

UNEMPLOYMENT CONTINUES TO DECREASE

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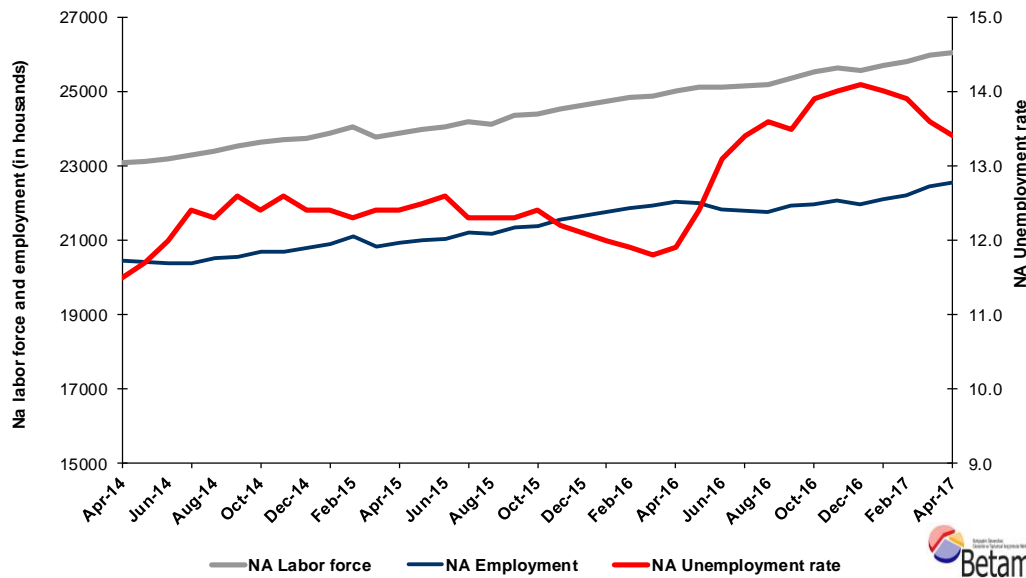
Executive Summary

Seasonally adjusted labor market data show that the nonagricultural unemployment rate decreased by 0.2 percentage points and is recorded as 13.4 percent in the period of April 2017. In the period of April 2017 compared to the period of March 2017, increases in the nonagricultural employment continued. Parallel to these developments, the nonagricultural unemployment decreased. In this period, we observed employment increases in all nonagricultural sectors. According to seasonally adjusted labor market data, in looking at gender breakdown, the male unemployment rate remained constant while the female unemployment rate decreased. Betam forecast model predicts that the non-agricultural unemployment rate will decline by 0.1 percentage points down to 13.3 percent in the period of May 2017.

Increase in nonagricultural employment has driven unemployment down

According to seasonally adjusted data, the nonagricultural labor force increased by 79 thousand and reached 26 million 57 thousand and the number of people employed in non-agricultural sectors increased by 120 thousand and reached 22 million 565 thousand in the period of April 2017 compared to the period of March 2017 (Figure 1, Table 1). While the number of people unemployed in nonagricultural sectors decreased by 41 thousand and is recoded as 3 million 492 thousand, the nonagricultural unemployment rate declined to 13.4 percent. Since the period of September 2016, except December 2016, the non-agricultural labor force has been increasing over 100 thousand. However, it has slowed down during the period of April 2017 and declined to the level of 79 thousand. Therefore, relatively high increase in the nonagricultural employment pulled the nonagricultural unemployment rate down.

