

10 August 2022 EMPLOYMENT STATISTICS 2nd quarter of 2022

THE UNEMPLOYMENT RATE DECREASED TO 5.7% IN THE 2ND QUARTER OF 2022

In the 2nd quarter of 2022, the employed population (4,901.8 thousand people) remained practically unchanged from the previous quarter, having increased by 1.9% (91.3 thousand) from one year before.

The share of the employed population who have teleworked, that is, who has worked from home using information and communication technologies was 19.6% (958.6 thousand people), of which 59.9% belonged to the occupational group of Professionals and 75.1% had tertiary education. An employee with an occupation in this occupational group had a probability of being in telework 8.0 percentage points (pp) higher than an employed person with an occupation in the reference group¹. Likewise, the probability of an employed person with tertiary education being in telework is 11.7 pp higher than for those who have completed, at most, the first and second stages of basic education.

The unemployed population, estimated at 298.8 thousand people, has decreased by 3.1% (9.6 thousand) from the previous quarter and by 13.6% (46.9 thousand) from a year earlier.

The unemployment rate stood at 5.7%, down 0.2 pp from the 1^{st} quarter of 2022 and down 1.0 pp from the 2^{nd} quarter of 2021.

The labour underutilisation covered 600.7 thousand people, having decreased by 2.8% (17.5 thousand) from the previous quarter and by 8.2% (53.5 thousand) from a year before. Similarly, also the labour underutilisation rate (11.2%) has decreased both from the previous quarter (0.3 pp) and from a year earlier (1.1 pp).

The inactive population aged 16 and over (3,604.4 thousand people) has increased by 0.3% (11.3 thousand) from the previous quarter and has decreased by 1.1% (40.7 thousand) from a year earlier.

1. Labour force (active population)

The Labour Force Survey results for the 2nd quarter of 2022 indicate that the labour force (active population), estimated at 5,200.6 thousand people, has decreased by 0,2% (8.7 thousand people) from the previous quarter, having increased by 0.9% (44.4 thousand) from the same quarter of 2021.

¹ In page 4 it is presented a study on the influence of a set of individual and socio-economic characteristics on the probability of an employed person teleworking in the 2nd quarter of 2022.

The reference group for the explanatory variable Main occupation was the set of occupational groups 5-9, including the armed forces, according to the International Standard Classification of Occupations 2008 (ISCO-08).



Therefore, the activity rate of the working age population (those aged 16 to 89) stood at 59.8%, having decreased by 0.1 percentage points (pp) from the prior quarter and increased by 0.5 pp from the 2nd quarter of 2021.

2. Employed population

The employed population stood at 4,901.8 thousand people and remained practically unchanged from the previous quarter, having increased by 1.9% (91.3 thousand) from one year before. Similarly, also the corresponding employment rate, which stood at 56.4%, remained unchanged from the 1st quarter of 2022 and increased from the 2nd quarter of 2021 (1.1 pp).



Figure 1. Employed population and employment rate

Source: Statistics Portugal, Labour Force Survey – 2nd quarter of 2022.

Figure 2 shows the breakdown of the year-on-year change of the employed population by different characterisation variables: sex, age group, highest completed level of education, activity sector, labour status, type of employment contract of employees, and work duration regime.

In summary, for the year-on-year change in the employed population, mainly contributed the increases in the following population groups: women (57.3 thousand; 2.4%); people aged 45 to 54 (35.0 thousand; 2.6%); with a tertiary education degree (119.6 thousand; 7.3%); employed in the services sector (105.6 thousand; 3.0%), namely in the set of activities of "wholesale and retail trade; repair of motor vehicles and motorcycles", of "transportation and storage", and of "accommodation and food services" (57.9 thousand; 5.0%), which

represented 54.8% of the sector change; employees (51.6 thousand; 1.3%), with a permanent contract (84.7 thousand; 2.5%); and working full-time (64.9 thousand; 1.5%).

Figure 2. Contributions to the year-on-year rate of change of the employed population in the 1st quarter of 2022



Source: Statistics Portugal, Labour Force Survey – 2nd quarter of 2022.

From the 2^{nd} quarter of 2022 onwards, the ad hoc module "Working from home" presents some changes from the previous edition (which was in force from the 1^{st} quarter of 2021 to the 1^{st} quarter of 2022). Therefore, it is no longer possible to directly compare the estimates between the two editions.

The changes introduced stem mainly from the interest in typifying the work organisation system in which work performed from home is done. Thus, new variables were introduced and the target population was extended to include all those who reported having worked from home in the reference period, regardless of the frequency with which they did so (note that in the previous edition, the target population corresponded to those who had always or almost always worked from home in the reference period).



