

EMPLOYMENT DECREASED IN MANUFACTURING AND CONSTRUCTION

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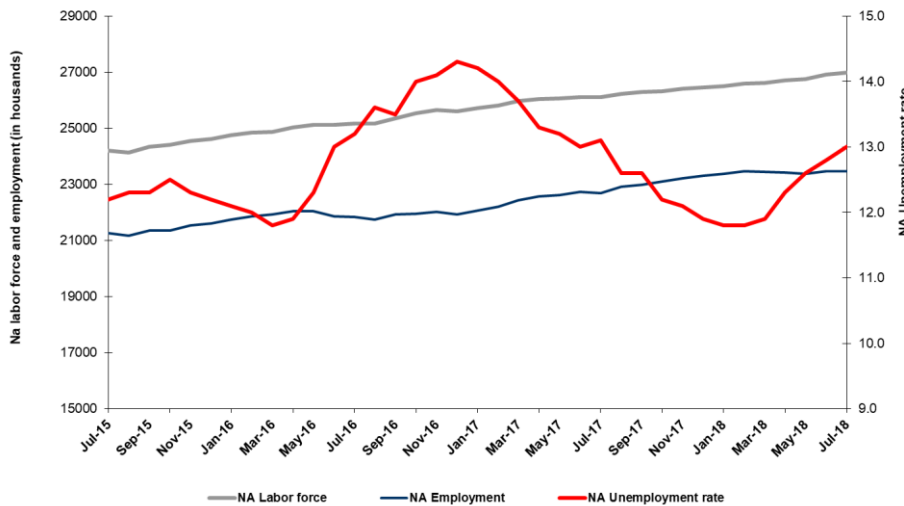
Executive Summary

Seasonally adjusted labor market data shows that in the period of July 2018 compared to June 2018, non-agricultural unemployment rate increased by 0.2 percentage points and reached 13.0 percent. Even though the increase in non-agricultural labor force slowed down in this period, losses in non-agricultural employment translated into an increase in the number of unemployed and the non-agricultural unemployment rate. Even though the employment increased in services by 77 thousand in July 2018, there are significant employment losses in manufacturing and construction. The cumulative loss in construction reached 230 thousand from February to July. The fact that there were losses in manufacturing of 34 thousand despite an increased in the industrial production index in July 2018, is worrisome. Betam's forecasting model predicts that the non-agricultural unemployment will rise to 13.1 percent in the period of August 2018. In the period of July 2018, the non-agricultural female and male unemployment rate increased in a parallel manner, and thus the gender gap in non-agricultural unemployment rates remained constant.

The decrease in non-agricultural employment

According to seasonally adjusted labor market data, in the period of July 2018 compared to June 2018, the non-agricultural labor force increased by 52 thousand and reached 26 million 975 thousand while the number of employed in non-agricultural sectors decreased by 9 thousand and reached 23 million 468 thousand (Figure 1, Table 1). As result, the number of unemployed in non-agricultural sectors increased by 61 thousand and was recorded as 3 million 507 thousand. Thus, the non-agricultural unemployment rate rose to 13.0 percent. The increases in the non-agricultural labor force which had accelerated in June 2018, slowed down in July 2018. On the other hand, the employment losses in non-agricultural sectors are significant. As result, the non-agricultural unemployment rate increased in July 2018.

