STOP IN INCREASE OF NON-AGRICULTURAL UNEMPLOYMENT

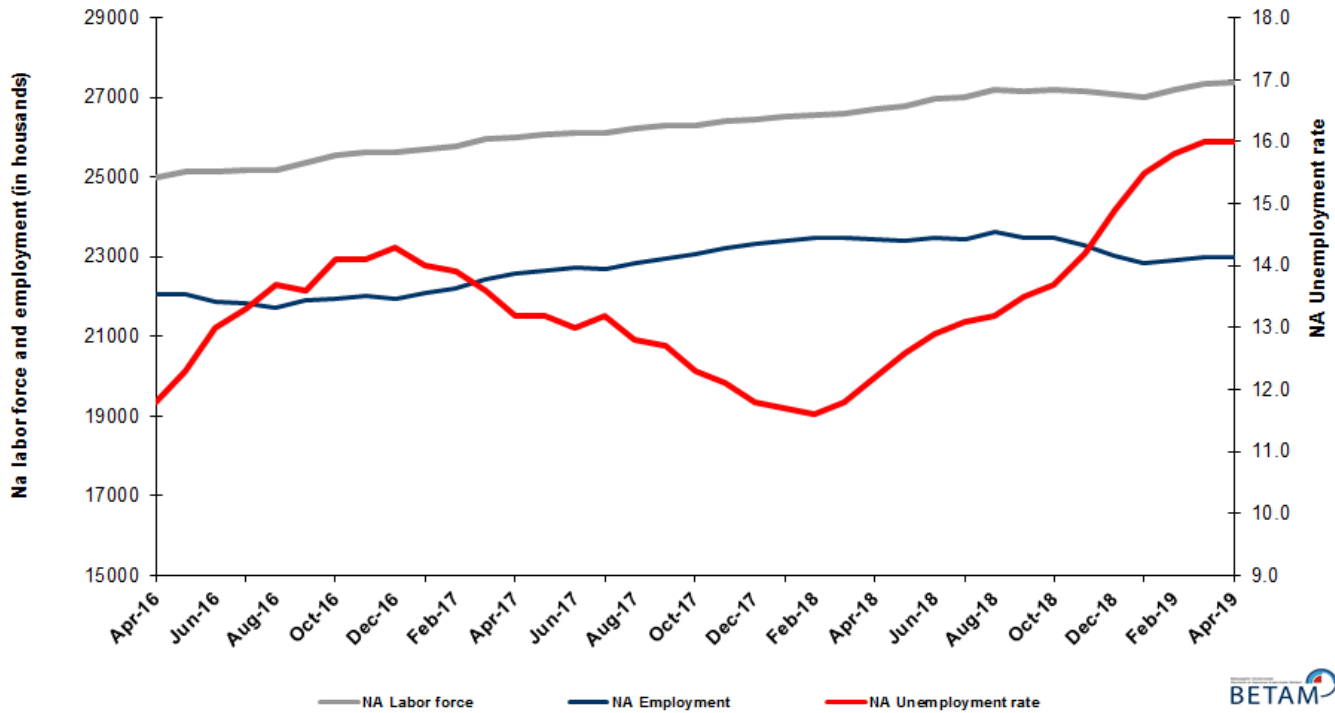**Seyfettin Gürsel[*], Gökçe Uysal[**] , Mehmet Cem Şahin[***]**

Executive Summary

Seasonally adjusted labor market data shows that, in the period of June 2019, non-agricultural unemployment rate remained unchanged and stood at 16.2 percent. In this period, increases in non-agricultural employment attained 75 thousand and non-agricultural labor force increased by 89 thousand. According to sectorial data, the only sector showing decrease in employment is services, and the sector showing the most significant increase in employment is manufacturing, with 70 thousand. Consecutive decreases in construction employment since February 2018 came to a halt in July 2019 with net increase in employment of 12 thousand people. Based on the seasonally adjusted data, decreases in male employment continued while female employment increased slightly. Apparently, the decreases in male employment is affected by the losses in construction employment.

The number of unemployed people in non-agricultural sector is close to 4.5 million

Seasonally adjusted data shows that non-agricultural labor force reached 27 million 384 thousand by an increase of 89 thousand in June 2019, while non-agricultural employment reached 22 million 948 thousand after an increase of 75 thousand in June 2019 (Figure 1, Table 1). As a result, non-agricultural unemployment increased by 14 thousand and reached 4 million 436 thousand, and non-agricultural unemployment rate stood at 16.2 percent.

