

6 August 2020



## Gross monthly earnings per employee

(Social Security and *Caixa Geral de Aposentações* – Data analysed by Statistics Portugal)

June 2020

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### **Gross monthly earnings per employee increased by 1.6% in the quarter ended in June 2020, to €1,326, below the quarter ended in March (3,2%)**

The gross monthly earnings per employee (per job) increased by 1.6% in the quarter ended in June 2020 (2<sup>nd</sup> quarter), compared to the same period of 2019, to €1,326. The same was observed on gross regular (2.6%) and base (3.0%) monthly earnings, which reached €1,065 and €1,005, respectively. In real terms, taking into account the change of the Consumer Price Index during the period under analysis, those gross monthly earnings per employee increased by 1.8% (total), 2.8% (regular) and 3.3% (base). These data concern nearly 4.0 million of employees, corresponding to the Social Security's beneficiaries and the subscribers of *Caixa Geral de Aposentações*.

The recent dynamic of the average monthly earnings in the quarter ended in June 2020 was significantly affected by the new simplified layoff regime. In effect, among the enterprises which applied to this regime the year-on-year nominal change of the average total, regular and base gross monthly earnings stood at, respectively, -2.0%, -0.1% and +0.7% while for other enterprises it stood at +5.5%, +5.5% and +5.6%, by the same order.

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## 1. Introduction

Following the work that Statistics Portugal has been doing with the statistical use of data from the Monthly Statement of Earnings (DMR – *Declaração Mensal de Remunerações*) sent by enterprises<sup>1</sup> to the Social Security and the Contributive Relation (RC – *Relação Contributiva*) of *Caixa Geral de Aposentações* (CGA),<sup>2</sup> that represents an universe of 4.0 million of employees (per job), in this Press Release we publish the gross

monthly earnings per employee, total and regular, by economic activity, by number of employees and by institutional sector<sup>3</sup>, up to the quarter ended in June 2020.

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<sup>1</sup> Also includes foundations, institutes and other organisms, being public, private or from the social sector.

<sup>2</sup> CGA is the Portuguese public servants retirement and survivor pensions funds. Up to 2005, all employees in the Public Administrations made their social contribution to CGA. Since the end of 2005, all new employees in the public sector were integrated in the general public Social Security, as an employee in the private sector.

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<sup>3</sup> The sector of Public Administrations (PA), as defined in the National Accounts, using as reference the list of entities that belong to the Public Administrations – S13 – and the private sector (total of economy excluding the PA).

## 2. Gross monthly earnings per employee and components

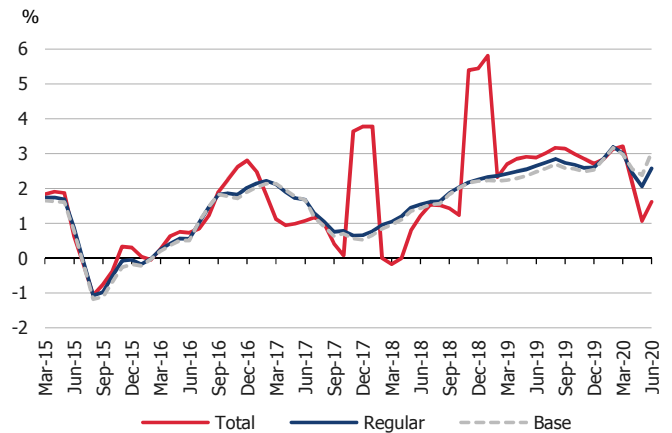
In June 2020<sup>4</sup>, the gross monthly earnings per employee recorded a year-on-year increase of 1.6% (Figure 1), increasing from €1,305 in June 2020 to €1,326 in June 2020. This change is 1.6 percentage points (pp) lower than the one of March 2020 (3.2%).

The regular gross monthly earnings per employee, which exclude, among other earnings components, the Christmas and Holidays allowances and, thus, have a less seasonal behaviour<sup>5</sup>, showed a year-on-year increase of 2.6%, from €1,038 in June 2019 to €1,065 in June 2020. This component has also registered an inferior change compared to March 2020 (less 0.4 pp).

The base gross monthly earnings per employee, which only includes the base earnings, showed a year-on-year increase of 3.0%, from €976 in June 2019 to €1,005 in June 2020. This change was the same observed in March 2020.

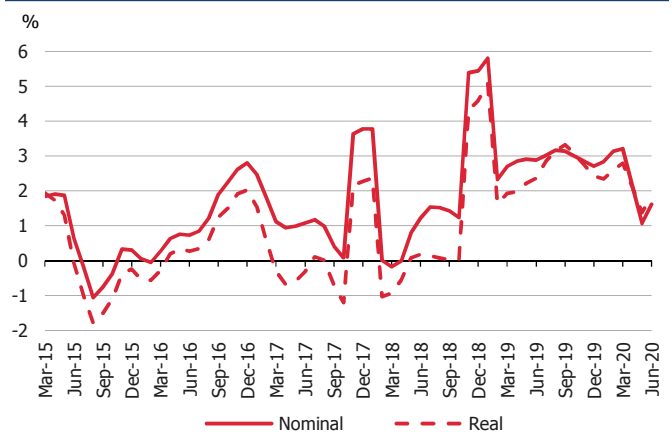
The significant fluctuations registered in the end of 2017 and 2018 were due the changes in the payment of the Christmas allowances in the public sector (50% in November 2017, 100% in November 2018), whereas in the previous years they were paid in one-twelfth over the year.

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



In real terms, that is, taking into account the inflation measured by the change of the Consumer Price Index (CPI) that stood at -0.3% in the 2<sup>nd</sup> quarter of 2020, the gross earnings (total, regular and base) registered a year-on-year increase of 1.8%, 2.8% and 3.8% (Figures 2, 3 and 4).

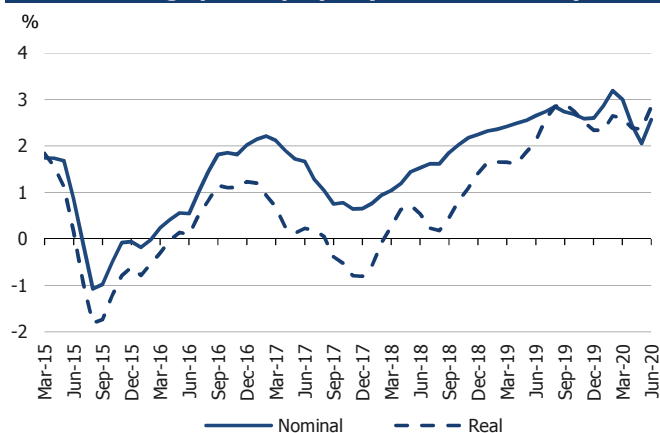
**Figure 2: Year-on-year change of total gross monthly earnings per employee (nominal and real)**



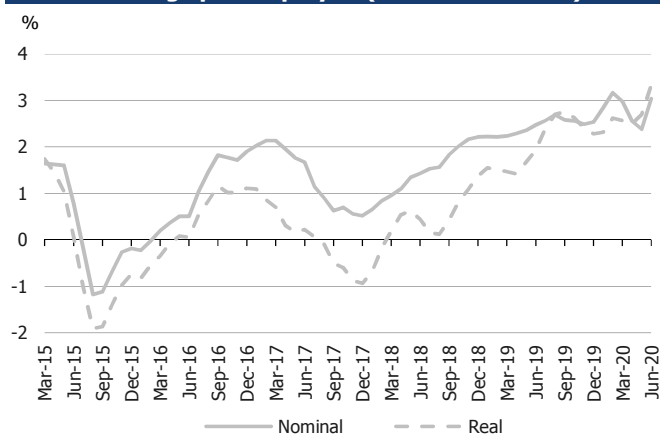
<sup>4</sup> The monthly data analysed in this Press Release refer to moving quarters ended in the reference month. The months of March, June, September and December corresponds to, respectively, to the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters of each year. Unless otherwise stated, the rates of change correspond to year-on-year ones (compared to the same moving quarter of the previous year). The year-on-year change series of the indicators under analysis are shown in the tables in the Annex.

<sup>5</sup> For a more detail description of the earnings components included in the total and in the regular gross monthly earnings, see the Technical note.

**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)**



### 3. Gross earnings by economic activity<sup>6</sup>

In June 2020, the total earnings varied between €761, in *Accommodation and food service activities* (section I), and €3,074, in the activities of *Electricity, gas, steam and air conditioning supply* (D) (Table 2 of the Annex).

