

## A BREAK IN THE INCREASE IN UNEMPLOYMENT

Seyfettin Gürsel\* Gökçe Uysal\*\* and Mine Durmaz\*\*\*

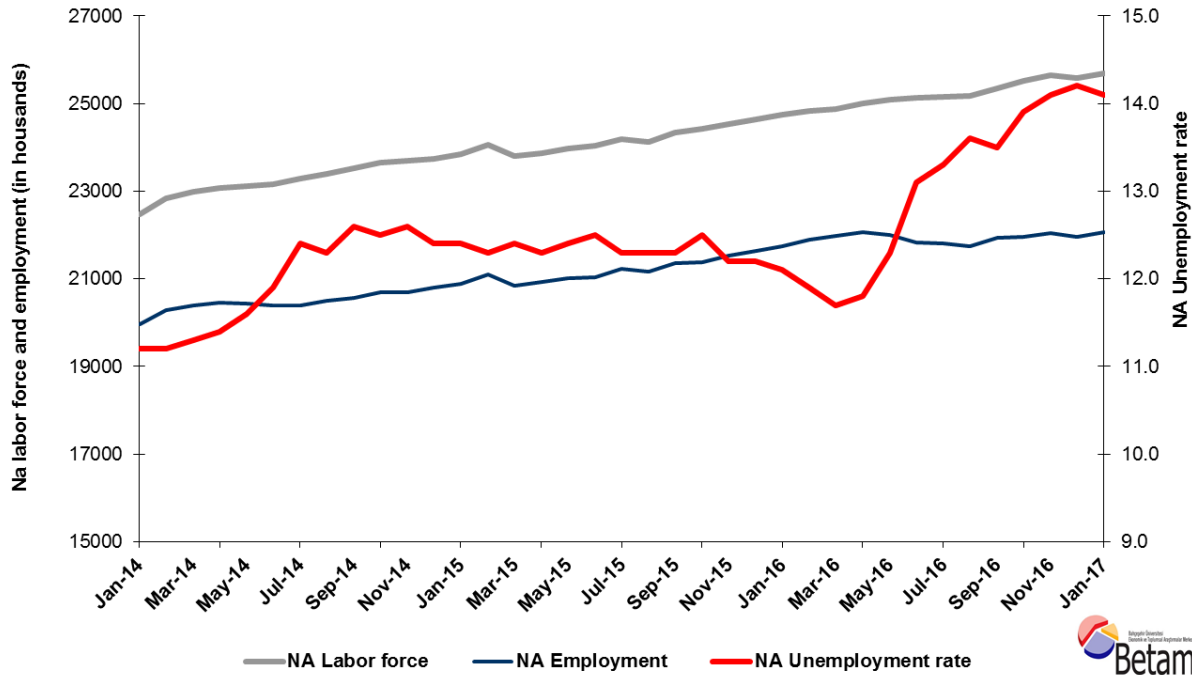
### Executive Summary

Seasonally adjusted labor market data show that nonagricultural unemployment rate decreased by 0.1 points and is recorded as 14.1 percent in the period of January 2017. While the nonagricultural labor force, which had decreased in the previous period, increased by 109 thousand in the period of January 2017, the increase in the nonagricultural employment reached 119 thousand and thus, the number of unemployed people decreased by 10 thousand. The most important reason behind this decrease is a significant increase of 90 thousand in the services sector employment in the period of January 2017 although the services sector employment had decreased in the previous period. Employment increases in industry and construction were limited. Betam's forecasting model predicts that the non-agricultural unemployment will decline to 14.0 percent in the period of February 2017.

### Increase in non-agricultural labor force and employment

In the period of January 2017, the nonagricultural labor force increased by 109 thousand and reached 25 million 689 thousand and the number of people employed in non-agricultural sectors increased by 119 thousand and reached 22 million 67 thousand (Figure 1, Table 1). While the number of people unemployed in nonagricultural sectors decreased by 10 thousand and is recoded as 3 million 622 thousand, the nonagricultural unemployment rate declined to 14.1 percent. In the previous period (December 2016), there were decreases in both the nonagricultural labor force and the nonagricultural employment.

