

NUMBER OF UNEMPLOYED IN NON-FARM SECTORS HITS 4.4 MILLION

Seyfettin Gürsel*, Gokce Uysal** and Furkan Kavuncu***

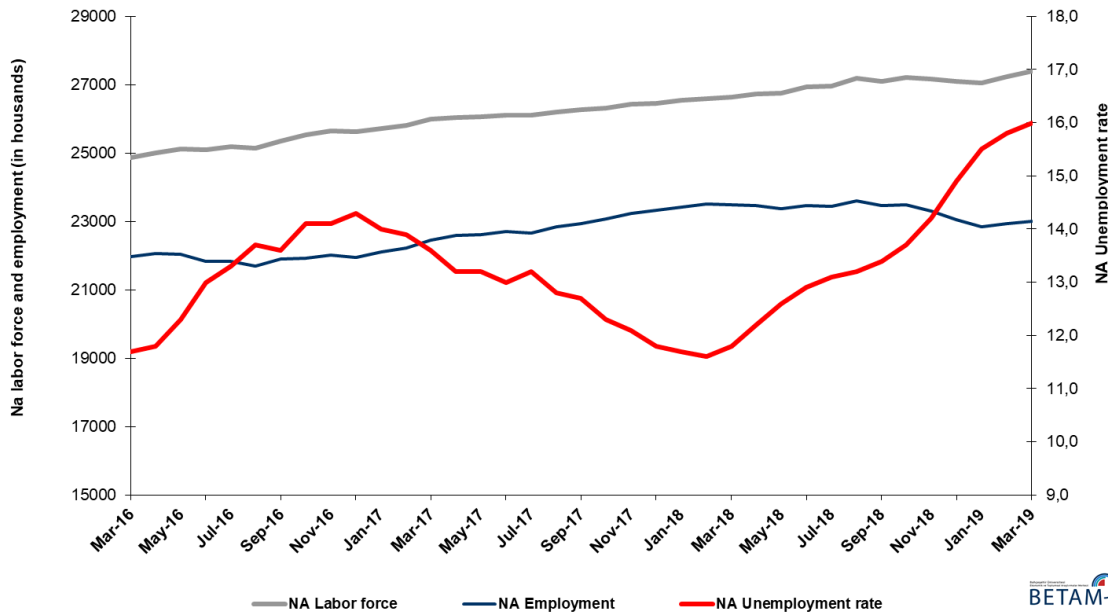
Executive Summary

Seasonally adjusted labor market data shows that, in the period of March 2019, non-agricultural unemployment rate increased by 0.2 percentage points and reached 16 percent. Increases in labor force and employment observed in the period of February 2019 continued in this period as well. The number of unemployed in non-agricultural sectors reached 4.4 million. The employment losses in manufacturing came to a halt in March 2019, and employment increased by 94 thousand, in line with the rise in industrial production index. While employment increased by 37 thousand in services, it declined in agriculture and construction by 5 thousand and 53 thousand, respectively. Since February 2018, the losses in construction have exceeded 600 thousand. In this period, female employment increased by 53 thousand, whereas male employment decreased by 40 thousand. The gender gap in non-agricultural unemployment shrank by 0.3 percentage points.

The rise in non-agricultural unemployment slowed down

According to seasonally adjusted labor market data, in the period of March 2019 compared to February 2019, the non-agricultural labor force increased by 157 thousand to 27 million 401 thousand, and the number of employed in non-agricultural sectors increased by 77 thousand to 23 million 17 thousand. Thereby, the number of unemployed in non-agricultural sectors rose by 80 thousand and reached 4 million 384 thousand and thus the non-agricultural unemployment rate went up to 16 percent (Figure 1, Table 1). As in the previous period, change in total employment level is positive again in this period; however, the increase in labor force continues and thus, the number of unemployed rises. The non-agricultural unemployment rate had reached 16.9 percent in April 2009 during the Global Recession. Nevertheless, a slight slowdown is observed in the rate of increase of non-agricultural unemployment rate in the last two periods.

