

STAGNATION IN UNEMPLOYMENT

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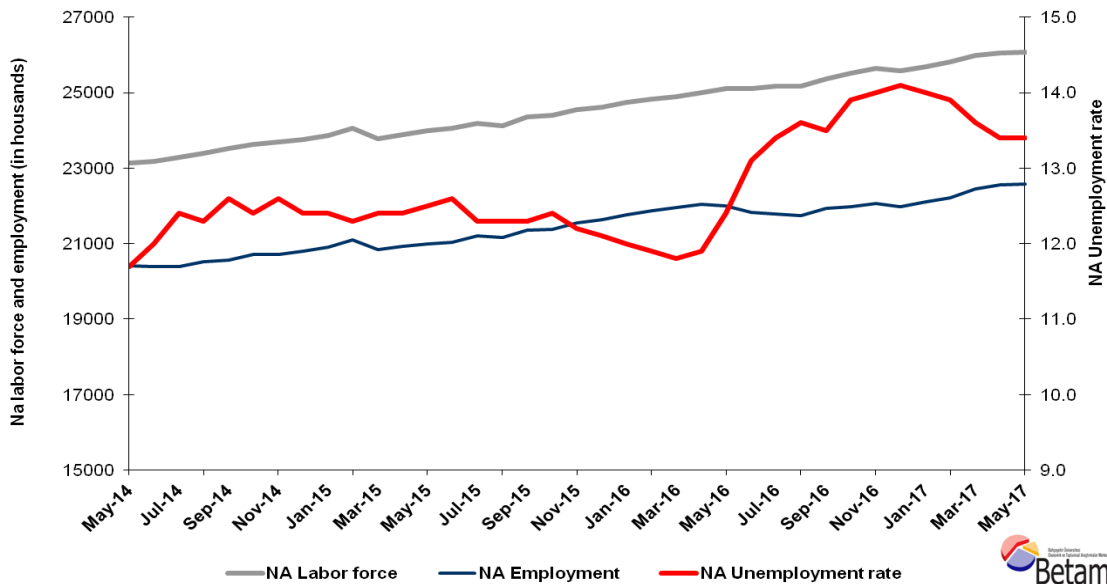
Executive Summary

Seasonal adjusted labor market data show that non-agricultural unemployment rate did not change in the period of May from April staying at 13.4 percent. The most important reason behind this result is a significant slowdown in the increase of non-agricultural employment in May compared to April. In that period, significant loss of employment was experienced in construction sector while employment in service sector increased significantly. On the other hand, according to seasonally adjusted labor data, decline both for females and males in non-agricultural unemployment rates continued. Betam's forecasting model predicts that the non-agricultural unemployment rate will decrease 0.1 points in the period of June 2017 reaching 13.3 percent.

Significant slowdown in non-agricultural employment

According to seasonally adjusted labor market data, in the period of May 2017 compared to April 2017, non-agricultural labor force increased by 31 thousand and reached 26 million 66 thousand and the number of people employed in non-agricultural sectors increased by 27 thousand and reached 22 million 573 thousand (Figure 1, Table1). While the number of unemployed in non-agricultural sectors increased by 4 thousand and recorded as 3 million 493 thousand, the nonagricultural unemployment rate remained at 13.4 percent. The most important reason behind this stagnation is a significant slowdown in employment growth. The non-agricultural employment increased by 575 thousand from January to April, monthly average being 144 thousand the lowest increase 119 thousand, far higher than the increase of from April to May, which has been limited to 27 thousand..