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



Source: Turkstat, Betam

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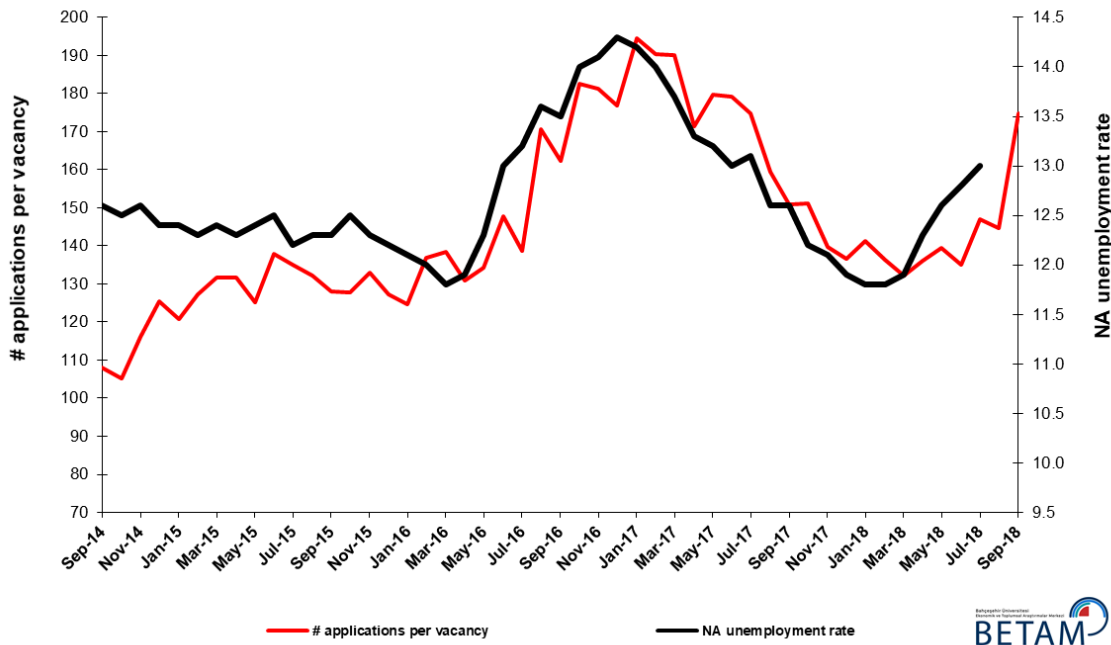
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Unemployment rate is expected to increase by 0.1 percentage points in the period of August 2018

Betam's forecasting model had predicted that the seasonally adjusted non-agricultural unemployment rate would increase by 0.1 percentage points to 12.9 percent in the July 2018. The non-agricultural unemployment rate rose by 0.2 percentage points to 13.0 percent in the period of July 2018. Betam's forecasting model predicts that the non-agricultural unemployment rate will reach 13.1 percent in the period of August 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 manufacturing and construction

According to seasonally adjusted sectoral labor market data, employment decreased in manufacturing and construction while it increased in agriculture and services in July 2018 compared to June 2018 (Figure 3, Table 2).³ The employment increased by 3 thousand in agriculture and 77 thousand in services while employment in manufacture and construction decreased by 34 and 52 thousand respectively. Note that employment losses in construction accelerated again and reached 230 thousand from February to July (Table 2). Furthermore, the employment losses in manufacturing despite an increase in the industrial production index are worrying.