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

Source: Turkstat, Betam

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Unemployment rate is expected to increase in July 2019

Betam's forecasting model had predicted an increase of 0.1 percentage point in non-agricultural unemployment rate for June 2019 but there has been non-increase. Our forecasting model predicts a 0.1 percentage point, increasing the unemployment rate to 16.3 percent in July 2019. 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 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
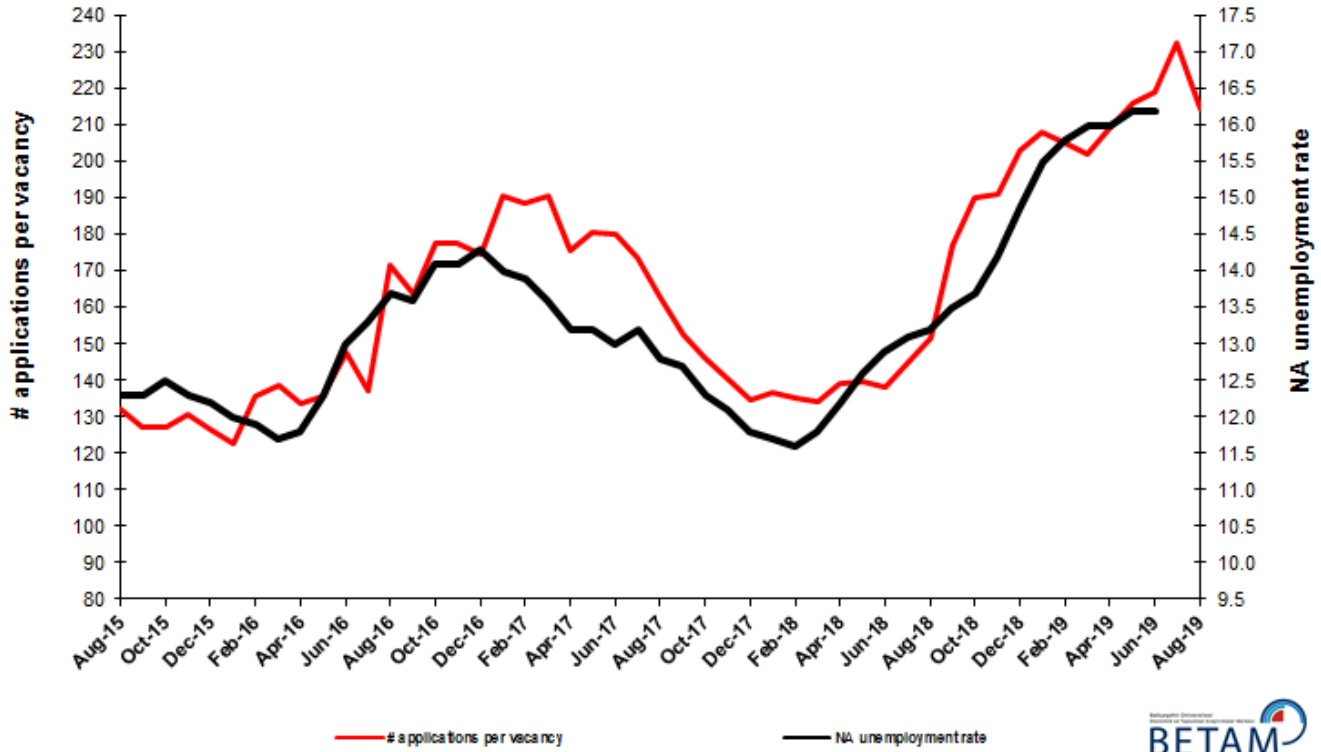
Source: Kariyer.net, Turkstat, Betam

Increase in construction employment after consecutive decreases of 16 months

According to seasonally adjusted sectorial labor market data, employment increased in the period of June 2019 compared to May 2019 in all sectors except services (Figure 3, Table 2).[3] After a decrease of 7 thousand in May 2019, employment in manufacturing sector increased by 70 thousand in June 2019. With an increase of 12 thousand in June 2019, employment in construction sector reversed its persistent decreases in employment during 16 months. On the other hand, employment in services sector has been declining for three consecutive, totaling 100 thousand.

