

INCREASE IN UNEMPLOYMENT CONTINUES

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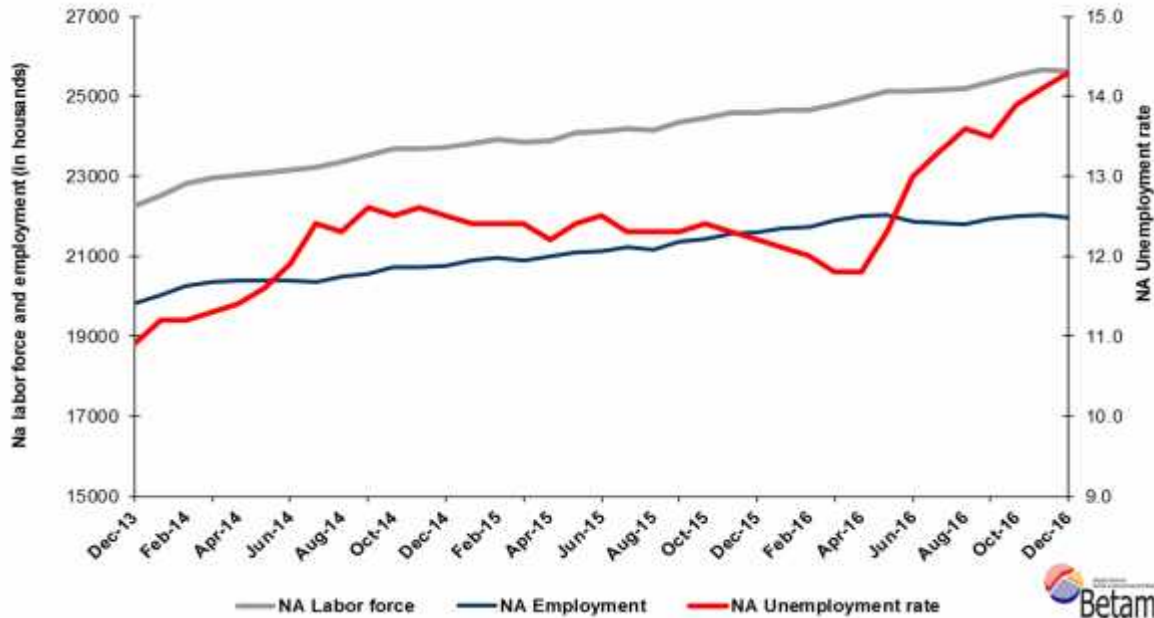
Executive Summary

Seasonally adjusted labor market data show that nonagricultural unemployment rate increased by 0.2 points and reached 14.3 percent in the period of December 2016. We observe employment losses in industry and construction in the period of December 2016. The number of people employed in industry and construction decreased by 51 thousand and 28 thousand respectively, whereas the number of people employed in services and agriculture increased by 4 thousand and 39 thousand. In the period of December 2016, the nonagricultural labor force decreased by 28 thousand and declined to 25 million 637 thousand and the number of people employed in non-agricultural sectors decreased by 85 thousand and declined to 21 million 971 thousand. As a result, the number of non-agricultural unemployed increased by 47 thousand and reached 3 million 666 thousand. Betam's forecasting model predicts that the non-agricultural unemployment will remain increase to 14.4 percent level in the period of January 2017.

Decline in non-agricultural labor force and employment

In the period of December 2016, the nonagricultural labor force decreased by 28 thousand and declined to 25 million 637 thousand and the number of people employed in non-agricultural sectors decreased by 85 thousand and declined to 21 million 971 thousand (Figure 1, Table 1). The number of people unemployed in nonagricultural sectors increased by 47 thousand and the nonagricultural unemployment rate reached 14.4 percent. The non-agricultural labor force in Turkey increases regularly. Since the non-agricultural labor force declined during this period, it has limited the increase in unemployment. However, due to the decrease in non-agricultural employment, the non-agricultural unemployment rate increased by 0.2 percentage points.

