

EMPLOYMENT LOSSES IN NON-AGRICULTURAL SECTORS

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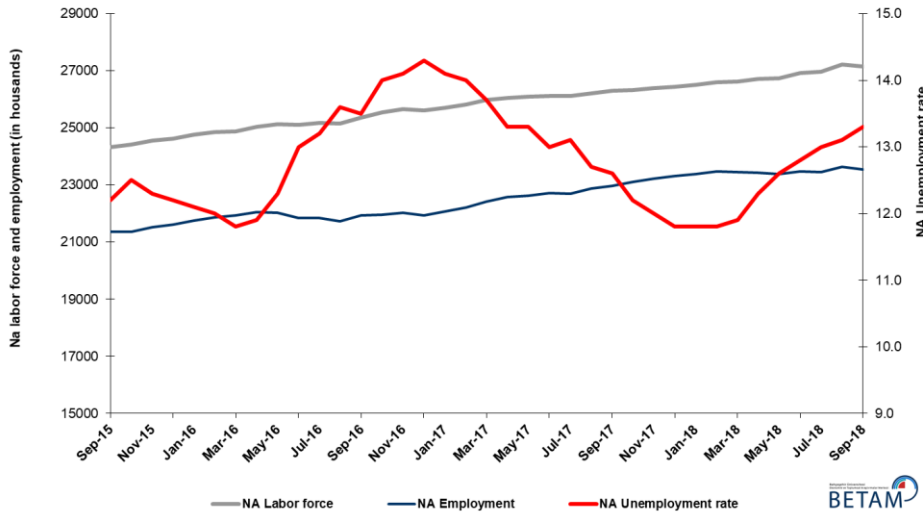
Executive Summary

Seasonally adjusted labor market data shows that in the period of September 2018, non-agricultural unemployment rate increased by 0.2 percentage points and reached 13.3 percent. In the period of September 2018, there is a strong decrease in non-agricultural employment, but due to a concurrent decrease in non-agricultural labor force, the increase in the non-agricultural unemployment rate was limited to 0.2 percentage points. In the period of September 2018, employment losses were recorded in all non-agricultural sectors. Employment decreased by 32 thousand in manufacturing, 29 thousand in construction and 50 thousand in services. While non-agricultural male unemployment rate rose by 0.6 percentage points, non-agricultural female unemployment rate decreased by 0.2 percentage points in September 2018. Betam's forecasting model predicts that the non-agricultural unemployment will increase to 13.4 percent in the period of October 2018.

The strong decrease in non-agricultural employment

According to seasonally adjusted labor market data, in the period of September 2018 compared to August 2018, the number of employed in non-agricultural sectors decreased by 112 thousand down to 23 million 534 thousand (Figure 1, Table 1). Note that the decline in non-agricultural employment is almost is similar in size to the decline in the periods of June-July-August 2016. In the period of September, non-agricultural labor force decreased by 66 thousand to 27 million 144 thousand. In Turkey there is an increasing trend in the labor force given that the population is young. In contrast to this general trend, there is a substantial fall in labor force (66 thousand). As a result, the increase in the number of unemployed in non-agricultural sectors was limited to 46 thousand and the number of unemployed reached 3 million 610 thousand and the non-agricultural unemployment rate increased to 13.3 percent.