Figure 1 Seasonally adjusted non-agricultural labor force, employment, and unemployment



Source: Turkstat, Betam

\*Prof. Dr. Seyfettin Gürsel, Betam, Director, seyfettin.gursel@eas.bau.edu.tr

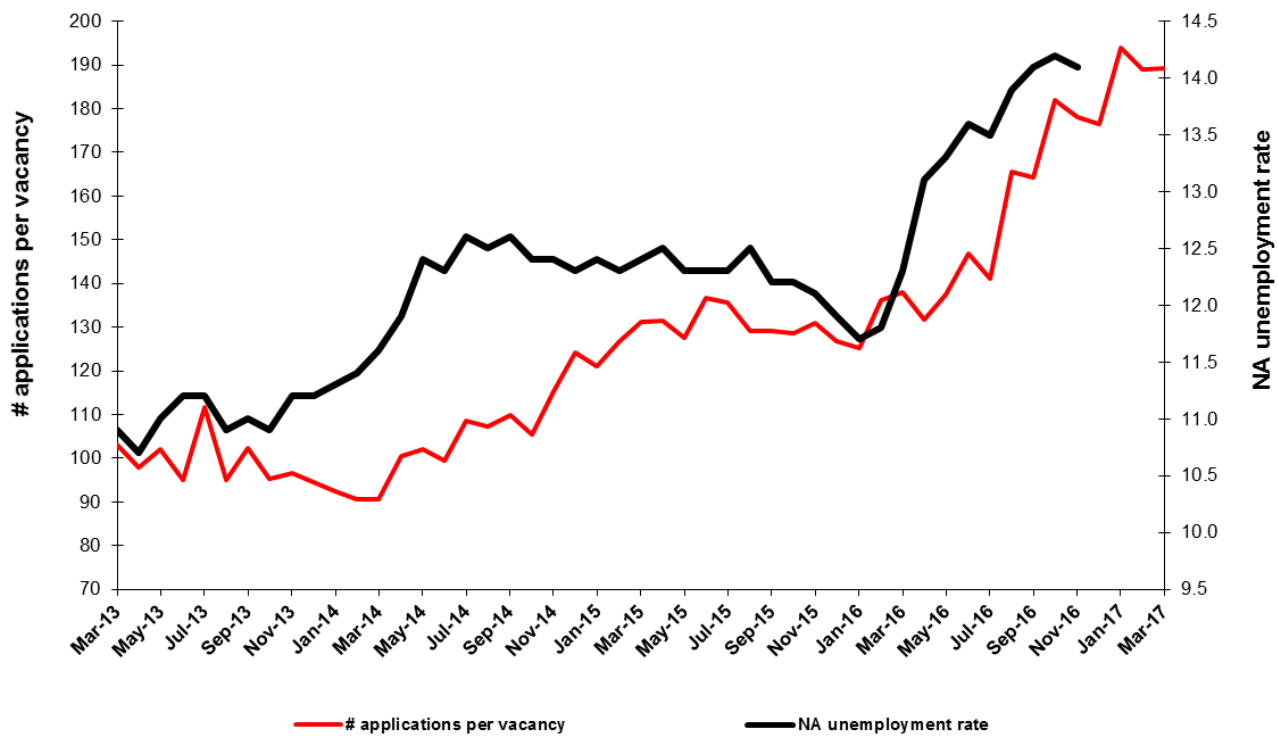
\*\*Asst. Prof. Gökçe Uysal, Betam, Deputy Director, gokce.uysal@eas.bau.edu.tr

\*\*\* Selin Köksal, Betam, Research Assistant, selin.koksal@eas.bau.edu.tr

## A slight decrease in the unemployment is expected in the period of February 2017

Betam's forecasting model had predicted that the seasonally adjusted nonagricultural unemployment rate would increase by 0.1 percentage points and become 14.1 percent in the period of January 2017. Turkstat revised the December 2016 seasonally adjusted nonagricultural unemployment rate from 14.3 percent to 14.2 percent. So, the non-agricultural unemployment rate in January period decreased by 0.1 percentage points down to 14.1 percent. Betam's forecasting model predicts the seasonally adjusted February 2017 nonagricultural unemployment will decrease by 0.1 points and realize as 14.0 percent. Forecasting model details are available on Betam's website.<sup>1</sup> Kariyer.net<sup>2</sup> application per vacancy series used in the Betam forecasting model is depicted in **Error! Reference source not found.** Kariyer.net series is only one of the inputs of Betam forecast model. Indeed, several variables such as employment agency (İŞKUR) data, reel sector confidence index, capacity utilization rate are used in forecasting. Taken into account all these factors, Betam's forecasting model predicts that seasonally adjusted nonagricultural unemployment rate will slightly decrease in the period of February 2017.