Considering the total employed population, 20.6% of them (1,009.3 thousand) reported having worked from home in the 2^{nd} quarter of 2022, 29.9%% of which (301.7 thousand) due to the COVID-19 pandemic. The average number of days worked at home was four.

Among those who worked at home, 33.0% (333.5 thousand) have always worked at home and 27.6% (278.4 thousand) only regularly, through a system that combines face-to-face work and work at home. Among these, the most common system was the one that combines a few days a week at home in every week (62.1%; 172.9 thousand).

Among those working home, 95.0% (958.6 thousand) have teleworked, that is, they have used information and communication technologies (ICT) to perform their jobs from home. This work practice covered 19.6% of the total employed population².

The influence of a set of individual and socio-economic characteristics on the probability of teleworking

Since it is integrated in the Labour Force Survey, the ad hoc module "Working from home" allows to characterise the employed population who teleworked according to several characterisation variables, as well as to evaluate their simultaneous impact on the probability of an employed person teleworking (this variable having only two values: 1 = teleworking; 0 = not teleworking).

To this end, a binomial Logit model was estimated^a, a binary choice model, in which it is assessed the impact on the probability of teleworking (binary variable to be explained) resulting from variations in a set of socio-demographic characteristics (explanatory variables, namely, gender, age group, level of education, region of residence, employment status)^b.

All explanatory variables are qualitative, and their classes were transformed into binary variables (0/1). The reference class (or comparison group) for each variable is the following: male; age group of 16 to 24 years old; those who have completed, at most, the first and second stages of basic education; *Região Autónoma da Madeira*; self-employed and unpaid family workers; primary and secondary sectors; occupational groups 5-9, including the armed forces, according to the International Standard Classification of Occupations 2008 (ISCO-08)^c.

The results of the Logit model^d indicate, on average, the contribution of each of the explanatory variables to the probability of occurrence of a particular state of the dependent variable when controlling for all the other variables simultaneously. In other words, they allow us to answer, for example, the following question: what is the impact of a change of occupation of an employed person on his/her probability of teleworking, keeping the other characterisation variables constant?

The coefficients presented correspond to the average changes in the above-mentioned probabilities (average marginal effects) associated with each of the explanatory variables (in relation to the reference class), keeping all the others constant.

^a See Methodological Note.

^b In addition, another model was estimated including the variables "economic activity group" and "occupation" (model 2). Its results are shown in Table A at the Methodological note.

^cList available in the notes of Table A. Average marginal effects - impact on the probability of an employed person teleworking.

 $^{^{\}rm d}$ Available at Table A at the Methodological note.

The results obtained allow us to conclude that the probability of an employed person teleworking:

- Is lower for women by 1.3 percentage points (pp).
- It increases with age, being higher for the age groups 45 to 54 (2.4 p.p.) and 55 to 64 (3.2 pp) in relation to those aged 16 to 24.
- Is higher among those that have upper secondary and post-secondary non-tertiary education or tertiary education (respectively, more 3.1 pp and 11.7 pp) than among those who have completed, at most, the first and second stages of basic education.
- Is 2.8 pp higher in Área Metropolitana de Lisboa than in Região Autónoma da Madeira.
- Is lower by 2.1 p.p. for employees than for self-employed workers or unpaid family workers.
- Is higher by 1.4 pp in J to N^e economic activities and lower by 1.7 pp in Q to U^e than in the activities of the primary and secondary sectors (model 2).
- Is higher in all occupational groups when compared to the reference class composed by the 5 to 9 groups including the armed forces^e by the following order: Professionals (8.0 pp), Managers (7.0 pp), Technicians and associate professionals (5.7 pp), and Clerical support workers (3.4 pp) (model 2).

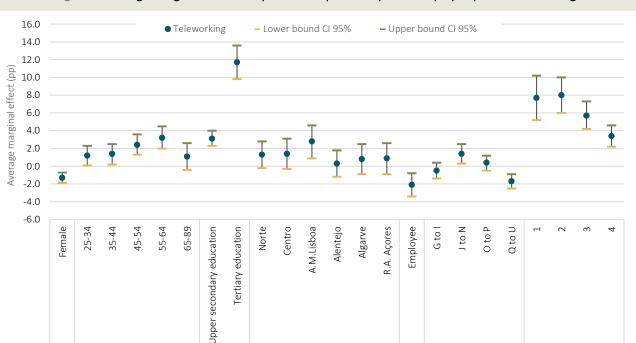


Figure A. Average marginal effects - impact on the probability of an employed person teleworking^e

Source: Statistics Portugal, Labour Force Survey – 2nd quarter of 2022.