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



Source: Turkstat, Betam

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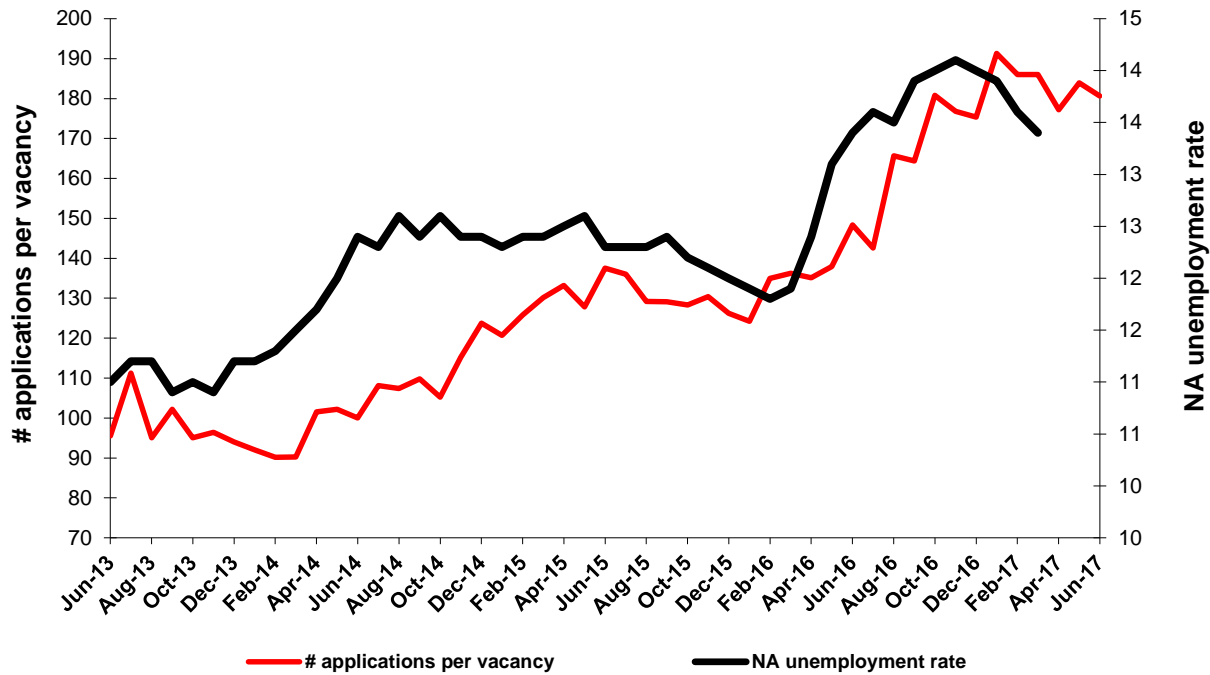
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The unemployment rate is expected to decline in the period of May 2017

Betam's forecasting model had predicted that the seasonally adjusted nonagricultural unemployment rate would decrease by 0.1 percentage points and would be 13.6 percent in the period of April 2017. Turkstat revised seasonally adjusted nonagricultural unemployment rate of the March 2017 period from 13.7 percent to 13.6 percent. As a result, the non-agricultural unemployment rate in April period decreased by 0.2 percentage points and it recorded as 13.4 percent. Betam's forecasting model predicts the seasonally adjusted May 2017 nonagricultural unemployment will decrease by 0.1 points to 13.3 percent. 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 **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 continue to decrease in the period of May 2017.

Figure 2 Seasonally adjusted nonagricultural unemployment rate and application per vacancy



Source: Turkstat, Betam

Slowdown in sectoral employment increases

According to seasonally adjusted sectoral labor market data, strong increases in the employment of the nonagricultural sectors were recorded in the period of March 2017. Even though we observe employment increase in all non-agricultural sectors during the period of April 2017, their pace is relatively slower compared to previous periods (Figure 3, **Error! Reference source not found.** Table 2).³ In this period, the employment increased by 26 thousand in industry, by 17 thousand in construction and by 76 thousand in services sector.

