

A SHARP DECREASE IN UNEMPLOYMENT

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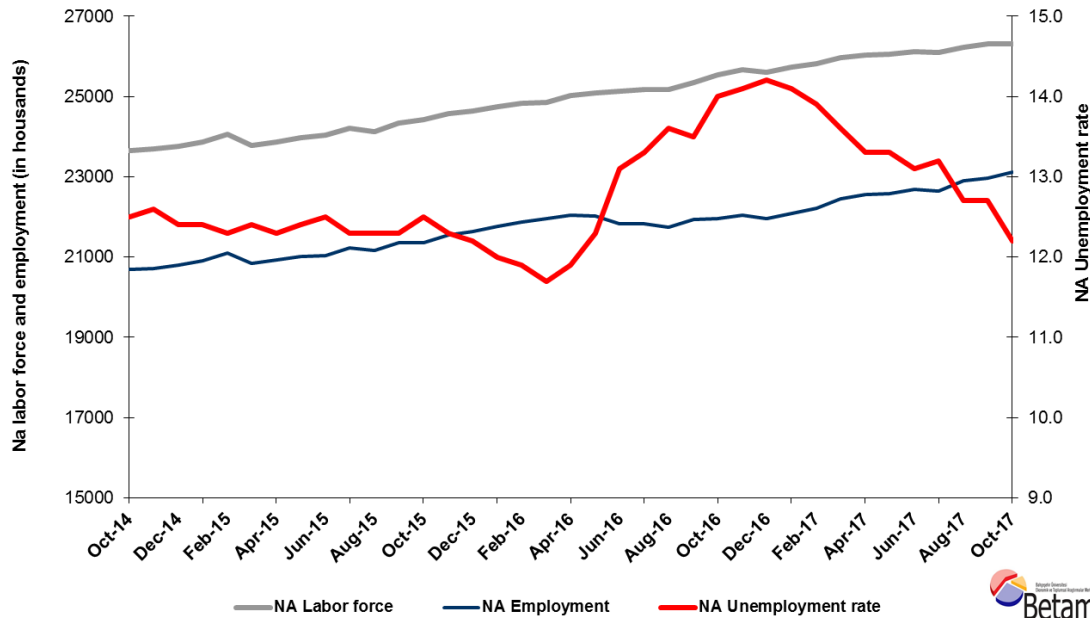
Executive Summary

Seasonally adjusted labor market data show that non-agricultural unemployment rate decreased by 0.5 percentage points in the period of October from September reaching 12.2 percent. On the other hand, according to seasonally adjusted labor data, non-agricultural unemployment rate of both females and males decreased. Betam's forecasting model predicts that the non-agricultural unemployment will remain at 12.2 percent in the period of November 2017.

Strong increase in employment, weak increase in labor force

According to seasonally adjusted labor market data, in the period of October 2017 compared to September 2017, the non-agricultural labor force increased by 19 thousand and reached 26 million 318 thousand while the number people employed in non-agricultural sectors increased by 148 thousand and reached 23 million 107 thousand (Figure 1, Table 1). As result, the number of unemployed in non-agricultural sectors decreased by 129 thousand and recorded as 3 million 211 thousand and the non-agricultural unemployment rate decreased from 12.7 percent to 12.2 percent. Nevertheless, the declining unemployment rate since January 2017 is still above the lowest level of 11.7 per cent in March 2016.