NUTS II Region

Education

attainment

 $\hbox{EMPLOYMENT STATISTICS}-2^{nd} \ quarter \ of \ 2022$

Occupation

(model 2)

Professional Main activity

(model 2)

status

Age group

Sex

^e List available in the notes of Table A. Average marginal effects - impact on the probability of an employed person teleworking.



3. Unemployed population

The unemployed population (298.8 thousand people) decreased by 3.1% (9.6 thousand) from the previous quarter and by 13.6% (46.9 thousand) from a year earlier.

To the year-on-year change of the unemployed population contributed mainly the following population groups decreases: women (24.0 thousand; 13.4%); people aged 16 to 24 (25.9 thousand; 32.8%); with upper secondary and post-secondary non-tertiary education (28.7 thousand; 21.9%); looking for a new job (49.3 thousand; 16.1%); and unemployed for less than 12 months (44.5 thousand; 23.3%) (Figure 4).

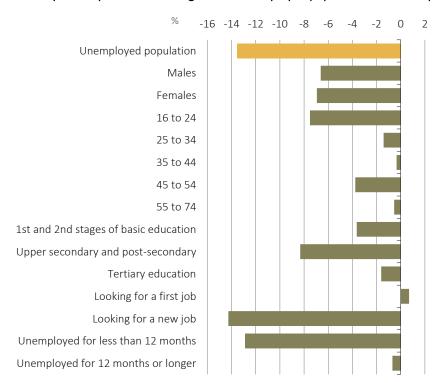


Figure 3. Unemployed population and unemployment rate

Source: Statistics Portugal, Labour Force Survey – 2nd quarter of 2022.



Figure 4. Contributions to the year-on-year rate of change of the unemployed population in the 2nd quarter of 2022



It should be noted that, in the 2nd quarter of 2022, 50.9% of the unemployed population was in this situation for 12 months or longer (long-term unemployment), up 4.7 pp from the quarter before and up 6.2 pp from a year earlier (Table 1).

The year-on-year change of the proportion of long-term unemployment was driven by increases among men (6.4 pp), those aged 55 to 74 (16.7 pp) and those with tertiary education (11.0 pp). The share of very long-term unemployment (24 or more months) in the long-term unemployment has increased by 15.2 p.p. from the previous quarter and by 1.0 p.p. from the same quarter of 2021.

The unemployment rate for the 2^{nd} quarter of 2022 stood at 5.7%³, which corresponds to a decrease by 0.2 pp from the 1^{st} quarter of 2022 and by 1.0 pp from the 2^{nd} quarter of 2021. A similar but more sharp evolution was shown by the youth unemployment rate (16 to 24 years old), estimated at 16.7%, down 3.9 pp from the previous quarter and down 7.0 pp from a year earlier.

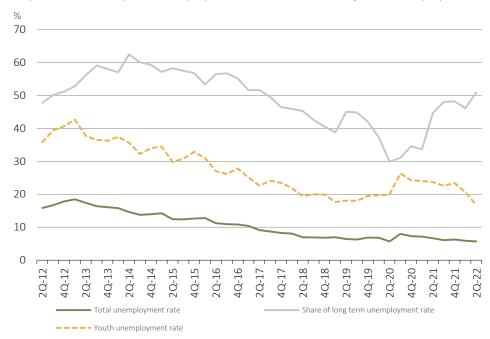
 $\hbox{EMPLOYMENT STATISTICS}-2^{nd} \ quarter \ of \ 2022$

³ This unemployment rate was calculated for those aged 16 to 89 (in line with the concepts in force of the International Labour Organization). The unemployment rate for the moving quarter centered in May 2022 (which corresponds to the 2nd quarter 2022), published in the Monthly Employment and Unemployment Estimates Press Release of June 2022 (released in 29-7-2022), was calculated for the age subgroup of those aged 16 to 74 (as in the Eurostat News Release). This rate (not seasonally adjusted) was 5.8%.

Table 1. Unemployed population for 12 months or longer (long-term unemployment)

Portugal	(Proportion		
roitugai	2Q-2021	1Q-2022	2Q-2022	2Q-2021
		Thousands		%
Total	154.4	142.6	152.1	50.9
Males	74.4	64.7	73.4	51.0
Females	80.1	77.8	78.7	50.8
16 to 24	18.7	13.7	13.6	25.7
25 to 34	29.8	31.0	37.2	49.3
35 to 44	39.0	23.8	32.9	51.5
45 to 54	39.0	31.2	32.6	61.2
55 to 74	27.8	42.8	35.7	67.2
First and second stages of basic education (at most)	72.2	59.1	65.7	53.6
Upper secondary and post-secondary non-tertiary	54.2	48.6	52.1	50.9
Tertiary education	28.1	34.9	34.2	46.3
Unemployed for less than 24 months	74.6	66.0	47.3	31.1
Unemployed for 24 months or longer	79.9	76.6	104.8	68.9

Figure 5. Total and youth unemployment rate and share of long term unemployment



Source: Statistics Portugal, Labour Force Survey -2^{nd} quarter of 2022.