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



Source: Turkstat, Betam

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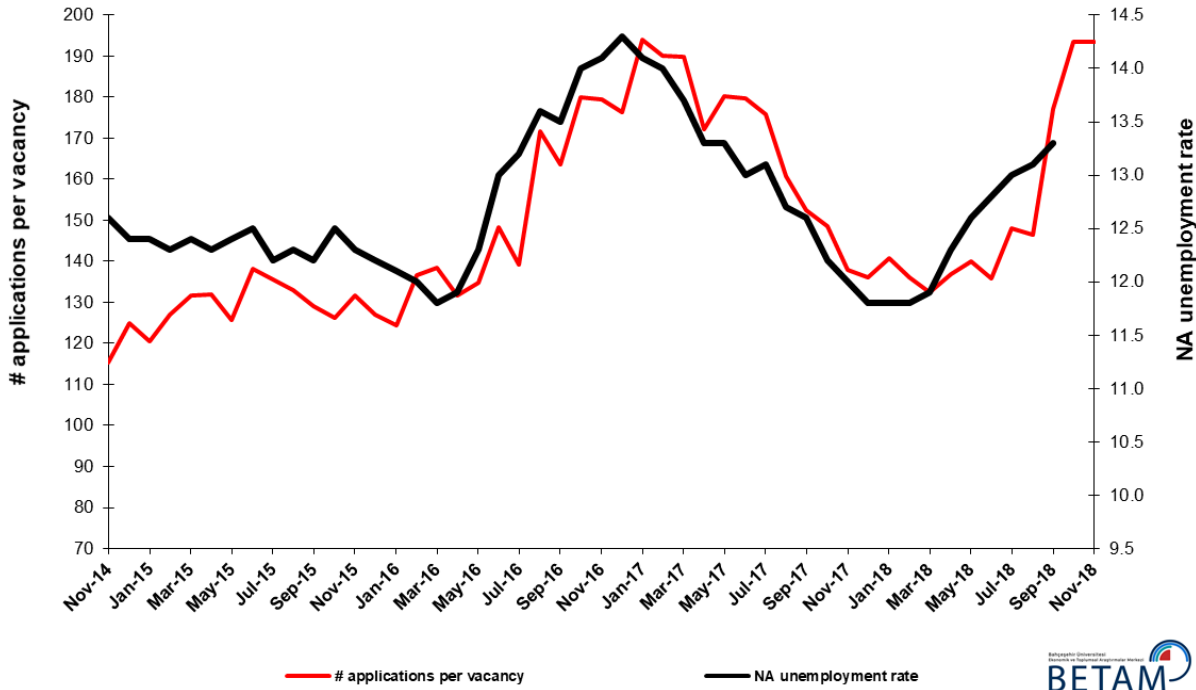
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Unemployment rate is expected to increase by 0.1 percentage points in the period of October 2018

Betam's forecasting model had predicted that the seasonally adjusted non-agricultural unemployment rate would increase by 0.2 percentage points to 13.2 percent in September 2018. TURKSTAT revised the unemployment rate of August 2018 from 13.0 percent to 13.1 percent. The non-agricultural unemployment rate increased by 0.2 percentage points, as forecasted, and reached to 13.3 percent in the period of September 2017. Betam's forecasting model predicts that the non-agricultural unemployment rate will reach 13.4 percent in the period of October 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 losses in non-agricultural sectors

According to seasonally adjusted sectoral labor market data, employment increased in agriculture while it decreased in all of the non-agricultural sectors in September 2018 compared to August 2018 (Figure 3, Table 2).³ The employment decreased by 50 thousand in services, 32 thousand in manufacturing and 29 thousand in construction. Note that employment losses in construction recorded since the period of February 2018 reached 200 thousand. It is remarkable that the strong increase in services in the period of August 2018 (154 thousand) was replaced by a decrease in the period of September 2018 (Table 2).

