



HELLENIC REPUBLIC



HELLENIC STATISTICAL AUTHORITY

Piraeus, June 5, 2014

## PRESS RELEASE

### LABOUR FORCE SURVEY: March 2014

The Hellenic Statistical Authority announces the seasonally adjusted unemployment rate for March 2014.

In the context of the program undertaken by ELSTAT for the improvement of dissemination and presentation of statistics, and in order to harmonize the presentation of monthly unemployment rate estimates with the presentation of monthly estimates provided by Eurostat, ELSTAT, since January 2012, announces the monthly results of the LFS seasonally adjusted, for persons 15 – 74 years old. Unadjusted data are still available on ELSTAT's website.

It should be noted that the estimates that are presented in the current press release have been produced using the population estimates that are based in the results of 2011 census, instead of the estimates that were based in the results of 2001 census. At the end of the present press release there is an analytical description of the changes in the monthly estimates that are due to the different population basis.

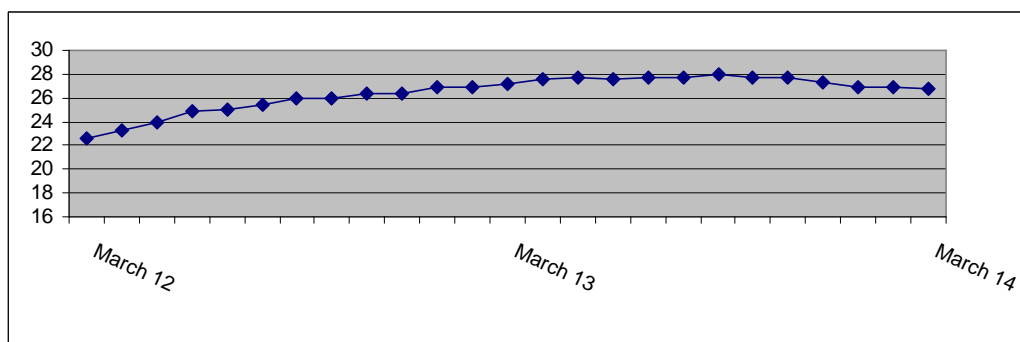
The seasonally adjusted unemployment rate in March 2014 was 26.8% compared to 27.2% in March 2013 and 26.9% in February 2014. The number of employed amounted to 3,482,345 persons. The number of unemployed amounted to 1,274,843 while the number of inactive to 3,393,042. The corresponding figures for March 2009 to 2014 are presented in Table 1.

The number of employed decreased by 9,972 persons compared with March 2013 (a 0.3% rate of decrease) and increased by 11,857 persons compared with February 2014 (a 0.3% rate of increase).

Unemployed decreased by 29,420 persons (a 2.3% rate of decrease) compared with March 2013 and by 1,466 persons compared with February 2014 (a 0.1% rate of decrease).

Inactive persons –that is, persons that neither worked neither looked for a job– decreased by 7,022 persons (a 0.2 rate of decrease) compared with March 2013 and by 14,859 persons compared with February 2014 (a 0.4% rate of decrease).

#### Unemployment rate by month (March 2012 – March 2014)



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Tables 2 and 3 illustrate unemployment rate by gender and age groups from March 2009 to 2014. Table 4 presents the evolution of unemployment rate during last 12 months by Decentralized Administrations<sup>1</sup>. The complete time series for employed, unemployed and inactive are available on ELSTAT's website.

**Table 1. Employed, unemployed, economically non-active and unemployment rate: March 2009-2014**

	March					
	2009	2010	2011	2012	2013	2014
Employed	4,563,135	4,459,226	4,127,999	3,753,361	3,492,317	3,482,345
Unemployed	459,957	589,021	793,769	1,095,478	1,304,263	1,274,843
Inactive	3,423,280	3,343,080	3,396,316	3,421,509	3,400,064	3,393,042
<b>Unemployment Rate</b>	<b>9.2</b>	<b>11.7</b>	<b>16.1</b>	<b>22.6</b>	<b>27.2</b>	<b>26.8</b>