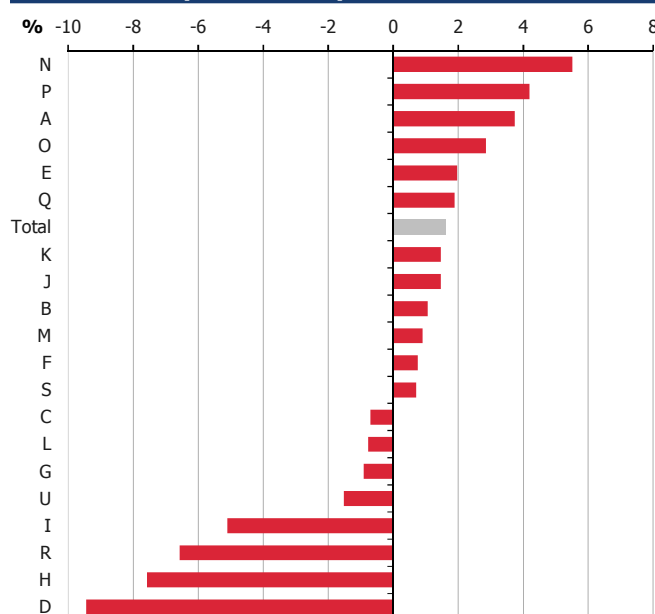
In turn, the regular earnings varied between €667, in *Accommodation and food service activities* (I), and €2,541, in the activities of *Electricity, gas, steam and air conditioning supply* (D).

<sup>6</sup> The economic activity designations can be found in Table 2 of the Annex.

Regarding the base earnings, it varied between €658, in the *Accommodation and food service activities* (I), and €2,365, in the activities of *Electricity, gas, steam and air conditioning supply* (D).

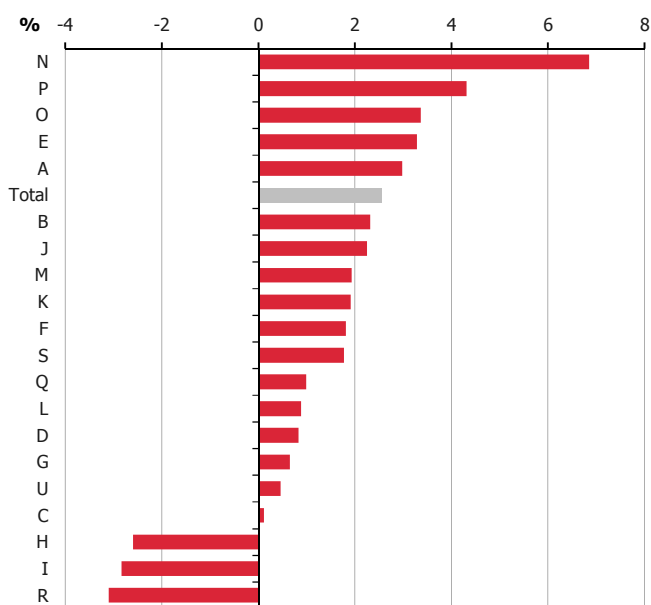
Compared to the same period of 2019, the major increases in total earnings were observed in *Administrative and support service activities* (N; 5.5%), followed by the activities of *Education* (P; 4.2%). On the other hand, the total earnings in the activities of *Electricity, gas, steam, cold and hot water and cold air conditioning supply* (D) decreased by 9.5%, the activities of *Transportation and storage* (H) decreased by 7.6%, the *Arts, entertainment, sports and recreation activities* (R) decreased by 6.6% and the *Accommodation and food service activities* (I) decreased by 5.1%. In June 2020, the total monthly earnings decreased in eight of the twenty activity sections under analysis (Figure 5).

**Figure 5: Year-on-year change of total gross monthly earnings per employee by economic activity (NACE-Rev. 2) in June 2020**



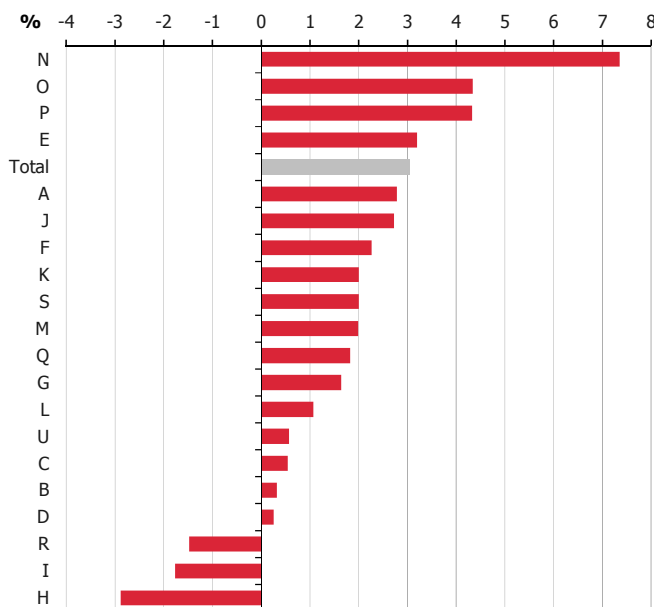
The larger increases of the regular earnings were observed in the *Administrative and support service activities* (N; 6.9%) and activities of *Education* (P; 4.3%) (Figure 6). The larger decreases were registered in *Arts, entertainment, sports and recreation activities* (R; -3.1%), in *Accommodation and food service activities* (I, -2.8%) and activities of *Transportation and storage* (H; -2.6%).

**Figure 6: Year-on-year change of regular gross monthly earnings per employee by economic activity (NACE-Rev. 2) in June 2020**



Regarding the base earnings, the activities with larger year-on-year increases were the *Administrative and support service activities* (N; 7.3%) and the *Public administration and defence; compulsory social security* (O; 4.3%). The larger decreases were observed in activities of *Transportation and storage* (H; -2.9%), in *Accommodation and food service activities* (I; -1.8%) and activities of *Arts, entertainment, sports and recreation activities* (R; -1.5%) (Figure 7).

**Figure 7: Year-on-year change of base gross monthly earnings per employee by economic activity (NACE-Rev. 2) in June 2020**



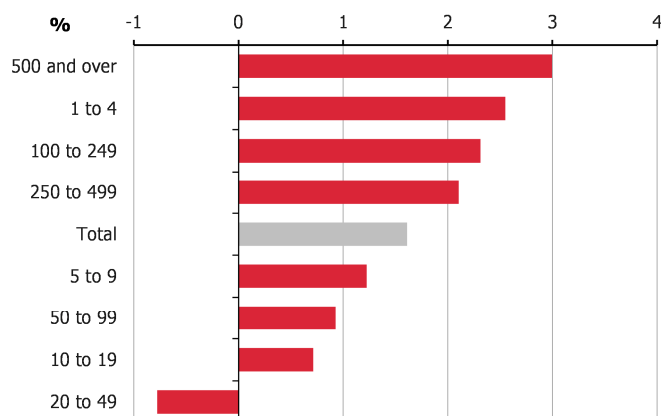
#### 4. Gross earnings by enterprise size

In June 2020, the total gross monthly earnings per employee ranged from €791, in enterprises with 1 to 4 employees, to €1,713, in enterprises with 500 or more employees (Table 3 of the Annex).

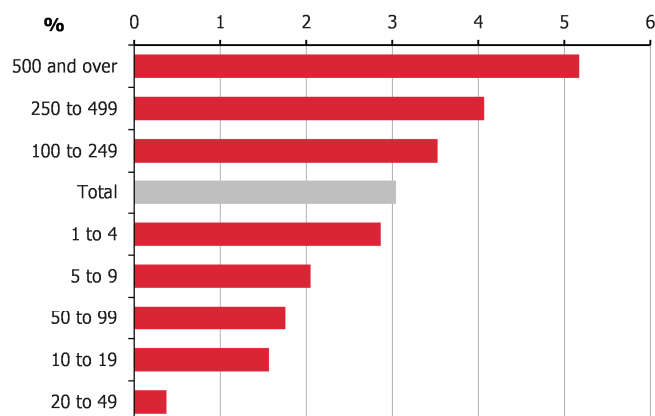
Regarding the regular and the base earnings, the larger and smaller monthly earnings were observed in the size class of 1 to 4 employees (€726 and €718, respectively) and in the size class of 250 to 499 employees (€1,302 and €1,234, respectively).

In regard to the same period of the last year (June 2019), the larger changes were observed in enterprises of 500 or more employees (3.0%) and of 1 to 4 employees (2.6%) (Figure 8). In turn, a negative year-on-year change was observed in the size class of 20 to 49 employees (0.8%).

