



HELLENIC REPUBLIC



HELLENIC STATISTICAL AUTHORITY

Piraeus, July 9, 2015

## PRESS RELEASE

### LABOUR FORCE SURVEY: April 2015

The Hellenic Statistical Authority announces the seasonally adjusted unemployment rate for April 2015.

The seasonally adjusted unemployment rate in April 2015 was 25.6% compared to the downward revised 27.0% in April 2014 and the upward revised percentage of 25.8% in March 2015. The number of employed amounted to 3,543,651 persons. The number of unemployed amounted to 1,216,870 while the number of inactive to 3,334,628. The corresponding figures for April 2010 to 2015 are presented in Table 1.

The number of employed increased by 49,283 persons compared with April 2014 (a 1.4% rate of increase) and by 16,834 persons compared with March 2015 (a 0,5% rate of increase).

Unemployed decreased by 78,759 persons (a 6.1% rate of decrease) compared with April 2014 and by 11,848 persons compared with March 2015 (a 1,0% rate of decrease).

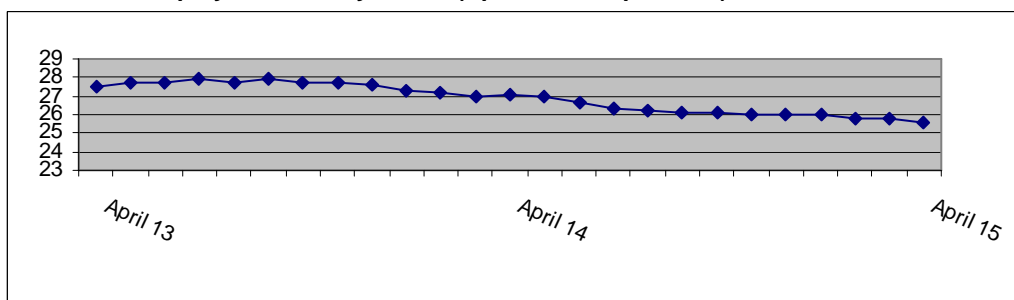
Inactive persons –that is, persons that neither worked neither looked for a job– decreased by 21,089 persons (a 0,6% rate of decrease) compared with April 2014 and by 9,103 persons compared with March 2015 (a 0,3% rate of decrease).

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. Users should take into account the fact that seasonal adjustment procedure requires data for many months in order to remove the seasonal component from a time series. As a result, several “observations” (that is a sufficient number of monthly results) are necessary so that the time series reflect a significant change in the trend of employment and unemployment.

The monthly estimates for the number of employed, unemployed and unemployment rate can be subject to revisions in the following months caused by updates to the seasonally adjusted series whenever new monthly data are added, inclusion of the most recent quarterly LFS data and update of seasonal adjustment model with complete annual data.

Users should also take into account that the first estimates of the most recent monthly unemployment rates are likely to be revised as they are produced with the collected and processed at the time of the press release survey data, which do not coincide with the finally collected and processed sample of the survey. For that reason monthly estimates are revised when the final quarterly estimates are known..

**Unemployment rate by month (April 2013 – April 2015)**



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Tables 2 and 3 illustrate unemployment rate by gender and age groups from April 2010 to 2015. Table 4 presents the evolution of unemployment rate during last 15 months by Decentralized Administrations. 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: April 2010-2015**

	April					
	2010	2011	2012	2013	2014	2015
Employed	4,426,623	4,128,970	3,740,807	3,516,487	3,494,369	3,543,651
Unemployed	598,234	805,627	1,147,095	1,332,943	1,295,629	1,216,870
Inactive	3,359,488	3,379,984	3,375,704	3,343,412	3,355,717	3,334,628
<b>Unemployment Rate</b>	<b>11.9</b>	<b>16.3</b>	<b>23.5</b>	<b>27.5</b>	<b>27.0</b>	<b>25.6</b>