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



Source: Turkstat, Betam

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

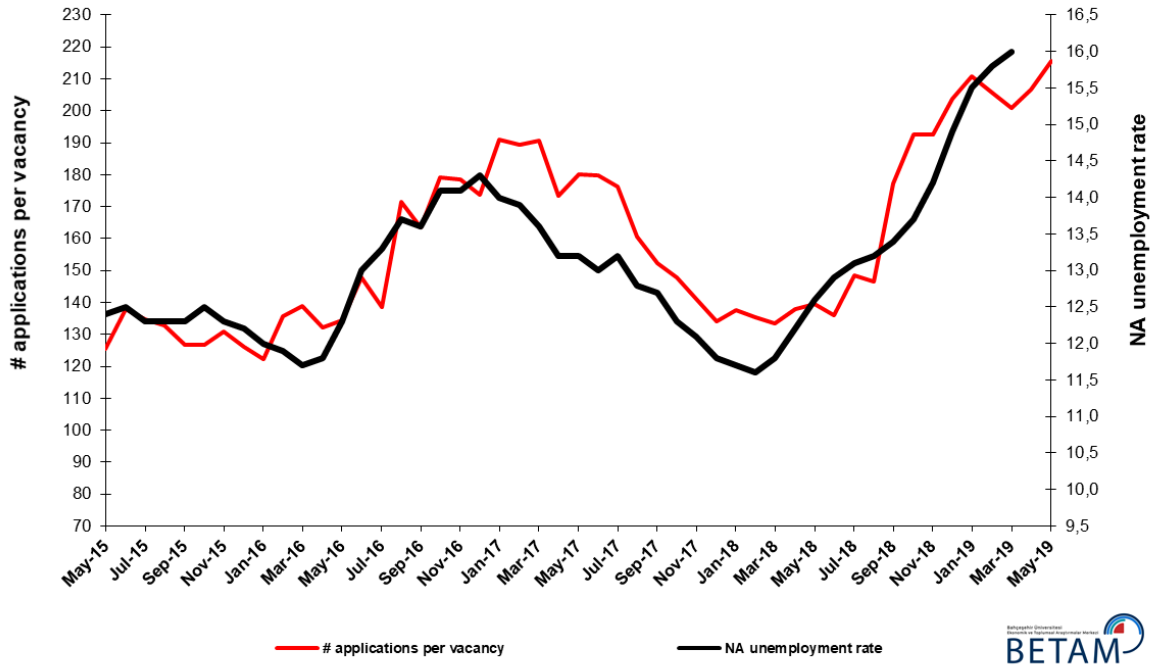
** Assoc. Prof. Gökçe Uysal, Betam, Deputy Director, gokce.uysal@eas.bau.edu.tr

***Furkan Kavuncu, Betam, Research Assistant, furkan.kavuncu@eas.bau.edu.tr

Unemployment rate is expected to be a constant in April 2019

Betam's forecasting model had predicted that the seasonally adjusted non-agricultural unemployment rate would stay constant at 15.8 percent in March 2019. In fact, non-agricultural unemployment increased by 0.2 percentage points and reached 16.0 percent. Betam's forecasting model predicts that the seasonally adjusted non-agricultural unemployment rate will stay constant at 16.0 percent in the period of April 2019. 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

Substantial employment increase in manufacturing

According to seasonally adjusted sectoral labor market data, employment increased in services and manufacturing, while it decreased in construction and agriculture in the period of March 2019 compared to February 2019 (Figure 3, Table 2).³ In construction, employment losses that started to slowdown in the period of February 2019 ended in March 2019. In fact, an increase of 94 thousand people observed in manufacturing employment level in this period coincide with the increases observed in the industrial production index since the beginning of 2019. In services, employment rose by 37 thousand. As for agriculture, a 5-thousand loss in employment is detected. Employment losses in construction continue. As employment has been declining regularly for a year (since February 2018) in this sector, the total loss in employment reached 608 thousand in March 2019.