**Figure 8: Year-on-year change of total gross monthly earnings per employee by employment size class in June 2020**

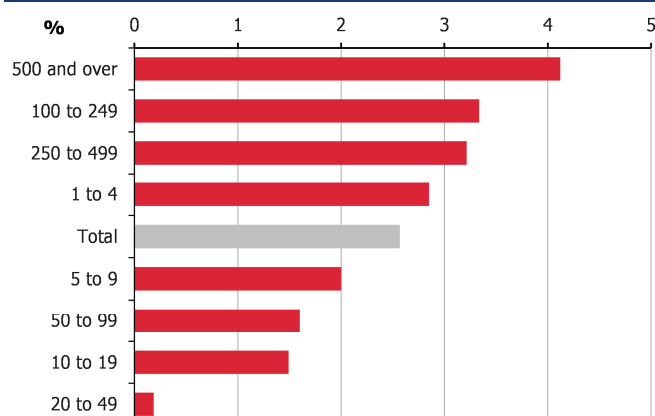


**Figure 10: Year-on-year change of base gross monthly earnings per employee by employment size class in June 2020**



The same pattern is observed for the regular and the base earnings, where the larger year-on-year changes were observed in enterprises of 500 and more employees (4.1% and 5.2%, respectively), of 100 to 249 employees (3.3% and 3.5%) and of 250 to 499 employees (3.2% and 4.1%) (Figures 9 and 10). The smaller year-on-year changes were observed in enterprises of 20 to 49 employees (0.2 and 0.4%) and of 10 to 19 employees (1.5% and 1.6%).

**Figure 9: Year-on-year change of regular gross monthly earnings per employee by employment size class in June 2020**



## 5. Gross earnings by institutional sector

Using, as reference, the institutional sector of Public Administration (S13) used by National Accounts<sup>7</sup>, we observed, in this sector, a year-on-year increase of 2.8%, from €2,073 in June 2019 to €2 132 in June 2020. The regular component increased, from the same period of the last year, 3.3%, to €1,559 (€1,519 in June 2019). The base earnings had a larger increase, of 4.0%, from €1,427 to €1,485 in June 2020 (Figures 11 and 12).

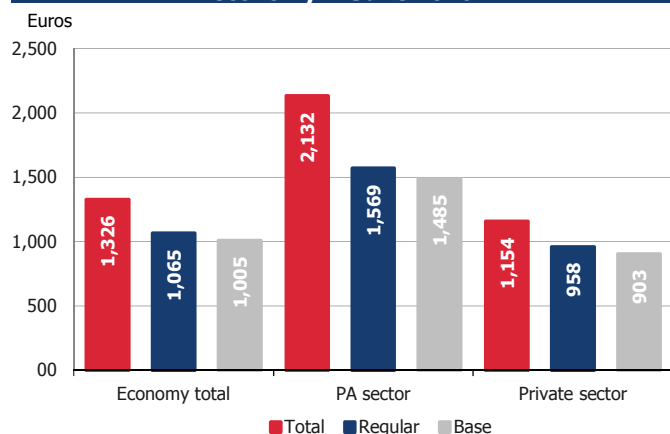
In the private sector, the total earnings recorded a lower year-on-year increase than the public sector (0.5% vs.2.8%), from €1,149 in June 2019 to €1,154 in June 2020. The regular component also observed a lower increase in the private sector (1.8% vs.3.3%), from €941 to €958, as the base earnings registered a lower increase in the private sector (2.2% vs.4.0%), from €884 to €903. The lower year-on-year change of earnings in the private sector was significantly affected

<sup>7</sup> The universe of entities that compose the institutional sector of the Public Administration is subject to updates twice a year.

by the simplified layoff regime (see section 7 of this Press release).

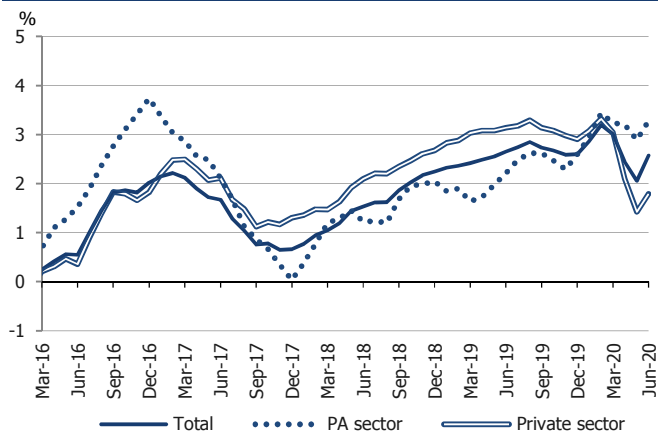
The average earnings differences between the public and private sector reflect, among others, differences in the tasks performed and in the employees' qualifications. Thus, it is observed that the employees in the public sector have, on average, a higher educational level<sup>8</sup>: in the public sector, 52.9% of the employees had completed the tertiary education in 2018 (20.1% in the private sector), 25.0% had the upper secondary or post-secondary non-tertiary education (29.9% in private sector) and 22.1% had up to the lower secondary education (50.0% in the private sector). However, beside these structural factors, the sector's differences increased in the quarter ended in June, due the simplified layoff regime.

**Figure 11: Gross monthly earnings per employee (total, regular and base) by institutional sector of the economy in June 2020**



<sup>8</sup> Results for 2018: from the Directorate-General for Administration and Public Employment (DGAEP), whose coverage is close to the sector of Public Administrations here defined; 2) from the Lists of Personnel (*Quadros de Pessoa*), from Strategy and Planning Office of the Ministry of Labour, Solidarity and Social Security.

**Figure 12: Year-on-year change of regular gross monthly earnings per employee by institutional sector of the economy**



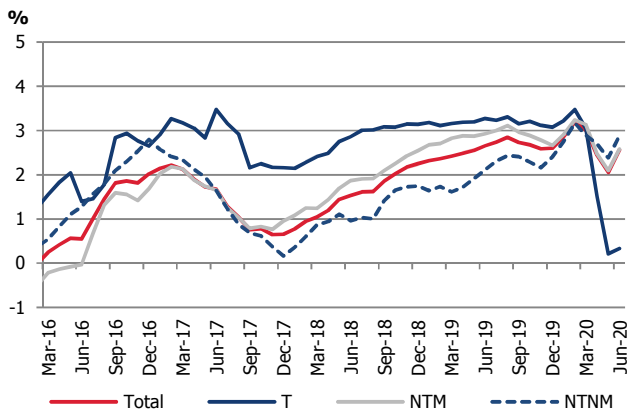
## 6. Gross earnings by groups of economic activity according to the market and tradable nature of the goods and services produced

In this Press Release, we resume the release of earnings by groups of economic activity according to the market and tradable nature of the goods and services produced, as was previously released for the quarter ended in September 2019: sector of mainly tradable goods and services (sections A to C); sector of mainly non-tradable market goods and services (sections D to U, excluding O, Q and Q) and sector of mainly non-tradable non-market goods and services (sections O, P and Q). This group, generally, includes the economic sections with larger presence of the public sector.

In June 2020, the regular earnings of sector T recorded a year-on-year increase smaller than the total economy (0.3% vs.2.6%), increasing from €916 in June 2019 to €919 in June 2020 (Figure 13). The sector NTM observed an increase equal to the total economy (2.6%), to €985 (€960 in June 2019). The sector NTNM

observed the larger year-on-year increase (2.9%), increasing from €1,312 to €1,350 in June 2020.

**Figure 13: Year-on-year change of the regular gross earnings per employee by groups of economic activity according to the market and tradable nature of the goods and services produced**



**Notes:**

T - Sector of mainly tradable goods and services (sections A to C).  
 NTM - Sector of mainly non-tradable market goods and services (sections D to U, excluding O, Q and R).  
 NTNM - Sector of mainly non-tradable non-market goods and services (sections O, P and Q).

**7. The COVID-19 pandemic impact on Gross monthly earnings per employee publish in this Press Release**

The recent dynamics of the average monthly earnings of the quarter ended in June 2020 were significantly influenced by the introduction of the new simplified layoff regime (art. 11 of Decree-law 10-G/2020, of 26 March) and, in a lesser extent, by the exceptional family support (art. 23 of Decree-Law 10-A/2020, of 13 March). In effect, the volume of earnings paid has been affected by the application of the simplified layoff regime, which resulted in a reduction in 1/3 of the base earnings (which cannot result in earnings lower than a Guarantee Minimum Monthly Wage - GMMW – or more than three GMMW).

With the information received from the Social Security it is possible to distinguish two groups of enterprises: those which have applied for, for at least one month, the simplified layoff or exceptional family support regimes, hereinafter referred to as “layoff enterprises”; and, by difference, the group of enterprises that have never used these regimes, which we have called “non-layoff enterprises”.<sup>9</sup> Once these two groups of enterprises have been identified, their relative behaviour can be evaluated in respect of the monthly earnings per employee before the pandemic (March 2020).

