Piraeus, 29 August 2024

**HELLENIC REPUBLIC** 

HELLENIC STATISTICAL AUTHORITY

**LABOUR FORCE SURVEY:** July 2024

The Hellenic Statistical Authority (ELSTAT) announces the seasonally adjusted estimates of

employment and unemployment for July 2024.

• The seasonally adjusted unemployment rate in July 2024 amounted to 9.9% compared to

11.1% in July 2023 and to the downwards revised 9.5% in June 2024.

• The number of employed persons amounted to 4,229,548 persons, increased by 26,303

persons as compared with July 2023 (0.6%) and decreased by 46,286 persons compared with

June 2024 (-1.1%).

• The **number of unemployed persons** amounted to 465,167, decreased by 62,204 persons as

compared with July 2023 (-11.8%) and increased by 16,728 persons compared with June 2024

(3.7%).

• The number of persons outside the labour force, i.e., persons under the age of 75, that

neither work nor look for a job, amounted to 3,081,262, increased by 11,693 persons as

compared with July 2023 (0.4%) and by 26,998 persons compared with June 2024 (0.9%).

Graph 1 shows the evolution of the above figures as of January 2010.

Based on the methodology of the Labour Force Survey and in order to maintain the quality and

representativeness of the survey results in line with the sample design, the monthly data are updated by

incorporating new survey units as soon as the corresponding data for the whole quarter are finalized in

order to ensure 100% coverage of the sample. The sample of households and individuals of the Labour

Force Survey has been recalibrated in line with the final detailed data of the 2021 Population Census and

is gradually applied as of 2024Q3.

Information on methodological issues

Population, Employment and Cost of Living Statistics Division

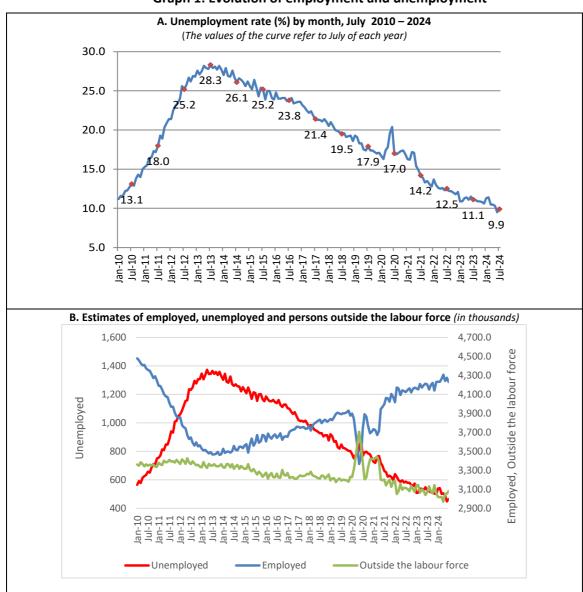
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**Graph 1: Evolution of employment and unemployment** 

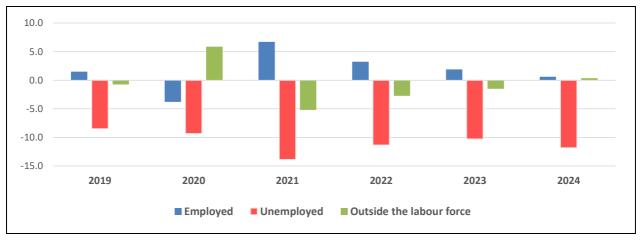


The figures and the changes of the estimates as regards the persons employed, the unemployed and the persons outside the labour force, as well as the unemployment rate for July of the years 2019-2024 are presented in Table 1. The complete data series for employed, unemployed and persons outside the labour force as well as the unemployment rate are published on ELSTAT's webpage. Graph 2 depicts the percentage changes in relation to the corresponding month of the previous year.