**Table 2. Unemployment rate by gender: April 2010-2015**

Gender	April					
	2010	2011	2012	2013	2014	2015
Males	9.2	13.6	20.6	24.4	24.2	22.2
Females	15.5	20.0	27.2	31.4	30.7	29.8
<b>Total</b>	<b>11.9</b>	<b>16.3</b>	<b>23.5</b>	<b>27.5</b>	<b>27.0</b>	<b>25.6</b>

**Table 3: Unemployment rate by age groups: April 2010-2015<sup>1</sup>**

Age Group	April					
	2010	2011	2012	2013	2014	2015
15-24 years old	30.9	43.3	53.4	59.6	55.4	53.2
25-34 »	15.3	22.4	30.4	36.2	35.4	32.9
35-44 »	10.0	13.2	19.9	23.8	23.9	22.0
45-54 »	8.0	11.0	17.4	20.6	20.4	21.2
55-64 »	6.1	7.5	12.7	16.1	17.8	17.8
65-74 »	1.1	2.1	4.5	9.4	12.4	11.1
<b>Total</b>	<b>11.9</b>	<b>16.3</b>	<b>23.5</b>	<b>27.5</b>	<b>27.0</b>	<b>25.6</b>

<sup>1</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 February 2014 - April 2015, by Decentralized Administration<sup>1</sup>**

Decentralized Administration	2nd 2014	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	1 <sup>st</sup> 2015	2nd	3rd	4th
Macedonia-Thrace	28.2	28.3	28.5	27.9	27.5	27.2	27.4	27.3	27.3	26.7	26.8	26.3	26.3	26.1	25.8
Epirus-Western Macedonia	28.5	28.1	28.0	27.6	27.2	27.1	26.4	26.0	25.8	26.4	26.6	26.6	26.5	27.0	26.4
Thessaly – Sterea Ellas	25.9	26.2	25.9	27.1	25.9	25.9	25.6	26.2	26.3	26.1	26.4	26.4	26.6	26.5	26.4
Peloponnese. Western Greece and Ionian Islands	25.9	25.3	25.7	26.2	26.2	25.7	25.1	24.7	24.7	24.9	25.6	25.9	25.5	26.1	26.1
Attica	28.6	27.9	28.0	27.3	27.3	27.0	27.5	26.9	26.9	26.7	27.1	27.0	26.6	26.5	26.4
Aegean	23.4	21.1	20.3	22.4	18.2	21.1	21.7	21.0	20.8	19.2	16.5	17.5	16.4	23.9	21.6
Crete	23.7	23.3	21.7	23.7	25.8	23.6	23.6	24.8	22.6	26.5	24.1	23.6	24.7	24.0	24.2
<b>Greece, Total</b>	<b>27.2</b>	<b>26.9</b>	<b>27.0</b>	<b>27.0</b>	<b>26.6</b>	<b>26.3</b>	<b>26.2</b>	<b>26.1</b>	<b>26.1</b>	<b>26.0</b>	<b>26.0</b>	<b>26.0</b>	<b>25.8</b>	<b>25.8</b>	<b>25.6</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

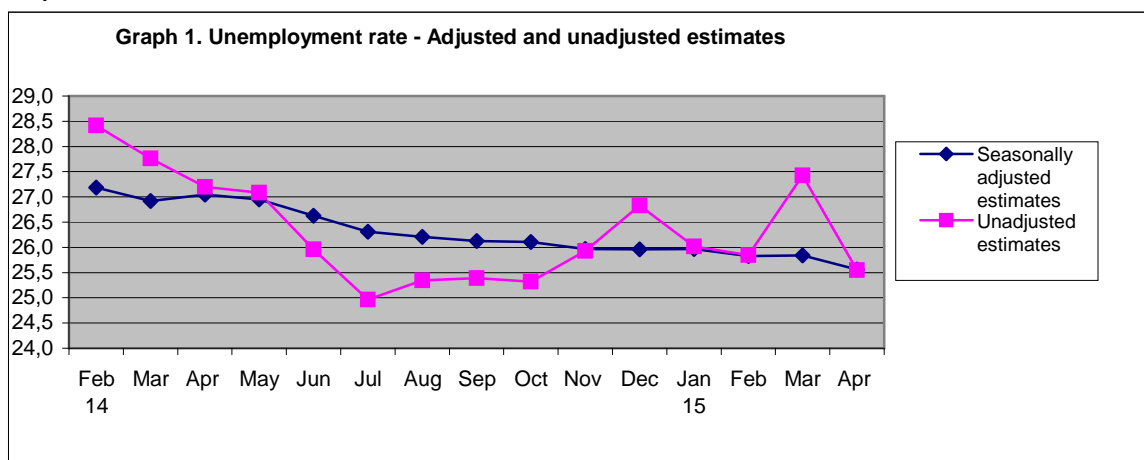
#### The effect of seasonal adjustment on the estimates of Labour Force Survey

