LIMITED DECREASE IN THE UNEMPLOYMENT

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Executive Summary

Seasonally adjusted labor market data show that nonagricultural unemployment rate decreased by 0.1 points and is recorded as 14.0 percent in the period of February 2017. The main reason behind this decrease in the nonagricultural unemployment rate is the increase in employment in both construction and services sectors in the periods of January and February 2017. Betam's forecasting model predicts that the non-agricultural unemployment will remain constant at 14.0 percent in the period of February 2017. As of February 2017, Betam starts to provide the seasonally adjusted male and female nonagricultural unemployment rates. In this period, the seasonally adjusted nonagricultural male unemployment rate is 12 percent and that for females is 19.4 percent. In the second half of the year of 2016 female unemployment rates soared and thus, the gap between female and male unemployment rates increased. However, starting from January 2017, the difference between the seasonally adjusted nonagricultural unemployment rates has slightly decreased.

Increases in non-agricultural labor force and employment

In the period of February 2017, the nonagricultural labor force increased by 111 thousand and reached 25 million 820 thousand and the number of people employed in non-agricultural sectors increased by 121 thousand and reached 22 million 205 thousand (Figure 1, Table 1). While the number of people unemployed in nonagricultural sectors decreased by 10 thousand and is recoded as 3 million 615 thousand, the nonagricultural unemployment rate declined to 14.0 percent.

Figure 1 Seasonally adjusted non-agricultural labor force, employment, and unemployment
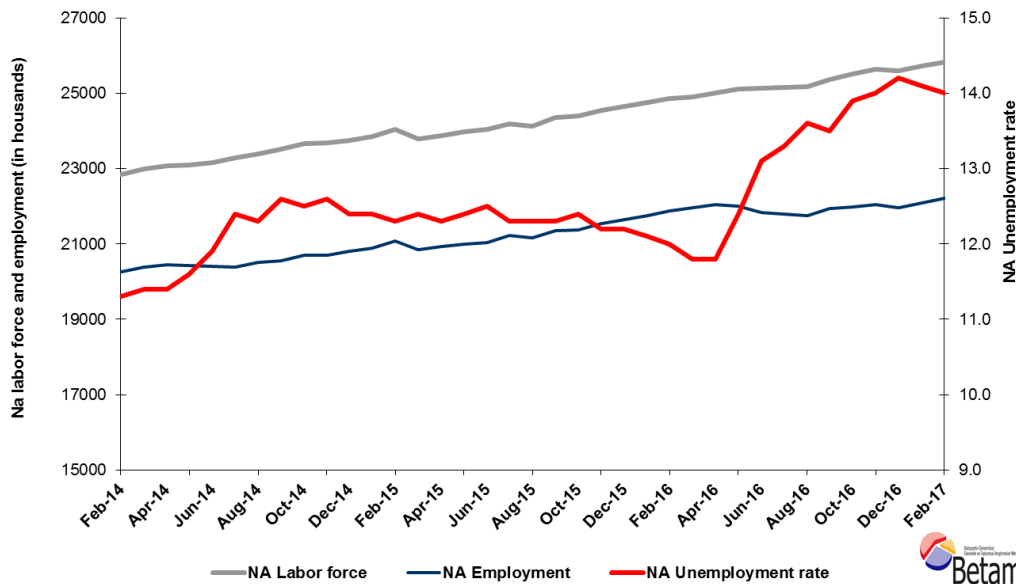
Source: Turkstat, Betam

The unemployment is expected to be constant in the period of March 2017

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Betam's forecasting model had predicted that the seasonally adjusted nonagricultural unemployment rate would decrease by 0.1 percentage points and become 14.0 percent in the period of February 2017. We observe that this forecast has been confirmed. Betam's forecasting model predicts the seasonally adjusted March 2017 nonagricultural unemployment remain constant at the level of 10.4 percent. Forecasting model details are available on Betam's website.[1] Kariyer.net[2] 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 remain constant in the period of March 2017.

