AN UNEXPECTED AND STRONG INCREASE IN UNEMPLOYMENT

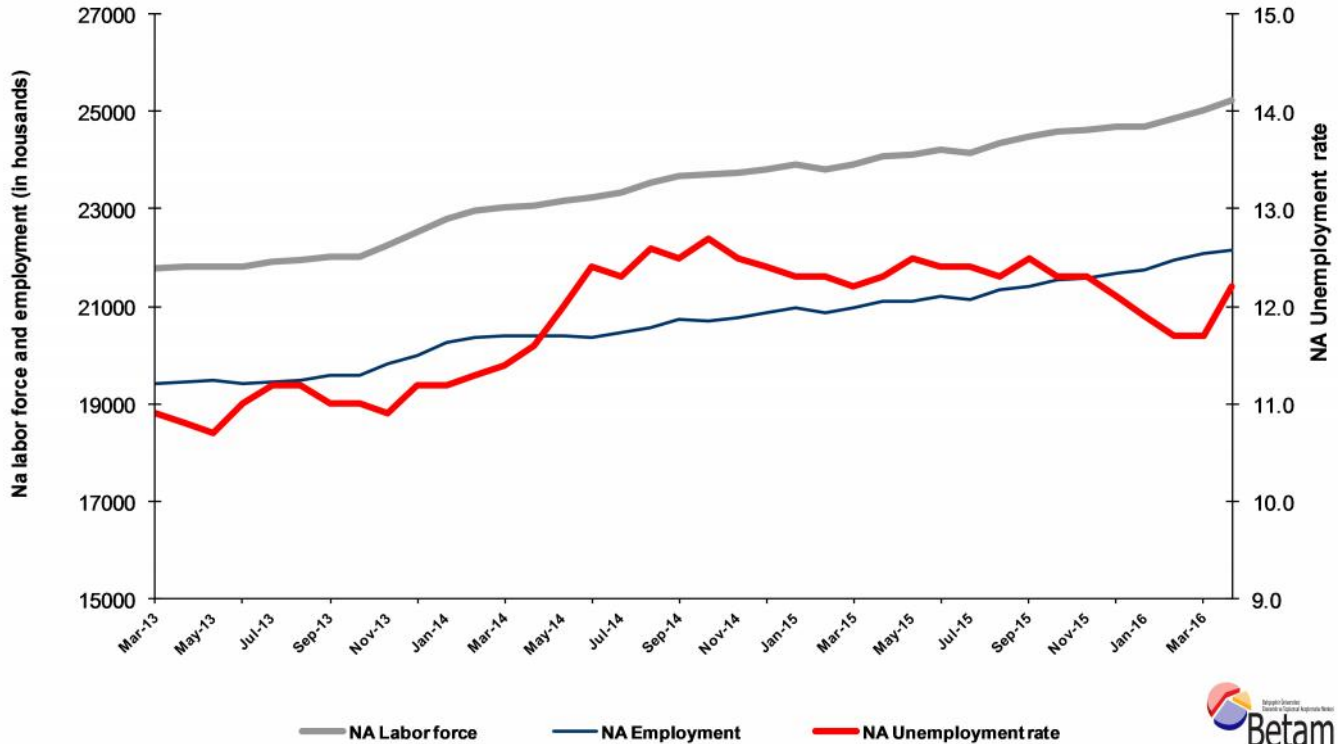**Seyfettin Gürsel[*] Gökçe Uysal[**] and Mine Durmaz [***]**

Executive Summary

Seasonally adjusted labor market data show that nonagricultural unemployment rate increased by 0.5 percentage points and reached 12.2 percent in the period of May 2016. Betam's forecasting model predicted that the nonagricultural unemployment rate would remain constant in the period of May 2016. This unexpected increase in unemployment is mainly because of the weak increase in employment against the increase in the labor force. The increases in nonagricultural employment in services and in manufacturing were limited to 53 thousand and 5 thousand respectively. However, employment decreased in the construction sector by 11 thousand. Compared to the May 2015 period, number of unemployed women increased by 9 thousand whereas number of unemployed men increased by 92 thousand in the period of May 2016.