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/>

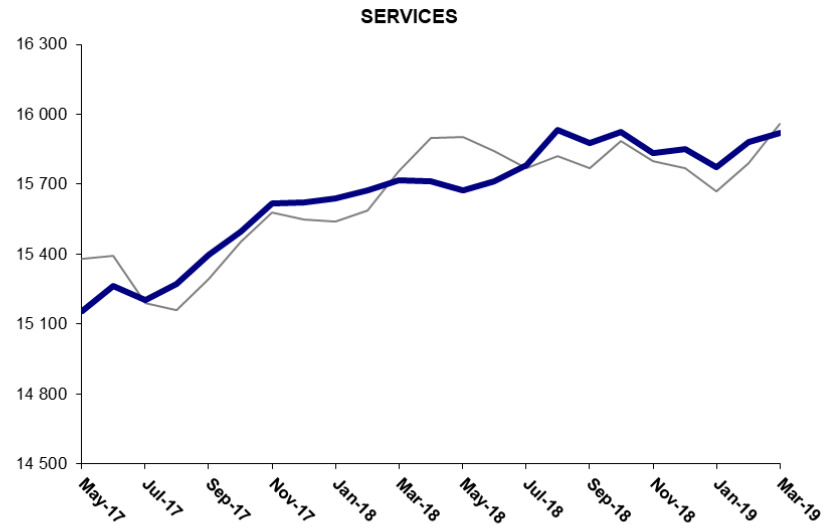
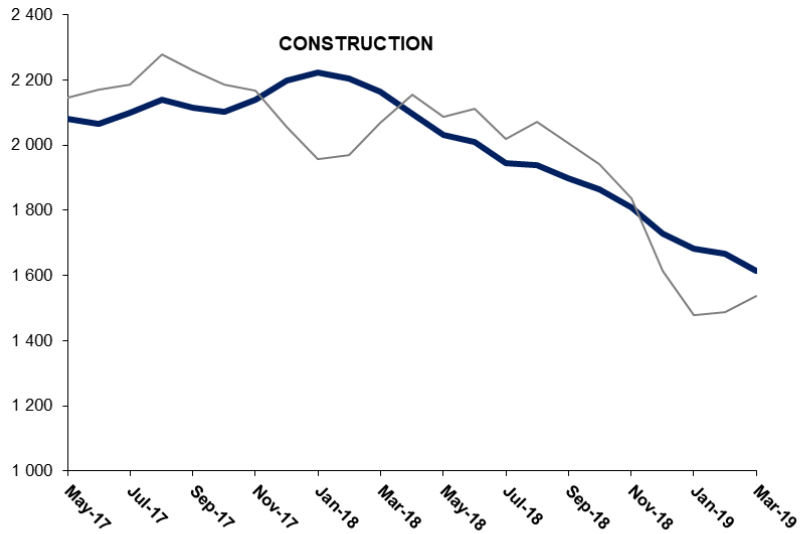
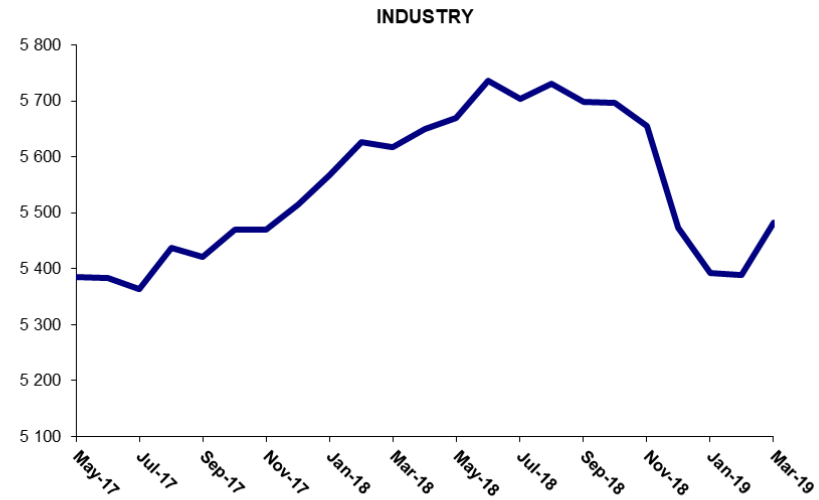
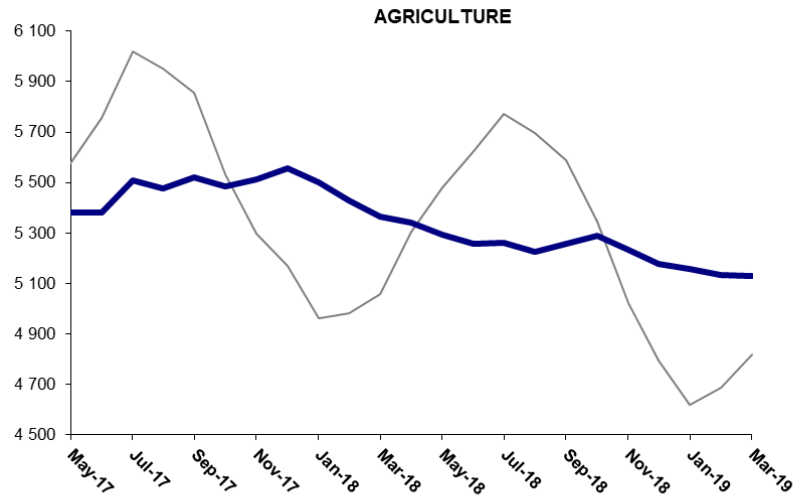
Soybilgen, B., "Mevsim Etkilerinden Arındırılmış İşsizlik Tahmini", Betam Research Brief 14