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/>

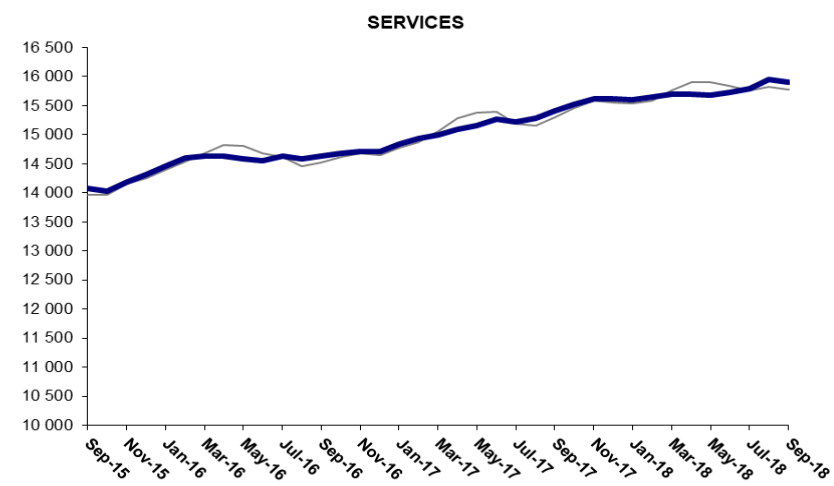
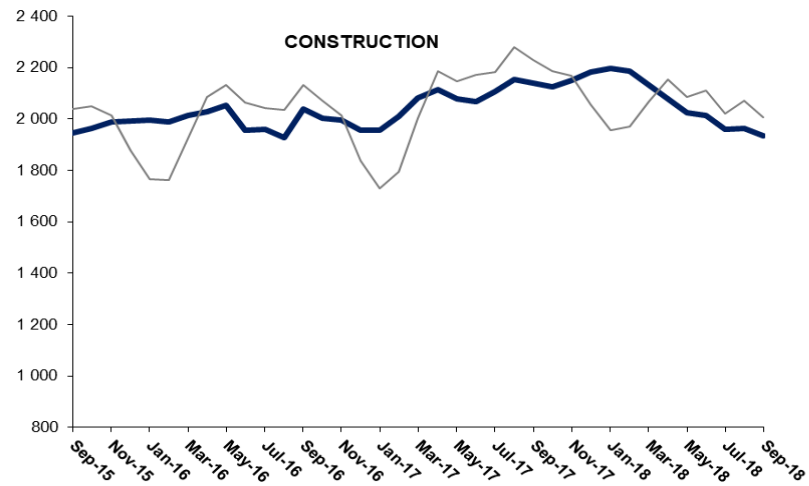
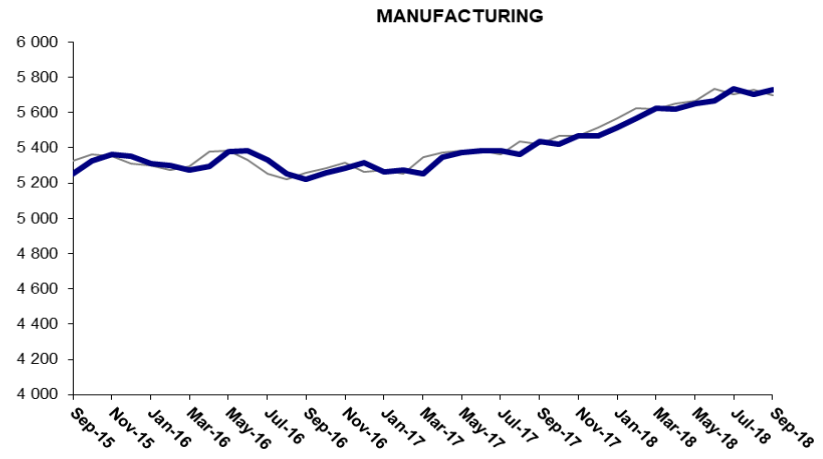
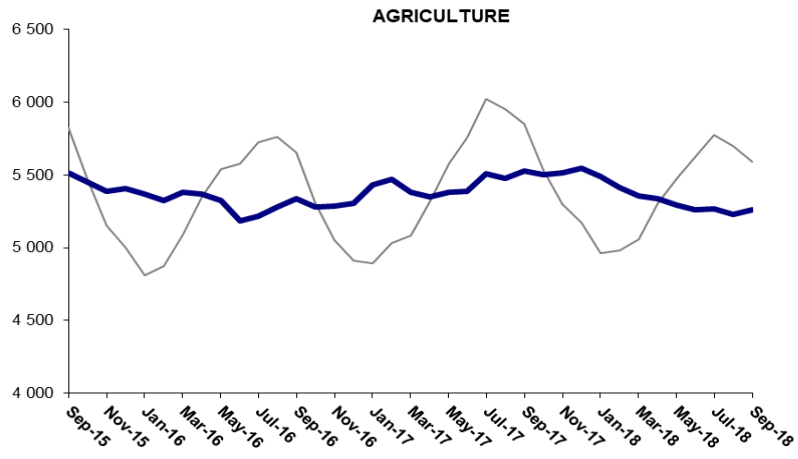
Soybilgen, B., "Mevsim Etkilerinden Arındırılmış İşsizlik Tahmini", Betam Research Brief 14