Striking increase in unemployment from April to May

According to seasonally adjusted labor market data, nonagricultural labor force increased by 195 thousand and became 25 million 218 thousand whilst nonagricultural employment increased 46 thousand and reached 22 million 141 thousand compared to April 2016 (Figure 1,Table 1). Therefore, the number of unemployed people in non-agricultural sectors increased strongly by 149 thousand. We would like to underline that the increase in non-agricultural unemployment reached its highest level since 2005 except for the economic crisis period.

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

Source: Turkstat, Betam

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Nonagricultural unemployment rate is expected to remain constant in June

Betam's forecasting model had predicted that the seasonally adjusted nonagricultural unemployment rate would remain constant at 11.5 percent in May 2016. April 2016 nonagricultural unemployment rate is revised to 11.7 percent by Turkstat. In May 2016, nonagricultural unemployment rate increased by 0.5 percentage points and reached 12.2 percent. Betam's forecasting model predicts the seasonally adjusted June 2016 nonagricultural employment rate will remain constant at the level of 12.2 percent. Forecasting model details are available on Betam's website.[1] Kariyer.net[2] application per vacancy series used in the Betam forecasting model is depicted in **Error! Reference source not found.**. 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 not change in the period of June 2016.

Figure 2: Seasonally adjusted nonagricultural unemployment rate and application per vacancy
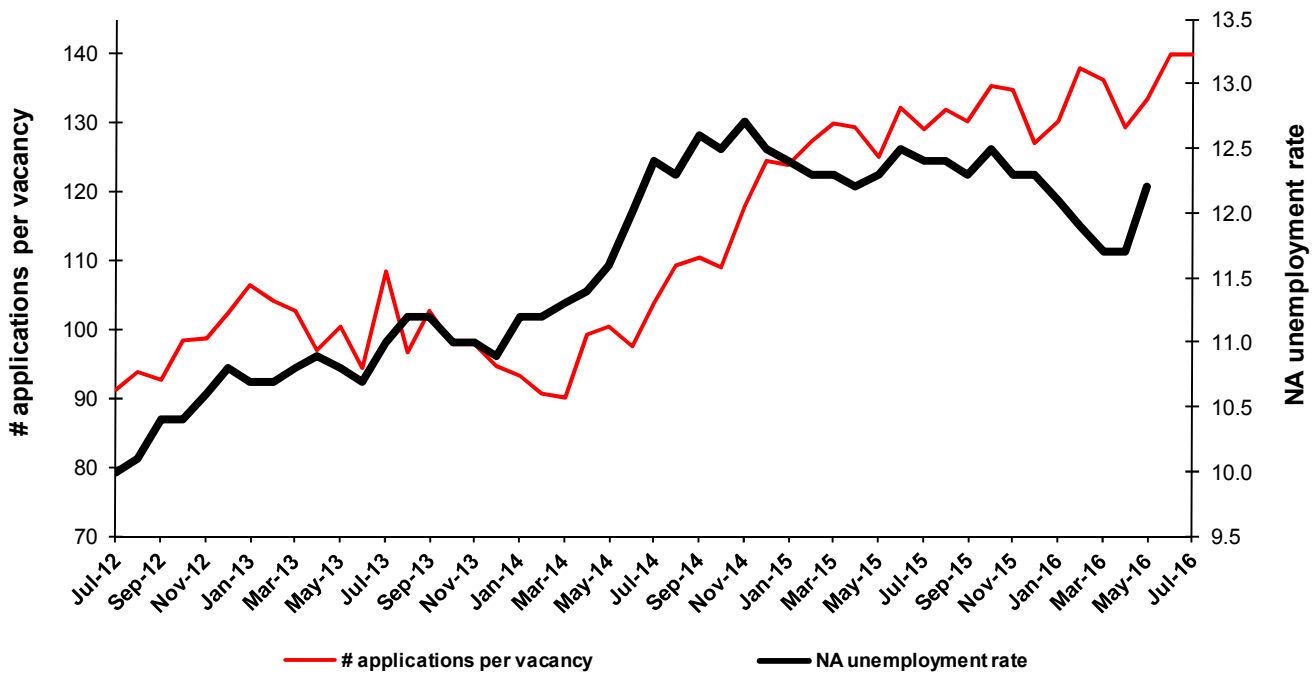
Source: Kariyer.net, Turkstat, Betam