Figure 2 Seasonally adjusted nonagricultural unemployment rate and application per vacancy



Source: Turkstat, Betam

## Strong employment increase in services

According to seasonally adjusted sectoral labor market data, the number of people employed in services sector, which had declined by 9 thousand in the period of December 2016, significantly increased by 90 thousand in the period of January 2017. On the other hand, the increase in the industry sector employment was limited to 9 thousand and thus, it could not compensate the 51 thousand loss in the period of December 2016 (Figure 3, **Error! Reference source not found.** Table 2).<sup>3</sup>

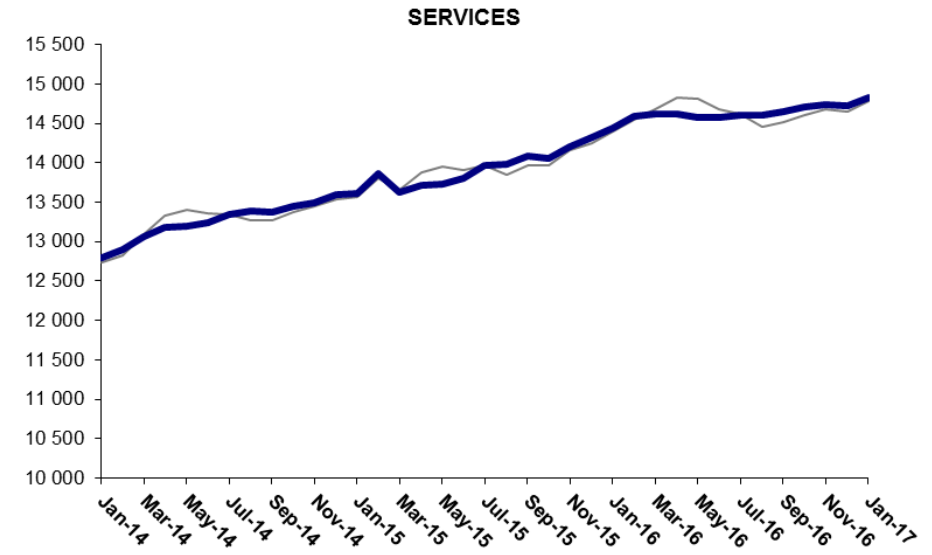
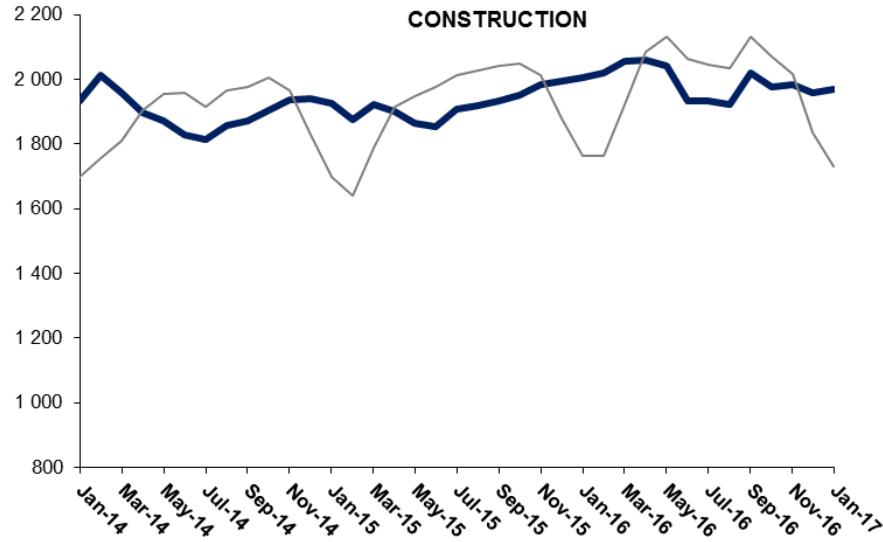
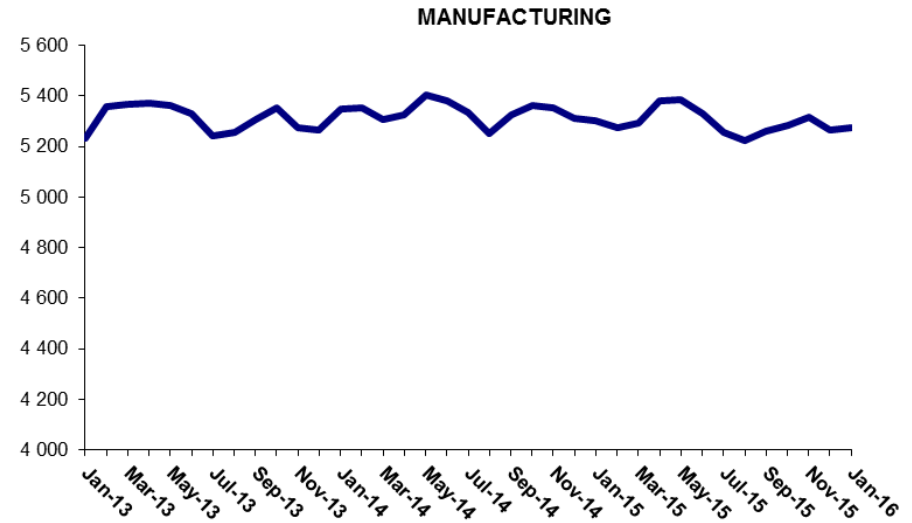
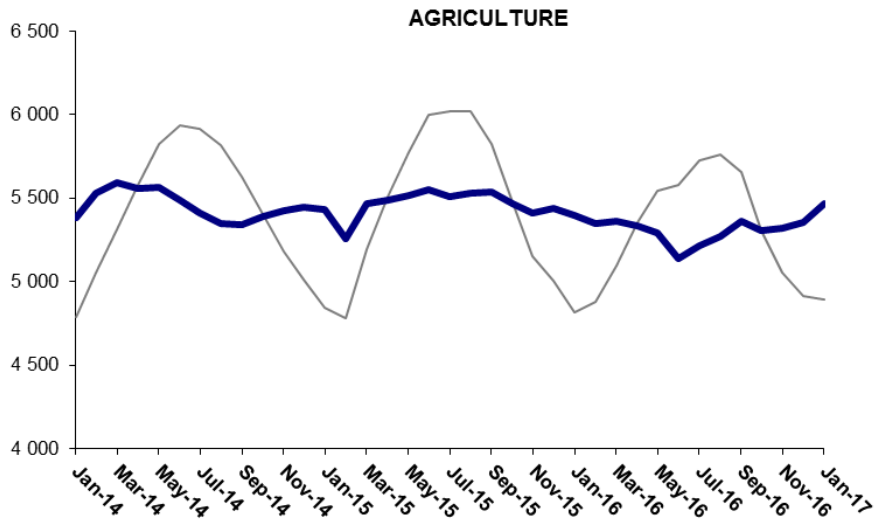
<sup>1</sup> For detailed information on Betam's forecasting model, please see Betam Research Brief 168 titled as "Kariyer.net Verisiyle Kısa Vadeli Tarım Dışı İşsizlik Tahmini"