<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)

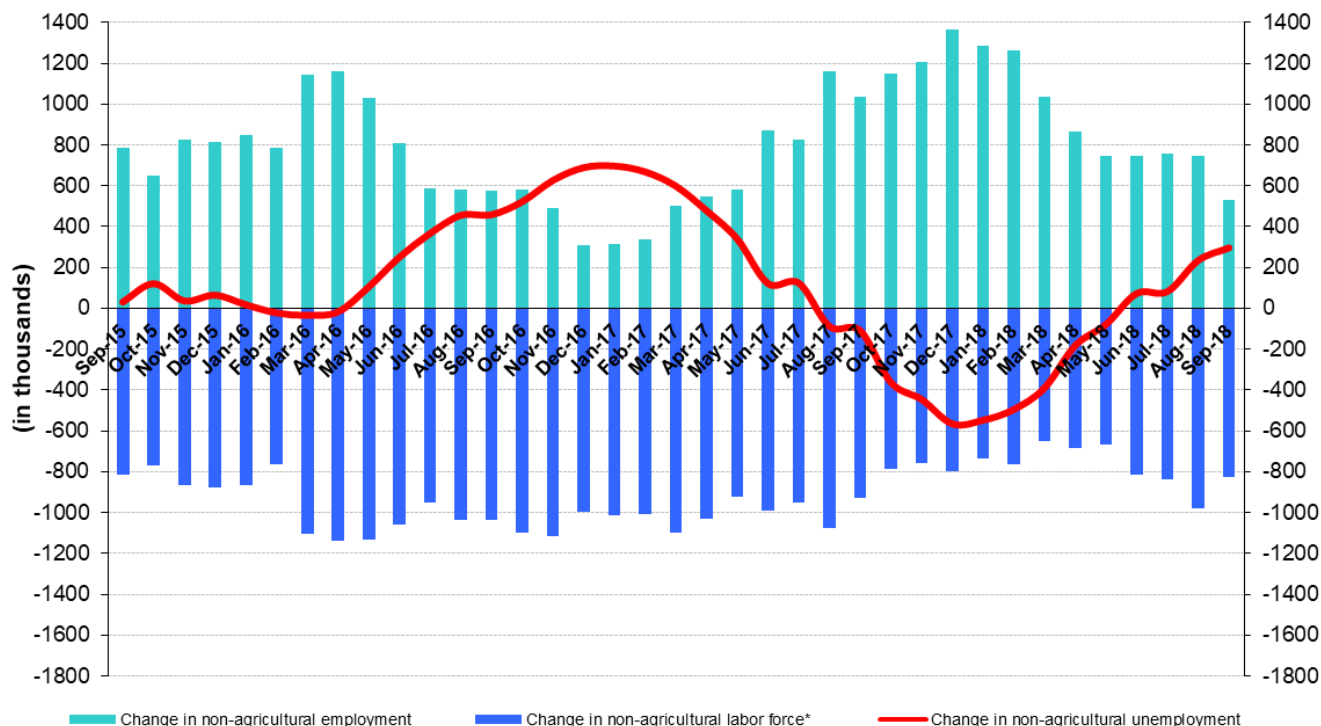


Source: TURKSTAT, Betam

The number of non-agricultural unemployed within a year increased

From September 2017 to September 2018 non-agricultural labor force increased by 827 thousand (3.1 percent) and non-agricultural employment increased by 531 thousand (2.3 percent) (Figure 4). Thus, non-agricultural unemployed decreased by 296 thousand and reached 3 million 664 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

The strong increase in the male unemployment rate

Figure 5 shows seasonally adjusted non-agricultural unemployment rate for males (green) and for females (purple)⁴. In the period of September 2018, non-agricultural female unemployment rate decreased by 0.2 percentage points to 17.9 percent while the non-agricultural male unemployment rate increased by 0.6 percentage points to 11.0 percent. The male employment decreased by 105 thousand in September 2018 compared to August 2018. In the same period, employment losses in females were limited to 6 thousand while female labor force decreased by 31 thousand. Parallel to the increase in male unemployment rate and the decrease in female unemployment rate, the gender gap in non-agricultural unemployment rates decreased from 7.8 to 6.9 percentage points in the period of September 2018.