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



Source: Turkstat, Betam

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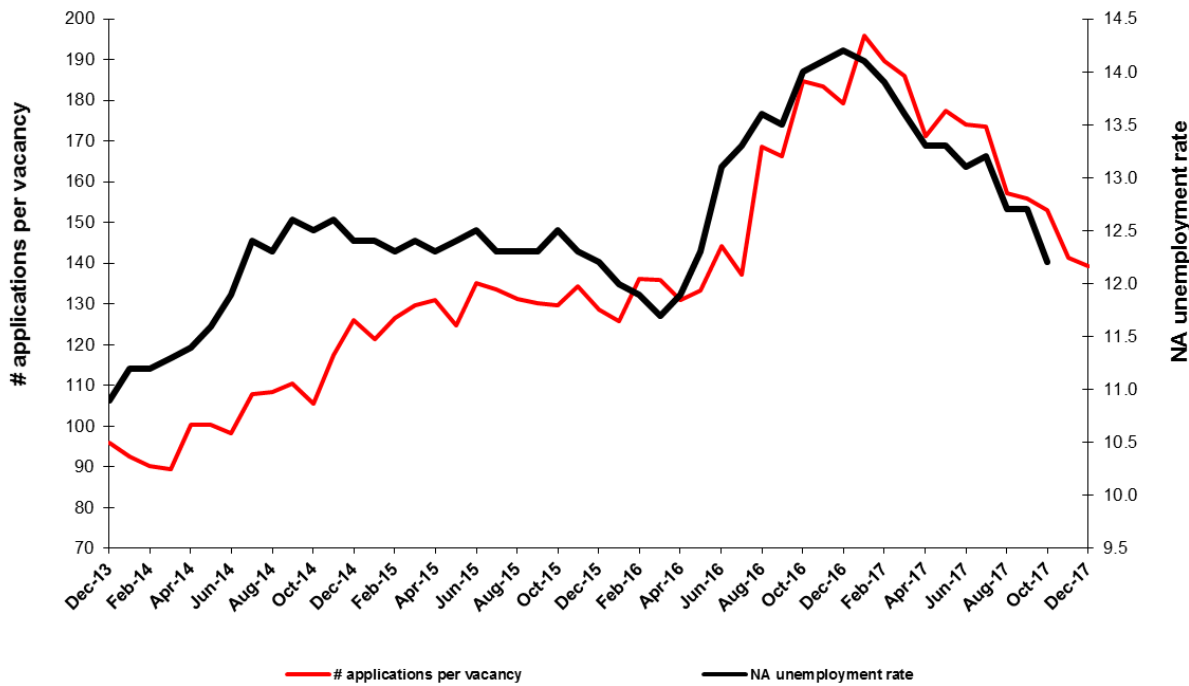
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No change in unemployment rate is expected in the period of October 2017

Betam's forecasting model had predicted that the seasonally adjusted non-agricultural unemployment rate would decrease by 0.2 percentage points reaching 12.5 percent in the period of October 2017. However, seasonally adjusted non-agricultural unemployment rate in October 2017 decreased by 0,5 percentage points and reached 12.2 compared to the previous period. Betam's forecasting model predicts the seasonally adjusted November 2017 non-agricultural unemployment will remain at 12,2. 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. Taken into account all these factors, Betam's forecasting model predicts that seasonally adjusted non-agricultural unemployment rate will decline in the period of November 2017.

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



Source: Kariyer.net, Turkstat, Betam

A strong employment increase in services continues

According to seasonally adjusted sectoral labor market data, in October 2017 employment decreased in agriculture and construction sectors while the number of people employed in manufacture and services sectors increased compared to September 2017. An employment decrease of 16 thousand has been observed in manufacture sectors in the period of September 2017, while employment increased by 49 thousand in this sector in the period of October 2017. In the construction sector 23 thousand employment decline observed in September 2017 continued by 8 thousand in October 2017. High employment growth over 100 thousand observed in services since the period of August 2017 continued in the period of October 2017, employment increase attaining 107 thousand (**Error! Reference source not found.,Error! Reference source not found.**).³

