

SHARP INCREASE IN NON-AGRICULTURAL UNEMPLOYMENT

Gökçe Uysal* and Uğurcan Acar**

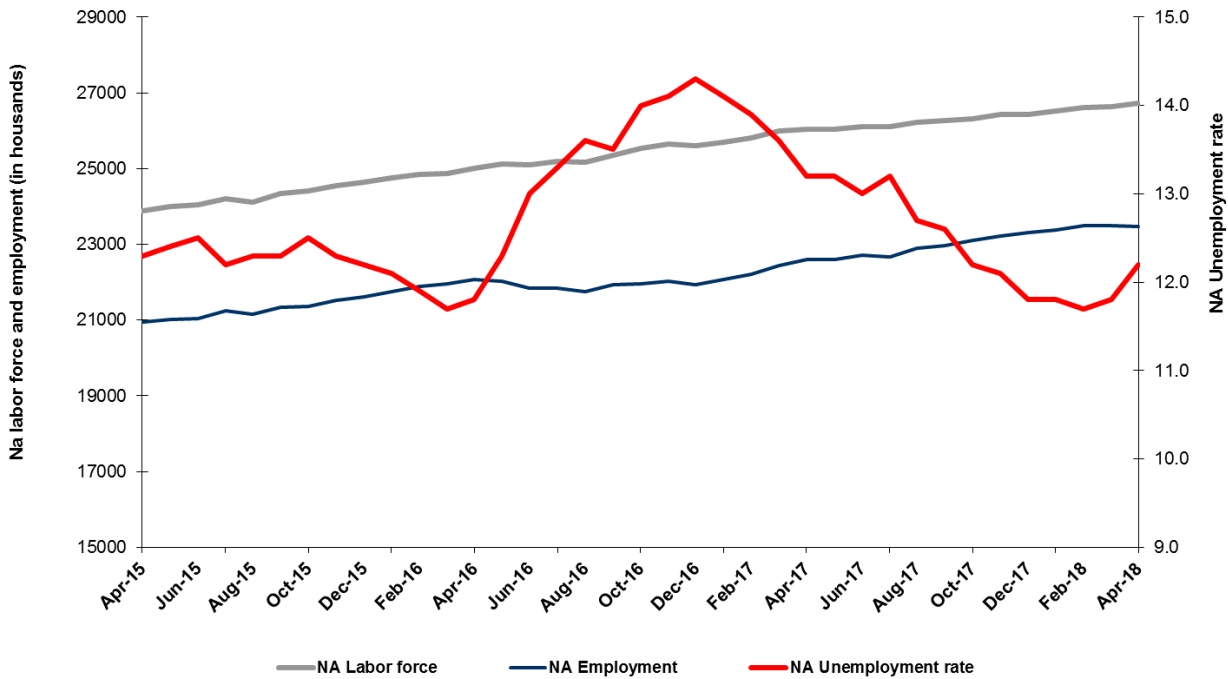
Executive Summary

Seasonally adjusted labor market data shows that, in the period of April 2018 compared to March 2018, non-agricultural unemployment rate increased by 0.4 percentage points and reached 12.2 percent. An increase in the labor force and a decrease in employment concurrently are the reasons behind the increase in non-agricultural unemployment. Sectoral data indicates that employment in manufacturing increased while employment in services remained almost unchanged. On the other hand, there have been strong employment losses in construction in the last two periods. Thus the non-agricultural unemployment rate has increased to 12.2 percent. Since employment losses occurred mostly in construction where men are more likely to be employed, the gender gap in non-agricultural unemployment rates have decreased in favor of women. Betam's forecasting model predicts that the non-agricultural unemployment will increase to 12.3 percent in the period of May 2018.

The non-agricultural labor force increased while employment decreased

According to seasonally adjusted labor market data, in the period of April 2018 compared to March 2018, the non-agricultural labor force increased by 105 thousand and reached 26 million 729 thousand while the number of employed in non-agricultural sectors decreased by 14 thousand and reached 23 million 468 thousand (Figure 1, Table 1). As result, the number of unemployed in non-agricultural sectors increased by 119 thousand and recorded as 3 million 261 thousand and the non-agricultural unemployment rate rose to 12.2 percent.