**Table 2. Unemployment rate by gender: March 2009-2014**

Gender	March					
	2009	2010	2011	2012	2013	2014
Males	6.6	9.0	13.5	19.7	24.4	23.8
Females	12.7	15.3	19.6	26.4	30.8	30.6
<b>Total</b>	<b>9.2</b>	<b>11.7</b>	<b>16.1</b>	<b>22.6</b>	<b>27.2</b>	<b>26.8</b>

**Table 3: Unemployment rate by age groups: March 2009-2014<sup>2</sup>**

Age Group	March					
	2009	2010	2011	2012	2013	2014
15-24 years old	25.1	30.8	41.5	52.5	59.7	58.3
25-34 »	12.1	14.9	22.4	30.3	34.1	35.5
35-44 »	7.1	9.7	13.0	19.0	23.8	24.1
45-54 »	5.6	7.8	11.0	16.4	20.9	20.7
55-64 »	4.2	6.4	8.2	12.4	16.2	17.4
65-74 »	0.8	0.9	2.7	4.1	10.0	14.8
<b>Total</b>	<b>9.2</b>	<b>11.7</b>	<b>16.1</b>	<b>22.6</b>	<b>27.2</b>	<b>26.8</b>

<sup>1</sup> Decentralized Administrations are the lowest geographical areas for which Labour Force Survey publishes estimates. LFS results are not published at lower level (NUTS II – “Perifereiakes Enotites” or NUTS III – “Perifereies”) because, due to small population and sample size, estimates in these areas have large sampling errors. We should note that the same problem of small populations and sample sizes exist also in certain Decentralized Administrations and as a result, estimates in these areas have large sampling errors

<sup>2</sup> Estimates of “rare” characteristics, that is estimates of characteristics that refer to 10.000 persons or less, are accompanied by large sampling errors, as for example in the case of unemployment rate in the age group of 65 – 74 years old

**Table 4. Unemployment rate during March 2014 and the last 12 months, by Decentralized Administration**

Decentralized Administration	Period												
	2013											2014	
	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	1st	2nd	3rd
Macedonia-Thrace	28,5	29,2	29,2	29,6	30,0	29,5	30,0	29,4	29,8	28,9	27,8	27,4	27,7
Epirus-Western Macedonia	29,5	29,3	29,6	29,0	29,7	29,3	28,9	28,9	28,1	30,3	28,4	29,1	29,0
Thessaly – Sterea Ellas	26,4	26,6	26,2	26,2	26,3	26,7	26,7	26,7	27,6	26,3	26,2	26,3	26,6
Peloponnese. Western Greece and Ionian Islands	23,2	23,8	24,0	24,4	24,4	25,2	25,1	25,3	24,7	26,4	25,5	25,6	25,7
Attica	28,7	28,4	28,9	28,3	28,7	28,5	29,1	29,0	28,9	28,2	27,8	27,7	27,6
Aegean	22,8	20,4	22,1	21,9	21,8	22,6	21,7	24,0	23,1	20,7	24,4	22,5	20,6
Crete	22,2	25,6	25,0	23,6	25,5	27,6	25,2	25,6	26,1	24,2	23,7	24,4	25,7
<b>Greece. Total</b>	<b>27,2</b>	<b>27,5</b>	<b>27,8</b>	<b>27,6</b>	<b>27,8</b>	<b>27,7</b>	<b>27,9</b>	<b>27,7</b>	<b>27,7</b>	<b>27,2</b>	<b>26,9</b>	<b>26,9</b>	<b>26,8</b>