<http://betam.bahcesehir.edu.tr/tr/2014/06/kariyer-net-verisiyle-kisa-vadeli-tarim-disi-issizlik-tahmini/>

<sup>2</sup> Betam has been calculating application per vacancy using series released by Kariyer.net for a while. Seasonal and calendar adjustment procedure is applied to application per vacancy series. A decrease in applications per vacancy may be caused by an increase in vacancies or by a decrease in the number of applications. An increase in vacancies signals economic growth while decreasing number of applications indicates a decrease in number of people looking for a job. Monthly labor market series released by TurkStat is the average of three months. Therefore, application per vacancy statistics calculated using Kariyer.net series is the average of three months as well.

<sup>3</sup> Employment in each sector is seasonally adjusted separately. Hence the sum of these series may differ from the seasonally adjusted series of total employment. The difference stems from the non-linearity of the seasonal adjustment process.

**Figure 3 Employment by sectors (in thousands)**

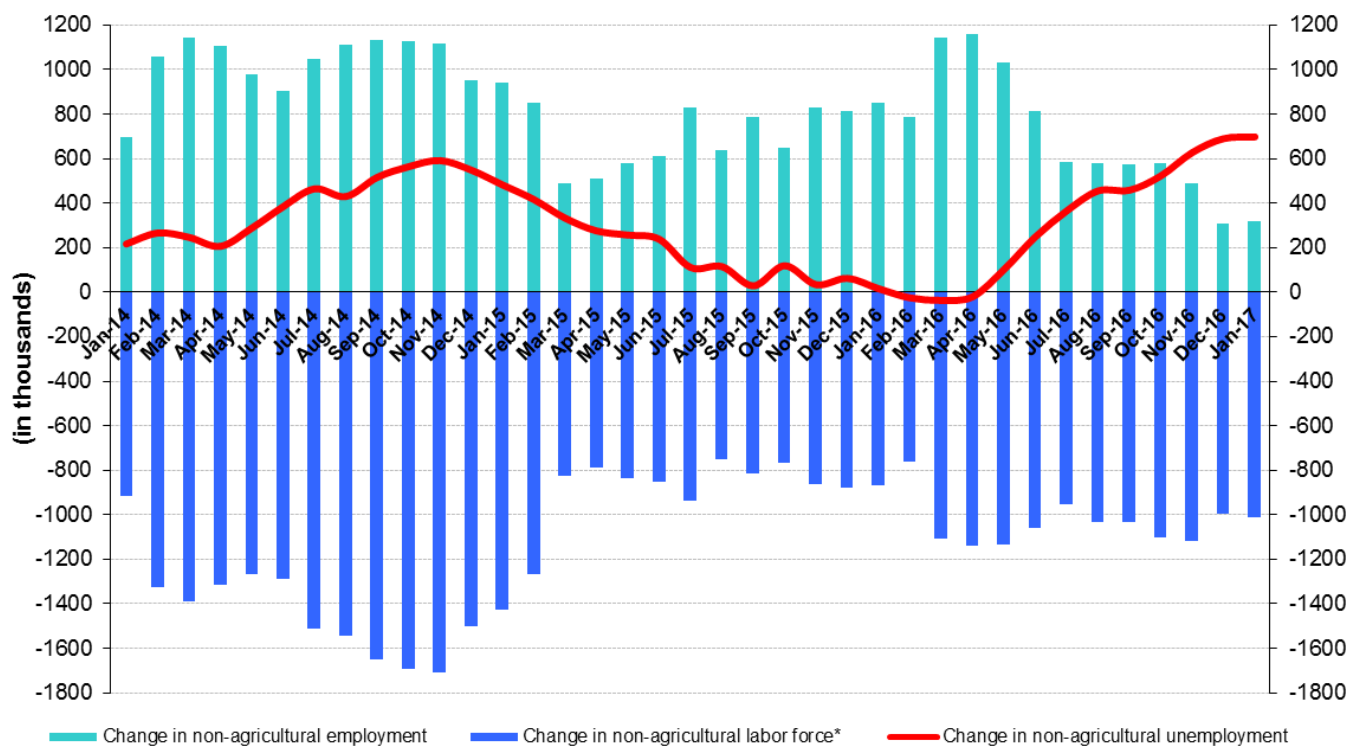


Source: Turkstat, Betam

## Increase in year-on-year non-agricultural employment continues to be low

From January 2016 to January 2017 the nonagricultural labor force increased by 1 million 14 thousand (4.1 percent) and nonagricultural employment increased by 317 thousand (1.5 percent) (Figure 4). Thus, the number of non-agricultural unemployed increased by 697 thousand (22.7 percent) in the period of January 2017. The increase in non-agricultural employment declined to 317 thousand whereas the increase non-agricultural labor force remains around 1 million level. Parallel to this situation, the increase in non-agricultural unemployment reached 700 thousand within a year. While the adverse effect of decelerating economic growth (2.9 percent) in the year of 2016 on the employment is obviously observed, the labor force follows its high-increase trend (Figure 4).

**Figure 4 Year-on-year changes in non-agricultural labor force, employment, and unemployment**



\* The change in labor force represented with a negative sign.