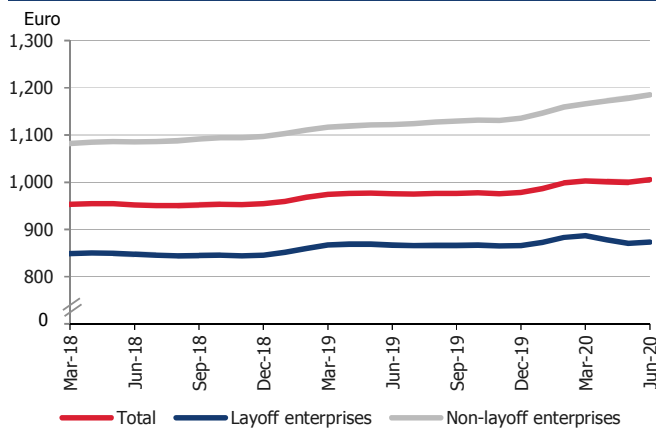
The two groups of enterprises are, before else, distinguished by their gross base monthly earnings per employee, with employees in the layoff group earning below the total economy average (13.1% in June 2020) and those of non-layoff enterprises earning above average (17.9% in June 2020) (Figure 14).

Between March 2018 and December 2020, the growth in base earnings per employee of layoff enterprises generally accompanied the growth of the economy’s total (Figure 15). As of January 2020, the year-on-year change in the base earnings of layoff enterprises was systematically lower (-2.3 p.p. than the economy’s total in June 2020). On the other hand, in the group of non-layoff enterprises the year-on-year base earnings change between March 2018 and December 2020 was

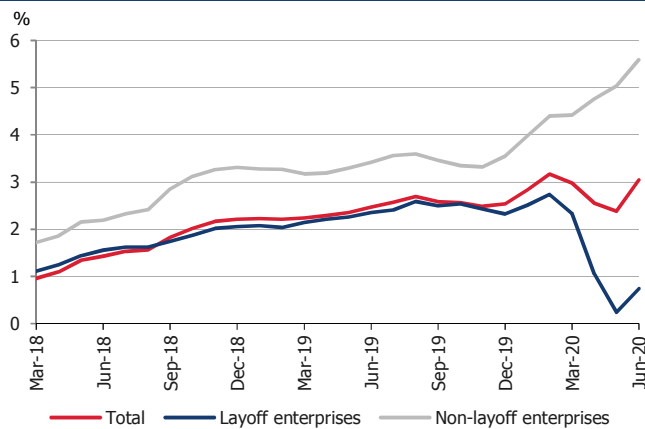
<sup>9</sup> The identification of these two groups of enterprises was made using the information received from Social Security, at the enterprise level, about the contributory scheme due COVID-19 in force in enterprises: simplified layoff regime (art. 11 of Decree-law 10-G/2020, of 26 March) and the exceptional family support (art. 23 of Decree-Law 10-A/2020, of 13 March). This information allows the rigorous estimation of the earnings volume for each group of enterprises. However, the information received by Statistics Portugal has no detail at the individual level. Thus, it is only possible, in the computation of the average earnings per employee in each enterprise, to use the ratio of the earnings volume and the corresponding number of employees at the enterprise, regardless of the enterprise having all or some of its employees in those regimes.

systematically higher than the economy's total (on average, 0.9 p.p. above the economy's total in the period under analysis). Since January 2020, however, this group of enterprises has recorded increasing year-on-year changes, and after March 2020 the difference in relation to the economy's total has intensified (+2.2 p.p. in April, +2.7 p.p. in May and +2.6 p.p. in June).

**Figure 14: Base monthly earnings per employee por economy's total, group of enterprises that used layoff and group of enterprises that never used layoff**



**Figure 15: Year-on-year change of base monthly earnings per employee por economy's total, group of enterprises that used layoff and group of enterprises that never used layoff**





**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			%			
<b>2020</b>								
June	4,033.9	1,326	1,065	1,005	-3.0	1.6	2.6	3.0
May	4,075.5	1,184	1,061	1,000	-1.2	1.1	2.1	2.4
April	4,130.1	1,180	1,064	1,001	0.9	2.1	2.4	2.6
March	4,178.4	1,190	1,067	1,003	2.8	3.2	3.0	3.0
February	4,187.2	1,258	1,063	998	3.2	3.1	3.2	3.2
January	4,204.3	1,439	1,051	987	3.3	2.8	2.9	2.8
<b>2019</b>								
December	4,217.4	1,423	1,042	978	3.4	2.7	2.6	2.5
November	4,220.1	1,342	1,038	976	3.5	2.8	2.6	2.5
October	4,203.7	1,171	1,040	978	3.5	3.0	2.7	2.6
September	4,203.1	1,222	1,038	977	3.5	3.1	2.7	2.6
August	4,197.2	1,359	1,038	976	3.5	3.2	2.8	2.7
July	4,187.6	1,350	1,038	975	3.6	3.0	2.7	2.6
June	4,158.7	1,305	1,038	976	3.7	2.9	2.7	2.5
May	4,124.0	1,171	1,040	977	3.7	2.9	2.5	2.4
April	4,091.8	1,155	1,039	976	3.7	2.9	2.5	2.3
March	4,066.3	1,153	1,036	974	3.6	2.7	2.4	2.2
February	4,058.9	1,219	1,030	968	3.5	2.3	2.4	2.2
January	4,071.1	1,400	1,022	960	3.4	5.8	2.3	2.2
<b>2018</b>								
December	4,080.1	1,385	1,015	954	3.4	5.4	2.2	2.2
November	4,078.6	1,305	1,012	952	3.4	5.4	2.2	2.2
October	4,061.8	1,137	1,012	953	3.5	1.2	2.0	2.0
September	4,059.5	1,185	1,011	952	3.6	1.4	1.9	1.8
August	4,056.1	1,317	1,010	951	3.7	1.5	1.6	1.6
July	4,042.4	1,310	1,010	951	3.7	1.5	1.6	1.5
June	4,011.6	1,268	1,012	952	3.7	1.2	1.5	1.4
May	3,975.2	1,138	1,014	954	3.7	0.8	1.4	1.3
April	3,945.9	1,123	1,014	954	3.9	0.0	1.2	1.1
March	3,924.0	1,123	1,012	953	4.0	-0.2	1.0	1.0
February	3,921.3	1,192	1,006	947	4.1	0.0	0.9	0.8
January	3,936.1	1,323	998	939	4.2	3.8	0.8	0.7
<b>2017</b>								
December	3,945.9	1,314	993	933	4.3	3.8	0.7	0.5
November	3,944.2	1,238	991	932	4.3	3.6	0.6	0.6
October	3,926.1	1,123	992	934	4.2	0.1	0.8	0.7
September	3,920.0	1,168	992	935	4.3	0.4	0.8	0.6
August	3,911.4	1,297	993	936	4.8	1.0	1.0	0.9
July	3,898.1	1,290	994	936	5.3	1.2	1.3	1.2
June	3,868.0	1,253	996	939	5.6	1.1	1.7	1.7
May	3,833.0	1,129	999	942	5.4	1.0	1.7	1.8
April	3,798.0	1,123	1,002	944	5.2	0.9	1.9	2.0
March	3,772.9	1,125	1,001	944	5.0	1.1	2.1	2.1
February	3,766.0	1,192	997	939	4.8	1.8	2.2	2.1
January	3,776.6	1,275	991	933	4.6	2.5	2.1	2.0
<b>2016</b>								
December	3,783.9	1,266	987	929	4.4	2.8	2.0	1.9
November	3,782.6	1,195	984	927	4.3	2.6	1.8	1.7
October	3,769.2	1,123	985	928	4.1	2.3	1.9	1.8
September	3,760.1	1,163	985	929	3.8	1.9	1.8	1.8
August	3,733.4	1,285	983	928	3.2	1.2	1.5	1.5
July	3,701.8	1,276	981	926	2.6	0.8	1.0	1.0
June	3,663.6	1,240	980	923	2.2	0.7	0.5	0.5

Source: Calculations by Statistics Portugal using the Social Security's Monthly Statement of Earnings (DMR) and the Contributive Relation of the *Caixa Geral de Aposentações* (CGA).