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

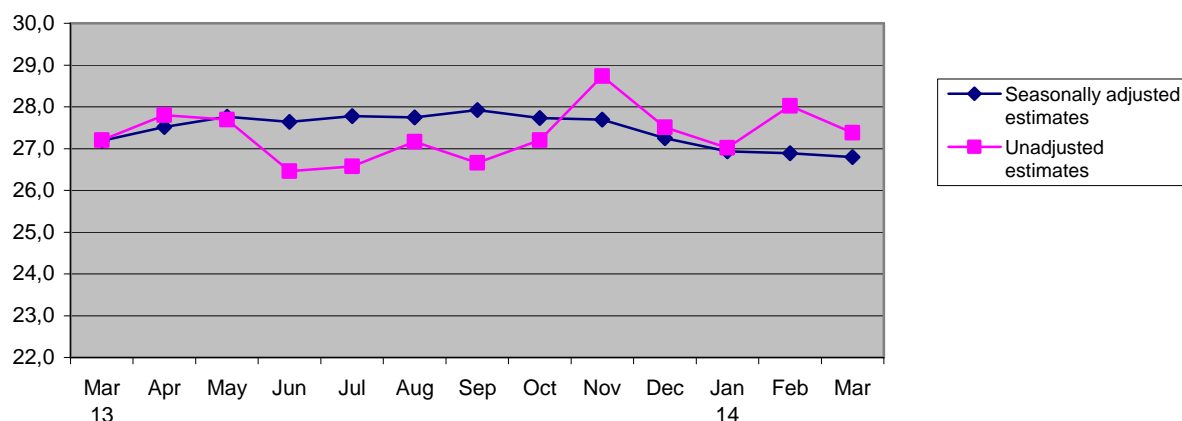
The characteristics surveyed by Labour Force Survey – number of employed, unemployed, etc.– have large seasonal variation: for example, in Greece, employment increases during summer because of tourism (if there are no other countervailing factors).

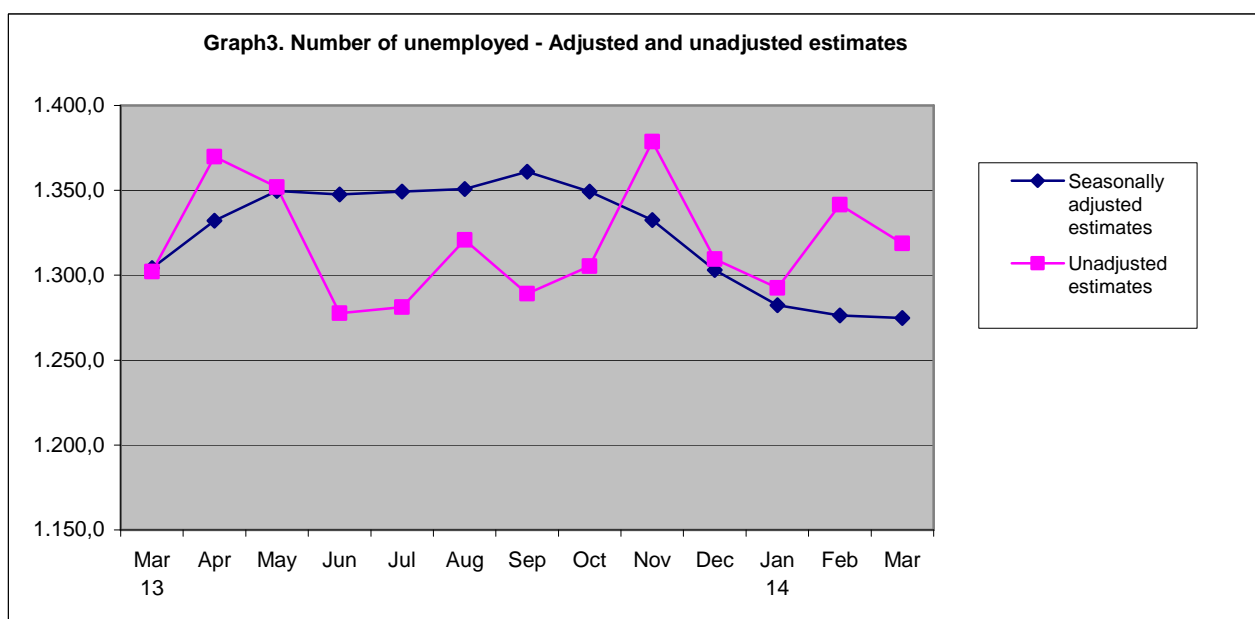
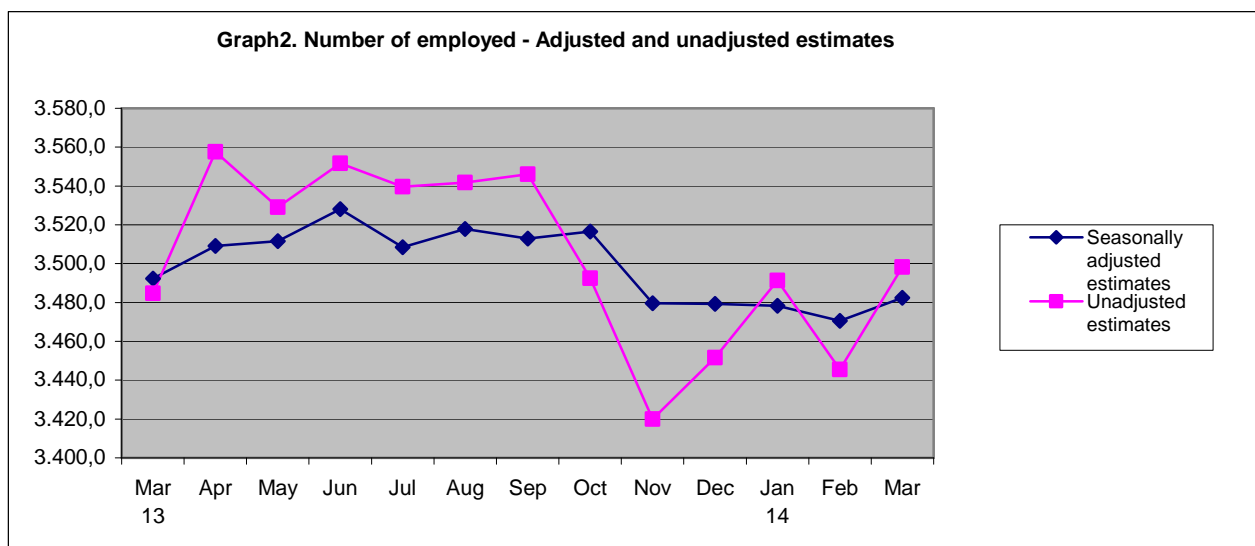
Seasonal adjustment is a statistical technique that removes the seasonal component of a time series, making more visible the underlying trend in the change of a characteristic.