Table 1: Employed, unemployed, persons outside the labour force and unemployment rate (%), July 2019 – 2024

			July			
	2019	2020	2021	2022	2023	2024
Employed	3,891,013	3,744,057	3,995,414	4,124,606	4,203,245	4,229,548
Unemployed	847,749	768,977	662,572	587,667	527,371	465,167
Persons outside the labour force	3,190,122	3,378,079	3,202,837	3,116,128	3,069,569	3,081,262
Unemployment Rate	17.9	17.0	14.2	12.5	11.1	9.9

Graph 2: Annual changes of persons employed, unemployed and persons outside the labour force (percentage change in relation to the corresponding month of the previous year)



Tables 2 and 3 illustrate the unemployment rate by gender and age group, from July 2019 to 2024.

Table 2: Unemployment rate (%) by gender, July 2019-2024

Gender	July					
	2019	2020	2021	2022	2023	2024
Males	14.5	14.4	10.5	9.6	8.5	7.8
Females	22.2	20.4	18.9	16.1	14.4	12.5
Total	17.9	17.0	14.2	12.5	11.1	9.9

Table 3: Unemployment rate (%) by aggregated age group, July 2019-2024

Age Group		July					
	2019	2020	2021	2022	2023	2024	
15-24	36.5	39.2	34.1	29.4	27.0	20.0	
25-74	16.9	15.9	13.3	11.6	10.2	9.4	
Total	17.9	17.0	14.2	12.5	11.1	9.9	

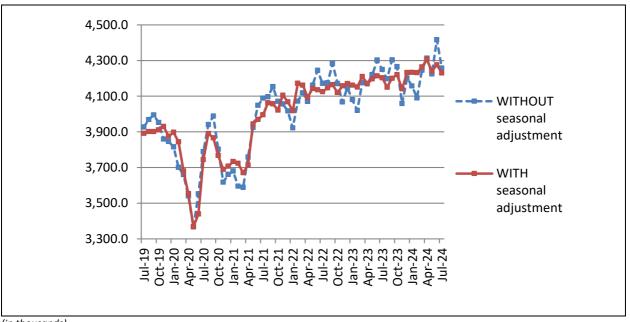
## The effect of seasonal adjustment on the estimates of Labour Force Survey

The characteristics surveyed by the Labour Force Survey (number of employed, unemployed, etc.) have large seasonal variation. For example, in Greece, employment normally increases during the summer months because of tourism (if there are no other countervailing factors).

Seasonal adjustment is a statistical technique that removes the seasonal component of a time series, making more visible the underlying trend in the change of a characteristic. Whenever new data are added, the monthly estimates are subject to revisions due to the update of the seasonally adjusted time series.

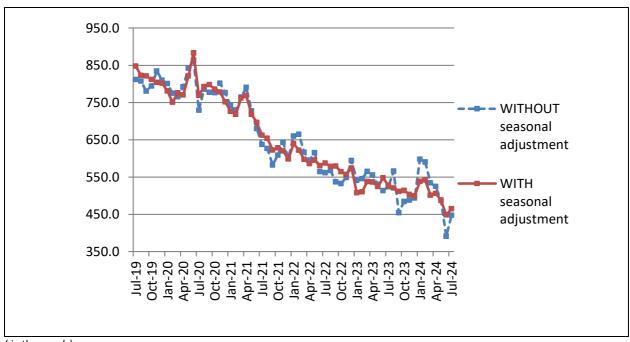
Graphs 3, 4 and 5 present the adjusted and unadjusted time series for employed and unemployed persons, and the unemployment rate as of 2019.