Both employment increase and loss in terms of sectors

According to seasonally adjusted labor market series, employment increased in services and manufacturing whereas it declined in construction and agriculture in the period of May 2016 (Figure 3**Error! Reference source not found.**,Table 2)[3]. The number of people employed in agriculture and in construction declined by 50 thousand and 11 thousand respectively. On the other hand, the increase in the number or people employed in the manufacturing sector remained limited to 5 thousand. Moreover, employment in services grew by 53 thousand in the period of May 2016 compared to the previous period.
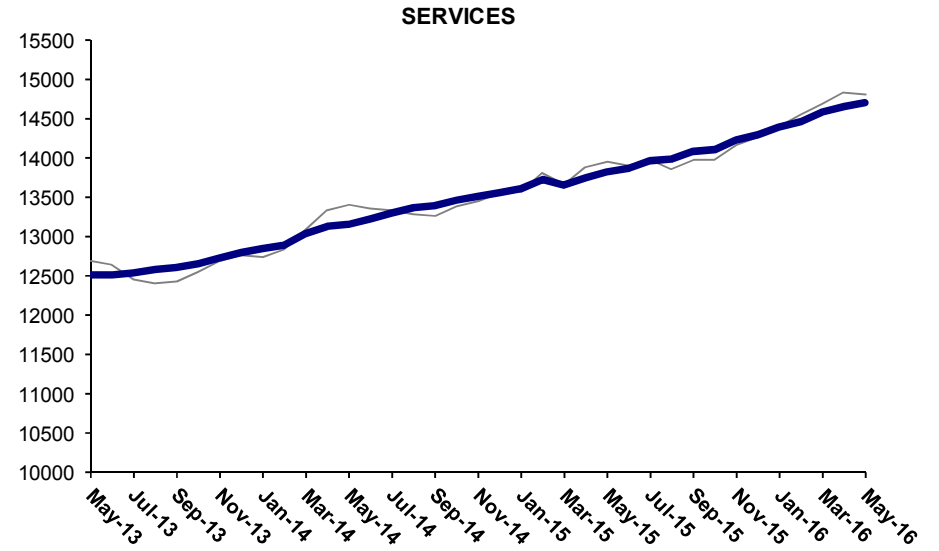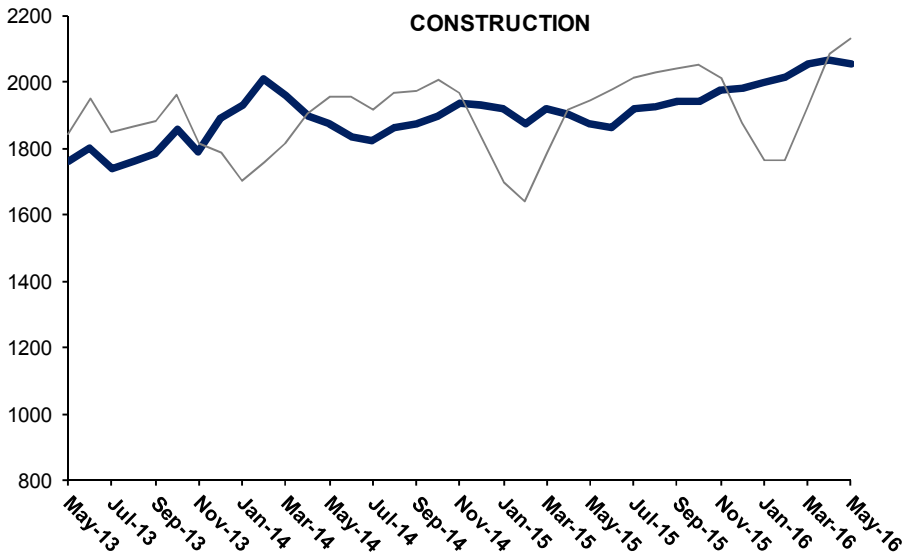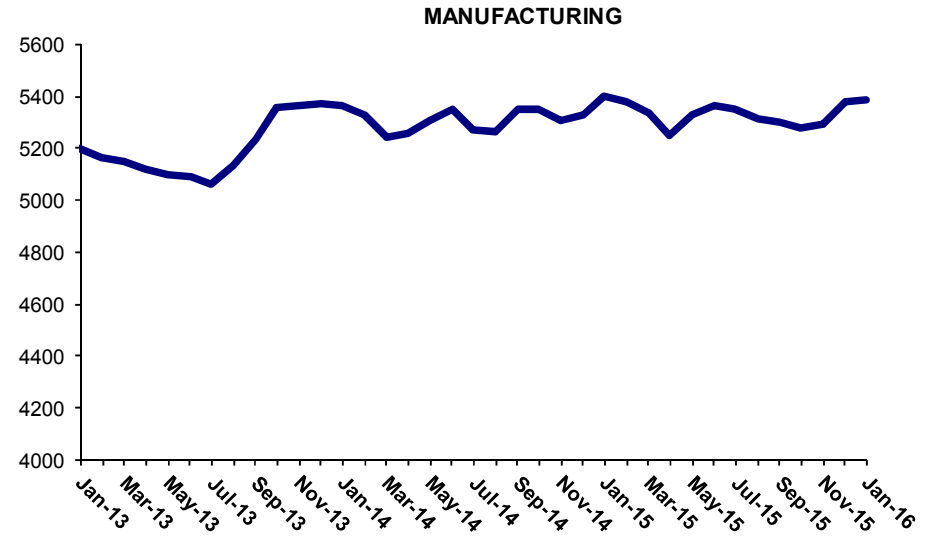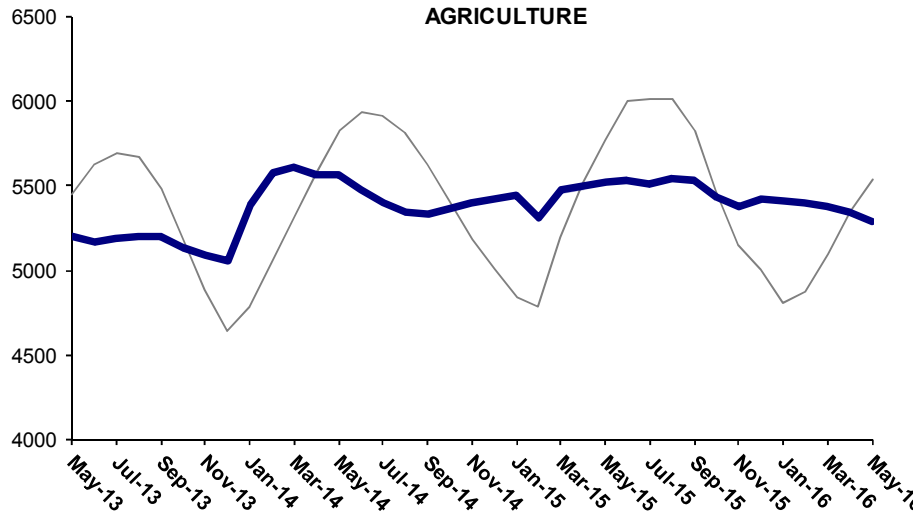
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[1] For detailed information on Betam's forecasting model, please see Betam Research Brief 168 titled as "Kariyer.net Verisiyle Kısa Vadeli Tarım Dışı İşsizlik Tahmini"
http://betam.bahcesehir.edu.tr/tr/2014/06/kariyer-net-verisiyle-kisa-vadeli-tarim-disi-issizlik-tahmini/
[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)**