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



Source: Turkstat, Betam

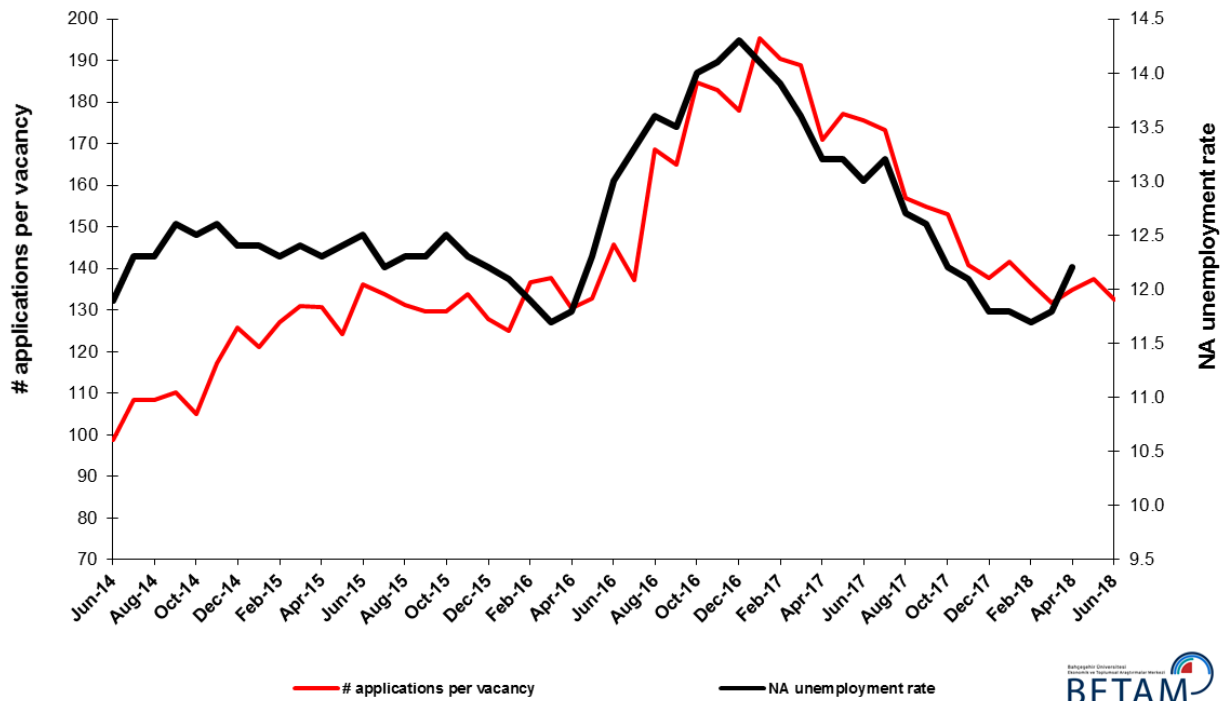
* Gökçe Uysal, Betam, Direktör Yardımcısı, gokce.uysal@eas.bau.edu.tr

** Uğurcan Acar, Betam, Araştırma Görevlisi, ugurcan.acar@eas.bau.edu.tr

Unemployment rate is expected to increase by 0.1 percentage point in the period of May 2018

Betam's forecasting model had predicted that the seasonally adjusted non-agricultural unemployment rate would remain constant at 11.7 percent in the April 2018. TURKSTAT revised the unemployment rate of March from 11.7 percent to 11.8. The non-agricultural unemployment rate rose to 12.2 percent in the period of April 2018. Betam's forecasting model predicts that the non-agricultural unemployment rate will reach to 12.3 percent in the period of May 2018. Forecasting model details are available on Betam's website.¹ Kariyer.net² application per vacancy series used in the Betam forecasting model is depicted in Figure 3. 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.

Figure 2 Seasonally adjusted non-agricultural unemployment rate and application per vacancy



Source: Kariyer.net, Turkstat, Betam

Employment decreases in construction continues

According to seasonally adjusted sectoral labor market data, employment decreased in agriculture and construction while employment increased in manufacturing and services in April 2018 compared to March 2018 (Figure 3, Table 2).³ Employment increased by 32 thousand in manufacturing and 6 thousand in services. On the other hand, employment in agriculture and construction decreased by 20 and 52 thousand respectively. Employment losses in construction in the last two periods have reached 100 thousand. The increase in employment in the service sector, which shoulders about half of the total employment, stalled in this period, whereas the employment losses in construction have continued, resulting in a sizeable increase in non-agricultural unemployment.