Figure 2 Seasonally adjusted nonagricultural unemployment rate and application per vacancy
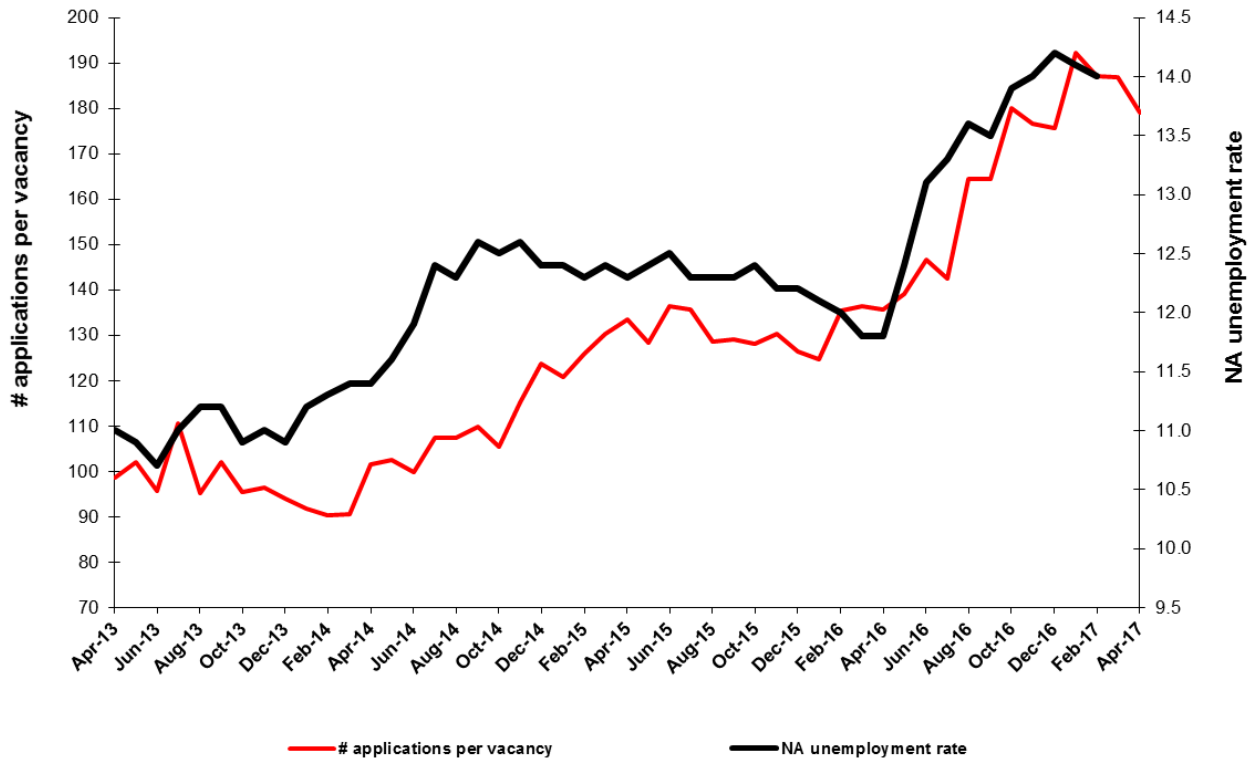
Source: Turkstat, Betam

Employment increases in services and construction

According to seasonally adjusted sectoral labor market data, recent developments in industry sector during the last three periods do not seem favorable (Figure 3,**Error! Reference source not found.** Table 2). [3] The employment in the industry sector had decreased by 51 thousand in December 2016, had increased by just 9 thousand in January 2017 and declined by 23 thousand in the period of February 2017. On the other hand, the unemployment decreased in the last two periods has been provided by the employment increase in the services sector by 96 thousand and 61 thousand respectively.

