DECREASE IN NONAGRICULTURAL UNEMPLOYMENT

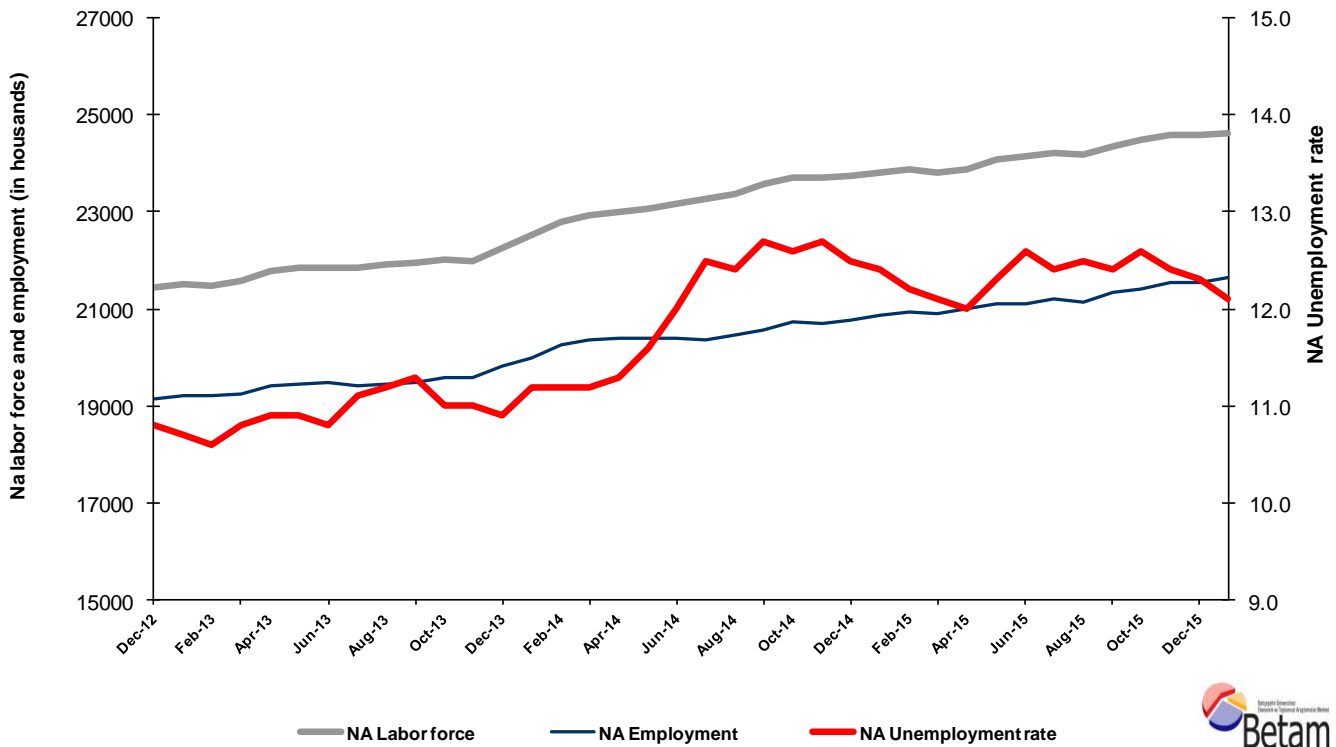**Seyfettin Gürsel[*] Gökçe Uysal[**] and Melike Kökkızıl [***]**

Executive Summary

Seasonally adjusted labor market data shows that, compared to the previous period, nonagricultural unemployment rate increased from 12.3 percent to 12.1 percent (0.2 percentage points) in the period of January 2015. Betam's forecasting model had predicted a 0.1 percent decrease for this period. We expect that the nonagricultural unemployment will continue to decline in the period of February 2016. A 95 thousand-employment increase in the services sector drives the decrease in nonagricultural unemployment. Employment declined in manufacturing by 11 thousand. The data released by Turkstat indicates that increases in female labor force and female employment are stronger relative to those of males in the period of January 2016 compared to the same period in the previous year. The increase in the number of females who are unemployed in nonagricultural sectors results from a faster increase in labor force than that in employment. For males, the increase in labor force was faster than that in employment, thus the number of males who were unemployed decreased in non-agricultural sectors.