AGRICULTURE

MANUFACTURING

CONSTRUCTION

SERVICES

Source: Turkstat, Betam

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Strong increase in year on year unemployed number

From May 2015 to May 2016 nonagricultural labor force increased to 1 million 133 thousand (4.7 percent) and nonagricultural employment increased to 1 million 29 thousand (4.8 percent). The data indicates that the relative slowdown in May has not yet been reflected in the year-on-year changes. Nevertheless, these developments have been sufficient enough to reverse the declining trend in the number of unemployed since February 2016 period. In the period of May 2016, number of unemployed people in nonagricultural sectors increased by 104 thousand on yearly basis

Figure 4: Year-on-year changes in non-agricultural labor force, employment, and unemployment
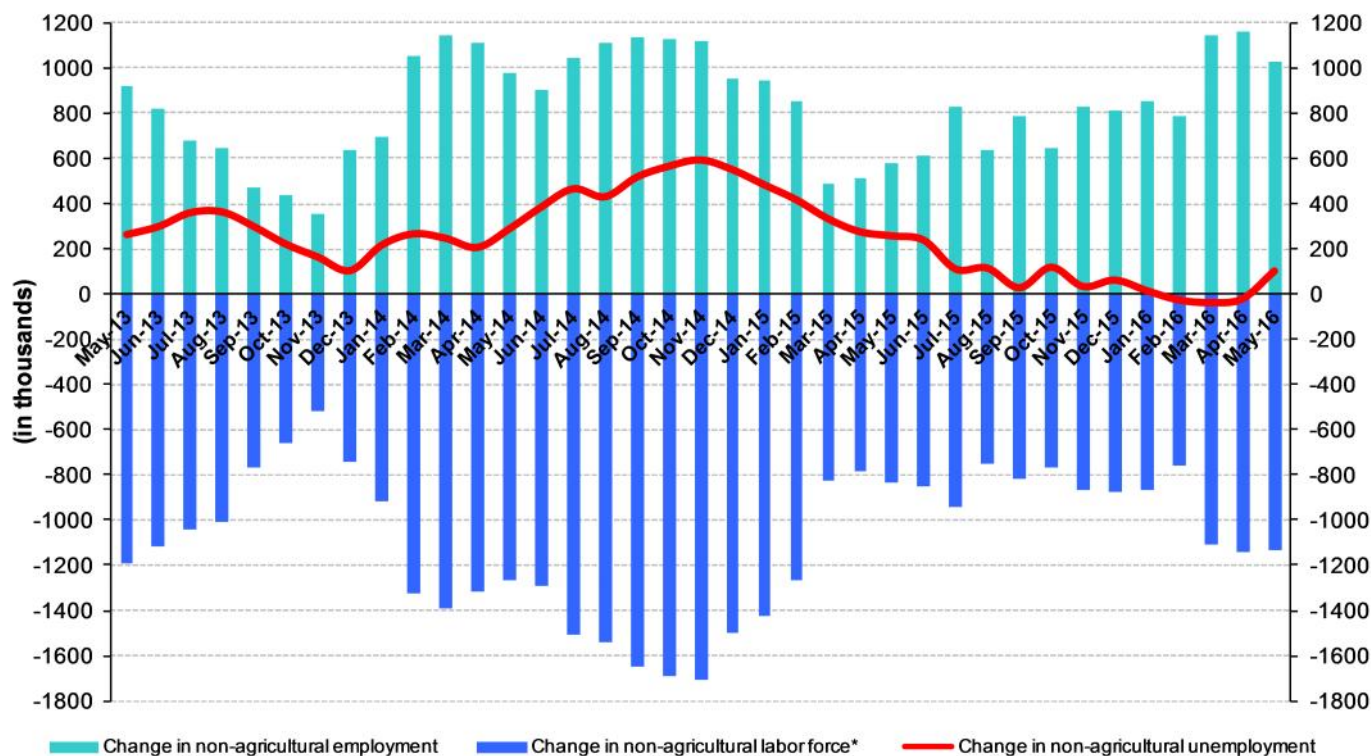
* The change in labor force represented with a negative sign.

Source: Turkstat; Betam

Female unemployment declined while male unemployment increased in the last year

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. Under these circumstances, we use the year-on-year changes in male and female labor market statistics to study the latest developments in the labor market. Figure 5 shows yearly non-agricultural employment (dark colors), non-agricultural labor force (light colors) for males (green) and for females (purple).