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



Source: Turkstat, Betam

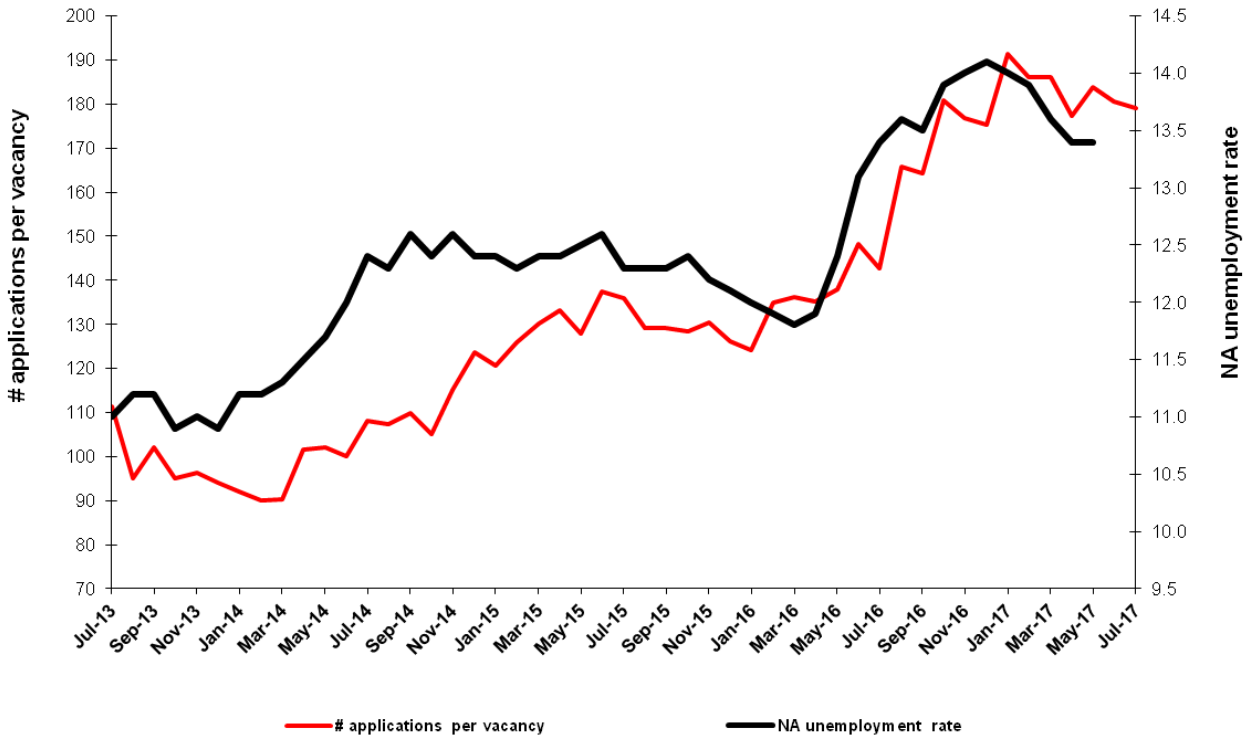
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Decrease in unemployment is expected in the period of May 2017

Betam's forecasting model had predicted that the seasonally adjusted nonagricultural unemployment rate would decrease from 13.4 to 13.3 percent in the period of May 2017. Seasonal adjusted mom-agricultural unemployment rate did not change in the period of May from April staying at 13.4 percent. Betam's forecasting model predicts the seasonally adjusted June 2017 non-agricultural unemployment will decrease by 0.1 percentage points reach 13.3 percent. 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 nonagricultural unemployment rate will decrease in the period of June 2017.

Figure 2 Seasonally adjusted nonagricultural unemployment rate and application per vacancy