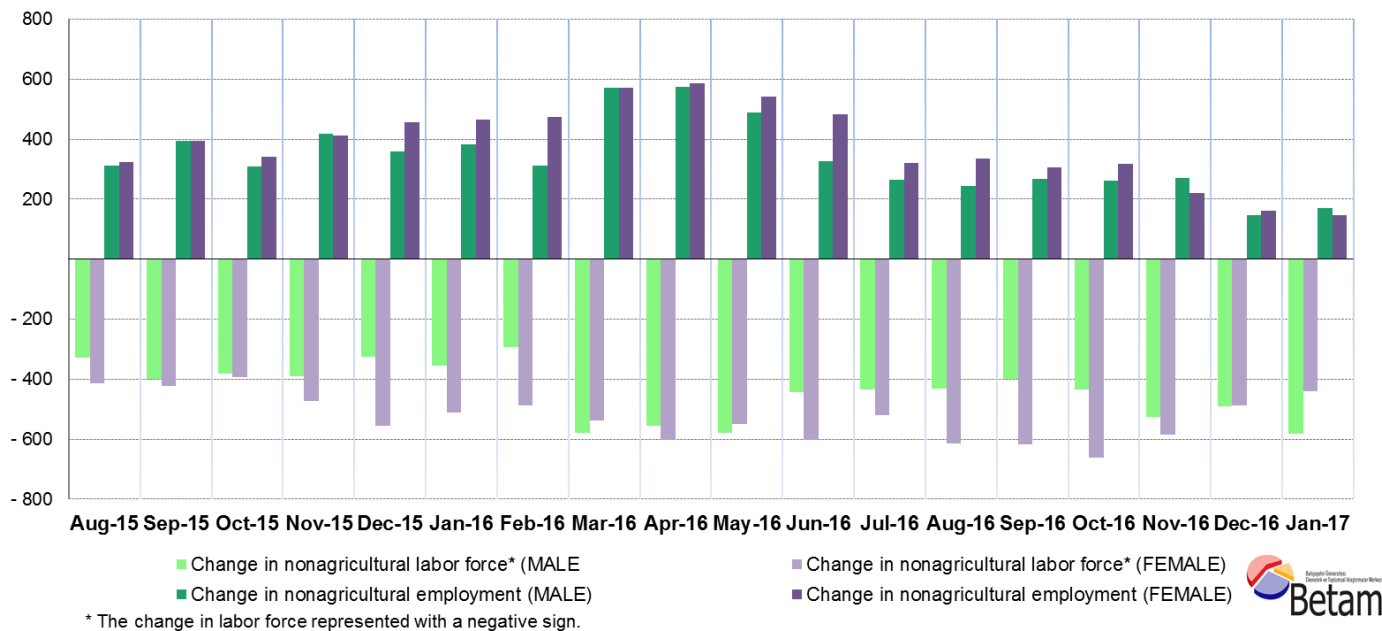


Source: Turkstat, Betam

## Strong increase in female unemployment

Turkstat revised the labor market statistics drastically in February 2014. Within this framework, they back casted various labor market indicators and they also continued to announce seasonally adjusted series. However, Turkstat is not providing back-casted series by gender. Therefore, female and male labor market statistics are not sufficiently long for the seasonal adjustment procedures. Under these circumstances, we use the year-on-year changes in male and female labor market statistics to study the latest developments in the labor market. Figure 5 shows yearly non-agricultural employment (dark colors), non-agricultural labor force (light colors) for males (green) and for females (purple).

**Figure 5 Year-on-year changes in nonagricultural labor force and employment by gender**



Source: Turkstat, Betam

In January 2017, nonagricultural female labor force and nonagricultural male labor force increased by 439 thousand and 581 thousand respectively compared to January 2016. On the other hand, nonagricultural male employment increased by 169 thousand whereas the increase in nonagricultural female employment was limited to 148 thousand. With respect to this, the number of non-agricultural unemployed women and men increased by 291 thousand and 412 thousand, respectively. From the period of January 2016 to the period of January 2017, the non-agricultural male unemployment rate grew from 11.5 percent to 13.4 percent and the non-agricultural female unemployment rate rose from 16.7 percent to 19.6 percent.