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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" . 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/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 thousand)

AGRICULTURE

INDUSTRY

CONSTRUCTION

SERVICES
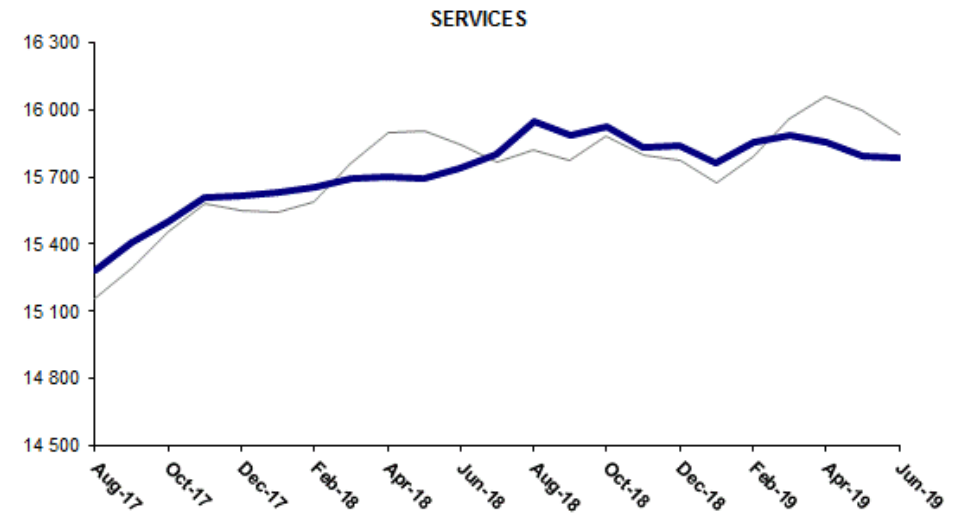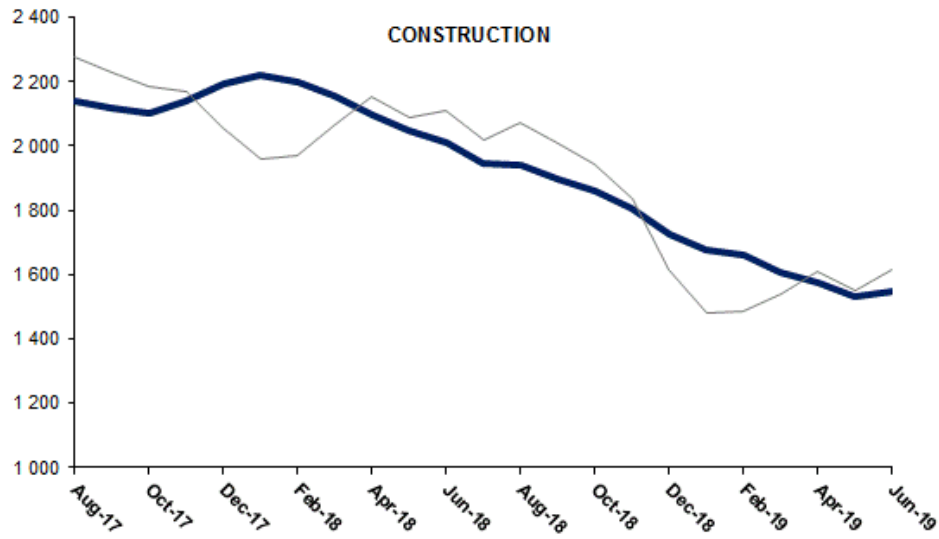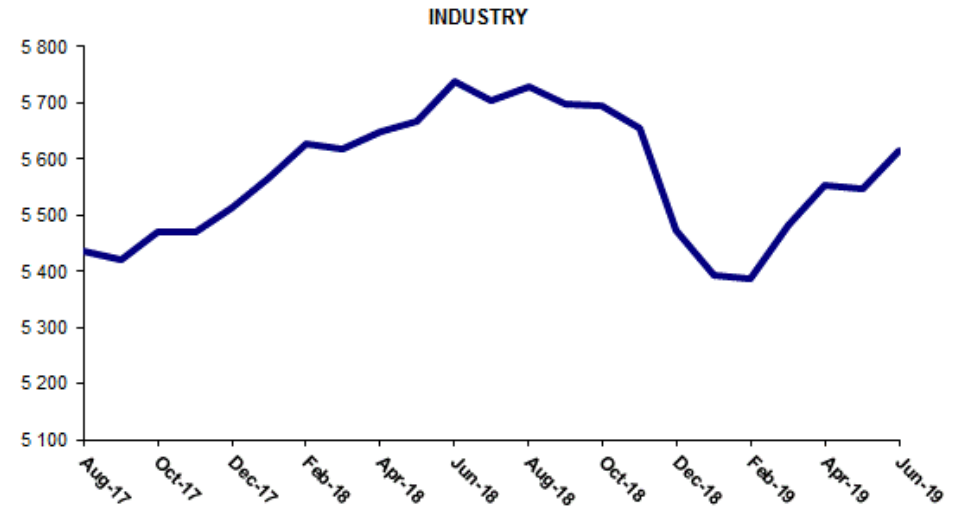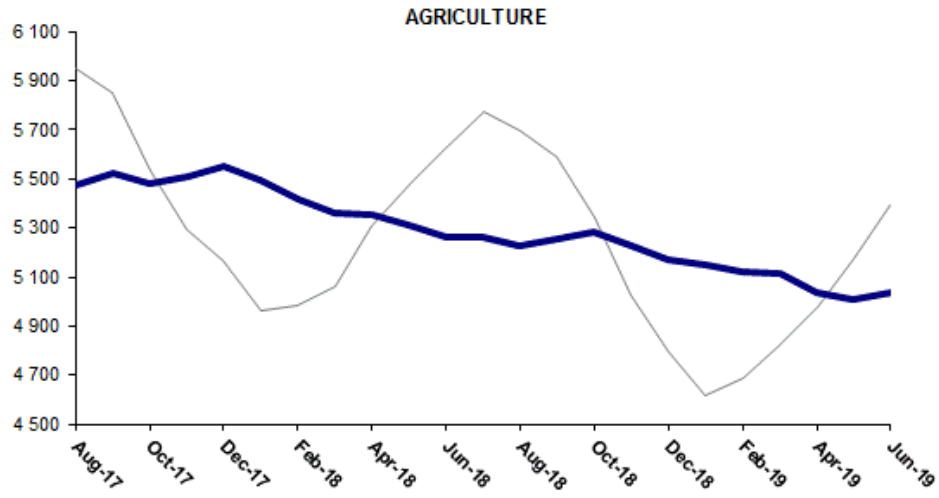
Source: TURKSTAT, Betam