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/>

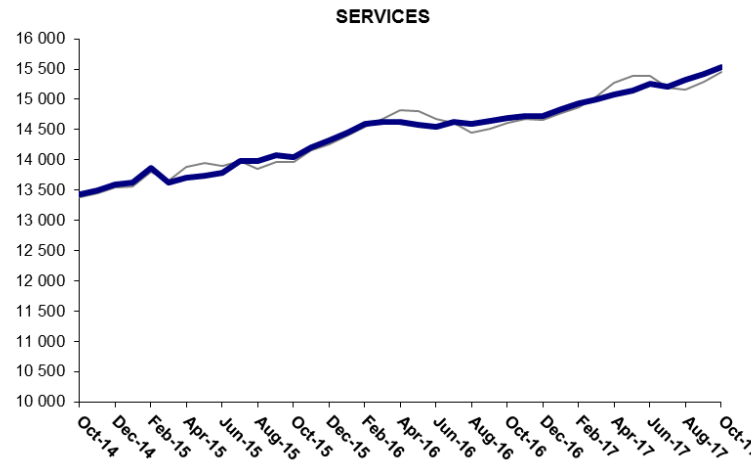
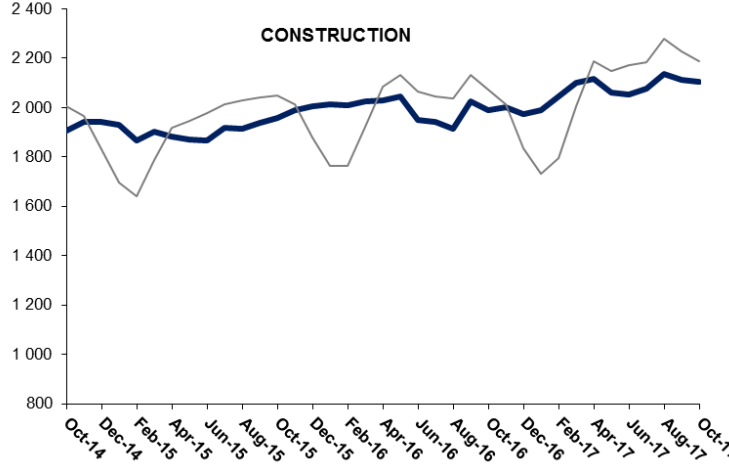
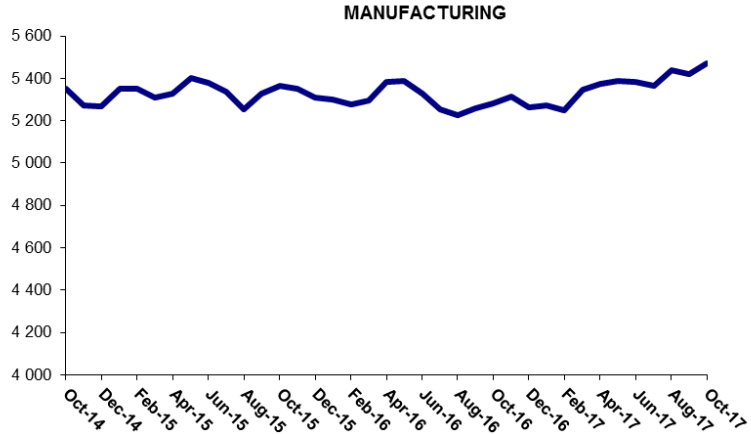
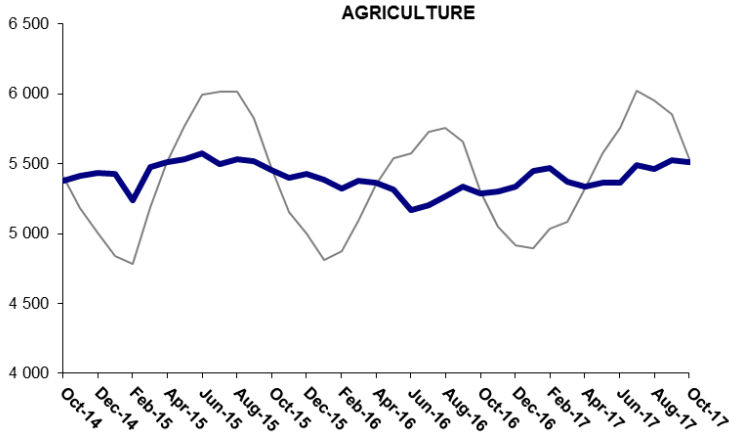
Soybilgen, B., "Mevsim Etkilerinden Arındırılmış İşsizlik Tahmini", Betam Research Brief 14

<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 thousands)