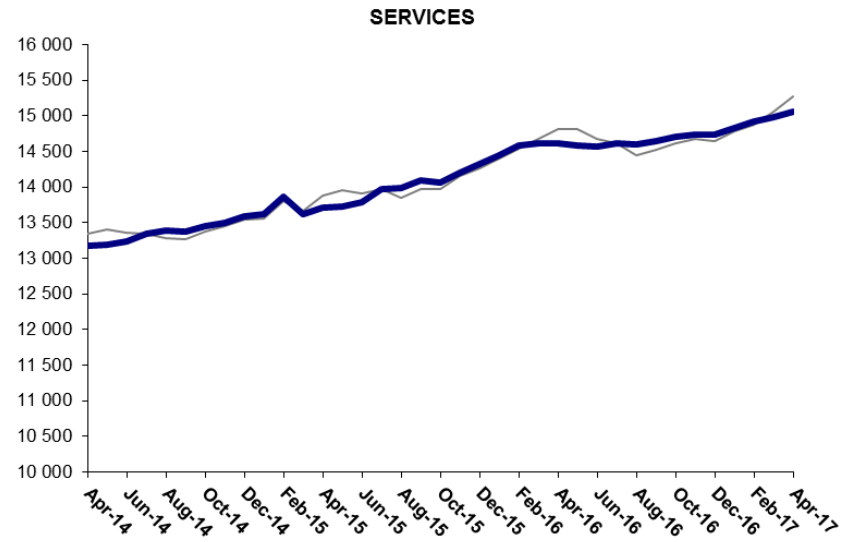
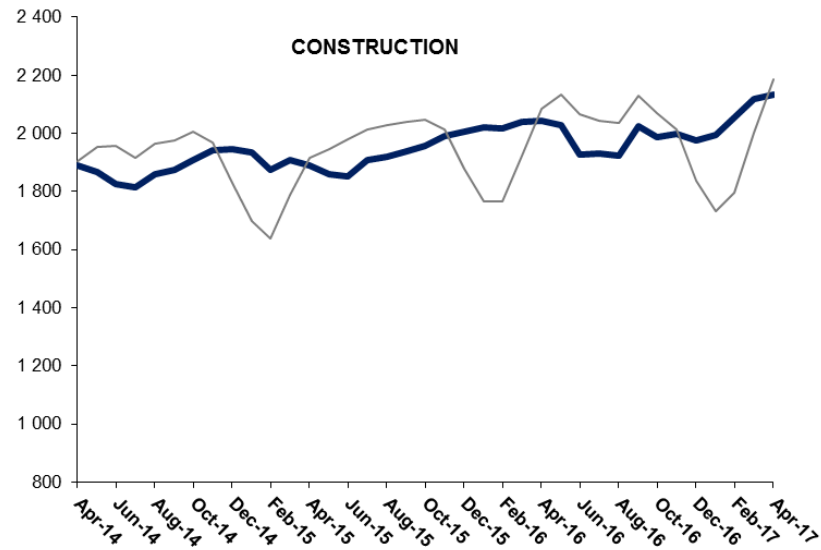
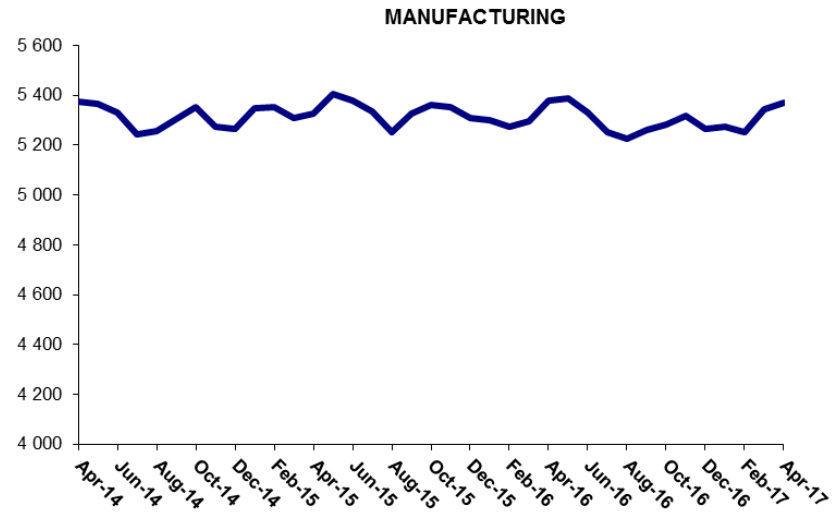
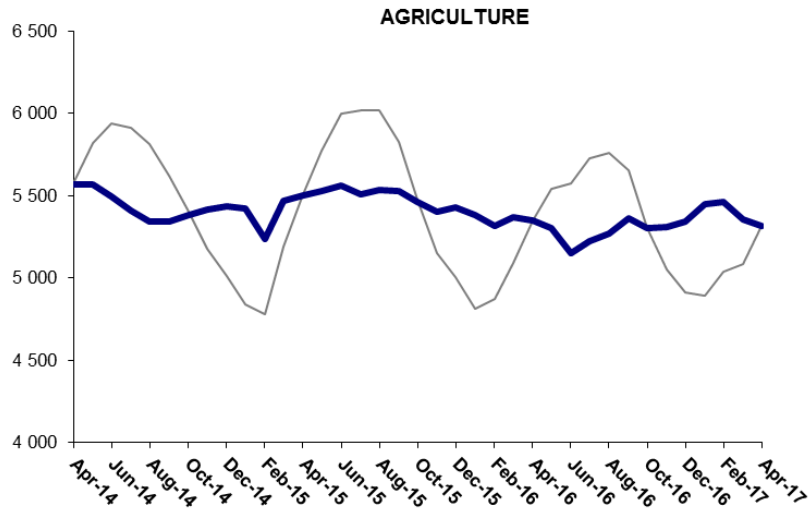
¹ For detailed information on Betam's forecasting model, please see Betam Research Brief 168 titled as "Kariyer.net Verisiyle Kısa Vadeli Tarım Dışı İşsizlik Tahmini"