Non-agricultural employment continues to decline year-on-year

From June 2018 to June 2019 non-agricultural labor force increased by 346 thousand (1.3 percent) and non-agricultural employment decreased by 569 thousand (-2.4 percent) (Figure 4). Annual labor force growth slowed down along with employment losses and deviated from its structural trend. However, non-agricultural employment suffered from heavy losses during the past year. Thus, compared to June 2018, the number of non-agricultural unemployed increased by 915 thousand

Figure 4 Year-on-year changes in non-agricultural labor force, employment, and unemployment
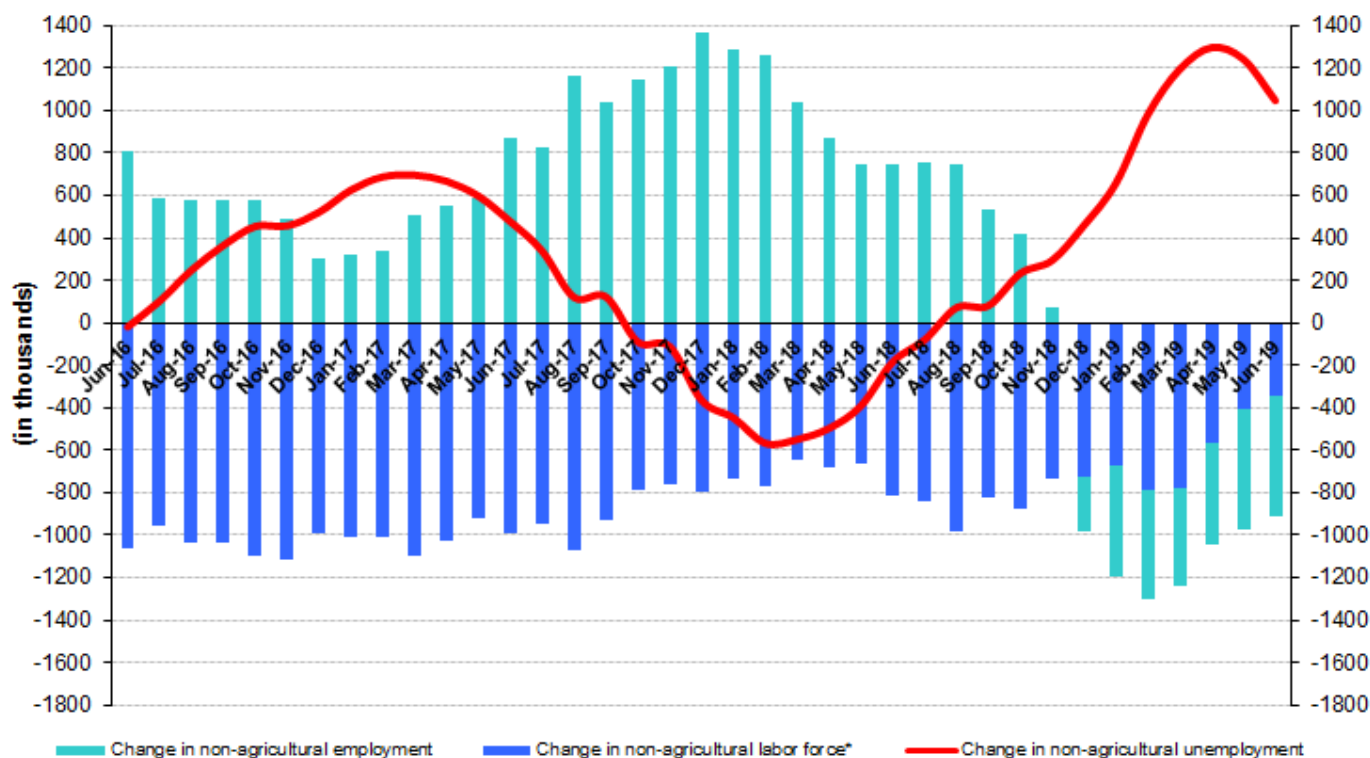
* The change in labor force represented with a negative sign.

Source: TURKSTAT, Betam

Increase in female employment

Figure 5 shows seasonally adjusted non-agricultural unemployment rate for males (green) and for females (purple)[4]. In the period of June 2019, compared to the previous month, female non-agricultural unemployment rate increased by 0.2 percent and reached 20.6 percent, while male non-agricultural unemployment rate remained unchanged at 14.2 percent. As a result, the gender gap in non-agricultural unemployment rates reached 6.4 percent.

In this period, while female labor force increased, the decreases in male labor force observed in the last months continued (Table 3). In contrast to the losses in male non-agricultural employment, female non-agricultural employment increased slightly in this period. Over the last 12 months, female employment increased by 38 thousand and male employment decreased by 612 thousand, and female and male labor force increased by 318 thousand and 65 thousand, respectively. Consequently, the gender gap in non-agricultural unemployment rates narrowed from 7.3 percent to 6.4 percent.