Eurostat is publishing seasonally adjusted monthly results since 2000. These results are based either solely in Labour Force Survey results either in estimations that are based in the most recent results of the Labour Force Survey and in registered unemployment.

The following graphs (Graph 1 – 3) present adjusted and unadjusted time series for employed, unemployed and rate of unemployment for the period March 2013 – March 2014, while Table 5 presents, for the same period, the change in monthly estimates of employed and unemployed because of seasonal adjustment.

**Graph 1. Unemployment rate - Adjusted and unadjusted estimates**





**Table 5. Change in monthly estimates of employed and unemployed because of seasonal adjustment**

	Estimated number of employed without seasonal adjustment (in thousands)	Change due to seasonal adjustment (in thousands)	% of change	Estimated number of unemployed without seasonal adjustment (in thousands)	Change due to seasonal adjustment (in thousands)	% of change
March 2013	3.484,8	7,5	0,2	1.302,1	2,1	0,2
April	3.557,5	-48,4	-1,4	1.369,8	-37,7	-2,8
May	3.529,1	-17,5	-0,5	1.351,9	-2,2	-0,2
June	3.551,6	-23,6	-0,7	1.277,7	69,9	5,5
July	3.539,5	-31,1	-0,9	1.281,2	68,1	5,3
August	3.541,7	-23,8	-0,7	1.320,8	30,0	2,3
September	3.546,1	-33,1	-0,9	1.289,1	71,9	5,6
October	3.492,5	24,0	0,7	1.305,3	44,0	3,4
November	3.419,9	59,7	1,7	1.378,7	-46,3	-3,4
December	3.451,5	27,7	0,8	1.309,6	-6,5	-0,5
January 2014	3.491,4	-13,1	-0,4	1.292,5	-10,2	-0,8
February	3.445,5	25,0	0,7	1.341,6	-65,2	-4,9
March	3.498,2	-15,9	-0,5	1.318,7	-43,8	-3,3

## Revision of the population data due to 2011 census and corresponding change in Labour Force Survey Estimates

Labour Force Survey produces its final estimates by weighting the sample data. This weighting is based on the current population estimates<sup>3</sup>.