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
August-15	24107	21142	2965	12.3%			
September-15	24315	21349	2966	12.2%	208	207	1
October-15	24411	21360	3051	12.5%	96	11	85
November-15	24551	21531	3020	12.3%	139	171	-32
December-15	24625	21621	3004	12.2%	75	90	-15
January-16	24750	21755	2995	12.1%	124	134	-10
February-16	24857	21874	2983	12.0%	107	119	-12
March-16	24879	21943	2936	11.8%	22	69	-47
April-16	25025	22047	2978	11.9%	146	104	42
May-16	25123	22033	3090	12.3%	98	-14	112
June-16	25111	21847	3264	13.0%	-12	-186	174
July-16	25167	21845	3322	13.2%	56	-2	58
August-16	25147	21727	3420	13.6%	-20	-118	98
September-16	25356	21933	3423	13.5%	209	206	3
October-16	25535	21960	3575	14.0%	179	27	152
November-16	25646	22030	3616	14.1%	111	70	41
December-16	25601	21940	3661	14.3%	-45	-90	45
January-17	25695	22072	3623	14.1%	94	132	-38
February-17	25819	22204	3615	14.0%	124	132	-8
March-17	25988	22428	3560	13.7%	170	224	-54
April-17	26038	22575	3463	13.3%	50	147	-97
May-17	26091	22621	3470	13.3%	53	46	7
June-17	26115	22720	3395	13.0%	24	99	-75
July-17	26105	22685	3420	13.1%	-10	-35	25
August-17	26208	22880	3328	12.7%	104	195	-91
September-17	26292	22979	3313	12.6%	83	99	-16
October-17	26328	23116	3212	12.2%	36	137	-101
November-17	26398	23230	3168	12.0%	70	114	-44
December-17	26430	23311	3119	11.8%	32	81	-49
January-18	26499	23372	3127	11.8%	69	61	8
February-18	26608	23468	3140	11.8%	109	96	13
March-18	26619	23451	3168	11.9%	11	-17	28
April-18	26717	23431	3286	12.3%	99	-20	119
May-18	26741	23372	3369	12.6%	24	-59	83
June-18	26919	23473	3446	12.8%	177	101	76
July-18	26967	23461	3506	13.0%	48	-12	60
August-18	27211	23646	3565	13.1%	244	185	59
September-18	27144	23534	3610	13.3%	-66	-112	46

Source: Turkstat, Betam

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

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
August-15	5541	5252	1922	13968				
September-15	5515	5327	1947	14075	-26	75	25	107
October-15	5449	5363	1965	14031	-66	36	18	-44
November-15	5386	5353	1988	14190	-63	-10	23	159
December-15	5406	5311	1992	14318	20	-42	4	128
January-16	5370	5300	1995	14459	-36	-11	3	141
February-16	5325	5276	1990	14608	-45	-24	-5	149
March-16	5385	5295	2015	14634	60	19	25	26
April-16	5368	5381	2029	14638	-17	86	14	4
May-16	5328	5386	2055	14592	-40	5	26	-46
June-16	5188	5330	1956	14561	-140	-56	-99	-31
July-16	5216	5254	1960	14631	28	-76	4	70
August-16	5282	5224	1926	14578	66	-30	-34	-53
September-16	5337	5260	2039	14635	55	36	113	57
October-16	5281	5282	2002	14675	-56	22	-37	40
November-16	5284	5316	1997	14716	3	34	-5	41
December-16	5306	5265	1956	14719	22	-51	-41	3
January-17	5431	5274	1958	14840	125	9	2	121
February-17	5471	5251	2012	14941	40	-23	54	101
March-17	5383	5346	2081	15002	-88	95	69	61
April-17	5349	5372	2114	15088	-34	26	33	86
May-17	5381	5386	2077	15158	32	14	-37	70
June-17	5387	5383	2067	15270	6	-3	-10	112
July-17	5509	5363	2108	15214	122	-20	41	-56
August-17	5480	5437	2155	15288	-29	74	47	74
September-17	5526	5421	2140	15418	46	-16	-15	130
October-17	5504	5470	2124	15522	-22	49	-16	104
November-17	5518	5470	2150	15610	14	0	26	88
December-17	5545	5514	2182	15615	27	44	32	5
January-18	5488	5567	2197	15608	-57	53	15	-7
February-18	5414	5627	2187	15655	-74	60	-10	47
March-18	5359	5618	2134	15699	-55	-9	-53	44
April-18	5339	5650	2078	15703	-20	32	-56	4
May-18	5292	5669	2024	15678	-47	19	-54	-25
June-18	5264	5737	2014	15721	-28	68	-10	43
July-18	5267	5703	1961	15797	3	-34	-53	76
August-18	5232	5730	1964	15951	-35	27	3	154
September-18	5263	5698	1935	15901	31	-32	-29	-50