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/>

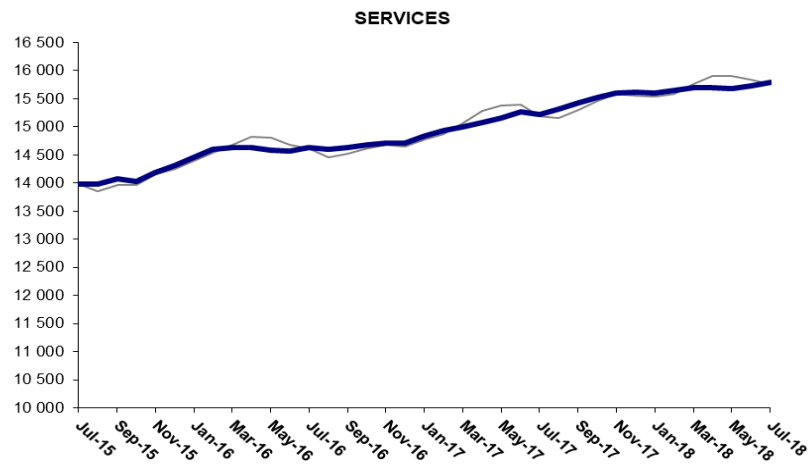
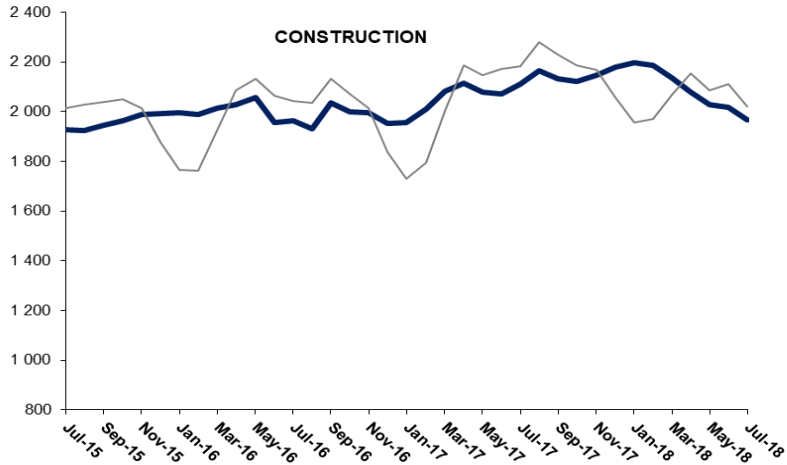
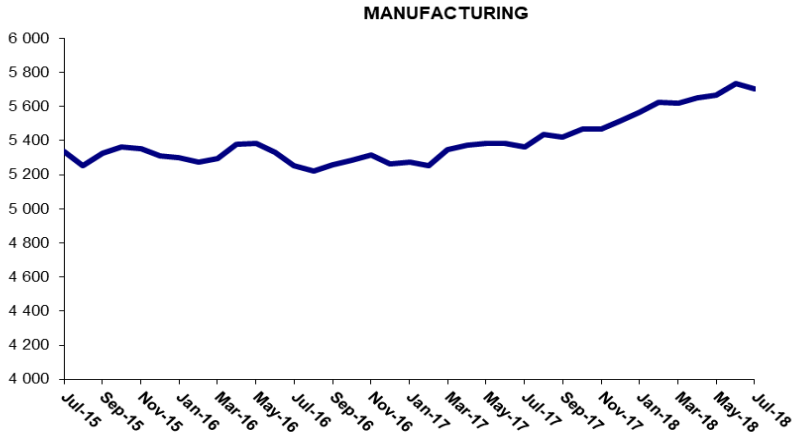
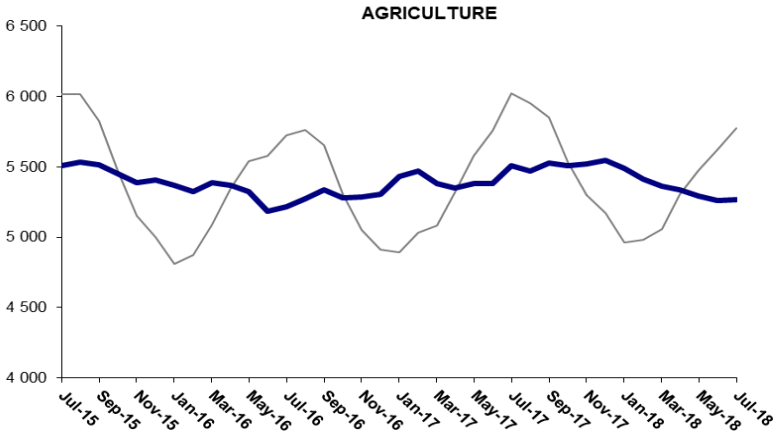
Soybilgen, B., "Mevsim Etkilerinden Arındırılmış İşsizlik Tahmini", Betam Research Brief 14

<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)