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". For the innovations in the model please see Betam Research Brief 14 titled as "Mevsim Etkilerinden Arındırılmış İşsizlik Tahmini".

Soybilgen, B., "Kariyer.net Verisiyle Kısa Vadeli Tarım Dışı İşsizlik Tahmini", Betam Research Brief 168.

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

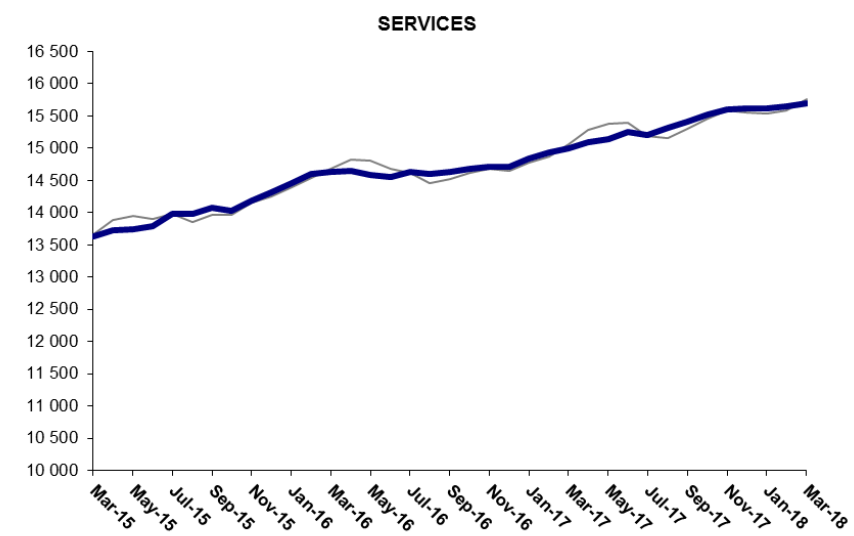
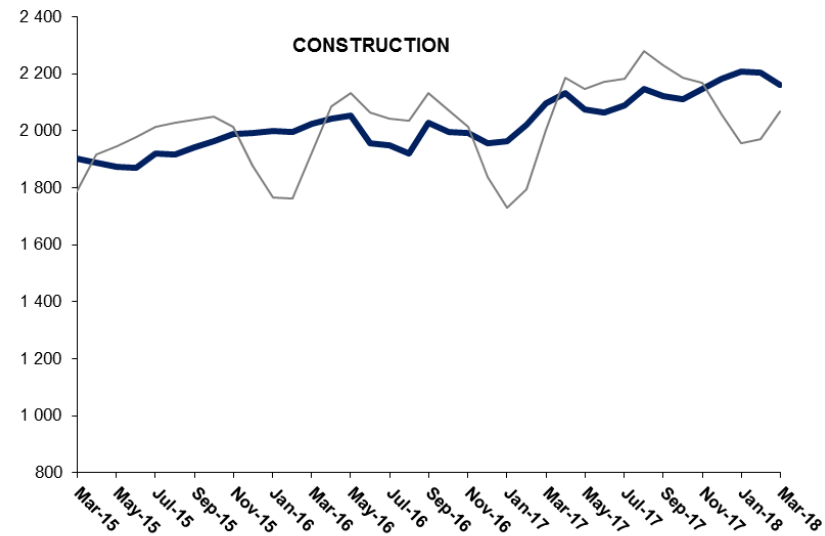
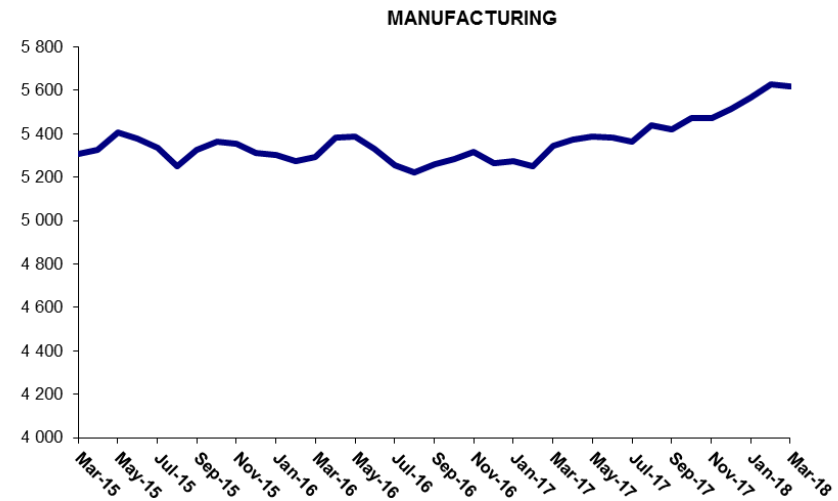
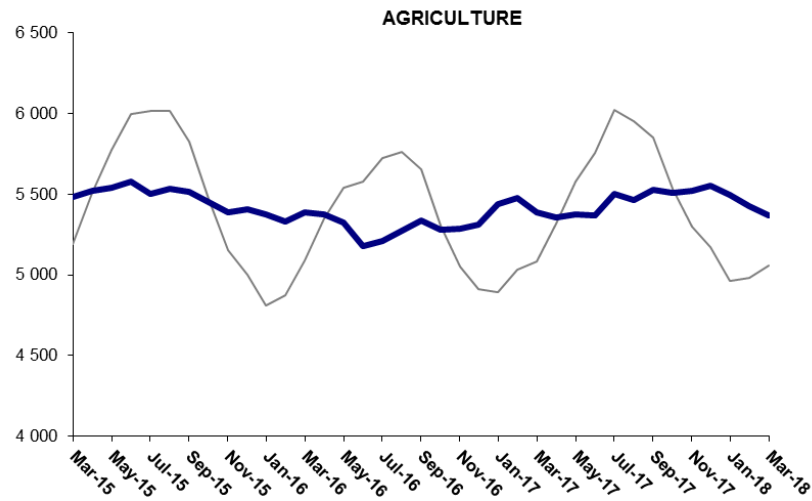
Soybilgen, B., "Mevsim Etkilerinden Arındırılmış İşsizlik Tahmini", Betam Research Brief 14