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[1] 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/
[2] 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.
[3] 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)
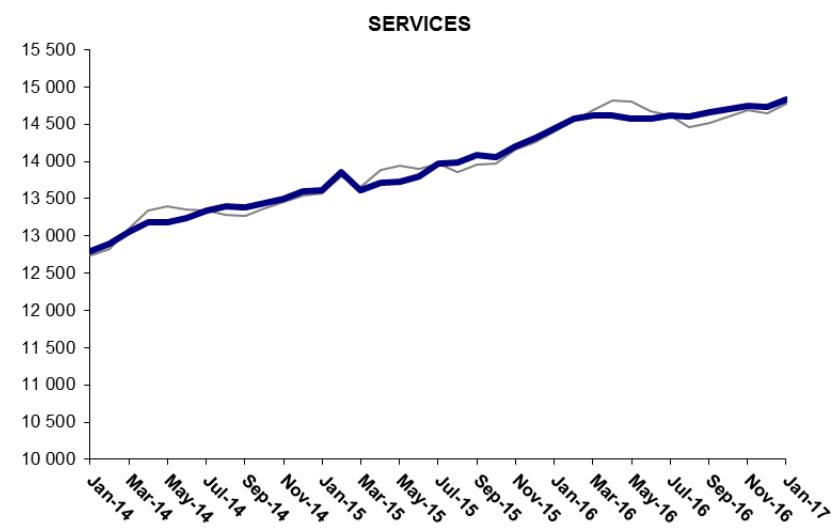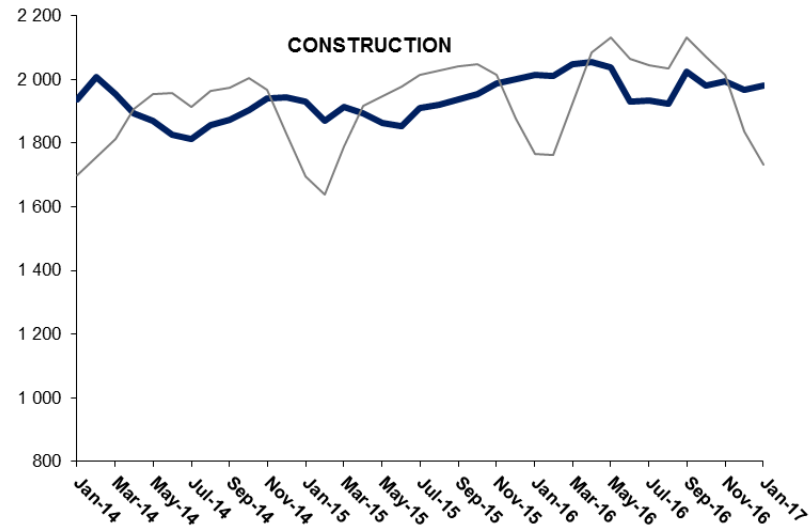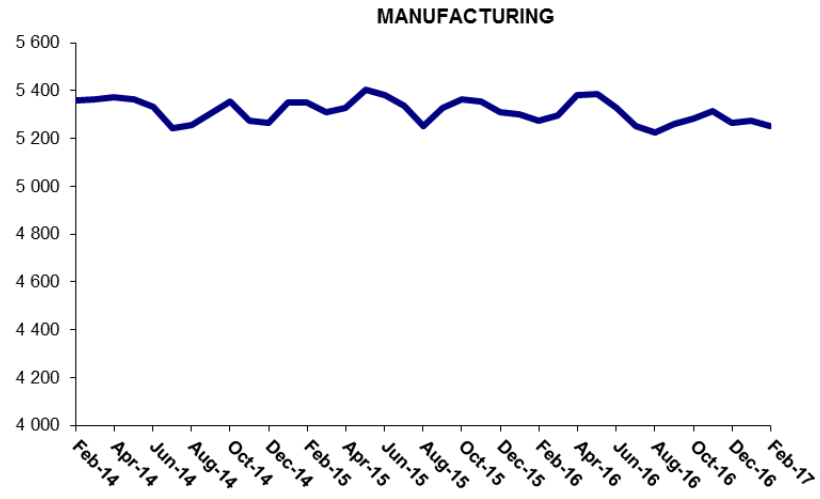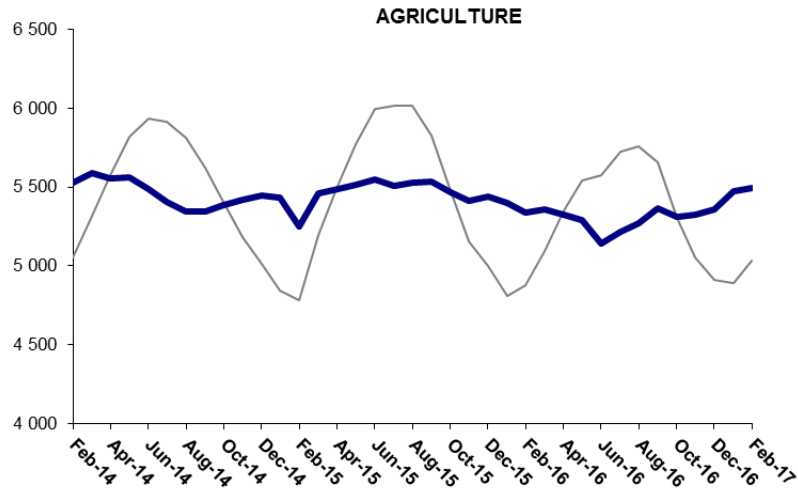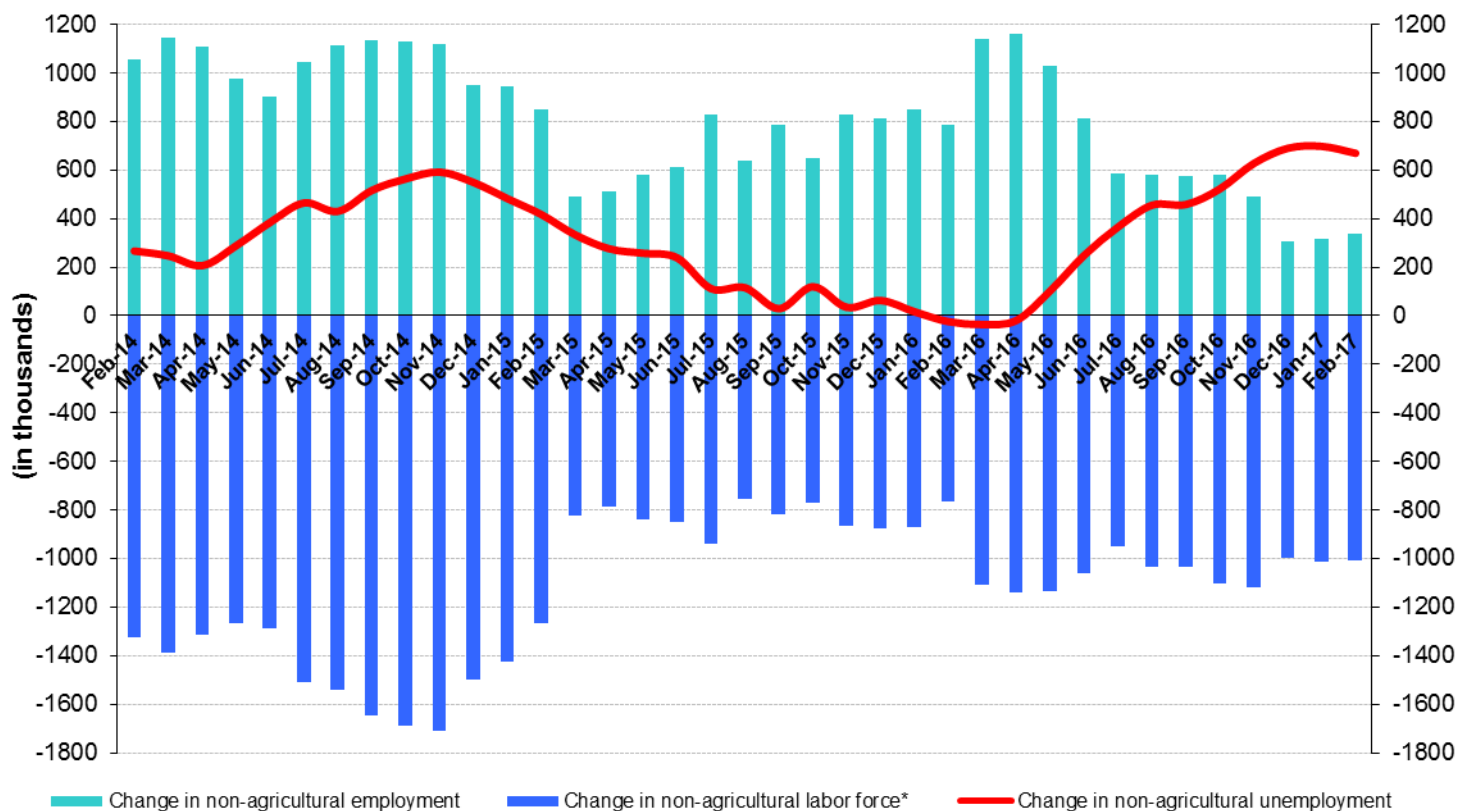