Seasonally adjusted employment increased

According to seasonally adjusted data in the period of January 2016, nonagricultural labor force increased by 57 thousand, and reached 24 million 634 thousand compared to the period of December 2015. Nonagricultural employment increased by 99 thousand, and reached 21 million 653 thousand (Figure 1Figure 1, Table 1). In the period of January 2016, the increase in nonagricultural employment helped bring unemployment down.

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

Source: Turkstat, Betam

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Nonagricultural unemployment will continue to decline

Betam's forecasting model had predicted that the seasonally adjusted nonagricultural unemployment rate would decline from 12.3 percent to 12.2 percent in January 2016. In this period, nonagricultural unemployment declined by 0.2 percentage points. Betam's forecasting model predicts that seasonally adjusted nonagricultural unemployment rate will decrease from 12.1 percent to 12.0 percent (0.1 percentage point) in the period of February 2016. 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 decrease in the period of February 2016.

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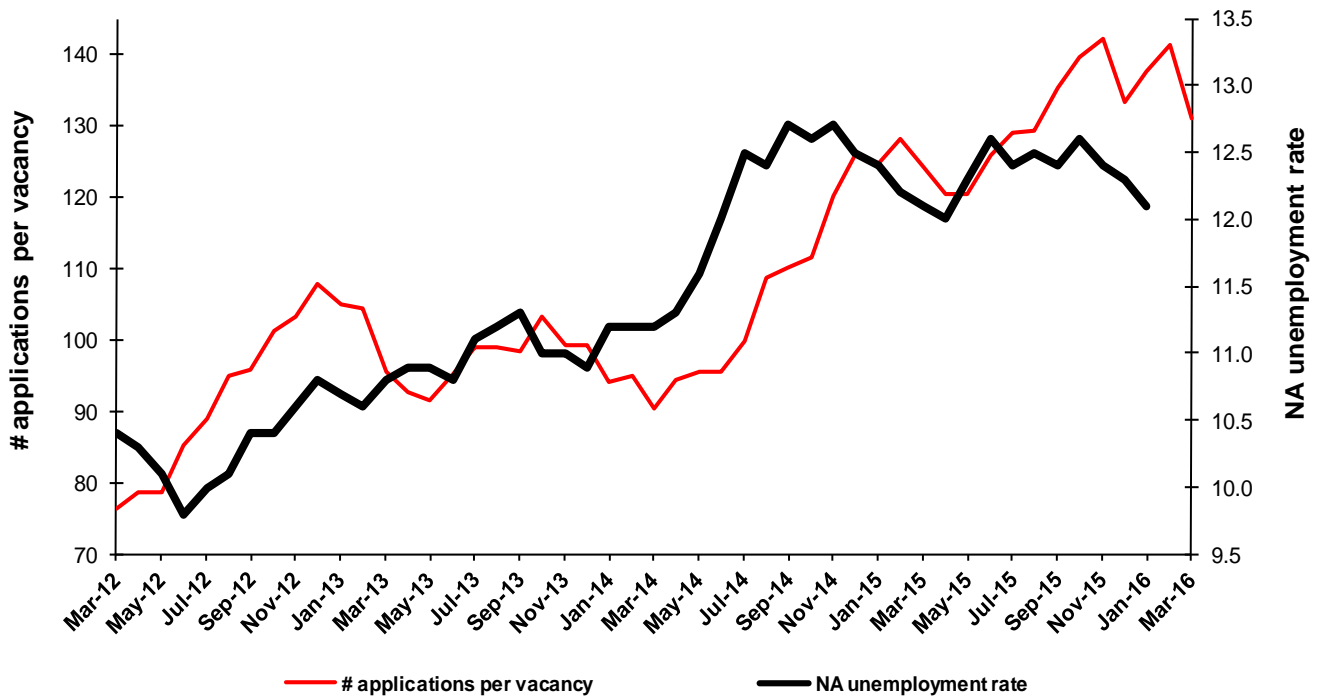
Source: Kariyer.net, Turkstat, Betam