Using the figures for the 1^{st} quarter of 2022 for comparison purposes in the European Union (Figure 6)⁴, the youth unemployment rate in the 27 countries average was estimated at 14.3%, 6.3 pp less than in Portugal (20.6%), which corresponded to the 6^{th} highest rate in the EU-27.

From the 4th quarter of 2021, the youth unemployment rate decreased by 0.1 pp in the EU-27 and by 2.8 pp in Portugal. From the 1st quarter of 2021, it decreased more in the EU-27 (4.3 pp) than in Portugal (3.5 pp).

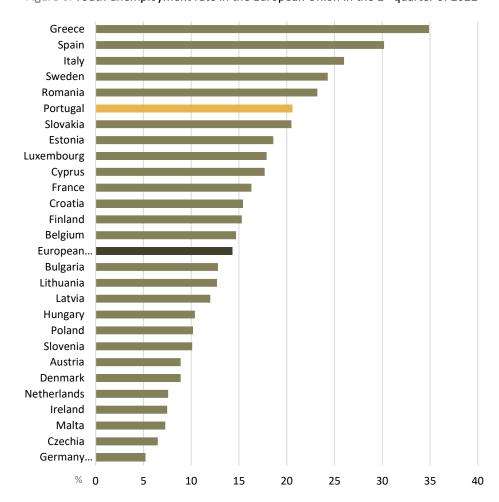


Figure 6. Youth unemployment rate in the European Union in the 1st quarter of 2022

Source: Eurostat, Unemployment by sex and age – quarterly data [UNE_RT_Q]

Analysing the unemployment rate by NUTS II region (Table 2), in the 2nd quarter of 2022, it is noted that three regions had a rate above the national average (*Região Autónoma da Madeira*: 7.3%; *Área Metropolitana de*

 $\hbox{EMPLOYMENT STATISTICS}-2^{nd} \ quarter \ of \ 2022$

⁴ The estimates for the 2nd quarter of 2022 at European Union level will be released on October 4, 2022. It should be noted that the reference age group is that of 15 to 24 years old, except for Portugal, Spain and Italy, whose lower age limit is 16.



Lisboa: 6.8%; Região Autónoma dos Açores: 5.9%), while the remaining four regions had it below the average (Norte: 5.5%; Algarve: 5.3%; Centro: 5.2%; and Alentejo: 4.4%).

From the previous quarter, the unemployment rate has increased only in *Norte* (0.1 pp), having remained unchanged in the $\acute{A}rea$ Metropolitana de Lisboa. Decreases were observed in the remaining five regions, the largest of them in Algarve (1.7 pp).

Also, when comparing to a year earlier, the negative change in the unemployment rate of *Algarve* (4.9 pp) stands out as the largest one. All other regions have year-on-year decreased, except *Área Metropolitana de Lisboa*, where the unemployment rate has increased by 0.1 pp.

Table 2. Unemployment rates by NUTS II (NUTS-2013)

Unit: % 2Q-2021 1Q-2022 2Q-2022 **Portugal** 6.7 5.9 5.7 Norte 6.3 5.4 5.5 5.2 6.2 5.4 Área Metropolitana de Lisboa 6.7 6.8 6.8 Alentejo 7.9 5.1 4.4 Algarve 10.2 7.0 5.3 Região Autónoma dos Açores 6.8 6.6 5.9 Região Autónoma da Madeira 7.3 8.4

Source: Statistics Portugal, Labour Force Survey – 2nd quarter of 2022.

4. Inactive population

The inactive population, estimated at 5,064.3 thousand people in the 2^{nd} quarter of 2022, has increased from the previous quarter (0.1%; 6.4 thousand) and decreased from the same quarter of 2021 (1.1%; 58.5 thousand).

The inactive population aged 16 or over stood at 3,604.4 thousand people, accounted for 71.2% of total inactive population, and increased by 0.3% (11.3 thousand) from the previous quarter and decreased by 1.1% (40.7 thousand) from the 2^{nd} quarter of 2021.

The inactivity rate (16 years old or over) stood at 40.9% and presented the same evolution pattern: it has increased from the previous quarter (0.1 pp) and decreased from the same period of 2021 (0.5 pp).