Source: Turkstat, Betam

Yearly increase of non-agricultural employment continues to be slow

From March 2016 to March 2017 the nonagricultural labor force increased by 1 million 8 thousand (4.1 percent) and the nonagricultural employment increased by 340 thousand (1.6 percent) (Figure 4). Thus, the number of non-agricultural unemployed increased by 668 thousand (21.3 percent) in the period of February 2017. The increase in non-agricultural employment declined to 340 thousand whereas the increase non-agricultural labor force remains around 1 million level. Parallel to this situation, the increase in non-agricultural unemployment reached 668 thousand within a year.

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 were not sufficiently long for the seasonal adjustment procedures. Indeed, at least 36 observations are required to implement a reliable seasonal-adjustment procedure. When February 2017 data released, we have sufficient 36 observations to run the seasonal-adjustment procedure. Note that the seasonal-adjustment procedure might generate volatility in the series for some more time.

Figure 5 shows the seasonally adjusted nonagricultural female and male unemployment rates. In the period of February 2017, the male unemployment rate is 12 percent whereas that for women is 19.4 percent. The gender gap in the unemployment rates has soared since May 2016. From the period of May to the period of December the male unemployment rate increased from 10.9 percent to 12.0 percent while the female unemployment rate increased from 16.7 percent to 19.6 percent. In other words, during this period the increase in the male unemployment rate was 1.1 percentage points whereas the female unemployment rate increased by 2.9 percentage points. The difference between male and female unemployment rates had reached 8,4 percentage points (=20-11,6) in the period of December 2016. Starting from February-January 2017, the female unemployment rates have been decreased slightly while the male unemployment rates have followed a flat trend. Therefore, the difference between female and male unemployment rates declined to 7.4 percentage points (=19,4-12) in March period.

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Figure 5 Seasonally adjusted female and male nonagricultural unemployment rates (%)
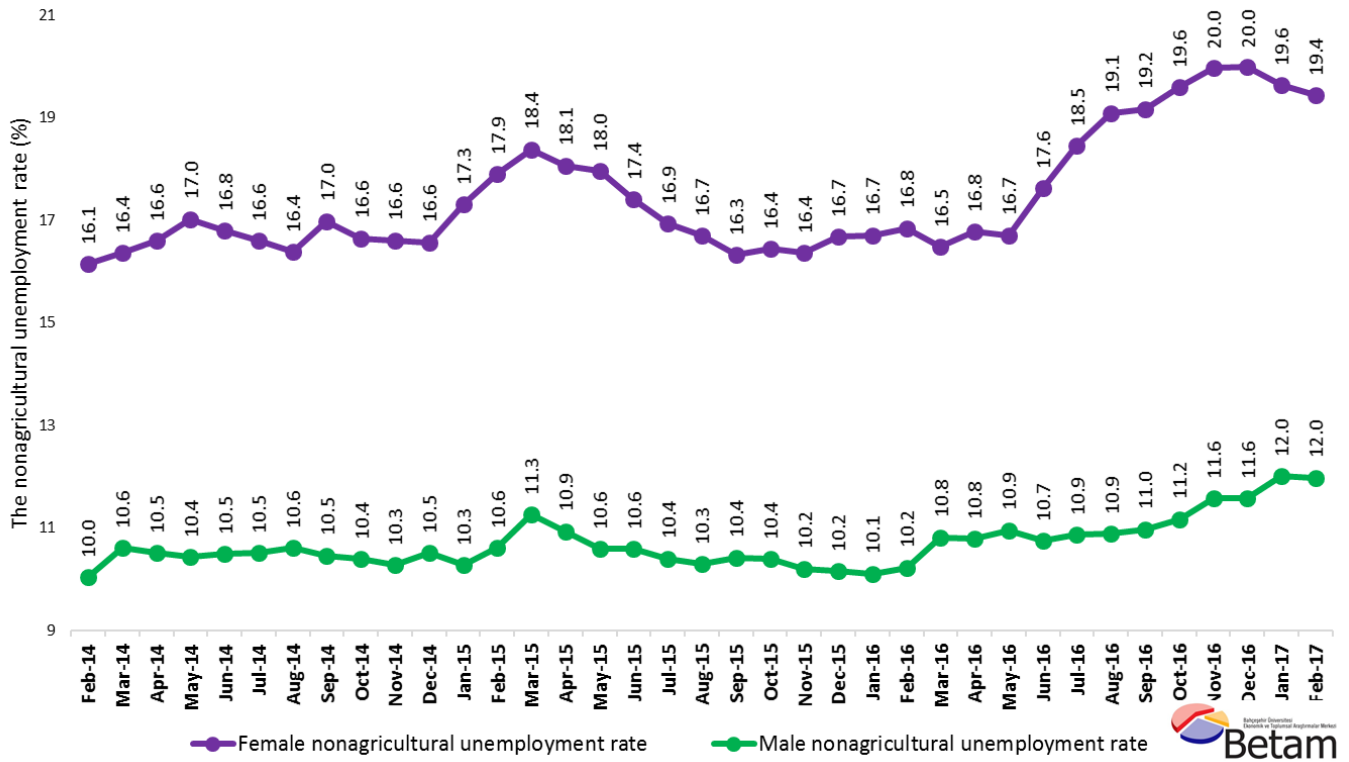
Source: Turkstat, Betam