Employment in manufacturing is still declining

According to seasonally adjusted labor market series, the increase in nonagricultural employment arises from an increase in employment in services in the period of January 2016 compared to the period of December 2015 (Figure 3,Table 2)[3]. Employment increased in services and construction by 95 thousand and 16 thousand, respectively. However, employment in manufacturing decreased by 11 thousand. Likewise, employment in agriculture decreased by 5 thousand.

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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
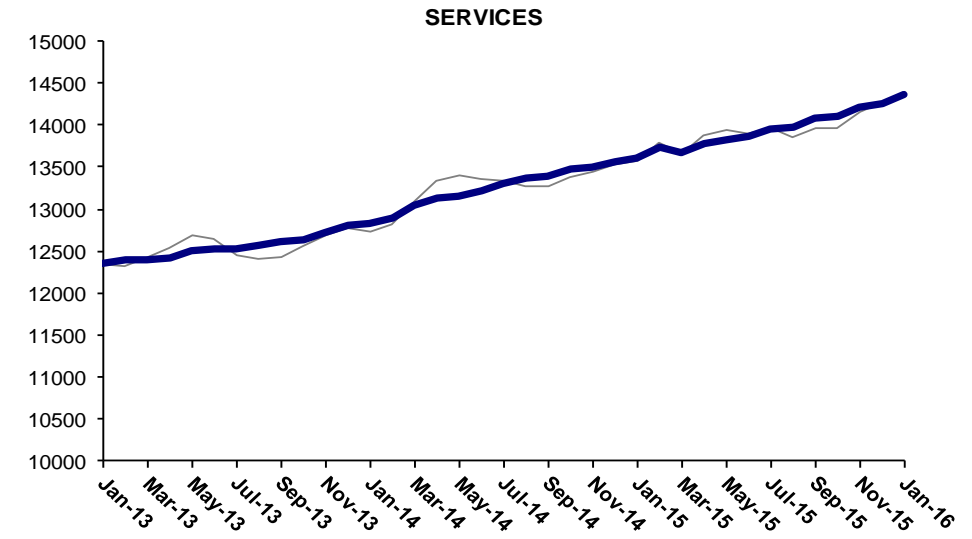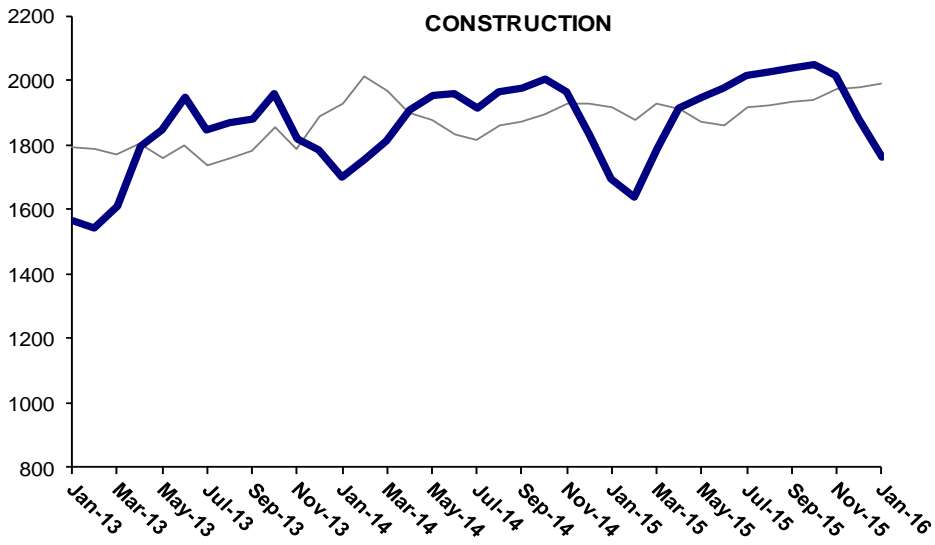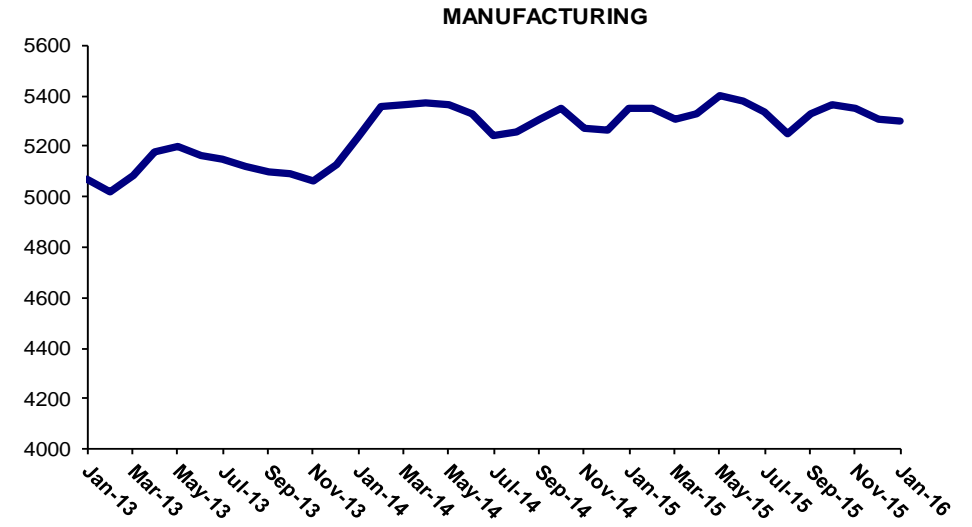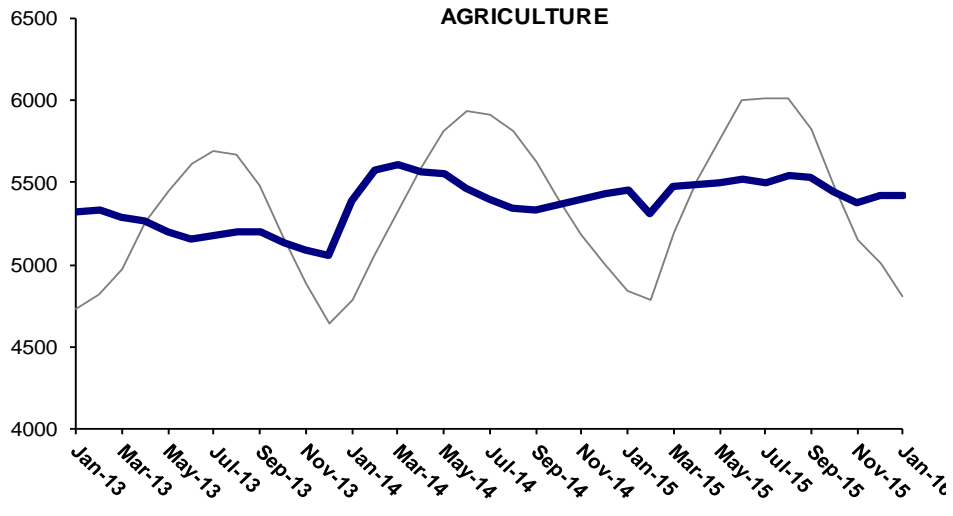
Source: Turkstat, Betam

Similar year-on-year increases in labor force and employment

In the period of January 2016, nonagricultural labor force increased by 869 thousand (3.6 percent), nonagricultural employment increased by 851 thousand (4.1 percent) and nonagricultural unemployment increased by 18 thousand compared to the same period in the previous year (Figure 4).