Graph 3: Number of Employed Persons - Adjusted and Non-adjusted Estimates



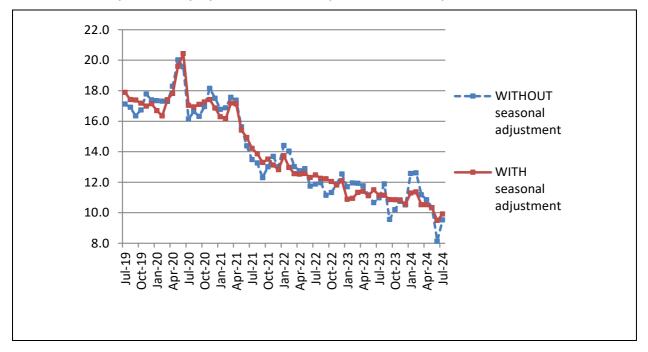
(in thousands)

**Graph 4: Number of Unemployed Persons - Adjusted and Non-adjusted Estimates** 



(in thousands)

Graph 5: Unemployment Rate (%) - Adjusted and Non-adjusted Estimates



# **Revisions of monthly estimates**

The monthly estimates for the number of employed and unemployed persons and the unemployment rate can be subject to revisions in the following months due to the updates to the seasonally adjusted series whenever new monthly data are added, to the inclusion of the most recent quarterly Labour Force Survey data, and the update of the seasonal adjustment model with complete annual data. In this publication the estimation of unemployment rate for the period May 2023 – June 2024 has been revised (compared to the estimation published in the previous publication) as follows:

Table 4: Comparison of seasonally adjusted estimates

	Estimations published on 31 July, 2024	Current estimations	
May 2023	11.1	11.1	
June 2023	11.4	11.5	
July 2023	11.1	11.1	
August 2023	11.2	11.1	
September 2023	10.9	10.9	
October 2023	10.8	10.9	
November 2023	11.0	10.8	
December 2023	10.6	10.6	
January 2024	11.2	11.3	
February 2024	11.3	11.4	
March 2024	10.6	10.5	
April 2024	10.4	10.5	
May 2024	10.3	10.3	
June 2024	9.6	9.5	
July 2024	-	9.9	

### **EXPLANATORY NOTES**

#### Labour Force Survey

The Labour Force Survey has been conducted since 1981. Until 1997 the results were produced on an annual basis with reference to the second quarter of each year. From 1998 onwards it is a continuous quarterly survey. The main statistical objective of the Labour Force Survey is to divide the population of working age (15 years and over) into three mutually exclusive and exhaustive groups - persons in employment, unemployed persons, and persons outside the labour force. In addition, the Labour Force Survey collects information on demographic characteristics, on main job characteristics, on the existence and characteristics of a second job, on educational attainment, on participation in education, on previous working experience and on search of a job.

#### Legislation

The current survey is fully harmonized with the European legislation. The basic act is the Regulation (EU) No 2019/1700 of the European Parliament and of the Council establishing a common framework for European statistics relating to persons and households, which is in force since 1/1/2021 and replaced Regulation (EC) 577/98. The implementing Regulation (EU) 2019/2240 sets out the design and characteristics of the survey and the implementing Regulation (EU) 2019/2241 lays down the technical elements of the monthly unemployment data.

#### Reference Period

The sample of Labour Force Survey is equally allocated to the 4 (or 5) weeks of the month. Every selected household is assigned to a specific week, the reference week, running from Monday to Sunday.

### Coverage

For the monthly estimates, a sub-sample of the quarterly Labour Force survey's sample is used.

#### Definitions

**Employed**: comprise persons aged 15 to 89 (in completed years at the end of the reference week) who, during the reference week, were in one of the following categories:

- a) persons who during the reference week worked for at least 1 hour for pay or profit, including contributing family workers
- b) persons with a job or business who were temporarily not at work during the reference week but had an attachment to their job, where the following groups have a job attachment:
- persons not at work due to holidays, working time arrangements, sick leave, maternity or paternity leave;
- persons in job-related training;
- persons on parental leave, either receiving and/or being entitled to job-related income or benefits, or whose parental leave is expected to be 3 months or less;
- seasonal workers during the off-season, where they continue to regularly perform tasks and duties for the job or business, excluding fulfilment of legal or administrative obligations;
- persons temporarily not at work for other reasons where the expected duration of the absence is 3 months or less.