<http://betam.bahcesehir.edu.tr/2015/08/mevsim-etkilerinden-arindirilmis-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)

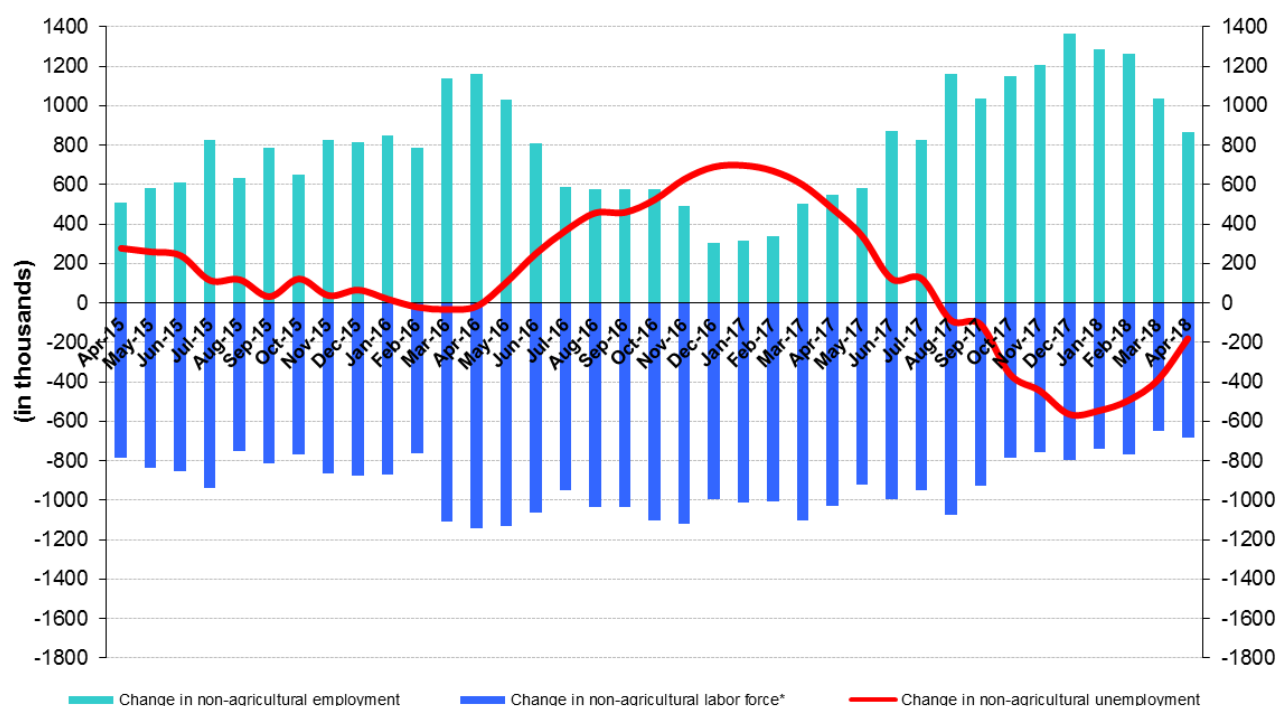


Source: TURKSTAT, Betam

The number of non-agricultural unemployed decreased within a year

From April 2017 to April 2018 non-agricultural labor force increased by 685 thousand (2.6 percent) and non-agricultural employment increased by 868 thousand (3.8 percent) (Figure 4). Thus, non-agricultural unemployed decreased by 183 thousand and attained 3 million 50 thousand (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.