Source: Kariyer.net, Turkstat, Betam

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/>

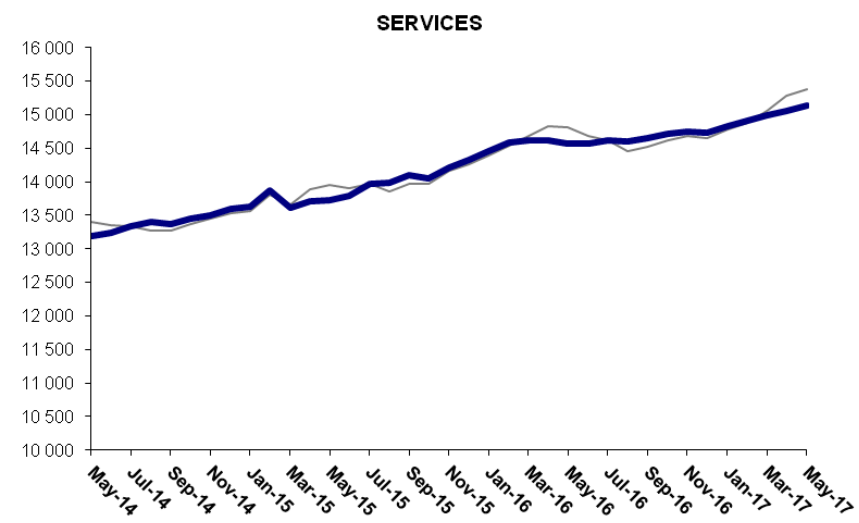
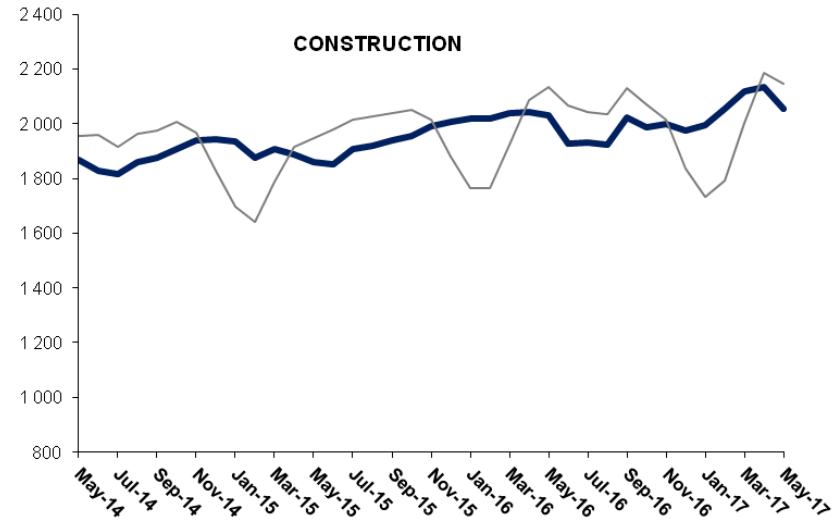
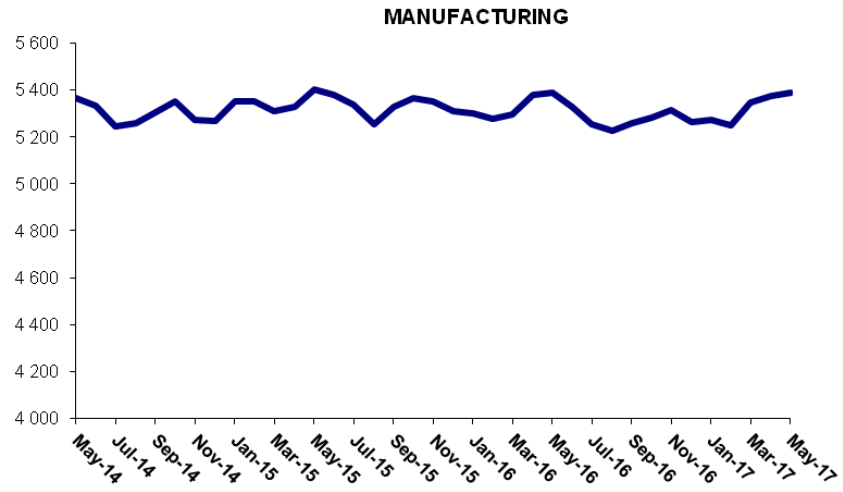
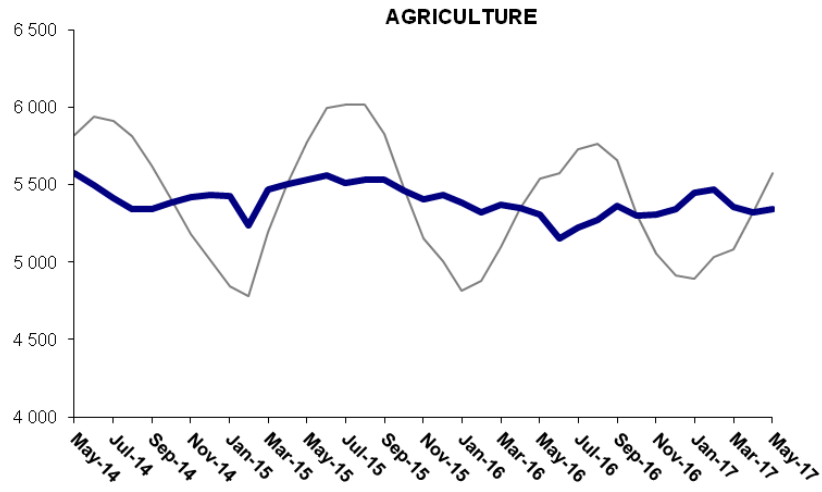
² Betam has been calculating application per vacancy using series released by Kariyer.net for a while. Seasonal and calendar adjustment procedure is applied to application per vacancy series. A decrease in applications per vacancy may be caused by an increase in vacancies or by a decrease in the number 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.