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



Source: Turkstat, Betam

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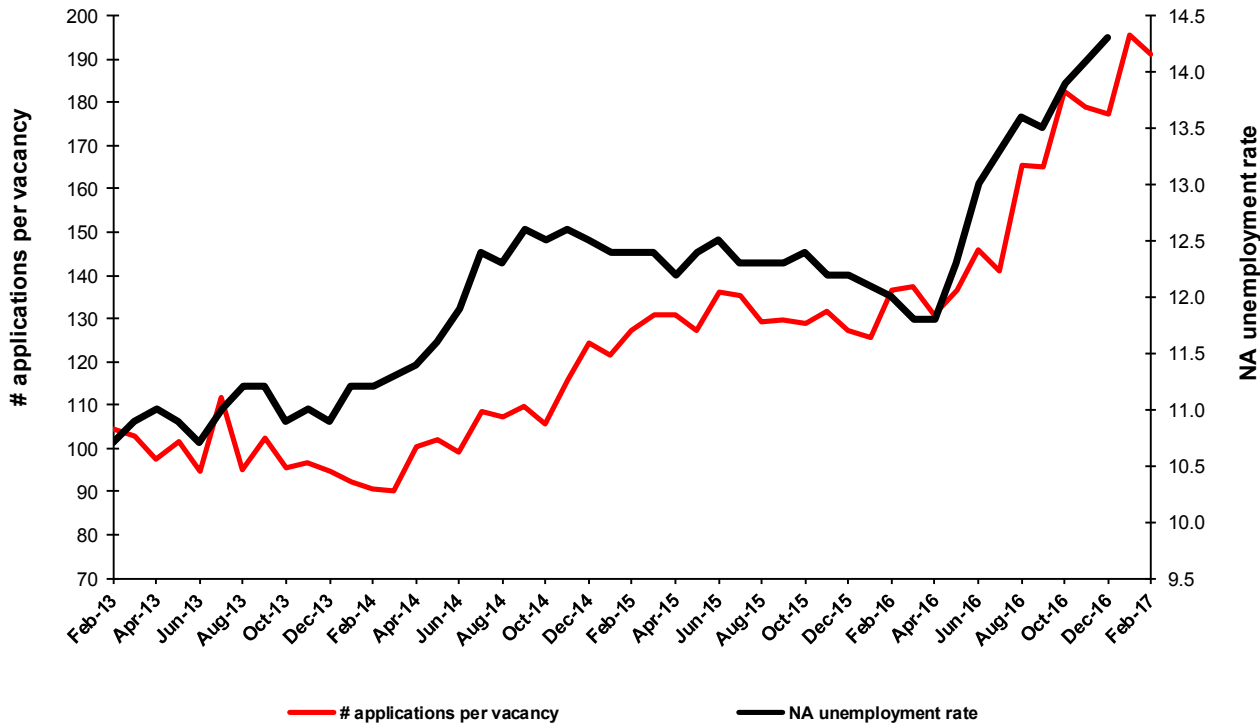
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Nonagricultural unemployment rate is expected to increase in the period of January 2017

Betam's forecasting model had predicted that the seasonally adjusted nonagricultural unemployment rate would remain constant at the 14.1 percent level in the period of December 2016. The non-agricultural unemployment rate in the period of December 2016 increased by 0.2 percentage points and reached 14.3 percent. Betam's forecasting model predicts the seasonally adjusted December 2016 nonagricultural unemployment will increase by 0.1 points and reach 14.4 percent level. 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 **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 increase in the period of January 2017.

Figure 2 Seasonally adjusted nonagricultural unemployment rate and application per vacancy



Source: Turkstat, Betam

Employment losses in industry

According to seasonally adjusted sectoral labor market data, the number of people employed in services showed a limited increase by 4 thousand whereas the number of people employed in industry and construction declined by 51 thousand and 28 thousand, respectively (Figure 3, **Error! Reference source not found.** Table 2).³ Even though there is an increase in the industry sector employment in the period of November, we observe a strong decrease during December. Employment in construction moves similarly. On the other hand, there is a weak employment increase in services compared to the previous period.