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Figure 5: Year-on-year changes in nonagricultural labor force and employment by gender
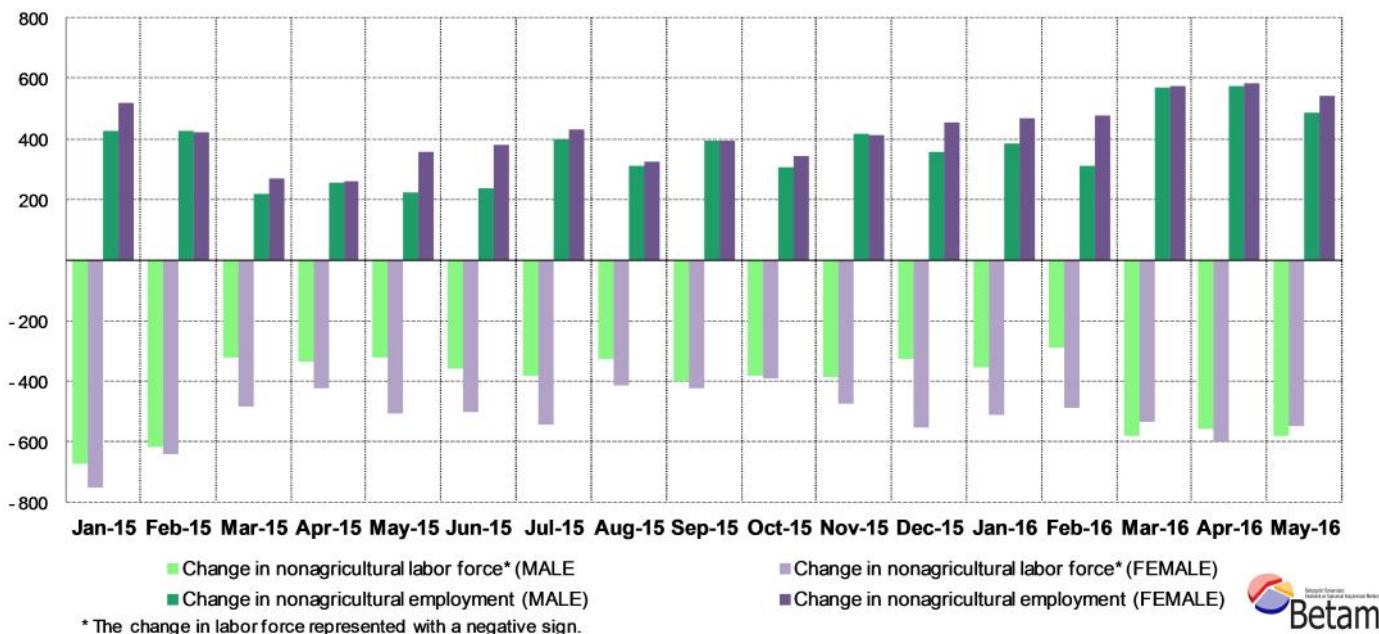
Source: Turkstat; Betam

In May 2016, nonagricultural female labor force and nonagricultural male labor force increased by 550 thousand and 580 thousand respectively compared to May 2015. On the other hand, nonagricultural female employment increased by 541 thousand whereas the increase in nonagricultural male employment was limited to 488 thousand. Thanks to a strong increase in female employment, increase of unemployed women remained at 9 thousand whilst number of unemployed men increased by 92 thousand. As a result of this asymetric development, nonagricultural female unemployment rate, which was 16 percent in May 2015, declined to 14.9 percent while nonagricultural male employment increased from 9.6 percent in May 2015 to 9.8 percent in May 2016.

Table 1 Seasonally adjusted non-agricultural labor force indicators (in thousands)*