**Table 2: Number of employees and gross monthly earnings per employee (total, regular and base) by economic activity (NACE-Rev. 2) in June 2020**

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			%			
<b>Total</b>	<b>4,033.9</b>	<b>1,326</b>	<b>1,065</b>	<b>1,005</b>	<b>- 3.0</b>	<b>1.6</b>	<b>2.6</b>	<b>3.0</b>
A - Agriculture, forestry and fishing	87.8	818	694	670	- 1.4	3.7	3.0	2.8
B - Mining and quarrying	8.6	1,504	1,233	1,035	- 0.8	1.1	2.3	0.3
C - Manufacturing	669.8	1,119	944	902	- 3.6	- 0.7	0.1	0.5
D - Electricity, gas, steam and air conditioning supply	11.6	3,074	2,541	2,365	- 2.4	- 9.5	0.8	0.3
E - Water supply; sewerage, waste management and remediation activities	34.9	1,325	995	929	2.3	2.0	3.3	3.2
F - Construction	279.1	928	804	776	1.7	0.8	1.8	2.3
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	635.3	1,128	905	866	- 2.4	- 0.9	0.6	1.6
H - Transportation and storage	173.4	1,484	1,198	1,019	- 1.4	- 7.6	- 2.6	- 2.9
I - Accommodation and food service activities	275.0	761	667	658	- 12.1	- 5.1	- 2.8	- 1.8
J - Information and communication	124.5	2,041	1,654	1,533	6.5	1.5	2.3	2.7
K - Financial and insurance activities	84.6	2,440	2,110	1,703	0.3	1.5	1.9	2.0
L - Real estate activities	45.4	1,029	905	883	1.7	- 0.8	0.9	1.1
M - Professional, scientific and technical activities	180.5	1,470	1,232	1,177	1.4	0.9	1.9	2.0
N - Administrative and support service activities	276.1	892	698	663	- 16.6	5.5	6.9	7.3
O - Public administration and defence; compulsory social security	371.7	1,900	1,421	1,292	1.2	2.9	3.4	4.3
P - Education	274.8	2,181	1,675	1,662	- 1.6	4.2	4.3	4.3
Q - Human health and social work activities	374.7	1,406	1,040	1,005	0.3	1.9	1.0	1.8
R - Arts, entertainment and recreation	37.8	1,186	999	959	- 4.0	- 6.6	- 3.1	- 1.5
S - Other service activities	82.6	1,047	886	863	- 4.3	0.7	1.8	2.0
U - Activities of extraterritorial organisations and bodies	1.2	1,994	1,719	1,687	- 1.1	- 1.5	0.5	0.6

**Source:** Calculations by Statistics Portugal using the Social Security's Monthly Statement of Earnings (DMR) and the Contributive Relation of the *Caixa Geral de Aposentações* (CGA).

**Table 3: Number of employees and gross monthly earnings per employee (total, regular and base) by enterprise size in June 2020**

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			%			
<b>Total</b>	<b>4,033.9</b>	<b>1,326</b>	<b>1,065</b>	<b>1,005</b>	<b>- 3.0</b>	<b>1.6</b>	<b>2.6</b>	<b>3.0</b>
From 1 to 4 employees	527.7	791	726	718	- 0.8	2.6	2.9	2.9
From 5 to 9 employees	374.6	928	816	801	- 2.6	1.2	2.0	2.0
From 10 to 19 employees	373.1	1,023	876	851	- 2.7	0.7	1.5	1.6
From 20 to 49 employees	489.0	1,124	941	903	- 1.8	- 0.8	0.2	0.4
From 50 to 99 employees	348.9	1,265	1,030	980	- 2.6	0.9	1.6	1.8
From 100 to 249 employees	509.9	1,572	1,230	1,170	- 3.5	2.3	3.3	3.5
From 250 to 499 employees	328.4	1,694	1,302	1,234	- 6.5	2.1	3.2	4.1
500 employees and over	1,082.4	1,713	1,300	1,177	- 3.6	3.0	4.1	5.2

**Source:** Calculations by Statistics Portugal using the Social Security's Monthly Statement of Earnings (DMR) and the Contributive Relation of the *Caixa Geral de Aposentações* (CGA).

**Table 4: Number of employees and gross monthly earnings per employee in public sector  
(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			%			
<b>2020</b>								
June	708.8	2,132	1,569	1,485	1.0	2.8	3.3	4.0
May	708.8	1,635	1,565	1,480	1.5	2.5	2.9	3.5
April	709.7	1,635	1,562	1,474	1.7	3.3	3.2	3.7
March	710.2	1,629	1,559	1,471	1.9	3.3	3.2	3.7
February	708.2	1,634	1,559	1,470	1.6	3.5	3.4	3.8
January	709.3	2,105	1,544	1,455	1.3	2.8	3.0	3.3
<b>2019</b>								
December	707.4	2,100	1,537	1,446	1.1	2.8	2.6	2.8
November	704.6	2,091	1,531	1,440	1.2	2.6	2.3	2.4
October	696.2	1,623	1,542	1,450	1.0	2.8	2.5	2.5
September	693.2	1,635	1,542	1,450	0.7	2.9	2.6	2.6
August	697.1	2,108	1,533	1,440	0.7	3.0	2.6	2.6
July	700.4	2,090	1,526	1,434	0.8	3.0	2.5	2.4
June	701.8	2,073	1,519	1,427	1.1	2.8	2.2	2.1
May	698.4	1,594	1,521	1,429	1.1	2.7	2.0	1.8
April	698.1	1,583	1,514	1,422	1.1	2.4	1.7	1.6
March	697.1	1,576	1,510	1,419	1.0	2.3	1.6	1.5
February	697.4	1,579	1,507	1,416	0.8	1.3	1.9	1.8
January	700.0	2,047	1,500	1,408	0.9	13.5	1.9	1.8
<b>2018</b>								
December	700.0	2,043	1,498	1,407	0.8	12.4	2.0	2.1
November	696.2	2,038	1,497	1,406	0.7	12.5	2.0	2.0
October	689.6	1,579	1,504	1,414	0.4	-0.9	2.0	1.9
September	688.2	1,588	1,503	1,413	0.4	-1.2	1.7	1.6
August	692.6	2,046	1,493	1,404	0.5	-1.1	1.2	1.0
July	694.5	2,029	1,489	1,400	0.3	-1.3	1.2	1.0
June	694.3	2,017	1,486	1,398	0.3	-1.2	1.2	1.0
May	690.7	1,553	1,492	1,403	0.2	-1.7	1.5	1.3
April	690.4	1,546	1,488	1,400	0.4	-1.8	1.3	1.2
March	690.1	1,541	1,485	1,398	0.5	-2.0	1.2	1.1
February	691.6	1,559	1,479	1,391	0.8	-2.4	0.8	0.6
January	693.8	1,804	1,473	1,384	1.1	11.3	0.4	0.1
<b>2017</b>								
December	694.7	1,818	1,468	1,379	1.3	10.8	0.0	-0.3
November	691.4	1,812	1,468	1,378	1.3	11.0	0.3	0.1
October	686.7	1,594	1,476	1,387	1.3	-2.4	0.7	0.5
September	685.3	1,608	1,478	1,391	1.4	-1.7	0.9	0.6
August	689.3	2,069	1,476	1,390	1.5	-0.6	1.1	0.9
July	692.2	2,057	1,471	1,386	1.5	-0.4	1.7	1.5
June	691.9	2,042	1,468	1,384	1.4	-0.5	2.1	2.1
May	689.1	1,580	1,470	1,386	1.0	-1.1	2.5	2.5
April	687.4	1,575	1,469	1,384	0.7	-1.2	2.6	2.6
March	686.8	1,573	1,468	1,383	0.5	-0.9	2.9	2.8
February	686.4	1,596	1,468	1,383	0.8	0.5	3.0	3.0
January	686.4	1,621	1,467	1,382	1.1	2.0	3.4	3.4
<b>2016</b>								
December	686.1	1,641	1,468	1,382	1.4	3.6	3.7	3.8
November	682.3	1,632	1,463	1,378	1.3	3.3	3.4	3.5
October	677.8	1,632	1,466	1,381	1.4	3.1	3.1	3.2
September	675.8	1,636	1,466	1,383	1.4	2.3	2.8	2.9
August	679.4	2,082	1,459	1,377	1.3	1.8	2.4	2.5
July	682.1	2,065	1,446	1,365	1.1	1.4	1.9	2.1
June	682.6	2,053	1,438	1,356	1.0	1.5	1.5	1.6

**Source:** Calculations by Statistics Portugal using the Social Security's Monthly Statement of Earnings (DMR) and the Contributive Relation of the *Caixa Geral de Aposentações* (CGA).

