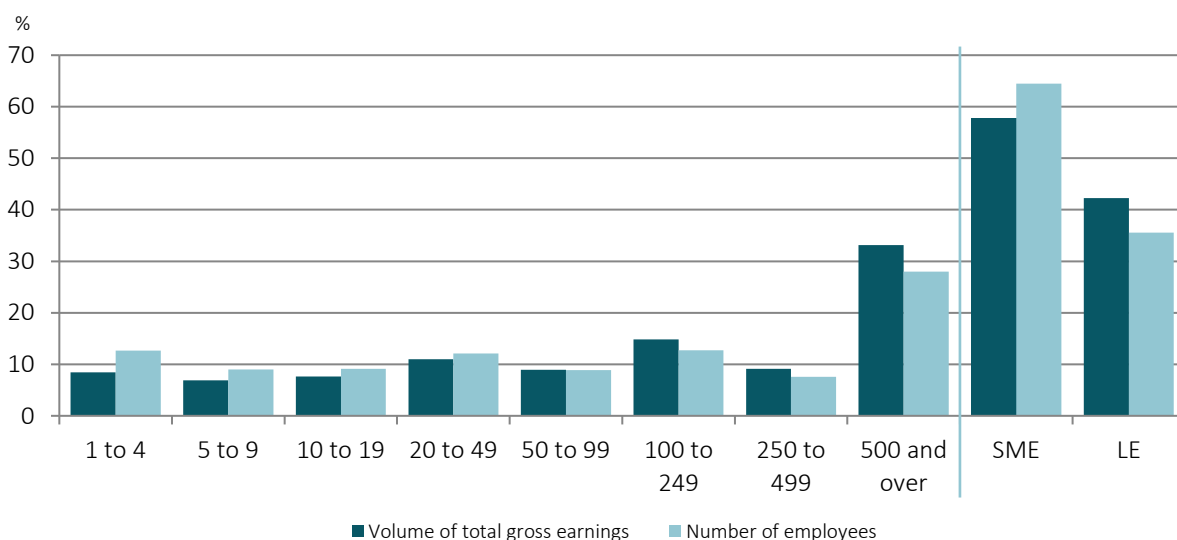


Distribution of the total gross earnings (volume) and the number of employees by economic activity (NACE Rev. 2) in 2022



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 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	October 2022	November 2022	December 2022
Number of enterprises	Thousands	- 0.5	- 0.9	0.6
Number of employees		- 0.5	2.9	2.6
Total gross monthly earnings per employee	Euros	1	0	5
Regular gross monthly earnings per employee		0	0	1
Base gross monthly earnings per employee		0	0	- 1
Number of enterprises (y-o-y)	pp	- 0.1	- 0.2	0.2
Number of employees (y-o-y)		- 0.1	0.0	0.0
Total gross monthly earnings per employee		0.0	0.1	0.3
Regular gross monthly earnings per employee		0.0	0.0	0.1
Base gross monthly earnings per employee		0.0	- 0.1	- 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 [methodological document](#), 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 18th April 2023.

Next Press Release – 10 August 2023