Figure 4 Year-on-year changes in non-agricultural labor force, employment, and unemployment

Change in non-agricultural employment   Change in non-agricultural labor force*   Change in non-agricultural unemployment
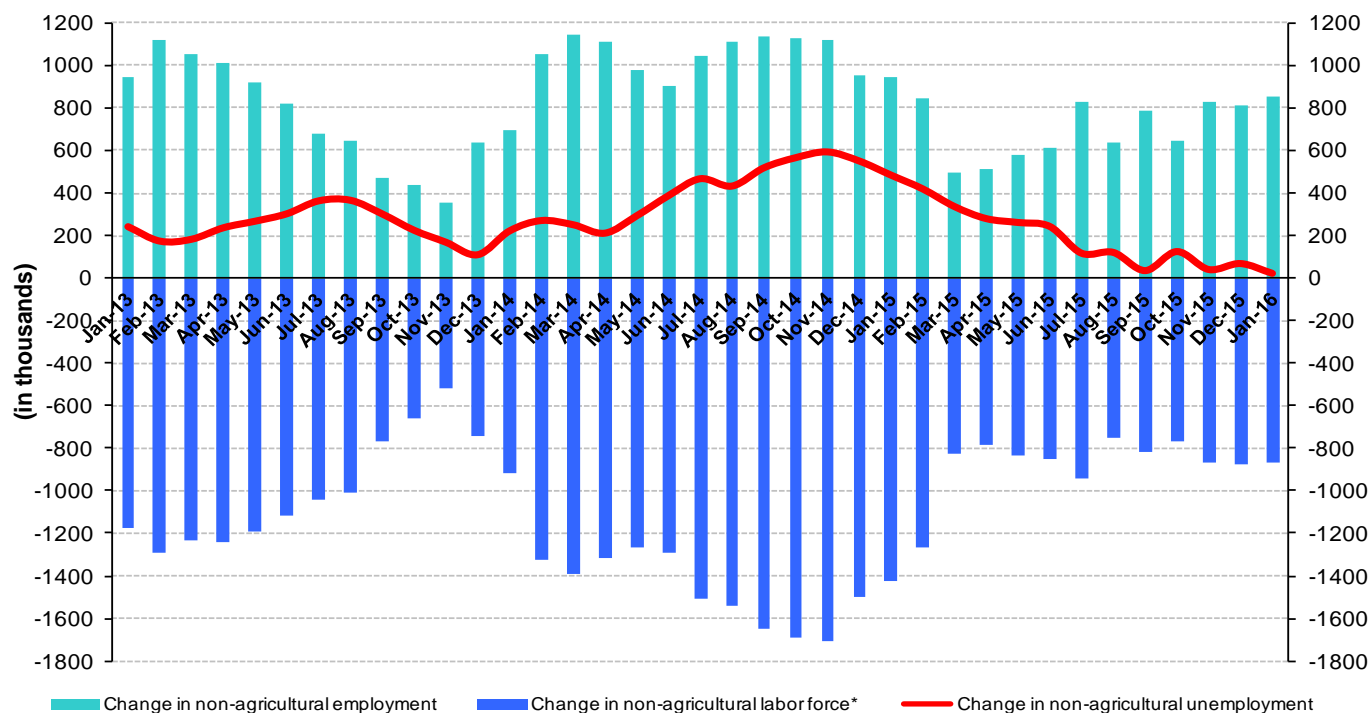
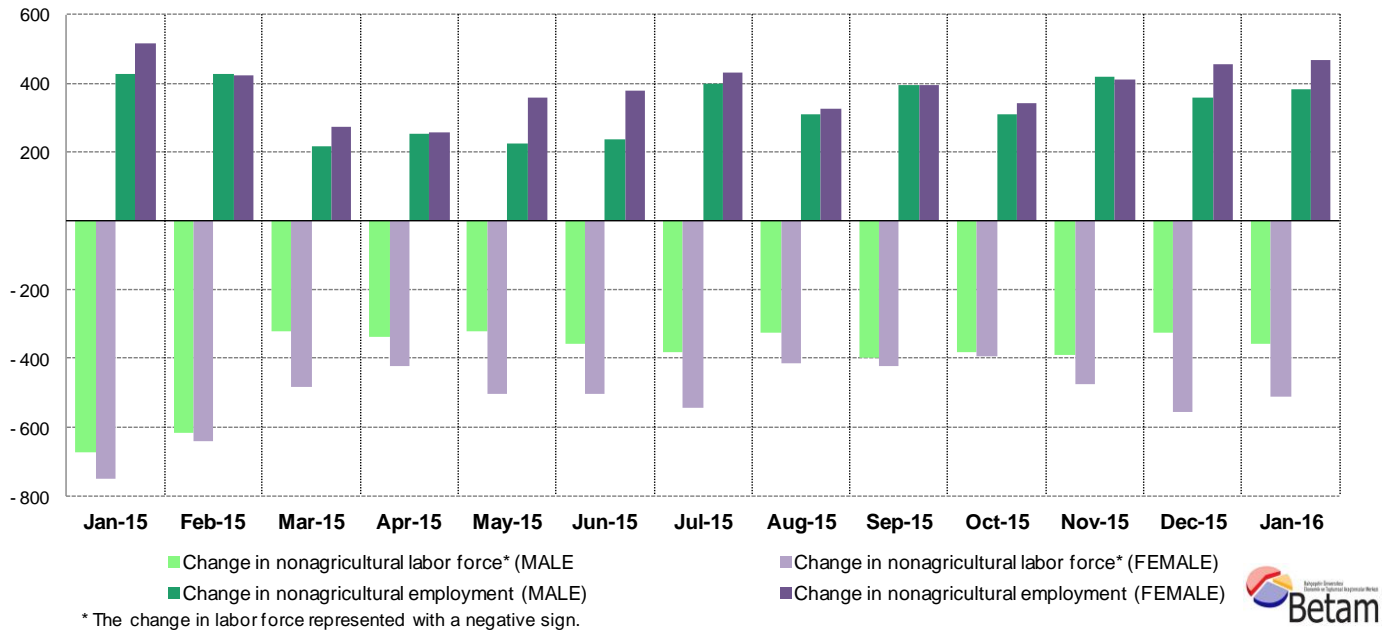* The change in labor force represented with a negative sign.