**Table 5: Number of employees and gross monthly earnings per employee in private sector  
(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			%			
<b>2020</b>								
June	3,325.0	1,154	958	903	-3.8	0.5	1.8	2.2
May	3,366.7	1,089	955	899	-1.7	0.4	1.4	1.6
April	3,420.4	1,085	961	903	0.8	1.7	2.1	2.1
March	3,468.2	1,100	967	908	2.9	3.3	3.0	2.9
February	3,479.0	1,181	962	902	3.5	3.2	3.3	3.2
January	3,495.0	1,304	951	892	3.7	3.1	3.1	2.9
<b>2019</b>								
December	3,510.0	1,286	942	884	3.8	3.0	2.9	2.8
November	3,515.5	1,192	940	883	3.9	3.3	3.0	2.8
October	3,507.4	1,082	940	884	4.0	3.3	3.1	2.9
September	3,509.9	1,140	939	883	4.1	3.4	3.1	2.9
August	3,500.1	1,209	940	884	4.1	3.7	3.3	3.1
July	3,487.2	1,201	940	883	4.2	3.4	3.2	3.0
June	3,456.9	1,149	941	884	4.2	3.4	3.1	2.9
May	3,425.6	1,085	941	885	4.3	3.2	3.1	2.9
April	3,393.7	1,067	941	884	4.2	3.3	3.1	2.9
March	3,369.2	1,065	938	882	4.2	3.1	3.0	2.8
February	3,361.5	1,145	931	875	4.1	2.9	2.9	2.7
January	3,371.1	1,265	922	867	4.0	3.7	2.8	2.7
<b>2018</b>								
December	3,380.1	1,249	915	860	4.0	3.6	2.7	2.6
November	3,382.4	1,154	912	859	4.0	3.4	2.6	2.6
October	3,372.2	1,047	912	859	4.1	2.3	2.5	2.5
September	3,371.3	1,102	910	858	4.2	2.6	2.3	2.3
August	3,363.6	1,167	910	857	4.4	3.1	2.2	2.2
July	3,347.9	1,161	911	858	4.4	3.2	2.2	2.2
June	3,317.3	1,112	912	859	4.4	2.8	2.1	2.0
May	3,284.5	1,051	913	860	4.5	2.0	1.9	1.8
April	3,255.5	1,033	913	860	4.7	1.0	1.6	1.5
March	3,233.9	1,034	911	858	4.8	0.8	1.5	1.4
February	3,229.7	1,113	905	852	4.9	1.1	1.5	1.4
January	3,242.3	1,220	897	844	4.9	1.8	1.4	1.3
<b>2017</b>								
December	3,251.1	1,206	892	838	5.0	2.0	1.3	1.2
November	3,252.7	1,116	889	837	4.9	1.6	1.2	1.2
October	3,239.5	1,024	890	838	4.8	1.3	1.2	1.2
September	3,234.7	1,075	889	838	4.9	1.4	1.1	1.0
August	3,222.1	1,132	890	839	5.5	2.3	1.5	1.4
July	3,205.9	1,125	891	839	6.2	2.6	1.7	1.6
June	3,176.1	1,081	893	842	6.5	2.6	2.1	2.1
May	3,144.0	1,030	896	844	6.4	2.3	2.1	2.1
April	3,110.6	1,023	898	847	6.2	2.3	2.3	2.4
March	3,086.1	1,025	898	846	6.0	2.4	2.5	2.5
February	3,079.6	1,101	892	840	5.7	2.7	2.5	2.4
January	3,090.2	1,198	885	833	5.4	2.9	2.2	2.0
<b>2016</b>								
December	3,097.8	1,183	880	828	5.1	2.8	1.8	1.6
November	3,100.3	1,098	879	828	5.0	2.7	1.7	1.5
October	3,091.4	1,011	879	829	4.7	2.3	1.8	1.7
September	3,084.3	1,059	880	830	4.4	2.1	1.8	1.8
August	3,054.1	1,107	877	828	3.6	1.3	1.4	1.3
July	3,019.6	1,097	876	826	3.0	0.9	0.9	0.9
June	2,980.9	1,054	875	824	2.5	0.6	0.4	0.3

Source: Calculations by Statistics Portugal using the Social Security's Monthly Statement of Earnings (DMR) and the Contributive Relation of the *Caixa Geral de Aposentações* (CGA).

**Table 6: Number of employees and gross monthly earnings per employee in the sector of mainly tradable goods and services (T)  
(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			%			
<b>2020</b>								
June	766.2	1,089	919	877	-3.6	-0.4	0.3	0.7
May	771.1	1,034	915	873	-2.6	-0.4	0.2	0.4
April	775.0	1,034	924	880	-1.7	1.2	1.5	1.5
March	780.0	1,045	935	889	-0.7	3.3	3.0	2.8
February	788.6	1,159	930	883	0.4	3.6	3.5	3.2
January	792.0	1,262	919	873	0.8	3.5	3.2	2.9
<b>2019</b>								
December	794.2	1,256	912	867	0.9	3.2	3.1	2.9
November	797.1	1,135	913	869	1.2	3.5	3.1	3.0
October	796.8	1,076	914	871	1.3	3.6	3.2	3.1
September	797.5	1,162	913	871	1.5	3.6	3.2	3.0
August	797.4	1,218	915	872	1.6	3.8	3.3	3.2
July	796.2	1,177	915	871	1.8	3.4	3.2	3.1
June	794.6	1,093	916	872	1.9	3.4	3.3	3.2
May	791.4	1,039	913	869	2.1	3.2	3.2	3.1
April	788.3	1,022	911	867	2.4	3.3	3.2	3.1
March	785.3	1,011	907	864	2.4	3.0	3.2	3.1
February	785.2	1,119	898	856	2.6	3.0	3.1	3.0
January	785.9	1,220	890	848	2.6	3.9	3.2	3.2
<b>2018</b>								
December	787.0	1,217	885	843	2.7	3.8	3.1	3.1
November	788.0	1,097	885	844	2.9	3.6	3.1	3.1
October	786.6	1,039	885	845	3.1	2.8	3.1	3.1
September	785.9	1,122	885	845	3.5	3.4	3.1	3.1
August	784.7	1,174	886	845	3.6	4.0	3.0	3.0
July	782.5	1,138	887	845	3.7	3.7	3.0	3.0
June	779.6	1,057	887	845	3.8	3.1	2.9	2.8
May	774.7	1,007	885	843	3.7	2.5	2.8	2.7
April	770.1	990	883	841	3.9	2.3	2.5	2.4
March	766.7	982	879	838	4.2	2.4	2.4	2.3
February	765.7	1,086	871	831	4.4	2.3	2.3	2.1
January	766.3	1,174	863	822	4.6	2.6	2.1	2.0
<b>2017</b>								
December	766.0	1,173	858	817	4.5	2.6	2.2	1.9
November	765.8	1,059	858	818	4.3	2.8	2.2	1.9
October	763.3	1,010	859	820	4.2	2.7	2.2	2.0
September	759.6	1,085	859	820	4.1	2.8	2.2	1.8
August	757.4	1,128	860	820	4.6	3.6	2.9	2.6
July	754.7	1,098	861	820	5.2	4.3	3.2	2.9
June	751.0	1,025	862	822	5.5	4.2	3.5	3.3
May	747.0	982	861	821	5.7	3.3	2.8	2.7
April	741.1	967	861	822	5.5	3.0	3.1	2.9
March	735.6	959	859	820	5.1	3.3	3.2	3.0
February	733.4	1,062	852	813	4.9	3.4	3.3	3.0
January	732.5	1,145	845	806	4.7	3.6	2.9	2.6
<b>2016</b>								
December	733.1	1,143	840	802	4.6	3.5	2.6	2.4
November	734.0	1,030	840	803	4.5	3.6	2.8	2.5
October	732.6	984	840	804	4.4	3.2	2.9	2.7
September	729.6	1,055	841	805	4.0	2.7	2.8	2.7
August	724.1	1,089	835	800	3.2	1.7	1.8	1.5
July	717.7	1,053	834	798	2.5	1.3	1.5	1.2
June	711.8	984	833	795	2.0	1.4	1.4	1.0

Source: Calculations by Statistics Portugal using the Social Security's Monthly Statement of Earnings (DMR) and the Contributive Relation of the *Caixa Geral de Aposentações* (CGA).