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	Change in female labor force	Change in female employment	Change in male labor force	Change in male employment
September-15	6760	5662	1098	17561	15742	1819				
October-15	6779	5651	1128	17607	15745	1862	20	-10	46	2
November-15	6875	5731	1144	17642	15806	1836	95	79	34	61
December-15	6967	5791	1177	17689	15852	1838	93	60	48	46
January-16	7011	5832	1178	17729	15894	1835	43	42	40	42
February-16	7048	5860	1188	17773	15906	1867	37	27	43	12
March-16	7062	5898	1164	17819	15980	1839	15	38	46	74
April-16	7147	5950	1197	17858	16012	1846	85	52	39	32
May-16	7179	5982	1197	17937	16020	1917	32	31	78	8
June-16	7261	5990	1271	17835	15890	1945	82	9	-101	-129
July-16	7274	5954	1320	17912	15954	1958	13	-37	77	64
August-16	7312	5932	1380	17878	15875	2003	38	-22	-34	-79
September-16	7377	5968	1409	17971	16011	1961	65	36	93	136
October-16	7440	5969	1471	18065	16011	2054	64	2	94	1
November-16	7458	5951	1508	18151	16074	2077	18	-19	86	63
December-16	7456	5951	1506	18189	16013	2176	-2	0	38	-61
January-17	7450	5980	1469	18288	16080	2208	-6	30	98	67
February-17	7513	6053	1460	18305	16077	2228	63	72	17	-3
March-17	7618	6145	1473	18354	16235	2119	105	92	48	158
April-17	7605	6150	1454	18390	16362	2028	-13	5	36	127
May-17	7656	6209	1447	18404	16391	2013	51	58	14	29
June-17	7670	6230	1439	18420	16511	1910	14	22	16	119
July-17	7685	6226	1459	18448	16507	1940	15	-5	27	-3
August-17	7718	6281	1437	18471	16654	1818	33	55	24	146
September-17	7767	6349	1418	18508	16665	1843	49	68	37	12
October-17	7790	6445	1345	18521	16680	1841	23	97	12	15
November-17	7827	6504	1323	18556	16722	1834	37	58	35	42
December-17	7886	6554	1332	18590	16772	1818	59	50	35	50
January-18	7922	6577	1345	18598	16771	1827	37	24	8	-1
February-18	7956	6581	1376	18646	16812	1834	34	3	48	41
March-18	7953	6576	1377	18679	16837	1842	-4	-5	33	25
April-18	7990	6587	1402	18718	16797	1921	37	11	39	-40
May-18	8026	6605	1421	18747	16761	1986	36	17	29	-36
June-18	8073	6620	1453	18810	16862	1947	47	16	63	101
July-18	8091	6623	1468	18846	16867	1979	18	2	36	5
August-18	8197	6713	1484	18907	16951	1956	106	90	61	84
September-18	8166	6707	1460	18918	16846	2072	-31	-6	11	-105

Source: Turkstat, Betam