<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)

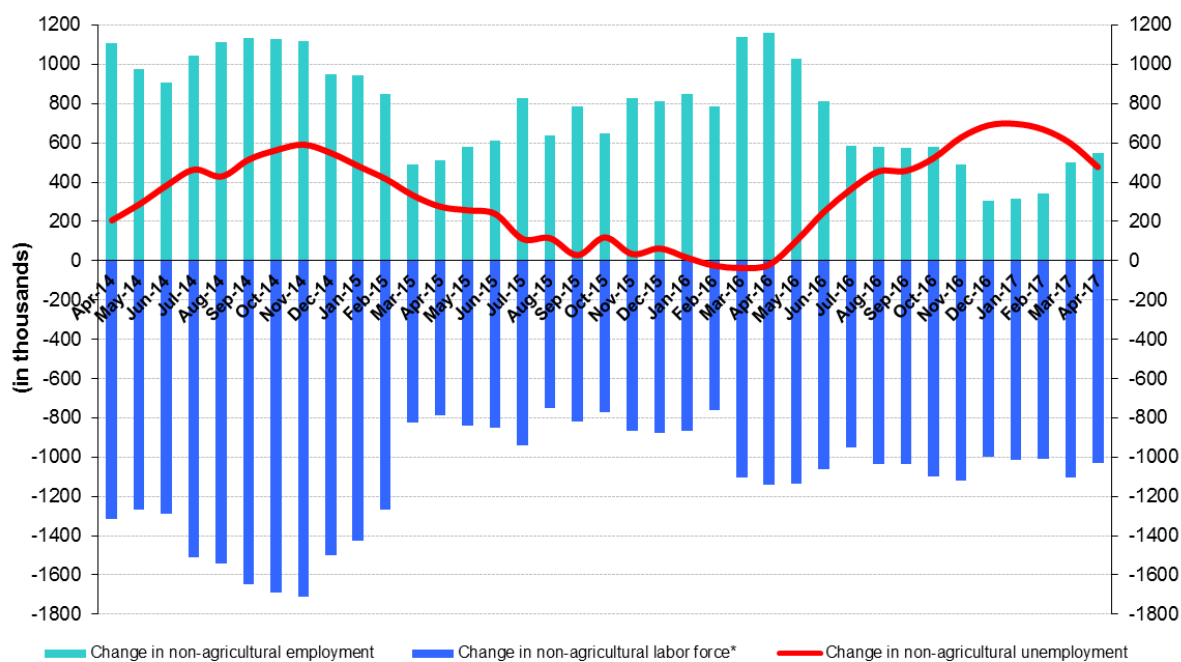


Source: Turkstat, Betam

Decrease in year-on-year nonagricultural unemployment

From March 2016 to April 2017 the nonagricultural labor force increased by 1 million 128 thousand (4.1 percent) and nonagricultural employment increased by 550 thousand (2.5 percent) (Figure 4). Thus, the number of non-agricultural unemployed increased by 478 thousand (17.4 percent).

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



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



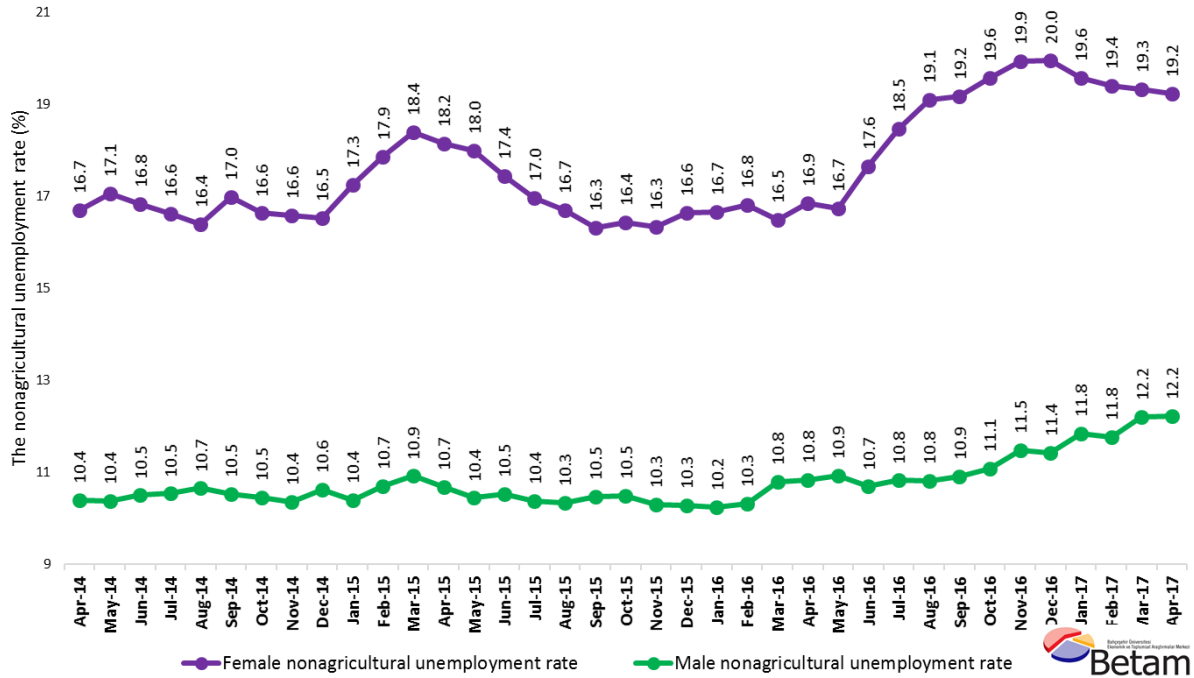
Source: Turkstat, Betam

Female unemployment decreased, male unemployment remained constant

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 a reliable seasonal-adjustment process and we need at least 36 observations to apply it. As of February 2017, we obtain the sufficient 36 observations to run the seasonal-adjustment process. Note that the seasonal-adjustment process might generate volatility in the series for some more time.