**Table 7: Number of employees and gross monthly earnings per employee in the sector of mainly non-tradable market goods and services (NTM) (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			%			
<b>2020</b>								
June	2,242.0	1,194	985	921	-4.8	0.7	2.6	3.0
May	2,278.0	1,129	982	916	-2.2	0.6	2.1	2.4
April	2,299.3	1,125	986	918	-0.1	1.9	2.5	2.5
March	2,329.8	1,141	990	921	2.2	3.3	3.1	3.0
February	2,363.3	1,211	985	915	4.2	3.0	3.2	3.1
January	2,371.8	1,341	973	905	4.6	2.8	2.9	2.8
<b>2019</b>								
December	2,378.1	1,317	964	896	4.6	2.7	2.7	2.5
November	2,389.1	1,230	960	894	4.7	3.0	2.8	2.6
October	2,389.9	1,102	959	894	4.7	3.1	2.9	2.7
September	2,388.7	1,150	958	893	4.8	3.4	3.0	2.8
August	2,383.6	1,221	959	893	4.8	3.5	3.1	2.9
July	2,370.1	1,224	959	893	4.8	3.3	3.0	2.8
June	2,353.8	1,186	960	894	4.8	3.1	2.9	2.7
May	2,328.5	1,122	962	895	4.8	3.0	2.9	2.6
April	2,302.5	1,104	963	896	4.8	3.1	2.9	2.6
March	2,279.6	1,105	960	894	4.7	2.9	2.8	2.6
February	2,268.4	1,175	954	887	4.6	2.7	2.7	2.5
January	2,268.1	1,305	946	880	4.5	3.7	2.7	2.6
<b>2018</b>								
December	2,272.6	1,282	939	874	4.5	3.6	2.5	2.5
November	2,281.0	1,194	934	871	4.5	3.4	2.4	2.4
October	2,281.7	1,069	932	870	4.5	2.0	2.3	2.3
September	2,279.9	1,113	930	869	4.6	2.2	2.1	2.1
August	2,275.1	1,179	930	868	4.7	2.7	1.9	1.9
July	2,261.8	1,185	931	869	4.7	3.0	1.9	1.9
June	2,245.4	1,150	933	870	4.9	2.8	1.9	1.8
May	2,221.9	1,089	935	872	5.0	1.9	1.7	1.6
April	2,196.8	1,071	936	873	5.2	0.7	1.4	1.4
March	2,177.5	1,074	934	871	5.3	0.3	1.2	1.2
February	2,169.3	1,145	929	865	5.4	0.7	1.2	1.2
January	2,170.3	1,257	921	858	5.5	1.7	1.1	1.1
<b>2017</b>								
December	2,175.5	1,237	915	852	5.5	1.8	1.0	1.0
November	2,183.8	1,155	912	850	5.5	1.3	0.8	0.9
October	2,183.3	1,048	912	851	5.4	0.7	0.8	0.9
September	2,180.0	1,089	911	851	5.5	1.0	0.8	0.8
August	2,173.9	1,148	912	852	5.9	1.9	1.0	1.0
July	2,159.3	1,151	914	852	6.3	2.1	1.3	1.2
June	2,141.0	1,119	916	855	6.7	2.1	1.7	1.7
May	2,116.1	1,068	920	858	6.9	1.8	1.7	1.9
April	2,089.1	1,064	922	861	6.7	1.7	1.9	2.1
March	2,067.2	1,070	922	861	6.4	1.9	2.1	2.3
February	2,058.7	1,137	917	855	6.2	2.4	2.2	2.1
January	2,058.0	1,236	911	849	5.9	2.7	2.0	1.9
<b>2016</b>								
December	2,061.9	1,215	907	844	5.6	2.7	1.7	1.6
November	2,070.8	1,140	905	843	5.3	2.5	1.4	1.3
October	2,070.7	1,040	904	843	5.1	2.2	1.6	1.5
September	2,065.6	1,078	904	844	4.7	1.9	1.6	1.7
August	2,053.1	1,127	903	843	4.3	1.4	1.3	1.4
July	2,030.5	1,127	902	842	3.8	0.8	0.7	0.8
June	2,006.2	1,097	901	840	3.3	0.5	0.0	0.1

Source: Calculations by Statistics Portugal using the Social Security's Monthly Statement of Earnings (DMR) and the Contributive Relation of the *Caixa Geral de Aposentações* (CGA).

**Table 8: Number of employees and gross monthly earnings per employee in the sector of mainly non-tradable non-market goods and services (NTNM) (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			%			
<b>2020</b>								
June	1,021.1	1,794	1,350	1,286	0.3	2.9	2.9	3.4
May	1,021.9	1,417	1,346	1,281	0.4	2.4	2.4	2.9
April	1,023.9	1,412	1,345	1,279	1.1	2.9	2.7	3.0
March	1,026.1	1,410	1,344	1,278	1.5	3.0	2.9	3.2
February	1,028.8	1,439	1,343	1,276	1.9	3.1	3.2	3.4
January	1,031.0	1,800	1,329	1,262	2.1	2.7	2.8	3.0
<b>2019</b>								
December	1,029.1	1,795	1,322	1,254	2.2	2.5	2.4	2.5
November	1,025.7	1,763	1,318	1,250	2.3	2.5	2.2	2.2
October	1,020.3	1,408	1,326	1,258	2.3	2.6	2.3	2.3
September	1,014.2	1,437	1,326	1,257	2.2	2.7	2.4	2.4
August	1,015.9	1,791	1,320	1,251	2.2	2.7	2.4	2.4
July	1,016.4	1,776	1,315	1,246	2.2	2.7	2.3	2.2
June	1,018.4	1,743	1,312	1,243	2.3	2.6	2.1	2.0
May	1,017.8	1,384	1,314	1,246	2.4	2.6	1.9	1.8
April	1,013.0	1,373	1,310	1,242	2.4	2.3	1.7	1.6
March	1,011.0	1,369	1,307	1,239	2.4	2.2	1.6	1.4
February	1,009.2	1,396	1,302	1,234	2.1	1.4	1.7	1.6
January	1,010.0	1,753	1,294	1,225	2.0	10.9	1.6	1.6
<b>2018</b>								
December	1,007.3	1,751	1,291	1,223	1.7	10.0	1.7	1.8
November	1,002.9	1,720	1,290	1,222	1.4	10.1	1.7	1.7
October	997.7	1,372	1,297	1,229	1.4	-0.6	1.7	1.6
September	992.4	1,399	1,295	1,228	1.2	-0.7	1.4	1.3
August	994.2	1,744	1,288	1,222	1.3	-0.7	1.0	0.8
July	994.7	1,729	1,285	1,219	1.3	-0.9	1.0	0.8
June	995.9	1,699	1,285	1,219	1.2	-1.1	1.0	0.8
May	994.3	1,349	1,290	1,224	1.0	-1.6	1.1	1.0
April	989.5	1,342	1,288	1,223	0.9	-1.8	0.9	0.8
March	987.8	1,339	1,286	1,221	0.9	-1.8	0.9	0.8
February	988.2	1,377	1,280	1,214	1.0	-1.9	0.6	0.4
January	990.5	1,581	1,273	1,207	1.3	8.8	0.4	0.1
<b>2017</b>								
December	990.4	1,591	1,269	1,202	1.4	8.5	0.2	-0.1
November	988.6	1,562	1,268	1,202	1.6	8.8	0.4	0.1
October	984.0	1,380	1,276	1,210	1.7	-1.8	0.6	0.4
September	980.2	1,409	1,277	1,212	1.7	-1.3	0.7	0.5
August	981.1	1,756	1,276	1,212	1.9	-0.5	0.9	0.7
July	982.2	1,745	1,272	1,209	2.1	-0.5	1.2	1.1
June	984.3	1,718	1,272	1,209	2.3	-0.5	1.6	1.6
May	984.1	1,371	1,275	1,212	2.4	-0.8	1.9	1.9
April	981.0	1,367	1,276	1,212	2.4	-0.7	2.1	2.1
March	979.4	1,364	1,275	1,212	2.3	-0.7	2.3	2.3
February	978.3	1,403	1,272	1,209	2.2	0.4	2.4	2.4
January	978.0	1,453	1,268	1,205	2.2	1.7	2.6	2.5
<b>2016</b>								
December	976.6	1,466	1,267	1,203	2.3	2.9	2.8	2.7
November	972.8	1,435	1,264	1,201	2.2	2.6	2.5	2.5
October	967.7	1,406	1,268	1,205	2.2	2.3	2.3	2.2
September	964.0	1,428	1,268	1,206	2.2	1.8	2.1	2.1
August	962.8	1,765	1,264	1,203	2.0	1.2	1.8	1.8
July	962.2	1,753	1,257	1,196	1.7	1.1	1.6	1.6
June	962.0	1,726	1,252	1,190	1.3	1.2	1.3	1.2

Source: Calculations by Statistics Portugal using the Social Security's Monthly Statement of Earnings (DMR) and the Contributive Relation of the *Caixa Geral de Aposentações* (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 (DMR – *Declaração Mensal de Remunerações*) from Social Security (SS), following a protocol celebrated between Statistics Portugal and the *Instituto de Informática, I.P.*, and the Contributive Relation (RC – *Relação Contributiva*) of *Caixa Geral de Aposentações (CGA)*. These statistics are stored in the StatsLab area of the Statistics Portugal website, where new statistical resources that give useful information for economic and social analysis are published.

The information received from the DMR includes the sum of earnings reported by enterprises to the SS by “Social Security Contributory Scheme” and “Earnings Components”. The information received from the RC includes the sum of earnings of the subscribers of CGA 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.