Note: contributing family workers, persons in own-use production work, voluntary workers, unpaid trainees and individuals involved in other forms of work are defined in the 19th International Conference of Labour Statisticians (ICLS) Resolution concerning statistics of work, employment and labour underutilisation, adopted on 11 October 2013.

**Unemployed persons** comprise persons aged 15 to 74 who were, during the reference week, (a) not employed, (b) currently available for work, and (c) actively seeking work, or found a job to start within a period of at most 3 months from the end of the reference week.

**Persons outside the labour force** comprise persons who were in one of the following categories: (a) aged below 15, (b) aged above 89, or (c) aged 15 to 89 and neither employed nor unemployed during the reference week, according to the definitions of employment and unemployment described above.

Economically active population (labour force) are persons either employed or unemployed.

Unemployment Rate is the ratio of unemployed divided by total labour force.

Changes in Labor Force Survey as of 2021

	Up to 2020	From 2021 onwards
Data collection	Paper questionnaires	By electronic means (CAPI)
Questionnaire	The number of the surveyed characteristics and the relevant questions remained the same for every quarter of the year.	The number of the surveyed characteristics and the relevant questions changes every quarter. For specific characteristics, only annual estimates are produced.
Definition of employed	Population: Persons aged 15 years and over.  Persons who reported that they did not work in the reference week but had a job from which they were temporarily absent are classified as employed, except in the following cases:  • Employees who are non-active, are absent for more than 3 months and receive less than 50 % of their salary.  • Employees who are absent from work due to seasonality.  Self-employed persons are employed in all cases (including family workers).	Population: Persons aged 15-89 years.  Persons who reported that they did not work in the reference week but had a job from which they were temporarily absent are considered to be employed only if the duration of their absence is less than 3 months or if they continue to receive income from their work.  • Sick leave, maternity/paternity leave, and educational leave are excluded, and in these cases, persons are classified as employed.  Seasonal workers, regardless of professional status, who reported that they did not work in the reference week but had a job from which they were temporarily absent due to seasonality are considered to be employed only if they perform tasks related to their work (e.g. renovation, business trip) excluding legal or administrative obligations.

# Seasonal adjustment

Seasonal adjustment is a statistical technique that removes the seasonal component of a time series, making more visible the underlying trend in the change of a characteristic. Hellenic Statistical Authority is using JDemetra+ for seasonal adjustment. Seasonally adjusted series are produced by TRAMO&SEATS algorithm. It should be noted that due to seasonal adjustment the whole series with monthly estimates is recalculated every time a new month is added in time series. As a result, estimations for the previous months are often revised. Moreover, it is noted that every time a quarter is completed the non-seasonally adjusted results (employed, unemployed, outside the labour force) of the corresponding months are recalculated so that their averages are the same as the corresponding quarterly estimates (benchmarking).

# Sampling errors

The monthly results of Labour Force Survey are estimations that are based in a relatively small sample size and have large sampling errors. An indication of the magnitude of survey's sampling errors is that estimations of characteristics that refer to 10,000 persons at the total country are accompanied by a coefficient of variation of at least 15%. More accurate estimates and detailed analysis of the changes in employment can be based on the quarterly results of the survey.

#### Methodology

Labour Force Survey's monthly estimates are produced by a suitable unbiased estimator which takes into account a) the probability of selection of every sampled household, b) the response rate in every primary sampling unit, c) the estimated population, for the corresponding month, allocated by NUTS II areas, gender and age group. The sample of households and individuals of the LFS has been recalibrated in line with the final data of the 2021 Population Census and is gradually applied as of 2024Q3.

#### References

More information about the monthly Labor Force Survey can be found on the ELSTAT website, at the link: <a href="https://www.statistics.gr/en/statistics/-/publication/SJO02/-">https://www.statistics.gr/en/statistics/-/publication/SJO02/-</a>