The population of Greece is determined every ten years by the census, while during the years between censuses, is determined by the results of the previous census and vital statistics. In addition, when computing the weighting factors for the Labour Force Survey, only the population living in private households is taken in to account (that is, persons living permanently in collective households, as monasteries, prisons, conscripts, etc., are exempted). In this point, we should note that 2011 and 2001 censuses have methodological differences. For example, during the 2001 census, persons that were enumerated after the day of the census (about 200,000 persons) were included in the population of collective households, while in the 2011 census they were included in the proper type of household. This resulted in an underestimation of the population of private households at the 2001 census.

Till the previous press release, Labour Force Survey estimates were based on the population estimates that can be found in the following link:

[http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/A0101/Other/A0101\\_SJO02\\_TB\\_MM\\_03\\_2014\\_01\\_F\\_EN.xls](http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/A0101/Other/A0101_SJO02_TB_MM_03_2014_01_F_EN.xls)

From the present press release, Labour Force Survey estimates are based on the population estimates that can be found in the following link:

[http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/A0101/Other/A0101\\_SJO02\\_TB\\_MM\\_03\\_2014\\_02\\_F\\_EN.xls](http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/A0101/Other/A0101_SJO02_TB_MM_03_2014_02_F_EN.xls)

We can observe that the new estimation give an increased population for the period 2001 – 2012, while from the 2<sup>nd</sup> quarter 2012, onwards, the estimated population decreases.

The decrease of population since 2012 has as a result the corresponding decrease in the estimated number of employed, unemployed and inactive. Indicatively, the following table presents the estimates for the employment status in February 2014, according to the old and the new population estimates.

February 2014	Employed	Unemployed	Inactive	% unemployment
<b>Estimates based on 2001 Census</b>	3,609.4	1,300.2	3,408.6	26.5
<b>Estimates based on 2011 Census</b>	3,470.5	1,276.3	3,407.9	26.9

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<sup>3</sup> A detailed description of the computation of the weights can be found at [http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p\\_param=A0101&r\\_param=SJO01&y\\_param=MT&mytabs=0](http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A0101&r_param=SJO01&y_param=MT&mytabs=0)

## EXPLANATORY NOTES

<b>Labour Force Survey</b>	Labour Force Survey produces estimates since 1981 (second quarter of the year). From 1998 onwards it is a continuous quarterly survey. The main statistical objectives 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 inactive persons. 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 job.
<b>Legislation</b>	The current survey is completely harmonized with European legislation. The principal legal act is the <u>Council Regulation (EC) No. 577/98</u> that stipulates the provisions on design, survey characteristics and decision-making processes.
<b>Reference Period</b>	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.
<b>Coverage</b>	For the monthly estimates, a sub-sample of the quarterly Labour Force survey's sample was used.
<b>Definitions</b>	<p><b>Employed</b> are persons aged 15 years or older, who during the reference week worked, even for just one hour, for pay or profit or they were working in the family business, or they were not at work but had a job or business from which they were temporarily absent.</p> <p><b>Unemployed</b> are persons aged 15-74 who were without work during the reference week (they were not classified as employed), were currently available for work and were either actively seeking work in the past four weeks or had already found a job to start within the next three months.</p> <p><b>Inactive</b> are those persons who are neither classified as employed nor as unemployed.</p> <p><b>Economically active population (labour force)</b> are persons either employed or unemployed.</p>
<b>Seasonal adjustment</b>	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 Demetra 2.0 for seasonal adjustment. Seasonally adjusted series are produced by TRAMO&SEATS algorithm. We note 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.
<b>Sampling errors</b>	The monthly results of Labour Force Survey are estimations that are based in a relatively small sample size and have large sampling errors. As an indication of the magnitude of survey's sampling errors, we note that estimations of characteristics that refer to 25.000 persons at the total country, are accompanied by a coefficient of variation of at least 15% (an analysis of Labour Force Survey sampling errors can be found at the address <a href="http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A0101">http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A0101</a> at the link "Methodology"). More accurate estimates and detailed analysis of the changes in employment can be based on the quarterly results of the survey.
<b>Methodology</b>	Labour Force Survey's estimates are produced by a suitable unbiased estimator which takes in to 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).
<b>References</b>	Analytical description of the Labour Force Survey's methodology and definitions can be found at <a href="http://www.statistics.gr">www.statistics.gr</a> .