

# **Research Brief 11/111**



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## UNEMPLOYMENT CONTINUES TO DECREASE

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#### **Executive Summary**

Seasonally adjusted labor market data show that in the period of January 2011 non-agricultural unemployment rate decreased from 13.6 percent to 13.4 percent following the 109 thousand increase in the non-agricultural labor force and 139 thousand increase in non-agricultural employment. Seasonally adjusted sectoral employment figures reveal that the decrease in unemployment rate is mainly driven by the increase in the service sector employment. On the other hand, number of applications per vacancy released by Kariyer.net suggests that the non-agricultural unemployment rate will continue to decrease in the period of February 2011.<sup>1</sup>

#### Non-agricultural unemployment continuous to decrease

According to the labor market statistics released by TurkStat on the 15<sup>th</sup> of April, employment has reached 22 million 461 thousand in the period of January 2011 (December 2010-January 2011- February 2011) while non-agricultural employment reached 17 million 60 thousand. Raw labor market statistics reveal that non-agricultural labor force increased by 433 thousand (2.2 percent) and non-agricultural employment increased by 937 thousand (5.8 percent) in January 2011 compared to their level in January 2010. On the other hand, non-agricultural unemployment decreased from 17.6 percent to 14.7 percent during the same period. More than 900 thousand (year on year) increase in non-agricultural employment resulted in a decrease in non-agricultural unemployment despite the increase in the labor force. While the increase in non-agricultural employment accelerates due to strong economic growth in the 4<sup>th</sup> quarter, it seems that non-agricultural labor force is converting to its long run trend (Figure 1).

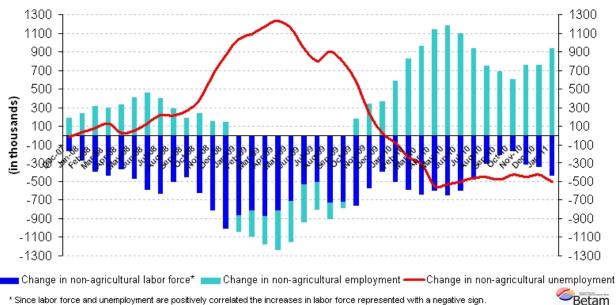


Figure 1 Year-on-year changes in non-agricultural labor force, employment and unemployment

Source: TurkStat, Betam

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<sup>&</sup>lt;sup>1</sup> On behalf of the Betam team, we would like to thank to Kariyer.net for sharing their valuable data on vacancies.

According to seasonally adjusted series, non-agricultural labor force increased by 109 thousand in January and reached 20 million 83 thousand. On the other hand, non-agricultural employment increased by 139 thousand to reach 17 million 388 thousand. Consequently, non-agricultural unemployment decreased by 29 thousand and non-agricultural unemployment rate dropped from 13.6 percent to 13.4 percent (Figure 2). Seasonally adjusted series show that non-agricultural unemployment rate decreased consistently from August 2010 on.

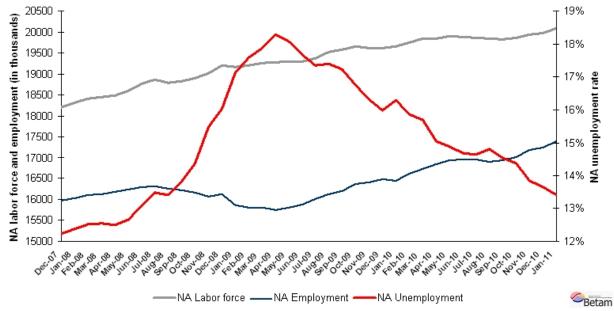


Figure 2 Seasonally adjusted non-agricultural labor force, employment and unemployment