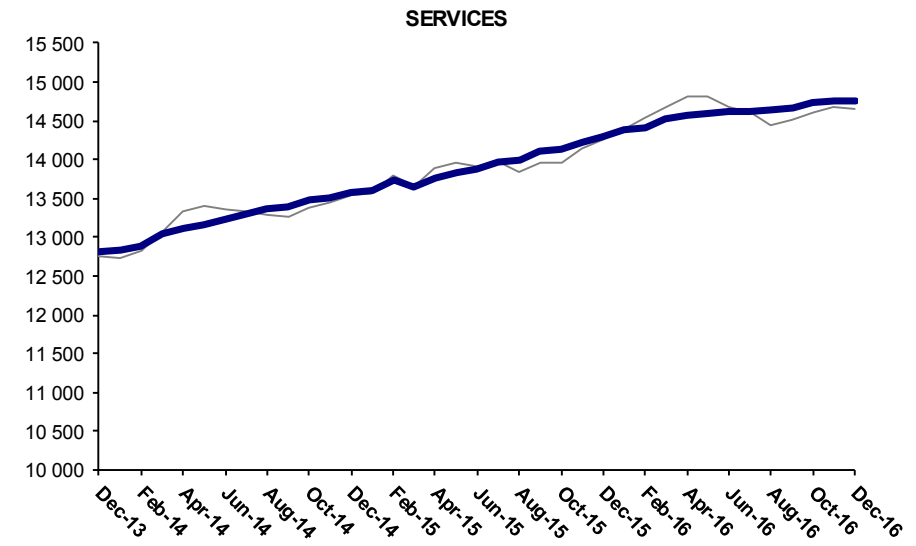
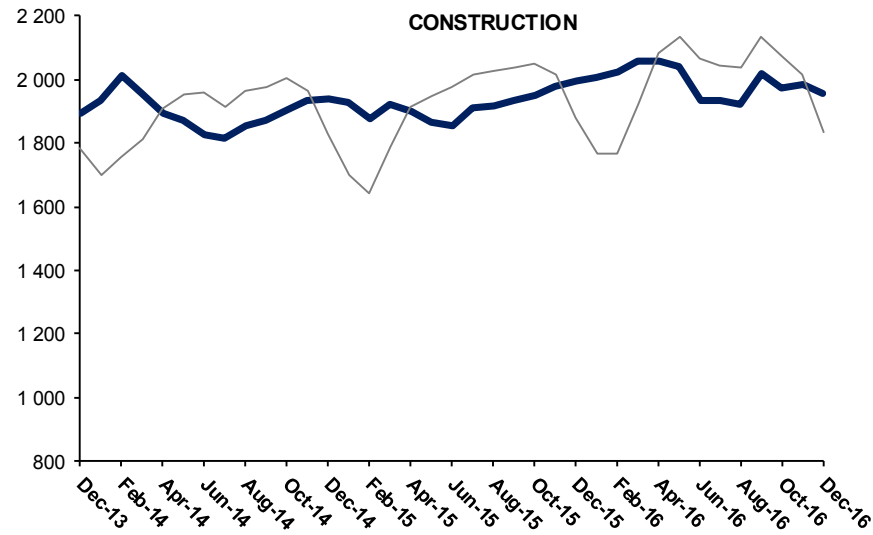
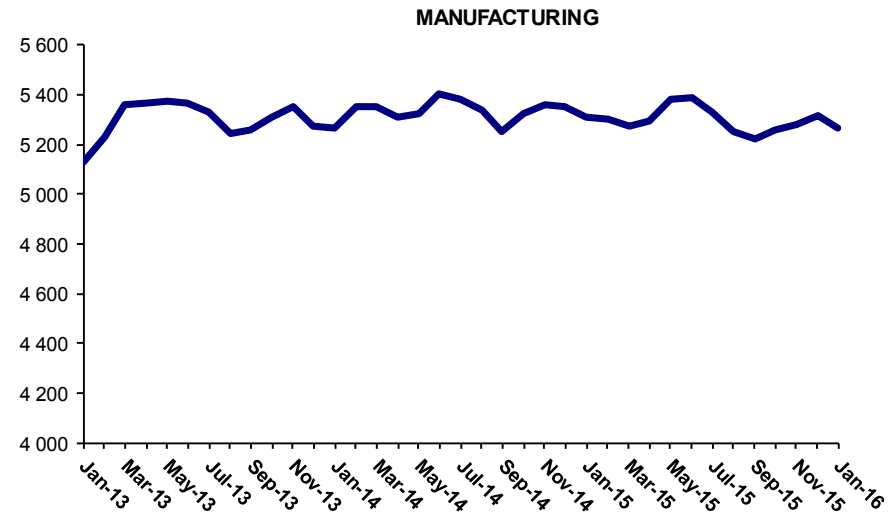
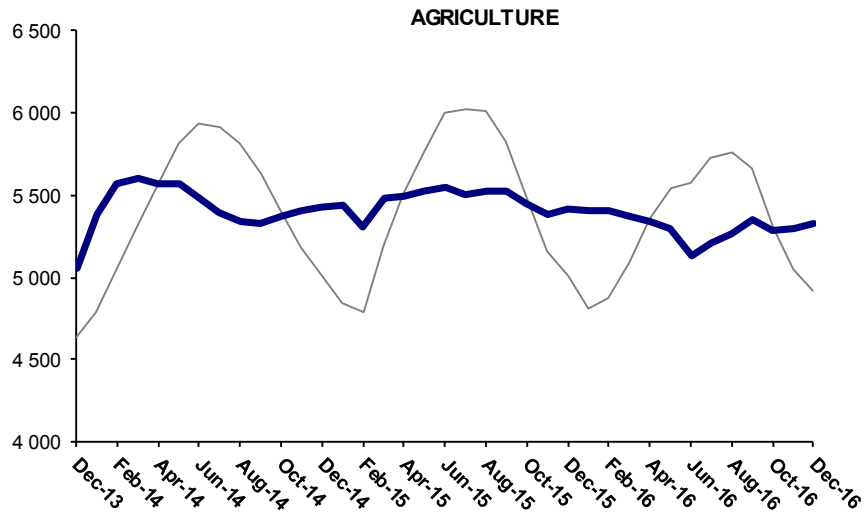
¹ For detailed information on Betam's forecasting model, please see Betam Research Brief 168 titled as "Kariyer.net Verisiyle Kısa Vadeli Tarım Dışı İşsizlik Tahmini"