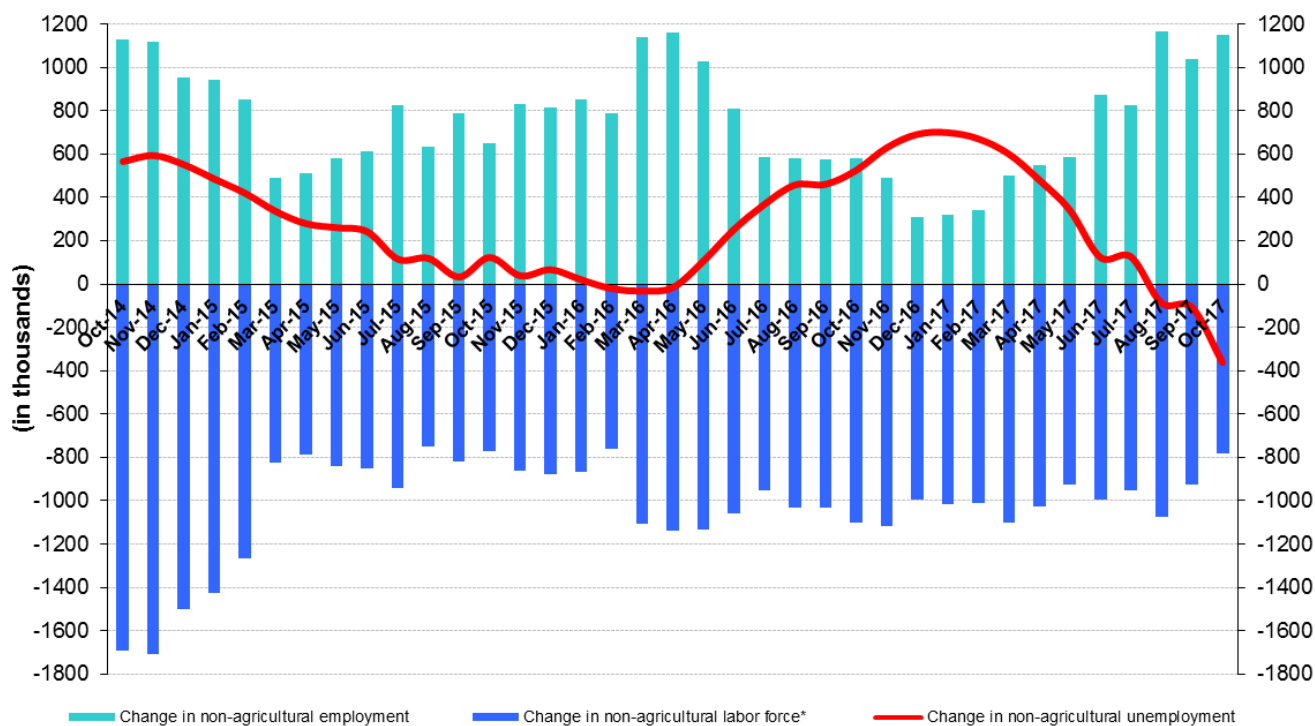


Source: TURKSTAT, Betam

The number of non-agricultural unemployed has decreased by 364 thousand in the last year

From October 2016 to October 2017 non-agricultural labor force increased by 784 thousand (3.1 percent) and non-agricultural employment by 1 million 148 thousand (5.2 percent) (Figure 4). Thus, the decrease in non-agricultural unemployed decreased by 364 thousand and attained 3 million 241 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.