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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 generated 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
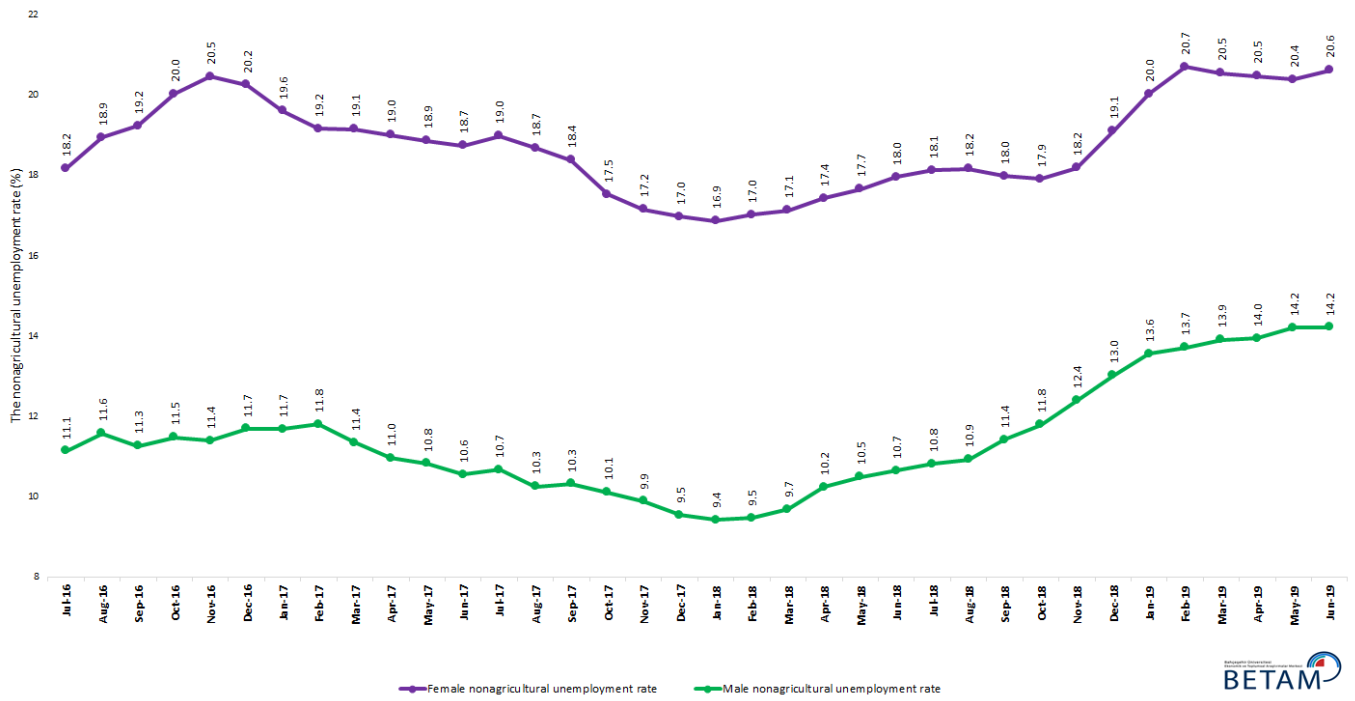
Source: Turkstat, Betam

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

	Labor force	Employment	Unemployment	Unemployment rate	Monthly changes		
					Labor force	Employment	Unemployment
April-16	25003	22053	2950	11.8%			
May-16	25141	22049	3092	12.3%	138	-4	142
June-16	25122	21856	3266	13.0%	-20	-193	173
July-16	25194	21843	3351	13.3%	72	-13	85
August-16	25165	21717	3448	13.7%	-29	-126	97
September-16	25362	21913	3449	13.6%	198	196	2
October-16	25534	21934	3600	14.1%	172	21	151
November-16	25641	22026	3615	14.1%	107	92	15
December-16	25610	21948	3662	14.3%	-31	-78	47
January-17	25695	22098	3597	14.0%	85	150	-65
February-17	25792	22207	3585	13.9%	97	109	-12
March-17	25964	22433	3531	13.6%	172	226	-54
April-17	26017	22583	3434	13.2%	53	150	-97
May-17	26091	22647	3444	13.2%	74	64	10
June-17	26128	22731	3397	13.0%	37	84	-47
July-17	26130	22681	3449	13.2%	3	-50	53
August-17	26216	22860	3356	12.8%	85	179	-94
September-17	26281	22943	3338	12.7%	65	83	-18
October-17	26310	23074	3236	12.3%	30	131	-101
November-17	26416	23220	3196	12.1%	106	146	-40
December-17	26446	23325	3121	11.8%	29	105	-76
January-18	26514	23412	3102	11.7%	69	87	-18
February-18	26557	23476	3081	11.6%	42	64	-22
March-18	26601	23462	3139	11.8%	44	-14	58
April-18	26707	23449	3258	12.2%	106	-13	119
May-18	26787	23412	3375	12.6%	80	-37	117
June-18	26967	23488	3479	12.9%	180	76	104
July-18	26990	23454	3536	13.1%	23	-34	57
August-18	27205	23614	3591	13.2%	215	160	55
September-18	27145	23480	3665	13.5%	-61	-134	73
October-18	27211	23483	3728	13.7%	66	3	63
November-18	27146	23291	3855	14.2%	-65	-192	127
December-18	27074	23040	4034	14.9%	-72	-251	179
January-19	27020	22832	4188	15.5%	-54	-208	154
February-19	27203	22905	4298	15.8%	183	73	110
March-19	27354	22977	4377	16.0%	150	72	78
April-19	27364	22986	4378	16.0%	11	9	2
May-19	27295	22873	4422	16.2%	-70	-113	43
June-19	27384	22948	4436	16.2%	89	75	14