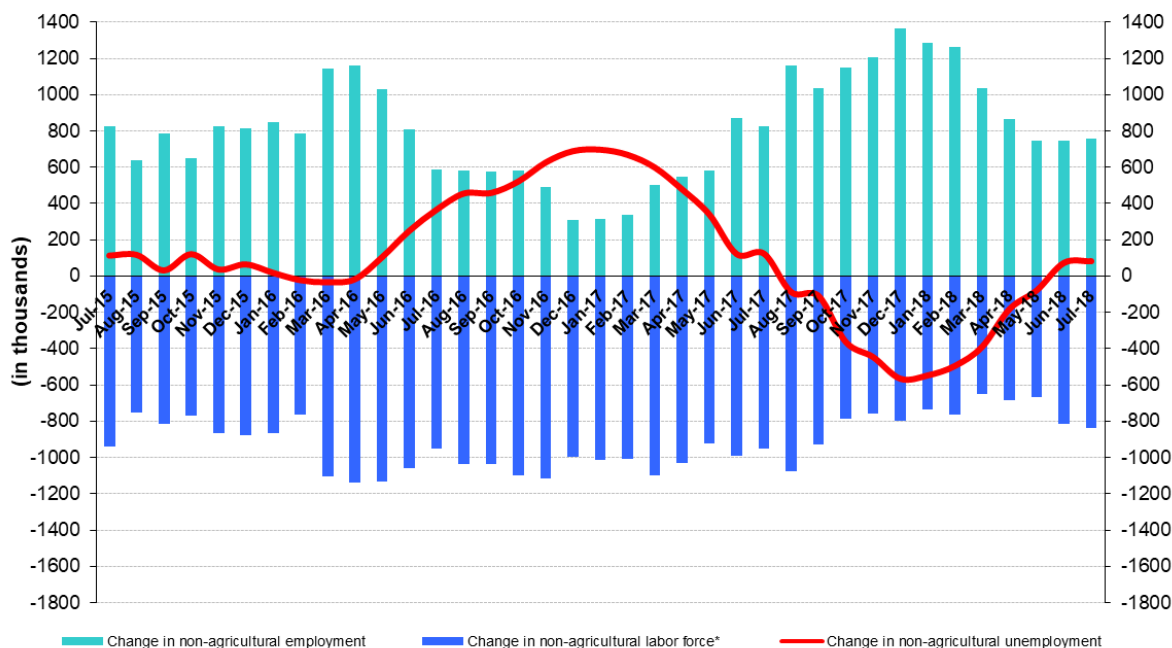


Source: TURKSTAT, Betam

The number of non-agricultural unemployed within a year increased

From July 2017 to July 2018 non-agricultural labor force increased by 837 thousand (3.2 percent) and non-agricultural employment increased by 755 thousand (3.3 percent) (Figure 4). Thus, non-agricultural unemployed decreased by 82 thousand and reached 3 million 479 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 and male unemployment rates

Figure 5 shows seasonally adjusted non-agricultural unemployment rate for males (green) and for females (purple)⁴. In the period of July 2018, the non-agricultural female unemployment rate increased by 0.1 percentage points to 18.1 percent while non-agricultural male unemployment rate increased by 0.2 percentage points to 10.6 percent. Parallel to increases in unemployment rates, the gender gap in non-agricultural unemployment rates remained constant at around 7.6 percentage points in July 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
June-15	24048	21042	3006	12.5%			
July-15	24205	21252	2953	12.2%	157	210	-53
August-15	24128	21160	2968	12.3%	-77	-92	15
September-15	24343	21349	2994	12.3%	216	189	27
October-15	24411	21360	3051	12.5%	68	11	57
November-15	24546	21527	3019	12.3%	135	167	-32
December-15	24622	21618	3004	12.2%	76	91	-15
January-16	24744	21750	2994	12.1%	122	132	-10
February-16	24849	21867	2982	12.0%	105	117	-12
March-16	24874	21939	2935	11.8%	25	72	-47
April-16	25020	22043	2977	11.9%	146	104	42
May-16	25123	22033	3090	12.3%	103	-10	113
June-16	25115	21850	3265	13.0%	-8	-183	175
July-16	25169	21847	3322	13.2%	54	-3	57
August-16	25176	21752	3424	13.6%	7	-95	102
September-16	25355	21932	3423	13.5%	179	180	-1
October-16	25533	21958	3575	14.0%	178	26	152
November-16	25640	22025	3615	14.1%	108	67	41
December-16	25596	21936	3660	14.3%	-44	-89	45
January-17	25720	22068	3652	14.2%	124	132	-8
February-17	25810	22197	3613	14.0%	90	129	-39
March-17	25983	22423	3560	13.7%	172	226	-54
April-17	26032	22570	3462	13.3%	50	147	-97
May-17	26062	22622	3440	13.2%	30	52	-22
June-17	26118	22723	3395	13.0%	56	101	-45
July-17	26109	22689	3420	13.1%	-9	-34	25
August-17	26217	22914	3303	12.6%	108	225	-117
September-17	26286	22974	3312	12.6%	69	60	9
October-17	26321	23110	3211	12.2%	35	136	-101
November-17	26418	23221	3197	12.1%	96	111	-15
December-17	26453	23305	3148	11.9%	35	84	-49
January-18	26492	23366	3126	11.8%	39	61	-22
February-18	26600	23461	3139	11.8%	108	95	13
March-18	26613	23446	3167	11.9%	13	-15	28
April-18	26713	23427	3286	12.3%	100	-19	119
May-18	26744	23374	3370	12.6%	31	-53	84
June-18	26923	23477	3446	12.8%	179	103	76
July-18	26975	23468	3507	13.0%	52	-9	61