Sectoral Employment: Significant loss in construction, high increase in services

According to seasonally adjusted sectoral labor market data, in April 2017 significant increases in non-agricultural sectors slowed down. In the period of May 2017, employment in services sector significantly increased while employment in construction sector significantly decreased (Figure 3, Table 2**Error! Reference source not found.**)³ In that period, employment increased by 17 thousand in agriculture, by 14 thousand in manufacture sector and by 70 thousand in services sector. At the same time, employment decreased by 58 thousand in construction.

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)

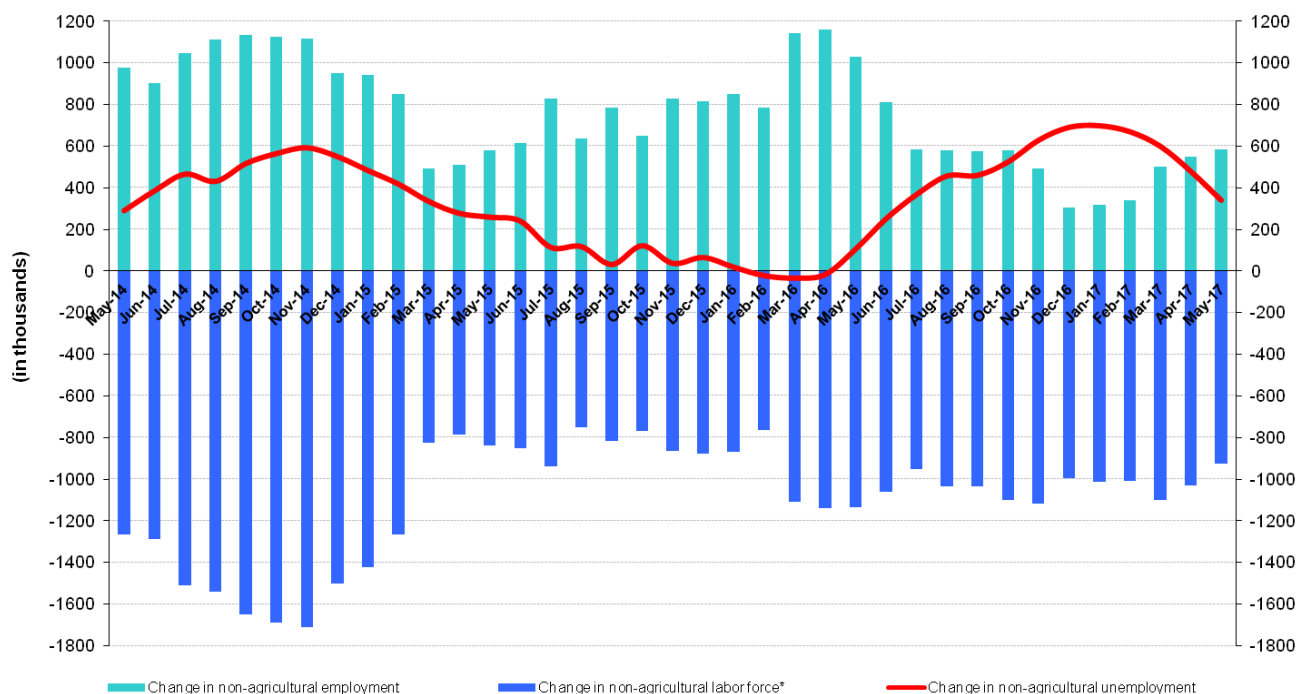


Source: Turkstat, Betam

Year-on-year decrease in non-agricultural unemployment

The decline in unemployment since January could not compensate the high increase in unemployment rate experienced during the period of May-December 2016. While seasonally adjusted non-agricultural unemployment rate was 11.9 percent in the period of April 2016, seasonally adjusted non-agricultural unemployment rate decreased only to 13.4 in the period of May 2017. Non-agricultural labor force increased by 923 thousand (3.7 percent), non-agricultural employment increased by 584 thousand (2.6 percent) from May 2017 to May 2016. As result, the annual increase in the number of unemployed was 339 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.