3,950 50 3,900 49 3.850 48 3,800 47 3.750 46 3,700 45 3,650 44 3,600 43 3,550 42 3.500 41 3,450 Ω Inactive population (thousands) - left axis - Inactivity rate (%) - right axis

Figure 7. Inactive population (aged 16 and over)

5. Supplementary indicators to unemployment and the labour underutilisation

The labour underutilisation is an indicator that aggregates the unemployed population, the underemployment of part-time workers, the inactive seeking work but not immediately available, and the inactive available but not seeking work⁵. This indicator is supplemented by its corresponding rate – the labour underutilisation rate⁶. This indicator is a broader measure of the labour underutilisation than the unemployment rate⁷.

In the 2nd quarter of 2022, the labour underutilisation was estimated at 600.7 thousand people and the corresponding rate was 11.2%.

⁵ For a more detail definition of these indicators, read the publication "Estatísticas do Emprego – 2.º trimestre de 2012" (only available in Portuguese) – chapter 4 (Concepts) and 6 (Theme under analysis) available at: http://www.ine.pt/xurl/pub/143643471.

⁶ See concepts in the technical note.

⁷ The labour underutilisation rate corresponds, with the due adaptations to the European context and to the information obtained from the Labour Force Survey (named *Inquérito ao Emprego* in Portugal), to the U6 measure regularly published by the US Bureau of Labour Statistics in addition to the official unemployment rate (U3). Eurostat also regularly publishes this indicator for the European Union countries under the designation *Labour market slack*, following the ILO recommendation set in the Resolution concerning statistics of work, employment and labour underutilization of the 19th International Conference of Labour Statisticians, but does it for the age group 15 to 74.

The labour underutilisation has decreased by 2.8% (17.5 thousand) from the previous quarter and by 8.2% (53.5 thousand) from a year earlier. Similarly, the labour underutilisation rate has decreased both from the previous quarter (0.3 pp) and from a year before (1.1 pp).

By component, the following is observed:

- The unemployed population was estimated at 298.8 thousand people and, as previously mentioned, decreased by 3.1% (9.6 thousand) from the previous quarter and by 13.6% (46.9 thousand) from the same quarter of 2021. The unemployment rate was 5.7%, down 0.2 pp from the previous quarter and down 1.0 pp from a year earlier.
- The number of underemployed part-time workers was 141.6 thousand people, a value lower than the one observed in the previous quarter (1.7%; 2.4 thousand) but a higher than that of a year earlier (4.3%; 5.8 thousand).
- The number of inactive persons seeking work but not immediately available stood at 31.1 thousand, up 9.9% (2.8 thousand) from the previous quarter and up 28.5% (6.9 thousand) from the 2nd quarter of 2021.
- The number of inactive persons available to work but not seeking a job (129.1 thousand) decreased by 6.1% (8.3 thousand) from the previous quarter and by 13.0% (19.3 thousand) from a year earlier.

Table 3. Labour underutilisation by component

Portugal	Quarterly level			Rate of change	
	2Q-2021	1Q-2022	2Q-2022	On year	On quarter
Number		Thousands			%
Total	654.2	618.2	600.7	-8.2	-2.8
Unemployed population	345.7	308.4	298.8	-13.6	-3.1
Underemployed part-time workers	135.8	144.0	141.6	4.3	-1.7
Persons seeking work but not immediately available	24.2	28.3	31.1	28.5	9.9
Persons available to work but not seeking	148.4	137.4	129.1	-13.0	-6.1
Rate		%			рр
Unemployment rate	6.7	5.9	5.7	-1.0	-0.2
Labour underutilisation rate	12.3	11.5	11.2	-1.1	-0.3

Source: Statistics Portugal, Labour Force Survey – 2nd quarter of 2022.