Figure 5 shows the seasonally adjusted nonagricultural female and male unemployment rates. From March 2017 to April 2017, the male nonagricultural unemployment rate remained constant at the level of 12.2 percent while the female nonagricultural unemployment rate decreased by 0.1 percentage points. As a result, female unemployment rate declined to 19.2 percent. Finally, we observe that gender gap in non-agricultural unemployment has slightly narrowed.

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
March-14	22968	20373	2595	11.3%			
April-14	23094	20438	2656	11.5%	125	65	60
May-14	23126	20420	2706	11.7%	32	-18	50
June-14	23181	20399	2782	12.0%	55	-21	76
July-14	23282	20395	2887	12.4%	101	-4	105
August-14	23388	20511	2877	12.3%	106	116	-10
September-14	23521	20557	2964	12.6%	133	46	87
October-14	23634	20703	2931	12.4%	113	146	-33
November-14	23693	20708	2985	12.6%	60	5	55
December-14	23752	20807	2945	12.4%	59	99	-40
January-15	23863	20904	2959	12.4%	111	97	14
February-15	24048	21090	2958	12.3%	185	186	-1
March-15	23783	20834	2949	12.4%	-265	-256	-9
April-15	23881	20920	2961	12.4%	98	86	12
May-15	23997	20997	3000	12.5%	115	77	38
June-15	24057	21026	3031	12.6%	61	29	32
July-15	24190	21215	2975	12.3%	133	189	-56
August-15	24128	21160	2968	12.3%	-63	-55	-8
September-15	24351	21356	2995	12.3%	223	196	27
October-15	24404	21378	3026	12.4%	53	22	31
November-15	24544	21550	2994	12.2%	140	172	-32
December-15	24622	21643	2979	12.1%	78	93	-15
January-16	24736	21768	2968	12.0%	114	125	-11
February-16	24833	21878	2955	11.9%	97	110	-13
March-16	24884	21948	2936	11.8%	51	70	-19
April-16	25011	22035	2976	11.9%	127	87	40
May-16	25105	21992	3113	12.4%	94	-43	137
June-16	25113	21823	3290	13.1%	8	-169	177
July-16	25167	21795	3372	13.4%	55	-28	83
August-16	25174	21750	3424	13.6%	6	-45	51
September-16	25361	21937	3424	13.5%	187	187	0
October-16	25524	21976	3548	13.9%	163	39	124
November-16	25648	22057	3591	14.0%	124	81	43
December-16	25582	21975	3607	14.1%	-66	-82	16
January-17	25697	22099	3598	14.0%	114	124	-10
February-17	25812	22224	3588	13.9%	115	125	-10
March-17	25978	22445	3533	13.6%	166	221	-55
April-17	26057	22565	3492	13.4%	79	120	-41

Source: Turkstat, Betam

Table 2 Seasonally adjusted employment by sectors (in thousands)