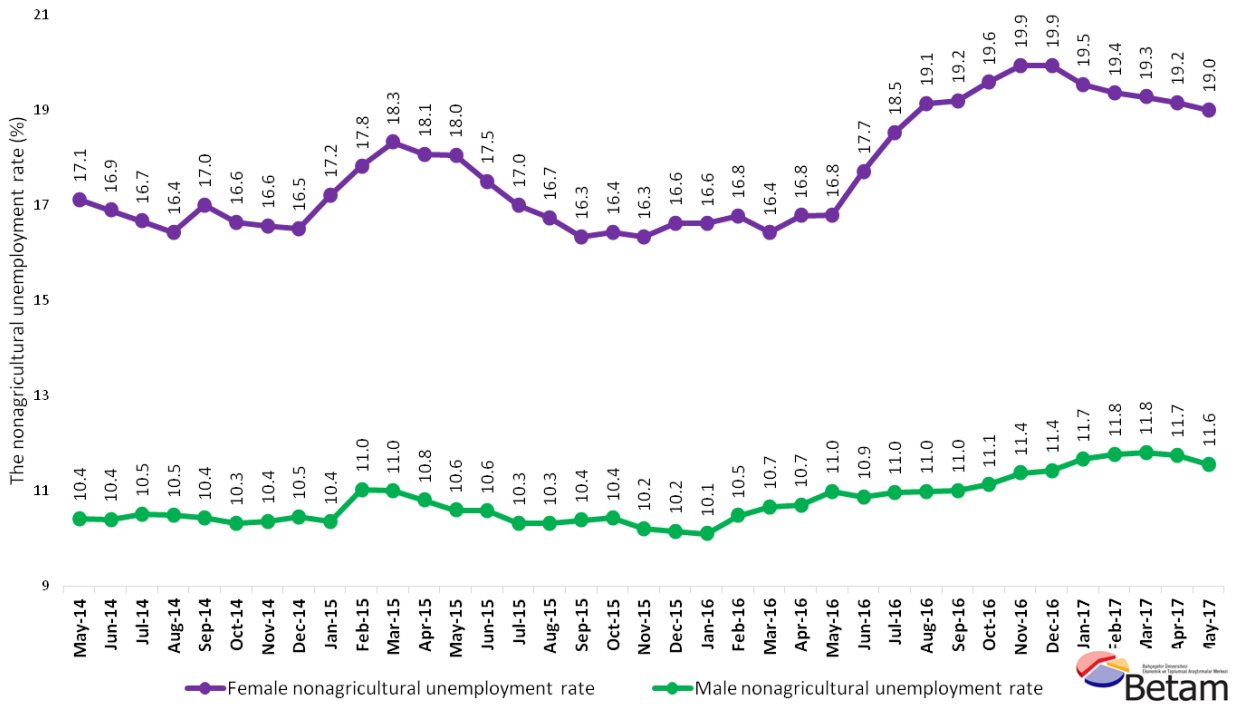
Source: Turkstat, Betam

Decreasing gender gap in unemployment

Figure 5 shows seasonal adjusted non-agricultural unemployment rate for males and females.⁴ The non-agricultural female unemployment rate decreased since the period of January 2017. The non-agricultural female unemployment rate which peaked at 19.9 percent, decreased steadily to 19 percent in the period of May 2017. On the other hand, the non-agricultural male unemployment rate decreased only during the last two periods. The non-agricultural male unemployment rate which peaked at 11.8 percent in the March, decreased to 11.6 percent in May. Thus the gender gap in non-agricultural unemployment rates has decreased slightly.

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
March-14	22963	20368	2595	11.3%			
April-14	23090	20435	2655	11.5%	128	67	61
May-14	23131	20425	2706	11.7%	41	-10	51
June-14	23188	20405	2783	12.0%	56	-20	76
July-14	23289	20401	2888	12.4%	101	-4	105
August-14	23392	20515	2877	12.3%	103	114	-11
September-14	23522	20558	2964	12.6%	129	43	86
October-14	23632	20702	2930	12.4%	111	144	-33
November-14	23691	20706	2985	12.6%	59	4	55
December-14	23748	20803	2945	12.4%	57	97	-40
January-15	23857	20899	2958	12.4%	110	96	14
February-15	24042	21085	2957	12.3%	185	186	-1
March-15	23775	20827	2948	12.4%	-267	-258	-9
April-15	23874	20914	2960	12.4%	99	87	12
May-15	24006	21005	3001	12.5%	131	91	40
June-15	24066	21034	3032	12.6%	61	29	32
July-15	24200	21223	2977	12.3%	133	189	-56
August-15	24132	21164	2968	12.3%	-67	-59	-8
September-15	24352	21357	2995	12.3%	220	193	27
October-15	24403	21377	3026	12.4%	51	20	31
November-15	24542	21548	2994	12.2%	139	171	-32
December-15	24619	21640	2979	12.1%	77	92	-15
January-16	24731	21763	2968	12.0%	112	123	-11
February-16	24825	21871	2954	11.9%	95	108	-13
March-16	24871	21936	2935	11.8%	46	65	-19
April-16	24999	22024	2975	11.9%	128	88	40
May-16	25116	22002	3114	12.4%	118	-22	140
June-16	25124	21833	3291	13.1%	8	-169	177
July-16	25178	21804	3374	13.4%	54	-29	83
August-16	25181	21756	3425	13.6%	3	-48	51
September-16	25364	21940	3424	13.5%	184	184	0
October-16	25525	21977	3548	13.9%	161	37	124
November-16	25647	22056	3591	14.0%	122	79	43
December-16	25579	21972	3607	14.1%	-68	-84	16
January-17	25690	22093	3597	14.0%	111	121	-10
February-17	25800	22214	3586	13.9%	111	121	-10
March-17	25990	22429	3561	13.7%	189	215	-26
April-17	26035	22546	3489	13.4%	45	117	-72
May-17	26066	22573	3493	13.4%	31	27	4