**Table 1 Seasonally adjusted non-agricultural labor market indicators (in thousands)**

	Labor force	Employment	Unemployment	Unemployment rate	Monthly changes		
					Labor force	Employment	Unemployment
December-13	22257	19831	2426	10.9%			
January-14	22480	19962	2518	11.2%	223	131	92
February-14	22834	20277	2557	11.2%	355	315	40
March-14	22979	20382	2597	11.3%	144	105	39
April-14	23079	20448	2631	11.4%	100	66	34
May-14	23106	20426	2680	11.6%	27	-22	49
June-14	23158	20402	2756	11.9%	51	-24	75
July-14	23282	20395	2887	12.4%	124	-7	131
August-14	23385	20509	2876	12.3%	103	114	-11
September-14	23516	20553	2963	12.6%	131	44	87
October-14	23655	20698	2957	12.5%	139	145	-6
November-14	23683	20699	2984	12.6%	28	1	27
December-14	23742	20798	2944	12.4%	59	99	-40
January-15	23849	20892	2957	12.4%	107	94	13
February-15	24052	21094	2958	12.3%	203	202	1
March-15	23799	20848	2951	12.4%	-253	-246	-7
April-15	23870	20934	2936	12.3%	71	86	-15
May-15	23981	21007	2974	12.4%	111	73	38
June-15	24035	21031	3004	12.5%	55	24	31
July-15	24193	21217	2976	12.3%	157	186	-29
August-15	24125	21158	2967	12.3%	-67	-59	-8
September-15	24344	21350	2994	12.3%	219	192	27
October-15	24422	21369	3053	12.5%	77	19	58
November-15	24531	21538	2993	12.2%	109	169	-60
December-15	24631	21626	3005	12.2%	100	88	12
January-16	24741	21747	2994	12.1%	110	121	-11
February-16	24838	21882	2956	11.9%	97	135	-38
March-16	24880	21969	2911	11.7%	42	87	-45
April-16	25011	22060	2951	11.8%	131	91	40
May-16	25096	22009	3087	12.3%	84	-51	135
June-16	25124	21833	3291	13.1%	28	-176	204
July-16	25144	21800	3344	13.3%	20	-33	53
August-16	25172	21749	3423	13.6%	28	-51	79
September-16	25351	21929	3422	13.5%	179	180	-1
October-16	25508	21962	3546	13.9%	156	33	123
November-16	25654	22037	3617	14.1%	147	75	72
December-16	25580	21948	3632	14.2%	-74	-89	15
January-17	25689	22067	3622	14.1%	109	119	-10

Source: Turkstat, Betam

**Table 2 Seasonally adjusted employment by sectors (in thousands)**

	Aylık deęişimler			
	Tarım	Sanayi	İnşaat	Hizmetler
<b>Aralık 13</b>	5053	5131	1895	12805
<b>Ocak 14</b>	5381	5232	1934	12796
<b>Şubat 14</b>	5527	5359	2013	12905
<b>Mart 14</b>	5591	5365	1958	13059
<b>Nisan 14</b>	5559	5373	1896	13179
<b>Mayıs 14</b>	5565	5364	1870	13191
<b>Haziran 14</b>	5490	5332	1827	13243
<b>Temmuz 14</b>	5407	5243	1814	13338
<b>Ağustos 14</b>	5344	5257	1856	13396
<b>Eylül 14</b>	5343	5306	1872	13375
<b>Ekim 14</b>	5388	5353	1903	13442
<b>Kasım 14</b>	5422	5273	1936	13491
<b>Aralık 14</b>	5442	5266	1939	13592
<b>Ocak 15</b>	5433	5349	1927	13616
<b>Şubat 15</b>	5255	5351	1877	13866
<b>Mart 15</b>	5463	5308	1921	13619
<b>Nisan 15</b>	5489	5326	1899	13709
<b>Mayıs 15</b>	5518	5404	1866	13736
<b>Haziran 15</b>	5552	5380	1854	13797
<b>Temmuz 15</b>	5507	5336	1909	13972
<b>Ağustos 15</b>	5531	5252	1918	13988
<b>Eylül 15</b>	5533	5327	1935	14089
<b>Ekim 15</b>	5466	5363	1951	14055
<b>Kasım 15</b>	5409	5353	1982	14203
<b>Aralık 15</b>	5439	5311	1995	14320
<b>Ocak 16</b>	5395	5300	2005	14442
<b>Şubat 16</b>	5346	5276	2020	14587
<b>Mart 16</b>	5360	5295	2057	14617
<b>Nisan 16</b>	5330	5381	2059	14619
<b>Mayıs 16</b>	5290	5386	2041	14581
<b>Haziran 16</b>	5140	5330	1934	14568
<b>Temmuz 16</b>	5216	5254	1934	14611
<b>Ağustos 16</b>	5267	5224	1924	14602
<b>Eylül 16</b>	5363	5260	2019	14651
<b>Ekim 16</b>	5307	5282	1977	14704
<b>Kasım 16</b>	5319	5316	1985	14736
<b>Aralık 16</b>	5356	5265	1957	14727
<b>Ocak 17</b>	5467	5274	1970	14823

Source: Turkstat, Betam