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

	Labor force	Employment	Unemployment	Unemployment rate	Monthly changes		
					Labor force	Employment	Unemployment
January-14	22484	19966	2518	11.2%			
February-14	22851	20269	2582	11.3%	367	303	64
March-14	22998	20376	2622	11.4%	147	107	40
April-14	23073	20443	2630	11.4%	76	67	9
May-14	23103	20423	2680	11.6%	30	-20	50
June-14	23156	20400	2756	11.9%	53	-23	76
July-14	23282	20395	2887	12.4%	126	-5	131
August-14	23388	20511	2877	12.3%	106	116	-10
September-14	23521	20557	2964	12.6%	133	46	87
October-14	23659	20702	2957	12.5%	139	145	-6
November-14	23689	20704	2985	12.6%	29	2	27
December-14	23748	20803	2945	12.4%	59	99	-40
January-15	23857	20899	2958	12.4%	110	96	14
February-15	24040	21083	2957	12.3%	183	184	-1
March-15	23789	20839	2950	12.4%	-251	-244	-7
April-15	23863	20928	2935	12.3%	74	89	-15
May-15	23976	21003	2973	12.4%	113	75	38
June-15	24034	21030	3004	12.5%	58	27	31
July-15	24193	21217	2976	12.3%	158	187	-29
August-15	24129	21161	2968	12.3%	-64	-56	-8
September-15	24349	21354	2995	12.3%	220	193	27
October-15	24402	21376	3026	12.4%	53	22	31
November-15	24540	21546	2994	12.2%	138	170	-32
December-15	24642	21636	3006	12.2%	103	90	13
January-16	24753	21758	2995	12.1%	111	122	-11
February-16	24848	21866	2982	12.0%	95	108	-13
March-16	24892	21955	2937	11.8%	45	89	-44
April-16	24999	22049	2950	11.8%	107	94	13
May-16	25116	22002	3114	12.4%	118	-47	165
June-16	25121	21830	3291	13.1%	4	-172	176
July-16	25143	21799	3344	13.3%	22	-31	53
August-16	25176	21752	3424	13.6%	33	-47	80
September-16	25360	21936	3424	13.5%	184	184	0
October-16	25519	21972	3547	13.9%	160	36	124
November-16	25638	22049	3589	14.0%	119	77	42
December-16	25599	21964	3635	14.2%	-39	-85	46
January-17	25709	22084	3625	14.1%	110	120	-10
February-17	25820	22205	3615	14.0%	111	121	-10

Source: Turkstat, Betam

Table 2 Seasonally adjusted employment by sectors (in thousands)