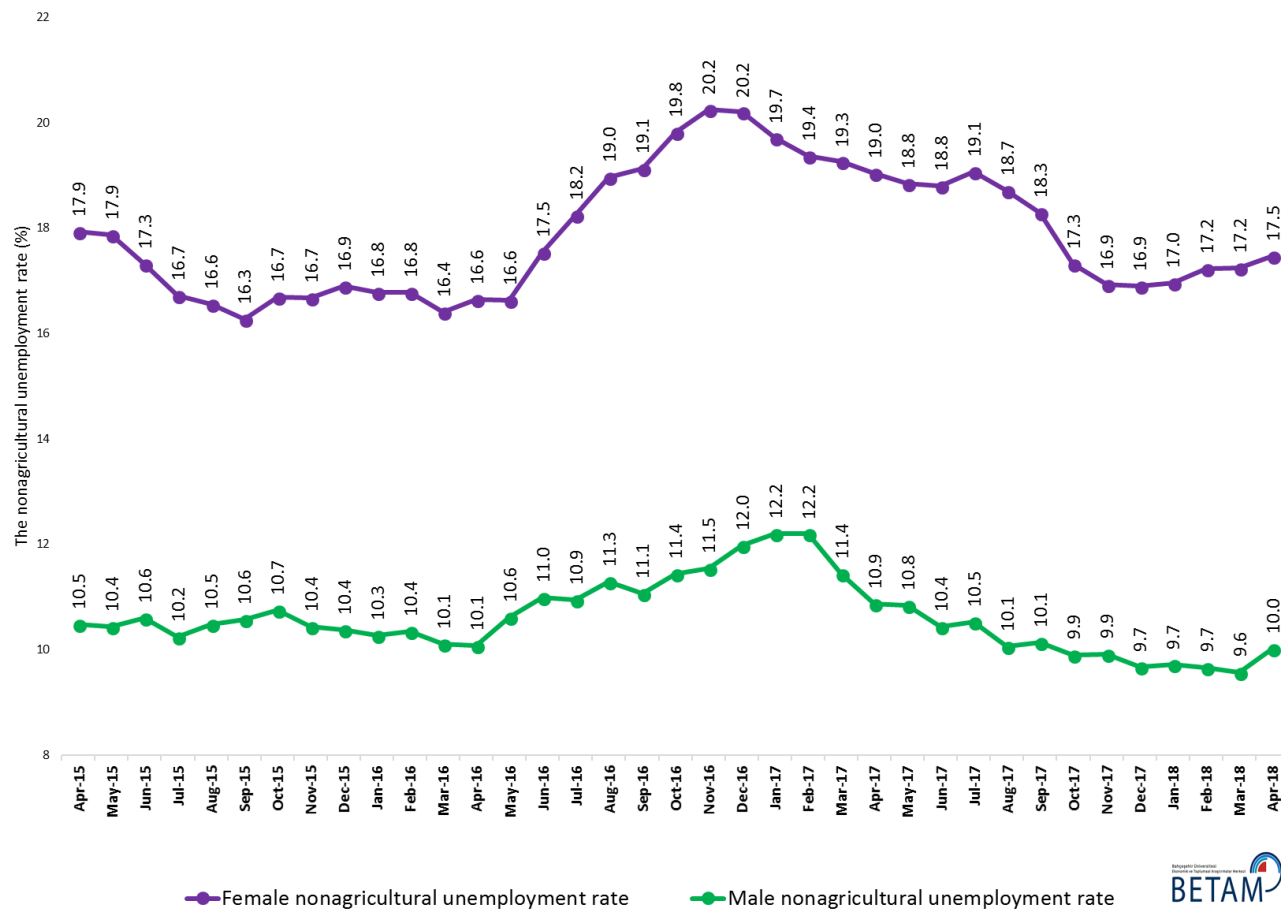
Source: Turkstat, Betam

Unemployment ratio difference between female and male decreased

Figure 5 shows seasonally adjusted non-agricultural unemployment rate for males (green) and for females (purple)⁴. In the period of April 2018, the non-agricultural female unemployment rate increased by 0.3 percentage points to 17.5 percent while non-agricultural male unemployment rate increased by 0.4 percentage points to 10 percent. In other words non-agricultural unemployment increases were larger for males. Thus, the gender gap in non-agricultural unemployment rates dropped from 7.7 percent in March 2018 to 7.4 percent in April 2018. This may be due to the fact that men are more likely to be employed more in construction where employment losses were stronger.

⁴ 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 (There should be minimum 36 observations). With the announcement of the period of February 2017 data, the number of observations required for the seasonal decontamination process was provided. From this period Betam get seasonal adjustment series in terms of gender. Nevertheless, it should not be forgotten that seasonal adjustment may cause extra volatility in the series for at least a while.

Figure 5: Seasonally adjusted non-agricultural unemployment rate by gender



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
March-15	23788	20838	2950	12.4%			
April-15	23873	20937	2936	12.3%	86	99	-13
May-15	23990	21015	2975	12.4%	116	78	38