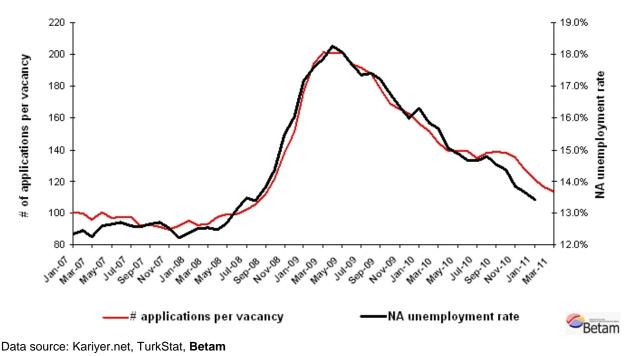
Source: TurkStat, Betam

#### Kariyer.net data signals a continuing decrease in unemployment

Starting from April, Betam will be using a new series released by Kariyer.net on application per vacancy. Kariyer.net collects this data via their website which is one of the largest job search engines in Turkey.<sup>2</sup> Given the lack of data on vacancies in Turkey, we believe that this new series will provide useful insight to the labor market in Turkey. It provides information on the number of unemployed who are actively seeking work as well as the number of jobs that are available in the labor market. 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. Figure 3 illustrates the seasonally adjusted non-agricultural unemployment rate and deseasonalized calendar day adjusted application per vacancy (Kariyer.net) series. It is clear that these series are highly correlated (almost 90 percent).

Given that non-agricultural unemployment rates are three-month moving averages, February 2011 figures that will be released next month, will show the average of January, February and March data. Kariyer.net data on applications per vacancy shows a decline in both February and March. Hence, we expect the decline in non-agricultural unemployment rate to continue in February 2011.

<sup>&</sup>lt;sup>2</sup> Application per vacancy= Total number of applications/ Total number of vacancies. Both series are seasonally and calendar day adjusted.





More than 150 thousand increase in manufacturing and service employment

According to the seasonally adjusted figures, employment in manufacturing increased by 39 thousand and in the service sector by 119 thousand (App. 1 Table 2, App. 2 Figure 4).<sup>3</sup> Recall that the Industry Production Index was still increasing in January, though at a slower rate. Despite the minor job loses in construction and the dampening increase in agricultural employment, more than 100 thousand increase in service employment drives both aggregate and non-agricultural employment figures up.

<sup>&</sup>lt;sup>3</sup> Seasonal adjustment procedure is applied to each sector of employment series 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.

	Labor force	Employment	Unemployment	Unemployment rate	Monthly changes			
January-08	18310	16045	2265	12.4%	Labor force	Employment	Unemployment	
February-08	18412	16107	2306	12.5%	102 62		40	
March-08	18442	16129	2313	12.5%	30 23		7	
April-08	18488	16178	2310	12.5%	45	48	-3	
May-08	18604	16247	2357	12.7%	117	70	47	
June-08	18758	16298	2460	13.1%	153	51	103	
July-08	18857	16313	2544	13.5%	100	15 85		
August-08	18788	16268	2519	13.4%	-70 -45		-25	
September-08	18830	16228	2602	13.8%	42 -41		83	
October-08	18892	16176	2716	14.4%	62 -52		114	
November-08	19010	16067	2942	15.5%	118 -109		227	
December-08	19199	16122	3077	16.0%	189 54		135	
January-09	19158	15875	3284	17.1%	-41	-247	206	
February-09	19192	15819	3374	17.6%	34	-56	90	
March-09	19256	15814	3442	17.9%	64 -4		68	
April-09	19275	15754	3521	18.3%	19 -61		80	
May-09	19287	15801	3486	18.1%	12	48	-35	
June-09	19300	15893	3408	17.7%	13	92	-79	
July-09	19379	16018	3361	17.3%	79	126	-47	
August-09	19523	16126	3397	17.4%	144	107	36	
September-09	19574	16203	3370	17.2%	51	78	-27	
October-09	19660	16369	3291	16.7%	86	166	-79	
November-09	19606	16408	3198	16.3%	-54 38		-93	
December-09	19619	16483	3136	16.0%	13 75		-63	
January-10	19658	16457	3201	16.3%	40 -26		66	
February-10	19752	16621	3130	15.8%	93 164		-71	
March-10	19849	16737	3112	15.7%	98	116	-18	
April-10	19837	16853	2984	15.0%	-12	116	-129	
May-10	19899	16937	2962	14.9%	62	84	-22	
June-10	19880	16962	2918	14.7%	-19	25	-44	
July-10	19862	16954	2908	14.6%	-19	-8	-11	
August-10	19843	16907	2936	14.8%	-18	-47	29	
September-10	19826	16942	2884	14.5%	-17	35	-52	
October-10	19863	17009	2854	14.4%	38	67	-30	
November-10	19940	17180	2760	13.8%	77	171	-94	
December-10	19974	17249	2725	13.6%	33	69	-35	
January-11	20083	17388	2696	13.4%	109	139	-29	