<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 Sektörel istihdam serileri teker teker mevsim etkilerinden arındırılmaktadır. Dolayısıyla sektörel istihdam rakamlarının toplamı, mevsim etkilerinden arındırılmış toplam istihdam rakamından farklı olabilmektedir. Aradaki fark mevsim etkilerinden arındırma prosedürünün lineer olmamasından kaynaklanmaktadır.

Figure 3 Employment by sectors (in thousands)

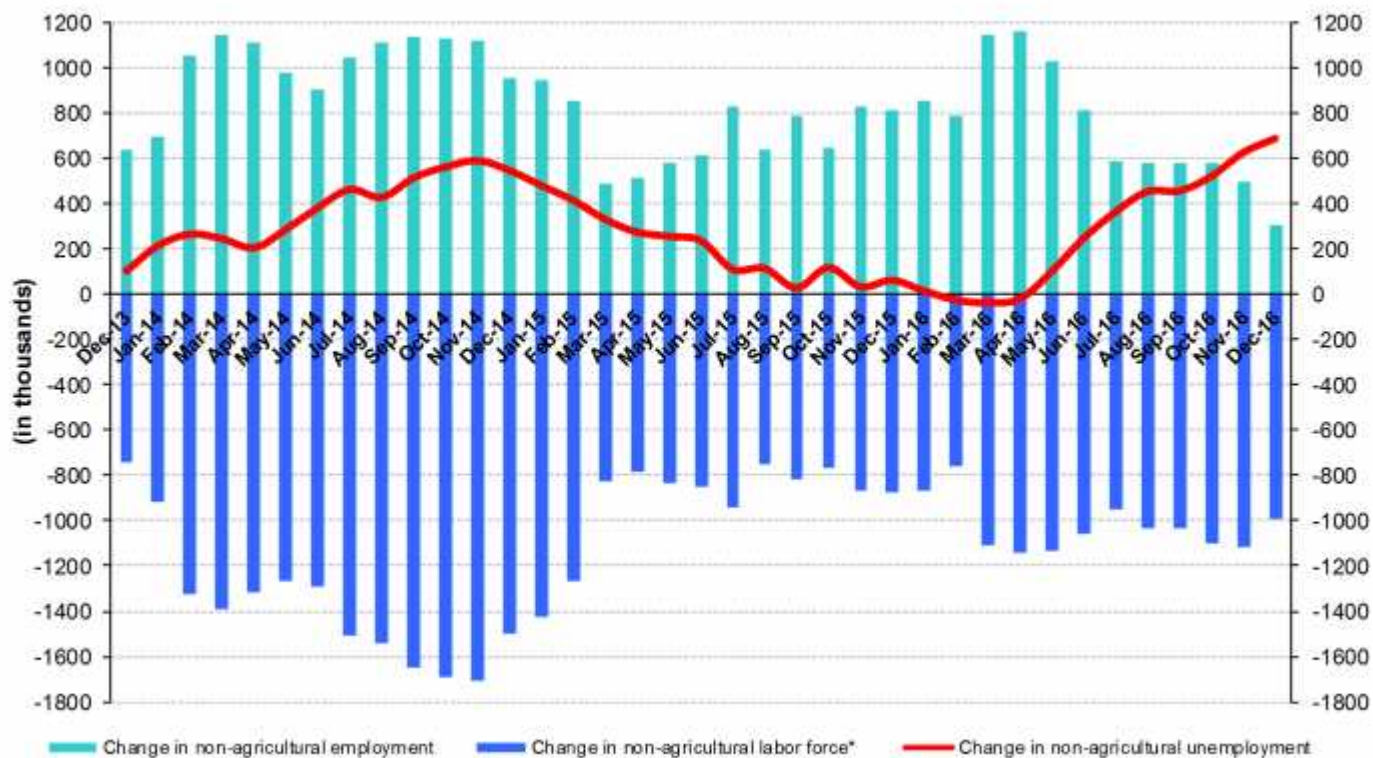


Source: Turkstat, Betam

Increase in year-on-year non-agricultural employment slows down

From December 2015 to December 2016 the nonagricultural labor force increased by 996 thousand (4.1 percent) and nonagricultural employment increased by 307 thousand (1.4 percent) (Figure 4). Thus, the number of non-agricultural unemployed increased by 689 thousand (22.1 percent) in the period of December 2016. The increase in non-agricultural labor force declined to 307 thousand whereas the increase non-agricultural labor force remains around 1 million level. Thus the increase in non-agricultural unemployment reached 700 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.