June-15	24038	21033	3005	12.5%	48	18	30
July-15	24192	21241	2951	12.2%	155	208	-53
August-15	24115	21149	2966	12.3%	-77	-92	15
September-15	24335	21342	2993	12.3%	220	193	27
October-15	24407	21356	3051	12.5%	72	14	58
November-15	24548	21529	3019	12.3%	142	173	-31
December-15	24628	21623	3005	12.2%	79	94	-15
January-16	24754	21759	2995	12.1%	127	136	-9
February-16	24837	21881	2956	11.9%	82	122	-40
March-16	24864	21955	2909	11.7%	28	74	-46
April-16	25015	22063	2952	11.8%	151	108	43
May-16	25113	22024	3089	12.3%	98	-39	137
June-16	25101	21838	3263	13.0%	-12	-186	174
July-16	25180	21831	3349	13.3%	79	-7	86
August-16	25160	21738	3422	13.6%	-20	-93	73
September-16	25345	21923	3422	13.5%	185	185	0
October-16	25526	21952	3574	14.0%	181	29	152
November-16	25641	22026	3615	14.1%	116	74	42
December-16	25602	21941	3661	14.3%	-39	-85	46
January-17	25703	22079	3624	14.1%	101	138	-37
February-17	25803	22216	3587	13.9%	99	137	-38
March-17	25981	22448	3533	13.6%	179	232	-53
April-17	26036	22599	3437	13.2%	54	151	-97
May-17	26046	22608	3438	13.2%	10	9	1
June-17	26100	22707	3393	13.0%	54	99	-45
July-17	26108	22662	3446	13.2%	8	-45	53
August-17	26222	22892	3330	12.7%	114	230	-116
September-17	26269	22959	3310	12.6%	47	67	-20
October-17	26312	23102	3210	12.2%	43	143	-100
November-17	26421	23224	3197	12.1%	109	122	-13
December-17	26433	23314	3119	11.8%	12	90	-78
January-18	26514	23385	3129	11.8%	80	71	9
February-18	26602	23490	3112	11.7%	89	105	-16
March-18	26624	23482	3142	11.8%	21	-8	29
April-18	26729	23468	3261	12.2%	105	-14	119