<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)

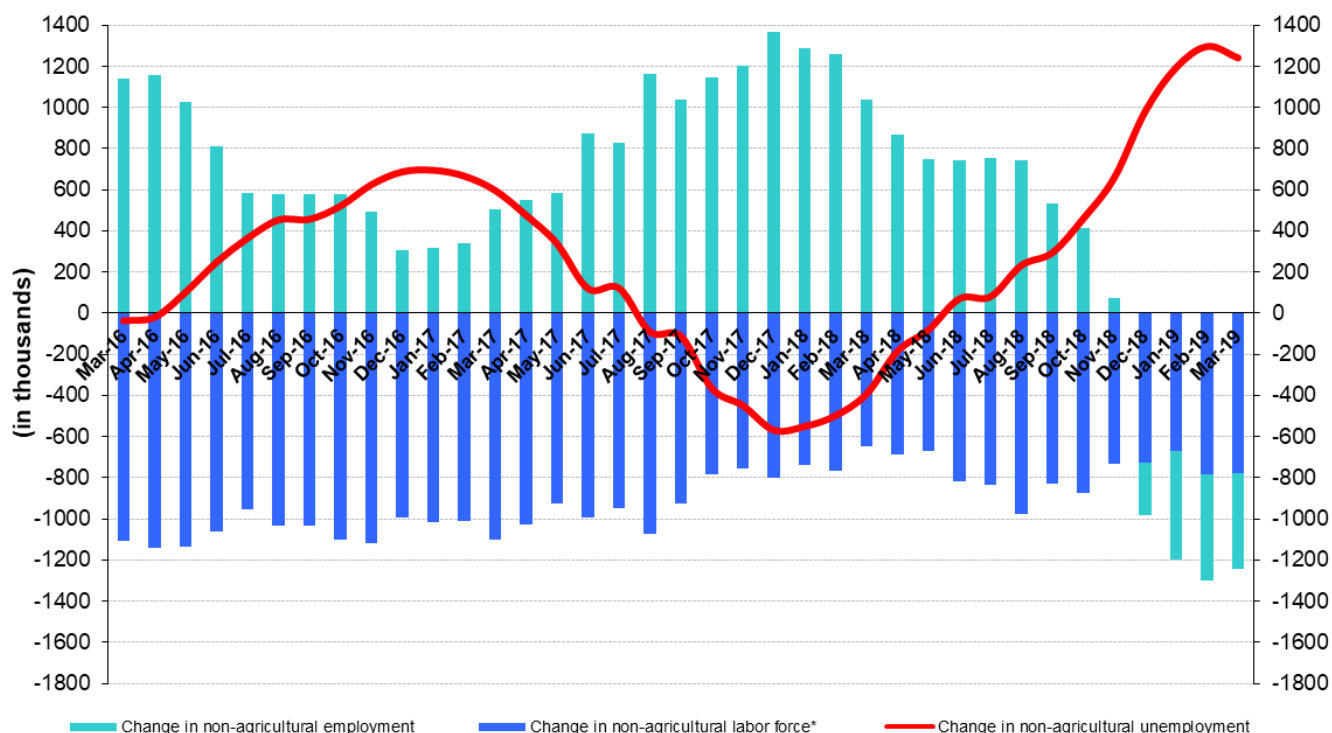


Source: TURKSTAT, Betam

The number of non-agricultural employed within a year decreased

From March 2018 to March 2019 non-agricultural labor force increased by 779 thousand (2.9 percent) and non-agricultural employment decreased by 464 thousand (-2 percent) (Figure 4). Year on year increase in labor force continues its usual trend. On the other hand, non-agricultural employment decreased within the past year. Thus, non-agricultural unemployed increased by 1 million 243 thousand and reached 4 million 409 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