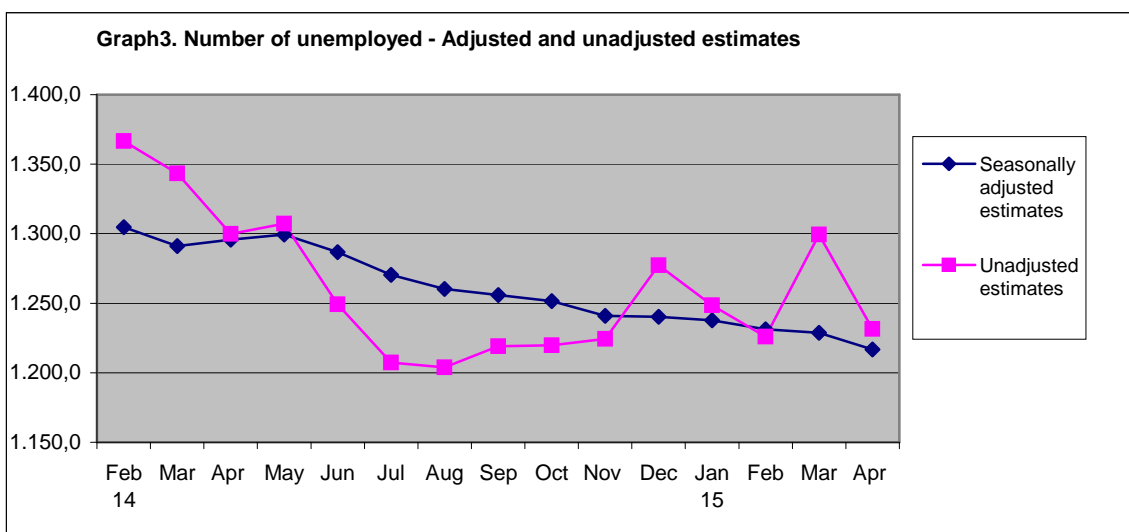
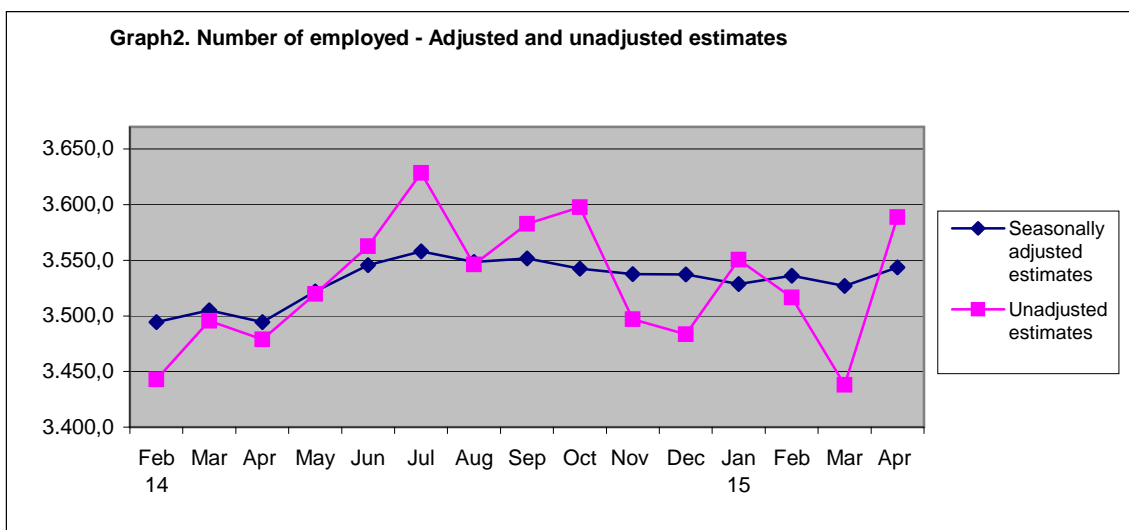
The characteristics surveyed by Labour Force Survey – number of employed, unemployed, etc.– have large seasonal variation: for example, in Greece, employment increases during summer because of tourism (if there are no other countervailing factors).