Table 4. Main indicators – active and employed population

Quarterly level			Rate of change		
Portugal	2Q-2021	1Q-2022	2Q-2022	On year	On quarter
		Thousands			%
Labour force (active population)	5,156.2	5,209.3	5,200.6	0.9	-0.2
Males	2,586.1	2,611.1	2,597.1	0.4	-0.5
Females	2,570.2	2,598.2	2,603.5	1.3	0.2
16 to 24	333.1	319.1	317.1	-4.8	-0.6
25 to 34	979.8	979.9	992.7	1.3	1.3
35 to 44	1,296.2	1,274.9	1,271.1	-1.9	-0.3
45 to 54	1,394.4	1,423.9	1,416.5	1.6	-0.5
55 to 64	959.8	999.9	994.2	3.6	-0.6
65 to 89	192.8	211.5	209.0	8.4	-1.2
First and second stages of basic education (at most)	1,839.7	1,825.8	1,723.9	-6.3	-5.6
Upper secondary and post-secondary non-tertiary	1,592.9	1,596.4	1,639.0	2.9	2.7
Tertiary education	1,723.6	1,787.2	1,837.7	6.6	2.8
Activity rate (%)	59.3	59.9	59.8		
Males	63.6	64.4	64.0		
Females	55.5	56.1	56.2		
Employed population	4,810.5	4,900.9	4,901.8	1.9	О
Males	2,419.1	2,470.5	2,453.0	1.4	-0.7
Females	2,391.4	2,430.4	2,448.7	2.4	0.8
16 to 24	254.2	253.3	264.1	3.9	4.3
25 to 34	899.4	902.1	917.2	2.0	1.7
35 to 44	1,231.1	1,224.5	1,207.2	-1.9	-1.4
45 to 54	1,328.3	1,368.7	1,363.3	2.6	-0.4
55 to 64	914.2	944.5	943.8	3.2	-0.1
65 to 89	183.4	207.7	206.1	12.4	-0.8
First and second stages of basic education	1,704.6	1,709.0	1,601.4	-6.0	-6.3
(Upper) secondary and post-secondary non-tertiary education	1,461.8	1,486.1	1,536.6	5.1	3.4
Tertiary education	1,644.1	1,705.8	1,763.7	7.3	3.4
Agriculture, forestry and fishing (a)	124.2	124.8	142.1	14.4	13.8
Manufacturing, electricity, gas and water supply and construction (a)	1,206.4	1,196.4	1,174.1	-2.7	-1.9
Services (a)	3,479.9	3,579.7	3,585.5	3.0	0.2
Employees	4,088.6	4,147.5	4,140.2	1.3	-0.2
With a permanent job (work contract of unlimited duration)	3,387.3	3,481.3	3,472.0	2.5	-0.3
With a temporary job (work contract of limited duration)	601.2	553.7	556.1	-7.5	0.4
Other contractual arrangements	100.0	112.5	112.1	12.1	-0.4
Self-employed workers	681.2	721.9	722.0	6.0	0
Unpaid family workers	40.7	31.4	39.5	-2.8	25.7
Full-time workers	4,446.5	4,512.2	4,511.4	1.5	О
Part-time workers	364.0	388.7	390.4	7.2	0.4
Underemployed part-time workers	135.8	144.0	141.6	4.3	-1.7
Employment rate (%)	55.3	56.4	56.4		
Males	59.5	60.9	60.5		
Females	51.7	52.5			

Notes: (a) The estimates are presented by NACE-Rev. 2. Conventional signs: • Less than half of the unit used.



Table 5. Main indicators – unemployed and inactive population

Quarterly level			Rate of change		
Portugal	2Q-2021	1Q-2022	2Q-2022	On year	On quarter
		Thousands			%
Unemployed population	345.7	308.4	298.8	-13.6	-3.1
Males	166.9	140.6	144.0	-13.7	2.4
Females	178.8	167.8	154.8	-13.4	-7.8
16 to 24	78.9	65.8	53.0	-32.8	-19.4
25 to 34	80.4	77.8	75.5	-6.1	-3.0
35 to 44	65.1	50.4	63.9	-1.8	26.7
45 to 54	66.2	55.1	53.2	-19.6	-3.5
55 to 74	55.1	59.3	53.2	-3.4	-10.2
First and second stages of basic education (at most)	135.1	116.8	122.5	-9.3	4.9
Upper secondary and post-secondary non-tertiary education	131.1	110.3	102.4	-21.9	-7.1
Tertiary education	79.5	81.4	73.9	-7.0	-9.2
Looking for a first job	39.7	46.9	42.1	6.0	-10.4
Looking for a new job	306.1	261.5	256.8	-16.1	-1.8
Unemployed for less than 12 months (short-term)	191.3	165.8	146.8	-23.3	-11.5
Unemployed for 12 months or longer (long-term)	154.4	142.6	152.1	-1.5	6.6
Unemployment rate (%)	6.7	5.9	5.7		
Males	6.5	5.4	5.5		
Females	7.0	6.5	5.9		
Youth (16 to 24)	23.7	20.6	16.7		
Long-term	3.0	2.7	2.9		
Inactive population	5,122.8	5,057.9	5,064.3	-1.1	0.1
Inactive population (16 and over)	3,645.1	3,593.1	3,604.4	-1.1	0.3
Males	1,512.1	1,477.8	1,492.5	-1.3	1.0
Females	2,133.0	2,115.3	2,111.9	-1.0	-0.2
16 to 24	659.4	668.4	668.5	1.4	0
25 to 34	132.4	133.4	121.4	-8.3	-9.0
35 to 44	99.9	84.6	77.7	-22.2	-8.2
45 to 54	158.9	137.5	148.0	-6.9	7.6
55 to 64	474.2	441.4	448.7	-5.4	1.7
65 to 89	2,014.5	2,016.1	2,026.4	0.6	0.5
Students (16 to 89)	731.9	764.6	758.0	3.6	-0.9
Fulfilled domestic tasks (16 to 89)	339.6	352.7	351.8	3.6	-0.3
Retired (16 to 89)	2,007.3	1,954.4	1,963.5	-2.2	0.5
Other inactive	566.3	521.3	531.1	-6.2	1.9
Persons seeking work but not immediately available	24.2	28.3	31.1	28.5	9.9
Persons available to work but not seeking	148.4	137.4	129.1	-13.0	-6.1
Inactivity rate (16 and over) (%)	41.4	40.8	40.9		
Males	36.9	36.1	36.5		
Females	45.4	44.9	44.8		