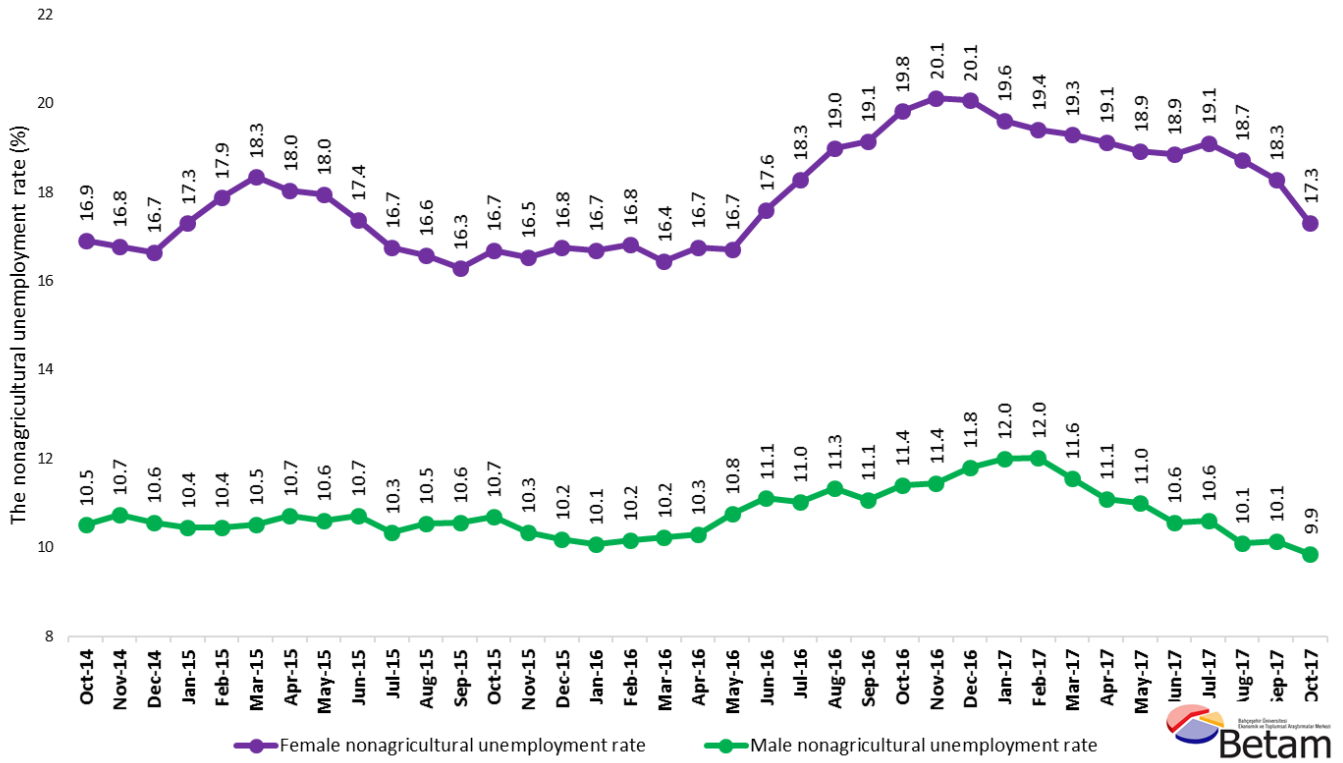
Source: Turkstat, Betam

Female and male unemployment

Figure 5 shows seasonally adjusted non-agricultural unemployment rate for males (green) and for females (purple)⁴. From the period of September 2017 to the period of October 2017, the non-agricultural female and male unemployment rate decreased by 1,0 and 0.3 percentage points respectively. Thus, non-agricultural unemployment decreased to 17.3 percent for females and to 9.9 percent for males.

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 nonagricultural 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
September-14	23514	20551	2963	12.6%			
October-14	23649	20693	2956	12.5%	135	142	-7
November-14	23689	20704	2985	12.6%	40	11	29
December-14	23748	20803	2945	12.4%	59	99	-40
January-15	23858	20900	2958	12.4%	111	97	14
February-15	24049	21091	2958	12.3%	191	191	0
March-15	23781	20832	2949	12.4%	-268	-259	-9
April-15	23855	20921	2934	12.3%	74	89	-15
May-15	23981	21007	2974	12.4%	125	86	39
June-15	24033	21029	3004	12.5%	53	22	31
July-15	24217	21238	2979	12.3%	184	209	-25
August-15	24121	21154	2967	12.3%	-96	-84	-12
September-15	24342	21348	2994	12.3%	221	194	27
October-15	24415	21363	3052	12.5%	73	15	58
November-15	24564	21543	3021	12.3%	150	180	-30
December-15	24644	21637	3007	12.2%	79	94	-15
January-16	24733	21765	2968	12.0%	89	128	-39
February-16	24837	21881	2956	11.9%	104	116	-12
March-16	24855	21947	2908	11.7%	18	66	-48
April-16	25012	22036	2976	11.9%	157	89	68
May-16	25097	22010	3087	12.3%	84	-26	110
June-16	25120	21829	3291	13.1%	23	-181	204
July-16	25174	21826	3348	13.3%	54	-3	57
August-16	25162	21740	3422	13.6%	-12	-86	74
September-16	25348	21926	3422	13.5%	186	186	0
October-16	25534	21959	3575	14.0%	186	33	153
November-16	25666	22047	3619	14.1%	132	88	44
December-16	25601	21966	3635	14.2%	-64	-81	17
January-17	25722	22095	3627	14.1%	120	129	-9
February-17	25812	22224	3588	13.9%	90	129	-39
March-17	25972	22440	3532	13.6%	160	216	-56
April-17	26023	22562	3461	13.3%	51	122	-71
May-17	26048	22584	3464	13.3%	25	22	3
June-17	26109	22689	3420	13.1%	61	105	-44
July-17	26096	22651	3445	13.2%	-14	-38	24
August-17	26219	22889	3330	12.7%	123	238	-115
September-17	26299	22959	3340	12.7%	80	70	10
October-17	26318	23107	3211	12.2%	19	148	-129