Source: Turkstat, Betam

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

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
April-16	5377	5381	2035	14636				
May-16	5337	5386	2064	14600	-40	5	29	-36
June-16	5187	5330	1955	14570	-150	-56	-109	-30
July-16	5214	5254	1955	14634	27	-76	0	64
August-16	5279	5224	1917	14576	65	-30	-38	-58
September-16	5333	5260	2026	14626	54	36	109	50
October-16	5265	5282	1991	14661	-68	22	-35	35
November-16	5276	5316	1991	14718	11	34	0	57
December-16	5308	5265	1963	14720	32	-51	-28	2
January-17	5435	5274	1969	14855	127	9	6	135
February-17	5477	5251	2018	14938	42	-23	49	83
March-17	5383	5346	2092	14995	-94	95	74	57
April-17	5362	5372	2126	15086	-21	26	34	91
May-17	5393	5386	2092	15169	31	14	-34	83
June-17	5386	5383	2066	15282	-7	-3	-26	113
July-17	5508	5363	2099	15218	122	-20	33	-64
August-17	5475	5437	2139	15284	-33	74	40	66
September-17	5521	5421	2116	15406	46	-16	-23	122
October-17	5482	5470	2103	15501	-39	49	-13	95
November-17	5508	5470	2138	15612	26	0	35	111
December-17	5550	5514	2195	15616	42	44	57	4
January-18	5495	5567	2218	15628	-55	53	23	12
February-18	5421	5627	2198	15652	-74	60	-20	24
March-18	5359	5618	2155	15690	-62	-9	-43	38
April-18	5357	5650	2098	15701	-2	32	-57	11
May-18	5310	5669	2050	15693	-47	19	-48	-8
June-18	5264	5737	2013	15737	-46	68	-37	44
July-18	5264	5703	1948	15803	0	-34	-65	66
August-18	5225	5730	1938	15946	-39	27	-10	143
September-18	5254	5698	1898	15884	29	-32	-40	-62
October-18	5286	5696	1861	15926	32	-2	-37	42
November-18	5228	5656	1806	15829	-58	-40	-55	-97
December-18	5171	5474	1726	15840	-57	-182	-80	11
January-19	5148	5392	1678	15762	-23	-82	-48	-78
February-19	5124	5388	1661	15857	-24	-4	-17	95
March-19	5117	5482	1607	15888	-7	94	-54	31
April-19	5034	5553	1576	15858	-83	71	-31	-30
May-19	5010	5546	1533	15795	-24	-7	-43	-63
June-19	5035	5616	1545	15788	25	70	12	-7

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
July-16	7283	5959	1324	17945	15947	1999
August-16	7322	5935	1387	17957	15878	2079
September-16	7387	5967	1421	18018	15988	2030
October-16	7438	5948	1489	18084	16007	2076
November-16	7468	5940	1527	18150	16081	2069
December-16	7452	5943	1509	18178	16052	2125
January-17	7446	5986	1459	18265	16132	2133
February-17	7494	6058	1436	18280	16123	2157
March-17	7595	6141	1454	18327	16247	2080
April-17	7600	6156	1444	18365	16352	2013
May-17	7666	6220	1446	18379	16389	1990
June-17	7679	6240	1439	18429	16483	1946
July-17	7694	6234	1460	18444	16475	1969
August-17	7728	6284	1444	18488	16592	1896
September-17	7777	6348	1429	18512	16602	1911
October-17	7788	6423	1365	18526	16653	1873
November-17	7836	6492	1344	18568	16730	1838
December-17	7881	6544	1337	18610	16834	1776
January-18	7918	6583	1336	18622	16868	1754
February-18	7937	6586	1351	18645	16879	1766
March-18	7930	6571	1359	18677	16868	1809
April-18	7985	6593	1392	18727	16809	1918
May-18	8036	6617	1419	18751	16783	1968
June-18	8082	6631	1452	18810	16806	2004
July-18	8100	6632	1468	18827	16790	2036
August-18	8207	6716	1491	18870	16808	2062
September-18	8177	6706	1471	18869	16715	2154
October-18	8268	6787	1481	18884	16657	2227
November-18	8251	6751	1501	18883	16543	2340
December-18	8335	6742	1592	18883	16424	2459
January-19	8361	6687	1674	18883	16322	2561
February-19	8432	6687	1745	18909	16316	2594
March-19	8478	6737	1742	18907	16277	2630
April-19	8416	6693	1723	18889	16254	2635
May-19	8368	6662	1706	18886	16203	2683
June-19	8400	6668	1732	18874	16191	2683

Source: Turkstat, Betam