Non-agricultural unemployment rate for females exceeded 20 percent

Figure 5 shows seasonally adjusted non-agricultural unemployment rate for males (green) and for females (purple)⁴. In the period of March 2019, the non-agricultural female unemployment rate decreased by 0.1 percentage points and reached 20.7 percent while the non-agricultural male unemployment rate increased by 0.3 percentage points to 14.3 percent. From February to March 2019, female labor force increased by 48 thousand, male labor force rose slightly by 8 thousand (Table 3). As to employment levels, in this period female employment increased by 53 thousand, whereas male employment decreased by 40 thousand. Thus, the gender gap in non-agricultural unemployment rates shrank from 6.7 to 6.3 percentage points.

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
March-16	24875	21965	2910	11,7%			
April-16	25014	22062	2952	11,8%	138	97	41
May-16	25124	22034	3090	12,3%	111	-28	139
June-16	25105	21841	3264	13,0%	-20	-193	173
July-16	25181	21832	3349	13,3%	76	-9	85
August-16	25149	21704	3445	13,7%	-32	-128	96
September-16	25351	21903	3448	13,6%	201	199	2
October-16	25527	21928	3599	14,1%	177	25	152
November-16	25645	22029	3616	14,1%	118	101	17
December-16	25617	21954	3663	14,3%	-28	-75	47
January-17	25709	22110	3599	14,0%	92	156	-64
February-17	25818	22229	3589	13,9%	108	119	-11
March-17	25995	22460	3535	13,6%	178	231	-53
April-17	26030	22594	3436	13,2%	35	134	-99
May-17	26062	22622	3440	13,2%	32	28	4
June-17	26105	22711	3394	13,0%	42	89	-47
July-17	26111	22664	3447	13,2%	6	-47	53
August-17	26201	22847	3354	12,8%	90	183	-93
September-17	26270	22934	3336	12,7%	70	87	-17
October-17	26307	23071	3236	12,3%	36	137	-101
November-17	26425	23228	3197	12,1%	119	157	-38
December-17	26457	23335	3122	11,8%	31	107	-76
January-18	26533	23429	3104	11,7%	76	94	-18
February-18	26590	23506	3084	11,6%	57	77	-20
March-18	26641	23497	3144	11,8%	50	-9	59
April-18	26718	23458	3260	12,2%	77	-39	116
May-18	26744	23374	3370	12,6%	26	-84	110
June-18	26935	23460	3475	12,9%	191	86	105
July-18	26964	23432	3532	13,1%	30	-28	58
August-18	27190	23601	3589	13,2%	226	169	57
September-18	27104	23472	3632	13,4%	-86	-129	43
October-18	27212	23484	3728	13,7%	108	12	96
November-18	27156	23300	3856	14,2%	-56	-184	128
December-18	27089	23053	4036	14,9%	-67	-247	180
January-19	27043	22851	4192	15,5%	-47	-202	155
February-19	27245	22940	4305	15,8%	202	89	113
March-19	27401	23017	4384	16,0%	157	77	80