Source: Turkstat, Betam

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

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
March-15	5244	5351	1862	13879				
April-15	5486	5308	1901	13629	242	-43	39	-250
May-15	5520	5326	1888	13724	34	18	-13	95
June-15	5543	5404	1875	13737	23	78	-13	13
July-15	5578	5380	1869	13785	35	-24	-6	48
August-15	5502	5336	1920	13985	-76	-44	51	200
September-15	5534	5252	1918	13980	32	-84	-2	-5
October-15	5515	5327	1941	14074	-19	75	23	94
November-15	5449	5363	1962	14031	-66	36	21	-43
December-15	5386	5353	1987	14189	-63	-10	25	158
January-16	5408	5311	1993	14318	22	-42	6	129
February-16	5374	5300	1999	14459	-34	-11	6	141
March-16	5330	5276	1996	14608	-44	-24	-3	149
April-16	5391	5295	2025	14635	61	19	29	27
May-16	5374	5381	2041	14641	-17	86	16	6
June-16	5325	5386	2054	14584	-49	5	13	-57
July-16	5177	5330	1955	14553	-148	-56	-99	-31
August-16	5210	5254	1950	14628	33	-76	-5	75
September-16	5271	5224	1921	14593	61	-30	-29	-35
October-16	5337	5260	2029	14633	66	36	108	40
November-16	5282	5282	1995	14675	-55	22	-34	42
December-16	5285	5316	1994	14715	3	34	-1	40
January-17	5310	5265	1956	14719	25	-51	-38	4
February-17	5437	5274	1963	14841	127	9	7	122
March-17	5479	5251	2022	14942	42	-23	59	101
April-17	5390	5346	2097	15005	-89	95	75	63
May-17	5357	5372	2134	15093	-33	26	37	88
June-17	5376	5386	2074	15147	19	14	-60	54
July-17	5372	5383	2065	15258	-4	-3	-9	111
August-17	5501	5363	2089	15210	129	-20	24	-48
September-17	5464	5437	2147	15308	-37	74	58	98
October-17	5527	5421	2123	15415	63	-16	-24	107
November-17	5506	5470	2112	15520	-21	49	-11	105
December-17	5521	5470	2145	15608	15	0	33	88
January-18	5552	5514	2184	15616	31	44	39	8
February-18	5498	5567	2208	15610	-54	53	24	-6
March-18	5425	5627	2206	15657	-73	60	-2	47
April-18	5370	5618	2160	15704	-55	-9	-46	47

Source: Turkstat, Betam

Table 3: Seasonally adjusted non-agricultural labor force by gender (thousands)

	Female Labor Force	Female Employment	Female Unemployed	Male Labor Force	Male Employment	Male Unemployed
April-15	6541	5368	1173	17268	15457	1811
May-15	6625	5441	1184	17328	15518	1809
June-15	6658	5505	1153	17412	15567	1845
July-15	6751	5623	1128	17481	15690	1791
August-15	6715	5603	1112	17481	15648	1833
September-15	6760	5660	1100	17587	15728	1859
October-15	6782	5650	1132	17635	15740	1895
November-15	6876	5730	1146	17642	15800	1841
December-15	6968	5791	1177	17688	15853	1835
January-16	7010	5834	1177	17720	15900	1820
February-16	7044	5862	1182	17752	15914	1838
March-16	7058	5900	1157	17790	15991	1799
April-16	7142	5953	1189	17824	16029	1795
May-16	7175	5982	1193	17907	16006	1901
June-16	7261	5988	1273	17855	15893	1961
July-16	7271	5945	1327	17915	15954	1960
August-16	7328	5938	1390	17914	15892	2021
September-16	7377	5966	1411	17987	15997	1990
October-16	7443	5968	1475	18068	16001	2067
November-16	7460	5950	1510	18167	16071	2096
December-16	7457	5951	1506	18180	16001	2178
January-17	7449	5982	1468	18301	16070	2232
February-17	7509	6055	1455	18293	16062	2231
March-17	7613	6147	1466	18346	16247	2100
April-17	7599	6153	1446	18379	16381	1998
May-17	7651	6209	1442	18352	16362	1990
June-17	7670	6228	1442	18451	16525	1926
July-17	7682	6217	1465	18453	16510	1943
August-17	7734	6287	1447	18572	16704	1869
September-17	7767	6347	1420	18530	16653	1878
October-17	7792	6444	1349	18504	16672	1832
November-17	7828	6503	1326	18564	16724	1840
December-17	7886	6554	1333	18558	16763	1794
January-18	7922	6579	1343	18562	16760	1803
February-18	7952	6583	1370	18593	16796	1797
March-18	7948	6578	1370	18638	16853	1785
April-18	7984	6590	1394	18684	16811	1873

Source: Turkstat, Betam