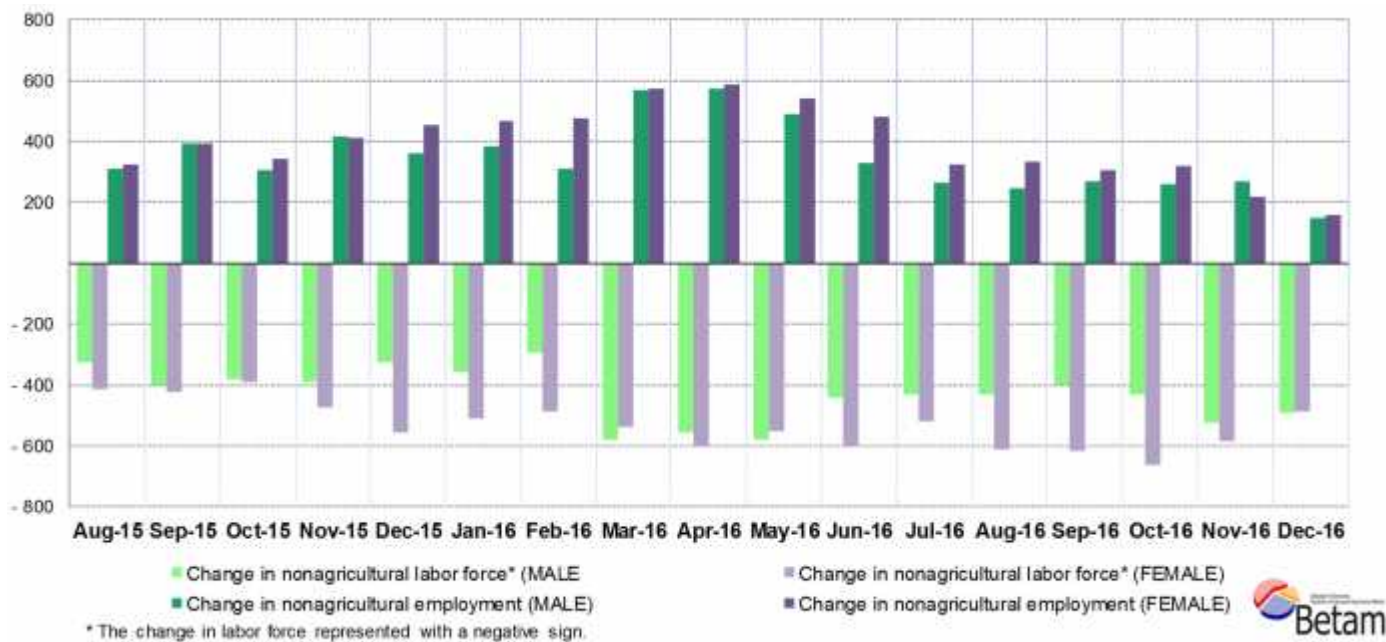


Source: Turkstat, Betam

Female unemployment continues to grow

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).

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



Source: Turkstat, Betam

In December 2016, nonagricultural female labor force and nonagricultural male labor force increased by 489 thousand and 492 thousand respectively compared to December 2015. On the other hand, nonagricultural female employment increased by 160 thousand whereas the increase in nonagricultural female employment was limited to 148 thousand. The number of non-agricultural unemployed women and men increased by 329 thousand and 344 thousand, respectively. Compared to December 2015, the non-agricultural male unemployment rate grew from 11.1 percent to 12.7 percent and the non-agricultural female unemployment rate rose from 16.8 percent to 20.1 percent