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
January-14	5053	5131	1895	12805				
February-14	5382	5232	1937	12797	329	101	42	-8
March-14	5525	5359	2009	12902	143	127	72	105
April-14	5590	5365	1954	13057	65	6	-55	155
May-14	5558	5373	1893	13177	-32	8	-61	120
June-14	5565	5364	1869	13190	7	-9	-24	13
July-14	5490	5332	1826	13243	-75	-32	-43	53
August-14	5407	5243	1814	13338	-83	-89	-12	95
September-14	5344	5257	1857	13397	-63	14	43	59
October-14	5343	5306	1874	13377	-1	49	17	-20
November-14	5389	5353	1905	13443	46	47	31	66
December-14	5423	5273	1939	13493	34	-80	34	50
January-15	5444	5266	1943	13594	21	-7	4	101
February-15	5435	5349	1932	13618	-9	83	-11	24
March-15	5252	5351	1871	13862	-183	2	-61	244
April-15	5462	5308	1915	13616	210	-43	44	-246
May-15	5488	5326	1895	13707	26	18	-20	91
June-15	5517	5404	1864	13735	29	78	-31	28
July-15	5551	5380	1853	13796	34	-24	-11	61
August-15	5507	5336	1909	13972	-44	-44	56	176
September-15	5531	5252	1919	13989	24	-84	10	17
October-15	5534	5327	1937	14091	3	75	18	102
November-15	5467	5363	1955	14057	-67	36	18	-34
December-15	5411	5353	1987	14206	-56	-10	32	149
January-16	5441	5311	2002	14323	30	-42	15	117
February-16	5398	5300	2013	14445	-43	-11	11	122
March-16	5341	5276	2010	14580	-57	-24	-3	135
April-16	5357	5295	2048	14612	16	19	38	32
May-16	5328	5381	2053	14615	-29	86	5	3
June-16	5289	5386	2037	14579	-39	5	-16	-36
July-16	5139	5330	1932	14568	-150	-56	-105	-11
August-16	5216	5254	1934	14611	77	-76	2	43
September-16	5268	5224	1925	14604	52	-30	-9	-7
October-16	5364	5260	2023	14653	96	36	98	49
November-16	5309	5282	1982	14707	-55	22	-41	54
December-16	5322	5316	1993	14740	13	34	11	33
January-17	5359	5265	1967	14732	37	-51	-26	-8
February-17	5472	5274	1982	14828	113	9	15	96

Source: Turkstat, Betam

	Kadın İşgücü	Kadın İstihdam	Kadın İşsiz	Erkek İşgücü	Erkek İstihdam	Erkek İşsiz
Şubat 14	5913	4959	942	16800	15114	1686
Mart 14	6051	5062	963	16942	15145	1731
Mayıs 14	6115	5100	988	16978	15193	1753
Şubat 14	6124	5082	1009	17021	15246	1739
Mart 14	6153	5120	1021	17082	15290	1734
Mayıs 14	6200	5171	1032	17109	15312	1802
Şubat 14	6299	5267	1047	17186	15363	1795
Mart 14	6336	5260	1080	17188	15390	1823
Mayıs 14	6384	5321	1081	17227	15438	1795
Şubat 14	6398	5335	1090	17230	15459	1844
Mart 14	6418	5354	1093	17322	15502	1844
Mayıs 14	6504	5378	1128	17310	15532	1844
Şubat 14	6555	5382	1151	17416	15570	1861
Mart 14	6533	5333	1176	17262	15319	1835
Mayıs 14	6539	5358	1160	17315	15423	1849
Şubat 14	6630	5439	1172	17343	15508	1831
Mart 14	6656	5498	1148	17441	15593	1844
Mayıs 14	6742	5600	1138	17492	15673	1798
Şubat 14	6713	5592	1124	17513	15709	1815
Mart 14	6758	5655	1112	17587	15755	1842
Mayıs 14	6777	5662	1124	17609	15779	1865
Şubat 14	6872	5747	1133	17619	15821	1824
Mart 14	6972	5809	1167	17648	15857	1813
Mayıs 14	7016	5844	1176	17666	15882	1811
Şubat 14	7043	5857	1190	17708	15898	1839
Mart 14	7070	5905	1187	17841	15912	1850
Mayıs 14	7141	5943	1220	17872	15944	1849
Şubat 14	7180	5980	1230	17923	15960	1918
Mart 14	7260	5981	1285	17884	15963	1949
Mayıs 14	7262	5922	1327	17925	15977	1968
Şubat 14	7326	5927	1371	17945	15993	2001
Mart 14	7375	5961	1394	17987	16014	1992
Mayıs 14	7437	5980	1426	18043	16028	2044
Şubat 14	7456	5967	1453	18145	16044	2086
Mart 14	7461	5969	1463	18140	16041	2149
Mayıs 14	7455	5992	1464	18248	16056	2205
Şubat 14	7508	6050	1474	18249	16063	2222