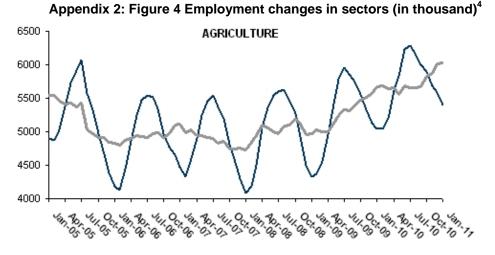
Appendix 1: Table 1 Seasonally adjusted non-agricultural labor force indicators (in thousands)

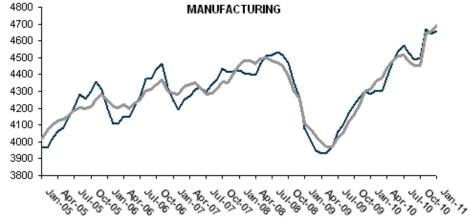
Source: TurkStat, Betam

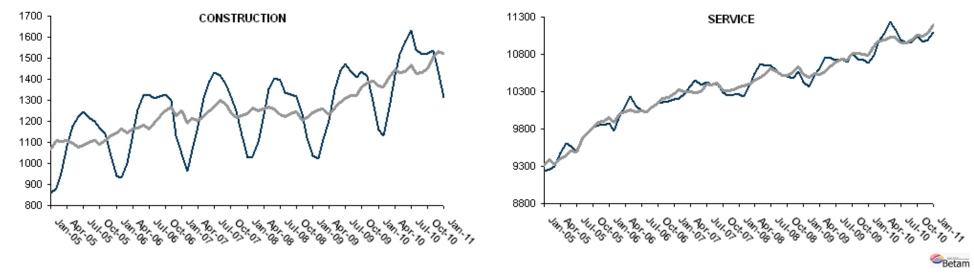
	Agriculture	Manufacturing	Construction	Service	Monthly changes				
January-08	4731	4461	1236	10358	Agriculture	Manufacturing	Construction	Service	
February-08	4849	4479	1262	10372	118	18	26	13	
March-08	4937	4484	1249	10404	88	5	-13	33	
April-08	5096	4464	1261	10458	159	-19	12	54	
May-08	5060	4495	1270	10488	-36	31	9	30	
June-08	4998	4501	1257	10548	-62	6	-13	60	
July-08	4972	4484	1232	10607	-26	-17	-25	59	
August-08	5087	4473	1222	10571	115	-11	-10	-37	
September-08	5101	4453	1235	10522	13	-20	13	-49	
October-08	5196	4393	1244	10514	95	-60	9	-8	
November-08	5121	4303	1205	10550	-75	-90	-39	36	
December-08	4958	4257	1219	10636	-163	-45	13	86	
January-09	4977	4112	1243	10534	18	-145	24	-103	
February-09	5036	4081	1255	10496	59	-31	12	-37	
March-09	5005	4034	1260	10539	-30	-46	5	43	
April-09	4999	4001	1232	10526	-7	-34	-28	-13	
May-09	5128	3971	1265	10574	130	-29	33	47	
June-09	5238	3969	1293	10640	109	-3	28	66	
July-09	5325	4025	1307	10692	87	56	14	52	
August-09	5313	4050	1321	10738	-12	25	14	46	
September-09	5397	4120	1321	10726	83	70	-1	-12	
October-09	5469	4161	1362	10818	72	41	41	92	
November-09	5516	4226	1380	10812	47	65	18	-5	
December-09	5567	4299	1389	10798	51	72	9	-14	
January-10	5670	4310	1369	10792	103	11	-20	-6	
February-10	5686	4361	1366	10912	16	51	-3	121	
March-10	5637	4380	1410	10981	-49	19	45	68	
April-10	5661	4436	1444	10993	24	57	34	12	
May-10	5559	4485	1432	11037	-103	48	-12	44	
June-10	5685	4510	1434	11026	126	25	2	-11	
July-10	5658	4518	1468	10958	-27	8	33	-68	
August-10	5661	4478	1429	10958	4	-39	-38	0	
September-10	5668	4452	1432	10998	7	-27	3	40	
October-10	5824	4451	1449	11057	156	-1	17	59	
November-10	5872	4645	1502	11049	47	194	53	-9	
December-10	6017	4653	1533	11077	146	8	30	29	
January-11	6028	4691	1521	11196	10	39	-12	119	

Appendix 1: Table 2 Seasonally adjusted sector of employment (in thousands)

Source: TurkStat, Betam







Source: TurkStat, Betam

<sup>&</sup>lt;sup>4</sup> Grey lines indicate seasonally adjusted series, where dark blue lines represent raw data.