Source: Turkstat, Betam

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

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
March-14	5598	5365	1944	13059				
April-14	5569	5373	1885	13177	-29	8	-59	118
May-14	5571	5364	1873	13188	2	-9	-12	11
June-14	5494	5332	1833	13241	-77	-32	-40	53
July-14	5409	5243	1822	13336	-85	-89	-11	95
August-14	5344	5257	1862	13395	-65	14	40	59
September-14	5342	5306	1877	13375	-2	49	15	-20
October-14	5386	5353	1906	13443	44	47	29	68
November-14	5417	5273	1939	13494	31	-80	33	51
December-14	5437	5266	1941	13596	20	-7	2	102
January-15	5426	5349	1928	13621	-11	83	-13	25
February-15	5238	5351	1868	13866	-188	2	-60	245
March-15	5473	5308	1901	13619	235	-43	33	-247
April-15	5504	5326	1881	13707	31	18	-20	88
May-15	5526	5404	1869	13731	22	78	-12	24
June-15	5557	5380	1861	13793	31	-24	-8	62
July-15	5510	5336	1917	13970	-47	-44	56	177
August-15	5532	5252	1925	13986	22	-84	8	16
September-15	5532	5327	1941	14089	0	75	16	103
October-15	5462	5363	1958	14056	-70	36	17	-33
November-15	5403	5353	1989	14207	-59	-10	31	151
December-15	5430	5311	2003	14326	27	-42	14	119
January-16	5384	5300	2013	14450	-46	-11	10	124
February-16	5322	5276	2008	14587	-62	-24	-5	137
March-16	5373	5295	2025	14617	51	19	17	30
April-16	5352	5381	2028	14615	-21	86	3	-2
May-16	5302	5386	2043	14574	-50	5	15	-41
June-16	5148	5330	1941	14563	-154	-56	-102	-11
July-16	5221	5254	1942	14608	73	-76	1	45
August-16	5269	5224	1932	14600	48	-30	-10	-8
September-16	5361	5260	2028	14651	92	36	96	51
October-16	5301	5282	1989	14706	-60	22	-39	55
November-16	5309	5316	1998	14742	8	34	9	36
December-16	5343	5265	1972	14735	34	-51	-26	-7
January-17	5452	5274	1986	14834	109	9	14	99
February-17	5468	5251	2042	14921	16	-23	56	87
March-17	5362	5346	2097	14985	-106	95	55	64
April-17	5324	5372	2113	15062	-38	26	16	77
May-17	5341	5386	2055	15132	17	14	-58	70

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
May-14	6122	5074	1048	17030	15255	1775
June-14	6152	5112	1039	17072	15295	1776
July-14	6199	5166	1033	17097	15300	1798
August-14	6299	5263	1035	17161	15361	1801
September-14	6336	5259	1077	17169	15376	1792
October-14	6385	5322	1062	17208	15433	1775
November-14	6399	5338	1060	17225	15441	1784
December-14	6420	5360	1059	17298	15490	1808
January-15	6507	5387	1120	17306	15514	1792
February-15	6563	5394	1169	17490	15561	1929
March-15	6521	5326	1195	17266	15367	1899
April-15	6542	5360	1183	17317	15446	1871
May-15	6627	5431	1196	17354	15515	1839
June-15	6655	5490	1165	17442	15596	1846
July-15	6741	5595	1147	17488	15683	1805
August-15	6712	5588	1124	17508	15701	1806
September-15	6758	5654	1104	17578	15752	1826
October-15	6777	5663	1114	17601	15765	1836
November-15	6873	5750	1123	17613	15815	1799
December-15	6974	5815	1159	17644	15853	1792
January-16	7019	5853	1166	17663	15879	1785
February-16	7052	5869	1183	17757	15895	1861
March-16	7057	5898	1159	17808	15907	1900
April-16	7144	5945	1199	17840	15930	1911
May-16	7177	5972	1205	17918	15949	1969
June-16	7259	5973	1285	17896	15949	1947
July-16	7261	5917	1345	17936	15968	1968
August-16	7325	5923	1402	17966	15991	1975
September-16	7375	5960	1415	18002	16021	1981
October-16	7438	5981	1457	18053	16043	2010
November-16	7457	5970	1486	18138	16074	2064
December-16	7463	5975	1488	18149	16074	2074
January-17	7458	6001	1457	18236	16108	2127
February-17	7517	6062	1455	18278	16126	2152
March-17	7613	6145	1468	18336	16172	2164
April-17	7601	6145	1456	18372	16215	2158
May-17	7653	6199	1454	18363	16239	2124

Source: Turkstat, Betam