Conventional sign:

[•] Less than half of the unit used.



TECHNICAL NOTE

The main purpose of the Labour Force Survey is to characterise the population in terms of the labour market. It is a quarterly sample survey, addressed to families occupying the same dwelling in the national territory, which makes available quarterly and annual data.

Most of the characteristics observed in this survey report to the situation in one pre-defined week (from Monday to Sunday), known as reference week. The reference weeks are uniformly distributed throughout the quarters and years. The interviews usually take place in the week following the reference week.

The information is obtained directly, through computer-assisted interview. Until the first fortnight of March 2020, the data were collected by using a mixed data collection mode: the initial interview was done face-to-face by an interviewer visiting the household and the other five interviews were done by telephone if certain requirements are met. Following the COVID-19 pandemic and the measures adopted by the competent authorities, Statistics Portugal has decided, as of that date and until further notice, to suspend the face-to-face collection mode, replacing it exclusively with the telephone interview one.

Published data were calibrated by using the population estimates calculated from the final results of Census 2011.

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

For more detailed information consult the Labour Force Survey <u>methodological document</u> (only in Portuguese) available at the Statistics Portugal website.

SOME CONCEPTS

Unemployed: person aged 16 and 74 who during the reference period met simultaneously the following situations:

- neither had a job nor was at work;
- had actively sought work, i.e. had actively searched for a paid or unpaid job during the specified period (reference
 period or the three previous weeks); and
- was available for a paid and unpaid job.

Employed: person aged 16 to 89 who, during the reference period, was in one of the following situations:

- worked for at least one hour for a wage or salary, in cash or in kind (including unpaid family work);
- had a formal attachment to his/her job but was not at work temporarily;
- was in early retirement but working in the reference week.

Working age resident population: Resident population aged 16 to 89.

Active: person aged 16 to 89 who, during the reference period, furnish the supply of labour force for the production of economic goods and services (was employed or unemployed).



Labour force: population formed by all active persons.

Extended labour force: corresponds to the labour force enlarged by the inactive seeking work but not immediately available and the inactive available but not seeking work.

Labour underutilisation: indicator that aggregates the unemployed population, the underemployment of part-time workers, the inactive seeking work but not immediately available, and the inactive available but not seeking work. All these population groups consider the age group 16 to 74.

Young people not in employment, education or training: population of young people of a given age group who, in the reference period, was not employed (i.e., was unemployed or inactive) and was not involved in education or training over a specific period of time (the reference week or in the previous three weeks).

Activity rate of the working age population: rate that defines the relation between the labour force and the working age population.

P.R. (%) = (Labour force / Working age population) x 100

Employment rate: rate that defines the relation between the employed population and the working age population.

E.R. (%) = (Employed population / Working age population) x 100

Unemployment rate: rate that defines the relation between the unemployed population and the labour force.

U.R. (%) = (Unemployed population / Labour force) x 100

Long term unemployment rate: rate that defines the relation between the unemployed population seeking employment for 12 months or over and the labour force.

L.T.U.R. (%) = (Unemployed population seeking employment for 12 months or over / Labour force) x 100

Inactivity rate of the working age population: rate that defines the relation between the working age inactive population and the working age total population.

I.R. (%) = (Working age inactive population / Working age population) x 100

Labour underutilisation rate: rate that defines the relation between the labour underutilisation and the extended labour force.

L.U.R. (%) = (Labour underutilisation / Extended labour force) x 100



Rate of young people not in employment, education or training: rate that defines the relation between the population of young people of a given age group not in employment, education or training and the total population of young people of the same age group.

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.