	Labor force	Employment	Unemployment	Unemployment rate	Monthly changes		
					Labor force	Employment	Unemployment
April-13	21774	19401	2373	10.9%			
May-13	21818	19462	2356	10.8%	44	61	-17
June-13	21823	19488	2335	10.7%	5	26	-21
July-13	21812	19413	2399	11.0%	-11	-75	64
August-13	21901	19448	2453	11.2%	89	35	54
September-13	21939	19482	2457	11.2%	38	34	4
October-13	22009	19588	2421	11.0%	70	106	-36
November-13	22002	19582	2420	11.0%	-7	-6	-1
December-13	22251	19826	2425	10.9%	249	244	5
January-14	22524	20001	2523	11.2%	272	175	97
February-14	22807	20253	2554	11.2%	284	252	32
March-14	22954	20360	2594	11.3%	146	107	39
April-14	23018	20394	2624	11.4%	64	34	30
May-14	23081	20404	2677	11.6%	63	10	53
June-14	23172	20391	2781	12.0%	90	-13	103
July-14	23241	20359	2882	12.4%	69	-32	101
August-14	23350	20478	2872	12.3%	109	119	-10
September-14	23531	20566	2965	12.6%	181	88	93
October-14	23683	20723	2960	12.5%	153	157	-4
November-14	23718	20706	3012	12.7%	35	-17	52
December-14	23728	20762	2966	12.5%	10	56	-46
January-15	23824	20870	2954	12.4%	96	108	-12
February-15	23901	20961	2940	12.3%	77	91	-14
March-15	23811	20882	2929	12.3%	-90	-79	-11
April-15	23902	20986	2916	12.2%	91	104	-13
May-15	24063	21103	2960	12.3%	161	117	44
June-15	24123	21108	3015	12.5%	61	5	56
July-15	24212	21210	3002	12.4%	89	102	-13
August-15	24145	21151	2994	12.4%	-67	-59	-8
September-15	24345	21351	2994	12.3%	201	200	1
October-15	24480	21420	3060	12.5%	135	69	66
November-15	24579	21556	3023	12.3%	99	136	-37
December-15	24615	21587	3028	12.3%	35	31	4
January-16	24683	21696	2987	12.1%	68	109	-41
February-16	24680	21743	2937	11.9%	-3	47	-50
March-16	24843	21936	2907	11.7%	163	193	-30
April-16	25023	22095	2928	11.7%	180	159	21
May-16	25218	22141	3077	12.2%	195	46	149

Source: Turkstat, Betam

Table 2 Seasonally adjusted employment by sectors (in thousands)

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
April-13	5270	5176	1799	12427				
May-13	5205	5200	1760	12502	-65	24	-39	75
June-13	5167	5163	1802	12523	-38	-37	42	21
July-13	5184	5146	1740	12527	17	-17	-62	4
August-13	5201	5117	1759	12572	17	-29	19	45
September-13	5199	5096	1782	12605	-2	-21	23	33
October-13	5129	5090	1855	12643	-70	-6	73	38
November-13	5091	5064	1791	12727	-38	-26	-64	84
December-13	5051	5131	1890	12804	-40	67	99	77
January-14	5385	5232	1930	12839	334	101	40	35
February-14	5572	5359	2010	12884	187	127	80	45
March-14	5606	5365	1957	13038	34	6	-53	154
April-14	5568	5373	1897	13124	-38	8	-60	86
May-14	5568	5364	1875	13165	0	-9	-22	41
June-14	5477	5332	1832	13227	-91	-32	-43	62
July-14	5402	5243	1821	13296	-75	-89	-11	69
August-14	5348	5257	1861	13361	-54	14	40	65
September-14	5338	5306	1875	13385	-10	49	14	24
October-14	5365	5353	1897	13473	27	47	22	88
November-14	5395	5273	1933	13500	30	-80	36	27
December-14	5424	5266	1930	13566	29	-7	-3	66
January-15	5441	5349	1921	13600	17	83	-9	34
February-15	5308	5351	1874	13736	-133	2	-47	136
March-15	5480	5308	1920	13655	172	-43	46	-81
April-15	5497	5326	1902	13758	17	18	-18	103
May-15	5520	5404	1873	13826	23	78	-29	68
June-15	5535	5380	1862	13866	15	-24	-11	40
July-15	5505	5336	1918	13956	-30	-44	56	90
August-15	5545	5252	1924	13976	40	-84	6	20
September-15	5533	5327	1939	14085	-12	75	15	109
October-15	5435	5363	1942	14115	-98	36	3	30
November-15	5374	5353	1977	14227	-61	-10	35	112
December-15	5417	5311	1981	14294	43	-42	4	67
January-16	5409	5300	1997	14399	-8	-11	16	105
February-16	5401	5276	2016	14451	-8	-24	19	52
March-16	5378	5295	2056	14586	-23	19	40	135
April-16	5339	5381	2064	14650	-39	86	8	64
May-16	5289	5386	2053	14703	-50	5	-11	53

Source: Turkstat, Betam