Source: Turkstat, Betam

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

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
March-16	5391	5295	2025	14646				
April-16	5371	5381	2035	14646	-20	86	10	0
May-16	5329	5386	2058	14591	-42	5	23	-55
June-16	5185	5330	1954	14556	-144	-56	-104	-35
July-16	5214	5254	1954	14624	29	-76	0	68
August-16	5280	5224	1917	14563	66	-30	-37	-61
September-16	5334	5260	2026	14617	54	36	109	54
October-16	5267	5282	1991	14656	-67	22	-35	39
November-16	5278	5316	1992	14721	11	34	1	65
December-16	5311	5265	1964	14725	33	-51	-28	4
January-17	5439	5274	1971	14865	128	9	7	140
February-17	5482	5251	2021	14957	43	-23	50	92
March-17	5389	5346	2098	15016	-93	95	77	59
April-17	5352	5372	2126	15097	-37	26	28	81
May-17	5381	5386	2080	15156	29	14	-46	59
June-17	5383	5383	2064	15264	2	-3	-16	108
July-17	5507	5363	2098	15204	124	-20	34	-60
August-17	5476	5437	2139	15271	-31	74	41	67
September-17	5522	5421	2116	15397	46	-16	-23	126
October-17	5484	5470	2103	15498	-38	49	-13	101
November-17	5511	5470	2140	15618	27	0	37	120
December-17	5555	5514	2198	15624	44	44	58	6
January-18	5501	5567	2223	15639	-54	53	25	15
February-18	5428	5627	2204	15674	-73	60	-19	35
March-18	5367	5618	2163	15716	-61	-9	-41	42
April-18	5343	5650	2096	15713	-24	32	-67	-3
May-18	5292	5669	2030	15675	-51	19	-66	-38
June-18	5259	5737	2009	15713	-33	68	-21	38
July-18	5263	5703	1946	15784	4	-34	-63	71
August-18	5225	5730	1939	15931	-38	27	-7	147
September-18	5256	5698	1899	15875	31	-32	-40	-56
October-18	5289	5696	1863	15925	33	-2	-36	50
November-18	5233	5656	1810	15835	-56	-40	-53	-90
December-18	5178	5474	1729	15850	-55	-182	-81	15
January-19	5156	5392	1683	15775	-22	-82	-46	-75
February-19	5134	5388	1668	15883	-22	-4	-15	108
March-19	5129	5482	1615	15920	-5	94	-53	37

Source: Turkstat, Betam

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

	Female			Male			Change in female labor force	Change in female employment	Change in male labor force	Change in male employment
	Labor Force	Employment	Unemployed	Labor Force	Employment	Unemployed				
February-16	7039	5868	1171	17766	15905	1861				
March-16	7060	5906	1154	17809	15974	1835	20	38	43	69
April-16	7146	5957	1188	17846	15995	1851	86	51	36	21
May-16	7179	5988	1191	17916	16004	1912	33	30	70	9
June-16	7262	5995	1267	17825	15891	1934	83	7	-91	-112
July-16	7277	5956	1321	17909	15947	1962	15	-39	83	55
August-16	7316	5932	1385	17945	15876	2069	40	-24	37	-70
September-16	7383	5965	1418	18016	15988	2028	67	33	71	112
October-16	7435	5947	1488	18087	16006	2081	52	-18	71	18
November-16	7467	5940	1527	18154	16080	2074	32	-7	67	74
December-16	7453	5943	1510	18185	16051	2133	-14	4	30	-29
January-17	7449	5988	1461	18269	16131	2138	-3	45	84	79
February-17	7505	6061	1444	18286	16120	2166	55	73	18	-11
March-17	7615	6153	1462	18333	16245	2088	110	92	47	125
April-17	7603	6158	1446	18370	16354	2016	-12	5	37	109
May-17	7655	6215	1440	18389	16387	2002	52	57	19	33
June-17	7670	6235	1436	18414	16487	1928	15	20	25	100
July-17	7687	6229	1459	18440	16477	1963	17	-6	26	-10
August-17	7722	6281	1441	18486	16594	1891	35	52	45	117
September-17	7773	6346	1427	18513	16603	1910	51	65	27	9
October-17	7785	6422	1363	18529	16653	1876	12	77	16	50
November-17	7835	6492	1343	18570	16730	1840	50	70	40	76
December-17	7883	6546	1337	18612	16832	1780	48	54	42	103
January-18	7922	6585	1337	18626	16865	1761	39	39	14	33
February-18	7948	6589	1359	18653	16875	1778	26	4	27	10
March-18	7950	6584	1366	18682	16863	1820	2	-5	29	-12
April-18	7988	6595	1393	18715	16811	1904	38	11	32	-52
May-18	8025	6611	1414	18739	16774	1964	37	16	24	-36
June-18	8074	6625	1449	18785	16816	1969	49	14	46	42
July-18	8093	6626	1467	18810	16799	2011	19	1	25	-17
August-18	8201	6713	1489	18854	16818	2036	108	87	45	19
September-18	8172	6703	1469	18864	16721	2143	-29	-9	10	-97
October-18	8265	6788	1478	18891	16660	2231	93	84	26	-61
November-18	8250	6752	1499	18904	16542	2361	-15	-36	13	-118
December-18	8336	6744	1591	18918	16418	2500	85	-7	14	-125
January-19	8365	6689	1676	18935	16311	2623	29	-55	17	-106
February-19	8443	6690	1753	18971	16303	2667	78	1	36	-8

Source: Turkstat, Betam