On quarter change

The quarterly change compares the level of the variable over two consecutive periods. Although this indicator allows to monitor the recent pace of the variable, its computation is particularly influenced by seasonal effects and other more specific effects in one (or both) of the quarters under comparison.

LOGIT MODEL

The probability of an individual working from home using information and communication technologies (p_i) given a set of explanatory variables (X_i) was estimated from the following equation:

$$p_i = \text{Prob}(Y = 1|X_i) = F(X_i\beta)$$

where Y is the binary dependent variable (that is, the variable one tries to explain and that only assumes two values: 1, if the individual is teleworking; 0, otherwise), X_i is the vector of independent (explanatory) variables and $F(X_i\beta) = \exp(X_i\beta)/(1 + \exp(X_i\beta))$ is the cumulative logistic function, where β is the vector of regression coefficients.

One of the characteristics of logit models is their symmetric distribution, where $Prob(Y = 0|X_i) = 1 - F(X_i\beta)$. In other words, the probability of an individual not teleworking is complementary to the probability of being teleworking, so the sum of both is equal to 1 (exhausts all possibilities). Remember that a probability ranges between the values 0 and 1.

Weighted data was used in this exercise, so that the results are valid for the population, based on 16,159 sample observations from the Labour Force Survey in the 2^{nd} quarter of 2022.

Table A. Average marginal effects - impact on the probability of an employed person teleworking

Explanatory variables	Reference class	Average marginal effect		
Explanatory variables	Reference class	Model 1	Model 2	
Sex				
Female	Male	-0.013 ***	-0.004 **	
Age group				
From 25 to 34	From 16 to 24	0.012 **	0.007	
From 35 to 44	From 16 to 24	0.014 **	0.006	
From 45 to 54	From 16 to 24	0.024 ***	0.010 **	
From 55 to 64	From 16 to 24	0.032 ***	0.013 ***	
From 65 to 89	From 16 to 24	0.011	0.003	
Nível de escolaridade completo				
Upper secondary and post-secondary non-tertiary education	Lower secondary education (at most)	0.031 ***	0.012 ***	
Tertiary education	Lower secondary education (at most)	0.117 ***	0.022 ***	
Residence region (NUTS II)				
Norte	Região Autónoma da Madeira	0.013 *	0.008	
Centro	Região Autónoma da Madeira	0.014 *	0.009	
Área Metropolitana de Lisboa	Região Autónoma da Madeira	0.028 ***	0.014 **	
Alentejo	Região Autónoma da Madeira	0.003	0.004	
Algarve	Região Autónoma da Madeira	0.008	0.005	
Região Autónoma dos Açores	Região Autónoma da Madeira	0.009	0.006	
Professional status				
Employee	Self-employed worker or Unpaid family	-0.021 ***	-0.008 **	
	worker			
Main activity (NACE-Rev. 2)				
G to I	A to F		-0.005	
J to N	A to F		0.014 ***	
O to P	A to F		0.004	
Q to U	A to F		-0.017 ***	
Occupation (ISCO-08)				
1: Managers	5 to 9 and Armed forces occupations		0.077 ***	
2: Professionals	6 to 9 and Armed forces occupations		0.080 ***	
3: Technicians and associate professionals	7 to 9 and Armed forces occupations		0.057 ***	
4: Clerical support workers	8 to 9 and Armed forces occupations		0.034 ***	
N (population)	4,901,756			
n (sample)	16,159			
Max-rescaled R ²		0.143	0.228	
Variance estimation method	Jackknife			

Source: Statistics Portugal, Labour Force Survey -2^{nd} quarter of 2022.

Notes:

- *** p<0.01 (statistically significant variable for a 99% confidence level).
- ** p<0.05 (statistically significant variable for a 95% confidence level).
- * p<0.10 (statistically significant variable for a 90% confidence level).
- Variables not marked are variables that are not statistically significant.
- Weighted regression.

Main activity (NACE-Rev. 2)

A: Agriculture, forestry and fishing

B to F: Manufacturing, electricity, gas and water supply and construction

C: Manufacturing

F: Construction

G to U: Services

G: Wholesale and retail trade; repair of motor vehicles and motorcycles

H: Transportation and storage

I: Accommodation and food services activities

J: Information and communication

K: Financial and insurance activities

L: Real estate activities

M: Professional, 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 and recreation

S a U: Other service activities

Occupation (ISCO-08)

- 1: Managers
- 2: Professionals
- 3: Technicians and associate professionals
- 4: Clerical support workers
- 5: Service and sales workers
- 6: Skilled agricultural and fishery workers
- 7: Craft and related trades workers
- 8: Plant and machine operators, and assemblers
- 9: Elementary occupations
- 0: Armed forces occupations

Next Press Release - 9 November 2022