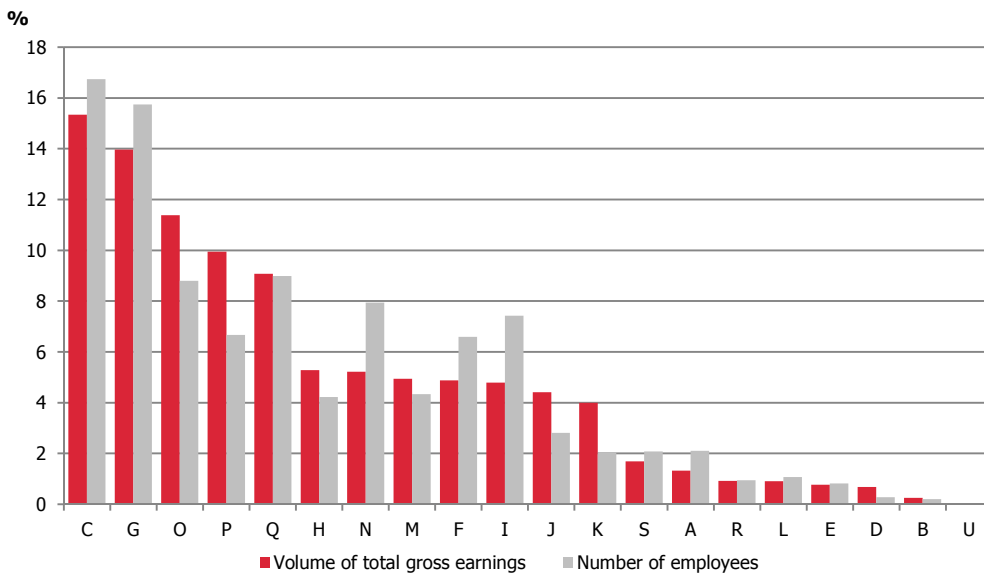
The **gross monthly earnings per employee** correspond to the ratio between the sum of the all earnings paid by the enterprises and the total number of employees in those enterprises. Hence, its evolution reflects changes in the amount of earnings paid (for example, the payment of bonuses, holiday allowances 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 0.7% of enterprises and 0.1% of employees in 2019.

Each employee is counted as many times as the **number of jobs** reported to the Social Security 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 figure 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) in 2019.

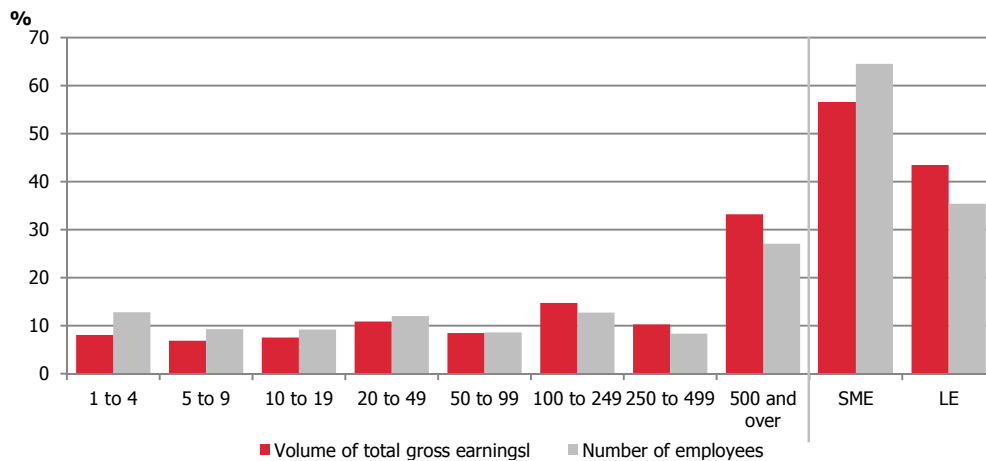
**Distribution of the total gross earnings (volume) and the number of employees by economic activity (NACE Rev. 2) in 2019**



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**Distribution of the total gross earnings (volume) and the number of employees by enterprise size in 2019**



**Notes:**

SME: Small and Medium-size Enterprises (up to 249 employees).

LE: Large-size Enterprises (250 employees and over).

**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

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**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

#### **Total gross monthly earnings**

The total gross monthly earnings correspond to the sum of all gross earnings (before taxes and contributions to the SS or to CGA) paid by enterprises or institutions. It does not include the amounts exempted from tax withheld and contributions to the SS, for example, meal allowances up to €4.77 or €7.63, if paid in cash or meal cards. It includes all components of the variable "Earnings components" of SS and the variable "Type of earnings" of CGA.

#### **Regular gross monthly earnings**

The regular gross monthly earnings corresponds to the sum of all gross earnings (before taxes and contributions to the Social Security) paid by enterprises or institutions on a regular and monthly basis. It does not include the amounts exempt from tax withheld and contributions to the SS, for example, meal allowances up to €4.77 or €7.63, if paid in cash or meal cards. It only includes the components "Base salary", "Meal allowance", "Regular monthly allowances" and "Bonuses and other monthly benefits" of the variable "Earnings components" of SS and the components "Base earnings", "Seniority payments"; "Permanent earnings", "Bonuses and other monthly benefits" and "Meal allowance" of the variable "Type of earnings" of CGA. In 2019, it corresponded to 81.4% of the total gross monthly earnings.

#### **Base gross monthly earnings**

The base gross monthly earnings corresponds to the base gross earnings (before taxes and contributions to the Social Security) paid by enterprises or institutions. It only includes the component "Base salary" of the variable "Earnings components" of SS and the component "Base earnings" of the variable "Type of earnings" of CGA. In 2019, it corresponded to 76.5% of the total gross monthly earnings.

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### On year rate of change

The on year (year-on-year) change compares the level of the variable in the current quarter/month with that of the corresponding quarter/month of the previous year. This rate of 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/month.

### 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 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. These revisions result from the integration of data sent later by some enterprises to the SS. The impact of these revisions, measured by the difference between the estimates now released and the ones published in the Press Release of December of 2019, are the following:

Revision of the estimates of the March 2020 - major indicators -				
	Unit	January 2020	February 2020	March 2020
Number of enterprises		0.2	0.7	2.3
Number of employees	Thousands	-0.9	1.0	8.4
Total gross monthly earnings per employee		0	2	1
Regular gross monthly earnings per employee	Euros	0	1	-2
Base gross monthly earnings per employee		0	0	-2
Number of enterprises (y-o-y)		0.0	0.2	0.6
Number of employees (y-o-y)		0.0	0.1	0.2
Total gross monthly earnings per employee	pp	0.0	0.1	0.0
Regular gross monthly earnings per employee		0.1	0.0	-0.2
Base gross monthly earnings per employee		0.0	0.0	-0.2

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

### Answers' imputation to reduce the revisions level of the values published for the most recent months

In order to reduce the level of revisions of the values published for the most recent months, the DMR 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 a enterprise has made a substantial correction of the values already reported when the correction is worth €10,000 or more. The detection of these enterprise is ensured by a combination of two methods: an *ad hoc* criterion and through the supervised Machine Learning algorithm in the form of the Support Vector Machine (SVM).

A given enterprise meets the *ad hoc* criterion if it meets at least one of two conditions: (i) it has made at least 9 corrections in the past 12 months; or ii) it has made at least 3 corrections in the past 4 months.

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A given enterprise meets the *ad hoc* criterion if it meets at least one of two conditions: (i) it has made at least 9 corrections in the past 12 months; or ii) it has made at least 3 corrections in the past 4 months.

The SVM algorithm allows the identification of enterprises that systematically correct information through an optimization process. In this procedure, we use a set of training data (records of enterprises that correct information and of enterprises that do not) to which the SVM algorithm is applied in order to obtain a classification model that maximizes the distinction between the two groups of enterprises, i.e., a model with maximum success rate (accuracy) in identifying enterprises that correct the information submitted previously. Although most enterprises are identified simultaneously by both methods (*ad hoc* and SVM), each allows identifying fringes of enterprises that the other does not. By using both, it is guaranteed that a greater number of enterprises are identified.

Once the enterprises that need imputation of answers are identified, the earnings volume is imputed by enterprise and earnings component. The imputation process is different according to the earnings component. For regular earnings components, such as "Bonuses and other monthly benefits", the "Base salary", the "Meal allowance" and the "Night-time work", the amount reported in the previous month is used. For non-regular components, such as the "Bonuses and other non-monthly benefits", the "Holyday allowance" and the "Christmas allowance", the values of the last year are used multiplied by the year-on-year change of the regular earnings of the previous month. For the remaining earnings components, the median values of the last 12 months are used, provided there are at least 6 observations. Otherwise, the value of the last month is used.

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 17 January 2020.

**Next Press Release:** 7 May 2019.