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 February – April 2015, while Table 5 presents, for the same period, the change in monthly estimates of employed and unemployed because of seasonal adjustment.





**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
February 2014	<b>3,442.9</b>	51.4	1.5	<b>1,366.7</b>	-62.0	-4.5
February	<b>3,495.6</b>	9.5	0.3	<b>1,343.4</b>	-52.2	-3.9
April	<b>3,478.9</b>	15.4	0.4	<b>1,299.8</b>	-4.1	-0.3
April	<b>3,519.7</b>	2.3	0.1	<b>1,307.2</b>	-7.7	-0.6
May	<b>3,562.5</b>	-16.9	-0.5	<b>1,249.2</b>	37.5	3.0
June	<b>3,628.5</b>	-70.5	-1.9	<b>1,207.3</b>	63.2	5.2
July	<b>3,546.3</b>	2.2	0.1	<b>1,203.8</b>	56.5	4.7
August	<b>3,582.7</b>	-31.0	-0.9	<b>1,219.1</b>	36.8	3.0
September	<b>3,597.7</b>	-55.2	-1.5	<b>1,219.8</b>	31.7	2.6
October	<b>3,497.1</b>	40.4	1.2	<b>1,224.4</b>	16.4	1.3
November	<b>3,483.5</b>	54.0	1.5	<b>1,277.3</b>	-37.1	-2.9
December	<b>3,550.5</b>	-21.8	-0.6	<b>1,248.5</b>	-10.8	-0.9
January 2015	<b>3,516.7</b>	19.4	0.6	<b>1,225.9</b>	5.3	0.4
February	<b>3,438.1</b>	88.7	2.6	<b>1,299.4</b>	-70.7	-5.4
April 2015	<b>3,588.8</b>	-45.1	-1.3	<b>1,231.5</b>	-14.6	-1.2

### Revisions of monthly estimates

The monthly estimates for the number of employed, unemployed and unemployment rate can be subject to revisions in the following months caused by updates to the seasonally adjusted series whenever new monthly data are added, inclusion of the most recent quarterly LFS data and update of seasonal adjustment model with complete annual data. In the current press release, the estimation of unemployment rate for the period February 2014 – April 2015 have been revised, compared to the corresponding estimation in March 2015 as follows:

	<b>Seasonally adjusted unemployment rate – Estimations in March 2015</b>	<b>Seasonally adjusted unemployment rate – Estimations in April 2015</b>
<b>February 2014</b>	27.2	27.2
<b>March</b>	26.9	26.9
<b>April</b>	27.1	27.0
<b>May</b>	27.0	27.0
<b>June</b>	26.6	26.6
<b>July</b>	26.3	26.3
<b>August</b>	26.2	26.2
<b>September</b>	26.1	26.1
<b>October</b>	26.1	26.1
<b>November</b>	25.9	26.0
<b>December</b>	25.9	26.0
<b>January 2015</b>	25.7	26.0
<b>February</b>	25.6	25.8
<b>March</b>	25.6	25.8
<b>April 2015</b>	-	25.6

## 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 <b>Council Regulation (EC) No. 577/98</b> 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> <p><b>Unemployment Rate</b> is the ratio of unemployed divided by total labour force.</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.

**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. 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 [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) 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.

**Methodology** 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).

**References** Analytical description of the Labour Force Survey' s methodology and definitions can be found at [www.statistics.gr](http://www.statistics.gr).