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
March-14	5596	5365	1950	13058				
April-14	5568	5373	1889	13176	-28	8	-61	118
May-14	5572	5364	1867	13189	4	-9	-22	13
June-14	5495	5332	1826	13241	-77	-32	-41	52
July-14	5410	5243	1815	13337	-85	-89	-11	96
August-14	5345	5257	1858	13396	-65	14	43	59
September-14	5342	5306	1875	13376	-3	49	17	-20
October-14	5386	5353	1907	13443	44	47	32	67
November-14	5417	5273	1941	13493	31	-80	34	50
December-14	5436	5266	1945	13595	19	-7	4	102
January-15	5425	5349	1935	13620	-11	83	-10	25
February-15	5237	5351	1875	13864	-188	2	-60	244
March-15	5471	5308	1909	13617	234	-43	34	-247
April-15	5502	5326	1889	13705	31	18	-20	88
May-15	5528	5404	1860	13733	26	78	-29	28
June-15	5559	5380	1851	13794	31	-24	-9	61
July-15	5512	5336	1908	13971	-47	-44	57	177
August-15	5533	5252	1920	13988	21	-84	12	17
September-15	5532	5327	1938	14090	-1	75	18	102
October-15	5462	5363	1957	14057	-70	36	19	-33
November-15	5403	5353	1991	14207	-59	-10	34	150
December-15	5430	5311	2007	14325	27	-42	16	118
January-16	5383	5300	2020	14448	-47	-11	13	123
February-16	5320	5276	2018	14584	-63	-24	-2	136
March-16	5370	5295	2038	14614	50	19	20	30
April-16	5349	5381	2042	14612	-21	86	4	-2
May-16	5305	5386	2030	14576	-44	5	-12	-36
June-16	5151	5330	1928	14565	-154	-56	-102	-11
July-16	5223	5254	1932	14609	72	-76	4	44
August-16	5271	5224	1925	14602	48	-30	-7	-7
September-16	5362	5260	2024	14652	91	36	99	50
October-16	5301	5282	1987	14707	-61	22	-37	55
November-16	5309	5316	1999	14742	8	34	12	35
December-16	5342	5265	1975	14735	33	-51	-24	-7
January-17	5449	5274	1993	14832	107	9	18	97
February-17	5465	5251	2056	14917	16	-23	63	85
March-17	5359	5346	2118	14982	-106	95	62	65
April-17	5320	5372	2135	15058	-39	26	17	76

Source: Turkstat, Betam

Table 3: Seasonally adjusted female and male non-agricultural labor market indicators (in thousands)

	Female Labor Force	Female Employment	Female Unemployed	Male Labor Force	Male Employment	Male Unemployed
April-14	6116	5095	1021	16967	15203	1763
May-14	6123	5079	1044	17014	15248	1766
June-14	6153	5117	1035	17077	15284	1793
July-14	6200	5170	1030	17106	15303	1803
August-14	6299	5267	1033	17185	15355	1831
September-14	6337	5261	1076	17189	15381	1809
October-14	6385	5323	1062	17231	15429	1802
November-14	6399	5338	1061	17237	15451	1786
December-14	6420	5359	1061	17331	15490	1840
January-15	6507	5384	1123	17322	15520	1801
February-15	6561	5389	1172	17427	15561	1866
March-15	6519	5321	1199	17246	15363	1883
April-15	6540	5353	1187	17304	15454	1849
May-15	6628	5436	1193	17336	15525	1811
June-15	6656	5495	1160	17436	15601	1835
July-15	6742	5599	1143	17489	15675	1814
August-15	6713	5592	1121	17512	15701	1812
September-15	6758	5656	1103	17589	15748	1841
October-15	6778	5664	1113	17613	15766	1847
November-15	6874	5750	1123	17626	15809	1817
December-15	6974	5814	1161	17657	15842	1814
January-16	7019	5850	1169	17678	15868	1809
February-16	7050	5864	1185	17719	15889	1830
March-16	7055	5893	1163	17826	15902	1923
April-16	7142	5938	1204	17860	15926	1934
May-16	7178	5977	1202	17916	15959	1957
June-16	7259	5978	1281	17879	15967	1911
July-16	7262	5921	1342	17922	15982	1940
August-16	7326	5927	1399	17945	16005	1940
September-16	7376	5962	1414	17989	16025	1963
October-16	7439	5982	1456	18046	16046	2000
November-16	7457	5971	1487	18151	16066	2085
December-16	7463	5974	1489	18149	16074	2074
January-17	7458	5998	1460	18259	16097	2162
February-17	7515	6057	1458	18259	16112	2147
March-17	7611	6140	1471	18382	16140	2243
April-17	7599	6138	1461	18415	16165	2250

Source: Turkstat, Betam