Source: Turkstat; Betam

Number of unemployed women increased, number of unemployed men decreased

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).

Compared to January 2015, in January 2016, the nonagricultural female labor force increased by 512 thousand and nonagricultural male labor force increased only by 356 thousand. Female employment increased by 466 thousand and male employment increased by 384 thousand in the same period. Hence, the number of unemployed women increased by 46 thousand while number of unemployed men decreased by 28 thousand. Both female labor force and female employment increases are higher relative those for males in the same period. The data show that the increase in number of unemployed women arises from their larger labor force increase. In addition, a large part of the increase in female employment (463 thousand) was created in the service sector. It is striking to see that the labor force participation of women with at most a high school degree increased whereas that of university graduates decreased significantly.

4

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

Change in nonagricultural labor force* (MALE
Change in nonagricultural labor force* (FEMALE)
Change in nonagricultural employment (MALE)
Change in nonagricultural employment (FEMALE)
* The change in labor force represented with a negative sign.

Source: Turkstat; Betam

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

	Labor force	Employment	Unemployment	Unemployment rate	Monthly changes		
					Labor force	Employment	Unemployment
December-12	21454	19137	2317	10.8%			
January-13	21518	19216	2302	10.7%	64	79	-15
February-13	21475	19199	2276	10.6%	-43	-17	-26
March-13	21590	19258	2332	10.8%	114	59	55
April-13	21779	19405	2374	10.9%	189	147	42
May-13	21842	19461	2381	10.9%	63	56	7
June-13	21846	19487	2359	10.8%	5	26	-21
July-13	21837	19413	2424	11.1%	-10	-74	64
August-13	21901	19448	2453	11.2%	64	35	29
September-13	21965	19483	2482	11.3%	64	35	29
October-13	22008	19587	2421	11.0%	43	104	-61
November-13	22001	19581	2420	11.0%	-7	-6	-1
December-13	22249	19824	2425	10.9%	248	243	5
January-14	22525	20002	2523	11.2%	276	178	98
February-14	22810	20255	2555	11.2%	285	253	32
March-14	22937	20368	2569	11.2%	127	113	14
April-14	22998	20399	2599	11.3%	61	31	30
May-14	23079	20402	2677	11.6%	81	3	78
June-14	23169	20389	2780	12.0%	90	-13	103
July-14	23266	20358	2908	12.5%	97	-31	128
August-14	23376	20477	2899	12.4%	109	119	-10
September-14	23557	20565	2992	12.7%	181	88	93
October-14	23709	20722	2987	12.6%	153	157	-4
November-14	23717	20705	3012	12.7%	8	-17	25
December-14	23726	20760	2966	12.5%	9	55	-46
January-15	23823	20869	2954	12.4%	97	109	-12
February-15	23866	20954	2912	12.2%	43	85	-42
March-15	23794	20915	2879	12.1%	-72	-39	-33
April-15	23873	21008	2865	12.0%	79	93	-14
May-15	24064	21104	2960	12.3%	191	96	95
June-15	24150	21107	3043	12.6%	86	3	83
July-15	24207	21205	3002	12.4%	57	98	-41
August-15	24165	21144	3021	12.5%	-42	-61	19
September-15	24360	21339	3021	12.4%	195	195	0
October-15	24489	21403	3086	12.6%	129	64	65
November-15	24579	21531	3048	12.4%	90	128	-38
December-15	24577	21554	3023	12.3%	-2	23	-25
January-16	24634	21653	2981	12.1%	57	99	-42

Source: Turkstat, Betam

Table 2 Seasonally adjusted employment by sectors (in thousands)

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
December-12	5349	5051	1776	12310				
January-13	5327	5073	1794	12350	-22	22	18	40
February-13	5334	5023	1787	12389	7	-50	-7	39
March-13	5285	5083	1769	12407	-49	60	-18	18
April-13	5267	5176	1802	12427	-18	93	33	20
May-13	5198	5200	1760	12501	-69	24	-42	74
June-13	5162	5163	1801	12522	-36	-37	41	21
July-13	5181	5146	1738	12528	19	-17	-63	6
August-13	5200	5117	1757	12574	19	-29	19	46
September-13	5199	5096	1781	12606	-1	-21	24	32
October-13	5131	5090	1854	12644	-68	-6	73	38
November-13	5094	5064	1789	12728	-37	-26	-65	84
December-13	5057	5131	1889	12805	-37	67	100	77
January-14	5391	5232	1929	12840	334	101	40	35
February-14	5577	5359	2012	12884	186	127	83	44
March-14	5607	5365	1965	13038	30	6	-47	154
April-14	5564	5373	1903	13123	-43	8	-62	85
May-14	5557	5364	1875	13164	-7	-9	-28	41
June-14	5469	5332	1831	13227	-88	-32	-44	63
July-14	5397	5243	1818	13296	-72	-89	-13	69
August-14	5346	5257	1858	13362	-51	14	40	66
September-14	5338	5306	1873	13386	-8	49	15	24
October-14	5368	5353	1895	13474	30	47	22	88
November-14	5400	5273	1930	13501	32	-80	35	27
December-14	5432	5266	1928	13566	32	-7	-2	65
January-15	5450	5349	1919	13601	18	83	-9	35
February-15	5317	5351	1875	13727	-133	2	-44	126
March-15	5482	5308	1931	13676	165	-43	56	-51
April-15	5492	5326	1911	13771	10	18	-20	95
May-15	5505	5404	1873	13827	13	78	-38	56
June-15	5524	5380	1860	13868	19	-24	-13	41
July-15	5498	5336	1915	13954	-26	-44	55	86
August-15	5541	5252	1921	13972	43	-84	6	18
September-15	5532	5327	1936	14076	-9	75	15	104
October-15	5439	5363	1939	14101	-93	36	3	25
November-15	5382	5353	1973	14205	-57	-10	34	104
December-15	5427	5311	1977	14266	45	-42	4	61
January-15	5422	5300	1993	14361	-5	-11	16	95

Source: Turkstat, Betam