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

	Labor force	Employment	Unemployment	Unemployment rate	Monthly changes		
					Labor force	Employment	Unemployment
November-13	22003	19583	2420	11.0%			
December-13	22257	19831	2426	10.9%	254	248	6
January-14	22530	20007	2523	11.2%	273	176	97
February-14	22812	20257	2555	11.2%	282	250	32
March-14	22957	20363	2594	11.3%	145	106	39
April-14	23017	20393	2624	11.4%	60	30	30
May-14	23077	20400	2677	11.6%	60	7	53
June-14	23140	20386	2754	11.9%	63	-14	77
July-14	23234	20353	2881	12.4%	94	-33	127
August-14	23345	20474	2871	12.3%	111	121	-10
September-14	23529	20564	2965	12.6%	183	90	93
October-14	23690	20729	2961	12.5%	162	165	-3
November-14	23695	20709	2986	12.6%	4	-20	24
December-14	23738	20771	2967	12.5%	44	62	-18
January-15	23833	20878	2955	12.4%	95	107	-12
February-15	23934	20966	2968	12.4%	100	88	12
March-15	23841	20885	2956	12.4%	-92	-81	-11
April-15	23900	20984	2916	12.2%	58	99	-41
May-15	24079	21093	2986	12.4%	179	109	70
June-15	24126	21110	3016	12.5%	47	17	30
July-15	24196	21220	2976	12.3%	70	110	-40
August-15	24145	21175	2970	12.3%	-51	-45	-6
September-15	24369	21372	2997	12.3%	225	197	28
October-15	24470	21436	3034	12.4%	101	64	37
November-15	24587	21563	3024	12.3%	117	127	-10
December-15	24606	21604	3002	12.2%	19	41	-22
January-16	24676	21690	2986	12.1%	70	86	-16
February-16	24675	21714	2961	12.0%	-1	24	-25
March-16	24808	21881	2927	11.8%	133	167	-34
April-16	24950	22006	2944	11.8%	142	125	17
May-16	25114	22025	3089	12.3%	164	19	145
June-16	25146	21877	3269	13.0%	32	-148	180
July-16	25161	21815	3346	13.3%	15	-62	77
August-16	25213	21784	3429	13.6%	51	-31	82
September-16	25371	21946	3425	13.5%	158	162	-4
October-16	25532	21983	3549	13.9%	161	37	124
November-16	25665	22046	3619	14.1%	133	63	70
December-16	25637	21971	3666	14.3%	-28	-75	47

Source: Turkstat, Betam

Table 2 Seasonally adjusted employment by sectors (in thousands)

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
November-13	5136	5090	1858	12644				
December-13	5098	5064	1792	12728	-38	-26	-66	84
January-14	5053	5131	1895	12805	-45	67	103	77
February-14	5385	5232	1935	12840	332	101	40	35
March-14	5570	5359	2014	12884	185	127	79	44
April-14	5602	5365	1958	13039	32	6	-56	155
May-14	5566	5373	1896	13124	-36	8	-62	85
June-14	5568	5364	1870	13165	2	-9	-26	41
July-14	5486	5332	1827	13227	-82	-32	-43	62
August-14	5398	5243	1814	13296	-88	-89	-13	69
September-14	5334	5257	1856	13362	-64	14	42	66
October-14	5332	5306	1872	13386	-2	49	16	24
November-14	5375	5353	1903	13474	43	47	31	88
December-14	5405	5273	1935	13501	30	-80	32	27
January-15	5426	5266	1938	13567	21	-7	3	66
February-15	5441	5349	1928	13601	15	83	-10	34
March-15	5308	5351	1878	13737	-133	2	-50	136
April-15	5476	5308	1921	13656	168	-43	43	-81
May-15	5496	5326	1900	13758	20	18	-21	102
June-15	5520	5404	1867	13822	24	78	-33	64
July-15	5547	5380	1854	13876	27	-24	-13	54
August-15	5498	5336	1909	13976	-49	-44	55	100
September-15	5523	5252	1918	14005	25	-84	9	29
October-15	5523	5327	1934	14111	0	75	16	106
November-15	5448	5363	1951	14122	-75	36	17	11
December-15	5388	5353	1981	14229	-60	-10	30	107
January-16	5419	5311	1994	14299	31	-42	13	70
February-16	5409	5300	2007	14384	-10	-11	13	85
March-16	5401	5276	2022	14416	-8	-24	15	32
April-16	5375	5295	2058	14528	-26	19	36	112
May-16	5339	5381	2060	14565	-36	86	2	37
June-16	5292	5386	2042	14598	-47	5	-18	33
July-16	5132	5330	1934	14612	-160	-56	-108	14
August-16	5207	5254	1934	14628	75	-76	0	16
September-16	5259	5224	1923	14637	52	-30	-11	9
October-16	5351	5260	2018	14668	92	36	95	31
November-16	5284	5282	1975	14726	-67	22	-43	58
December-16	5291	5316	1983	14747	7	34	8	21

Source: Turkstat, Betam