Source: Turkstat, Betam

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

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
June-15	5583	5380	1871	13791				
July-15	5506	5336	1929	13987	-77	-44	58	196
August-15	5536	5252	1924	13984	30	-84	-5	-3
September-15	5516	5327	1945	14076	-20	75	21	92
October-15	5450	5363	1964	14033	-66	36	19	-43
November-15	5387	5353	1987	14188	-63	-10	23	155
December-15	5407	5311	1991	14316	20	-42	4	128
January-16	5371	5300	1995	14455	-36	-11	4	139
February-16	5326	5276	1990	14601	-45	-24	-5	146
March-16	5386	5295	2015	14629	60	19	25	28
April-16	5369	5381	2029	14633	-17	86	14	4
May-16	5328	5386	2056	14591	-41	5	27	-42
June-16	5186	5330	1958	14562	-142	-56	-98	-29
July-16	5215	5254	1962	14632	29	-76	4	70
August-16	5274	5224	1930	14598	59	-30	-32	-34
September-16	5338	5260	2036	14636	64	36	106	38
October-16	5283	5282	2000	14676	-55	22	-36	40
November-16	5285	5316	1995	14714	2	34	-5	38
December-16	5308	5265	1954	14717	23	-51	-41	3
January-17	5433	5274	1957	14837	125	9	3	120
February-17	5473	5251	2012	14934	40	-23	55	97
March-17	5384	5346	2081	14996	-89	95	69	62
April-17	5350	5372	2115	15083	-34	26	34	87
May-17	5381	5386	2078	15157	31	14	-37	74
June-17	5385	5383	2070	15270	4	-3	-8	113
July-17	5508	5363	2111	15215	123	-20	41	-55
August-17	5468	5437	2163	15314	-40	74	52	99
September-17	5528	5421	2134	15419	60	-16	-29	105
October-17	5507	5470	2120	15521	-21	49	-14	102
November-17	5520	5470	2146	15605	13	0	26	84
December-17	5548	5514	2179	15612	28	44	33	7
January-18	5491	5567	2196	15603	-57	53	17	-9
February-18	5416	5627	2187	15647	-75	60	-9	44
March-18	5360	5618	2135	15693	-56	-9	-52	46
April-18	5340	5650	2080	15698	-20	32	-55	5
May-18	5292	5669	2027	15678	-48	19	-53	-20
June-18	5262	5737	2018	15722	-30	68	-9	44
July-18	5265	5703	1966	15799	3	-34	-52	77

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-15	6750	5628	1122	17481	15693	1788
August-15	6714	5609	1105	17481	15651	1830
September-15	6759	5664	1095	17572	15730	1843
October-15	6781	5652	1129	17610	15740	1869
November-15	6876	5731	1145	17618	15800	1818
December-15	6968	5791	1177	17655	15851	1805
January-16	7011	5832	1179	17685	15896	1789
February-16	7046	5858	1187	17770	15909	1861
March-16	7060	5896	1164	17821	15984	1836
April-16	7145	5948	1197	17851	16021	1830
May-16	7176	5979	1197	17937	16028	1909
June-16	7257	5987	1270	17859	15889	1970
July-16	7270	5950	1320	17917	15957	1960
August-16	7327	5944	1383	17911	15894	2017
September-16	7376	5970	1406	17981	15998	1983
October-16	7442	5970	1472	18059	16002	2057
November-16	7460	5951	1508	18146	16070	2076
December-16	7457	5951	1506	18163	16001	2162
January-17	7450	5980	1470	18276	16068	2208
February-17	7511	6051	1460	18308	16060	2248
March-17	7615	6143	1472	18366	16239	2127
April-17	7602	6148	1454	18396	16372	2024
May-17	7652	6206	1447	18391	16387	2004
June-17	7666	6227	1439	18440	16519	1921
July-17	7681	6222	1459	18446	16513	1933
August-17	7733	6293	1440	18548	16702	1846
September-17	7766	6351	1415	18517	16652	1865
October-17	7792	6446	1345	18501	16672	1828
November-17	7828	6504	1324	18544	16722	1823
December-17	7887	6554	1333	18553	16762	1791
January-18	7923	6577	1345	18553	16758	1795
February-18	7954	6579	1375	18618	16795	1823
March-18	7950	6574	1376	18663	16845	1818
April-18	7987	6585	1402	18706	16803	1903
May-18	8022	6602	1421	18708	16742	1966
June-18	8069	6617	1452	18835	16873	1962
July-18	8087	6619	1468	18865	16871	1994

Source: Turkstat, Betam