Source: Turkstat, Betam

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

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
September-14	5332	5306	1875	13370				
October-14	5381	5353	1906	13433	49	47	31	63
November-14	5414	5273	1940	13491	33	-80	34	58
December-14	5435	5266	1941	13596	21	-7	1	105
January-15	5427	5349	1929	13623	-8	83	-12	27
February-15	5239	5351	1868	13871	-188	2	-61	248
March-15	5476	5308	1901	13623	237	-43	33	-248
April-15	5510	5326	1883	13713	34	18	-18	90
May-15	5535	5404	1871	13733	25	78	-12	20
June-15	5573	5380	1866	13784	38	-24	-5	51
July-15	5500	5336	1918	13985	-73	-44	52	201
August-15	5532	5252	1915	13987	32	-84	-3	2
September-15	5516	5327	1938	14082	-16	75	23	95
October-15	5454	5363	1959	14042	-62	36	21	-40
November-15	5398	5353	1990	14200	-56	-10	31	158
December-15	5428	5311	2004	14322	30	-42	14	122
January-16	5384	5300	2014	14452	-44	-11	10	130
February-16	5325	5276	2010	14596	-59	-24	-4	144
March-16	5378	5295	2026	14626	53	19	16	30
April-16	5362	5381	2030	14625	-16	86	4	-1
May-16	5315	5386	2046	14578	-47	5	16	-47
June-16	5172	5330	1948	14551	-143	-56	-98	-27
July-16	5205	5254	1943	14628	33	-76	-5	77
August-16	5269	5224	1915	14602	64	-30	-28	-26
September-16	5338	5260	2023	14643	69	36	108	41
October-16	5289	5282	1990	14687	-49	22	-33	44
November-16	5302	5316	2000	14732	13	34	10	45
December-16	5339	5265	1974	14727	37	-51	-26	-5
January-17	5451	5274	1988	14833	112	9	14	106
February-17	5472	5251	2045	14929	21	-23	57	96
March-17	5372	5346	2100	14994	-100	95	55	65
April-17	5339	5372	2116	15073	-33	26	16	79
May-17	5363	5386	2060	15138	24	14	-56	65
June-17	5364	5383	2053	15254	1	-3	-7	116
July-17	5494	5363	2077	15211	130	-20	24	-43
August-17	5461	5437	2134	15318	-33	74	57	107
September-17	5528	5421	2111	15427	67	-16	-23	109
October-17	5515	5470	2103	15534	-13	49	-8	107

Source: Turkstat, Betam

Table 1: Seasonally adjusted non-agricultural labor force by gender (thousands)

	Female Labor Force	Female Employment	Female Unemployed	Male Labor Force	Male Employment	Male Unemployed
October-14	6388	5308	1080	17248	15436	1812
November-14	6399	5325	1074	17241	15390	1852
December-14	6419	5350	1069	17333	15503	1831
January-15	6505	5380	1125	17322	15514	1808
February-15	6565	5392	1173	17425	15605	1819
March-15	6520	5325	1196	17243	15429	1814
April-15	6540	5360	1180	17299	15445	1854
May-15	6623	5434	1189	17351	15512	1838
June-15	6654	5498	1156	17429	15561	1868
July-15	6747	5617	1130	17493	15686	1807
August-15	6712	5600	1112	17487	15646	1841
September-15	6758	5658	1100	17587	15729	1858
October-15	6780	5649	1132	17630	15744	1886
November-15	6873	5737	1136	17630	15806	1824
December-15	6973	5805	1168	17660	15862	1798
January-16	7017	5846	1171	17678	15898	1780
February-16	7053	5867	1187	17717	15917	1800
March-16	7057	5897	1160	17823	15999	1824
April-16	7141	5945	1196	17856	16017	1839
May-16	7173	5975	1198	17930	16000	1930
June-16	7258	5981	1277	17872	15888	1984
July-16	7268	5939	1328	17926	15950	1976
August-16	7325	5935	1390	17919	15890	2029
September-16	7375	5964	1411	17987	15998	1990
October-16	7441	5967	1475	18064	16006	2058
November-16	7457	5957	1500	18156	16077	2079
December-16	7462	5965	1497	18151	16011	2141
January-17	7457	5994	1463	18259	16067	2192
February-17	7519	6060	1459	18257	16065	2193
March-17	7612	6144	1468	18379	16255	2125
April-17	7598	6145	1453	18410	16369	2041
May-17	7649	6202	1448	18375	16356	2019
June-17	7666	6221	1445	18468	16520	1949
July-17	7678	6211	1467	18465	16506	1959
August-17	7731	6284	1447	18578	16702	1876
September-17	7765	6345	1420	18531	16654	1877
October-17	7791	6443	1348	18499	16677	1823

Source: Turkstat, Betam