

# Research Brief 11/117



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# STRONG INCREASE IN MANUFACTURING EMPLOYMENT

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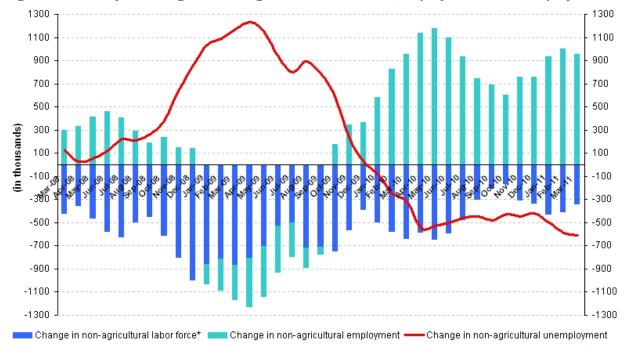
### **Executive Summary**

According to the labor market statistics released by TurkStat, non-agricultural employment increased by 956 thousand on a year-on-year basis, while non-agricultural unemployment rate decreased from 16.7 percent to 13.4 percent. Seasonally adjusted labor market data show that non-agricultural labor force reached 17 million 630 thousand and non-agricultural unemployment rate decreased to 12.6 percent. In the period of March 2011, non-agricultural unemployment rate continued to decrease, parallel to the strong increase in manufacturing employment. On the other hand, industry production index, capacity utilization ratio and Kariyer.net data suggest that the decrease in non-agricultural unemployment rate may slow down in the upcoming periods.<sup>1</sup>

#### Increase in non-agricultural employment is parallel to the strong economic growth

According to the labor market statistics released by TurkStat on the 15<sup>th</sup> of June, employment has reached 23 million 286 thousand in the period of March 2011 (February – March- April) while non-agricultural employment reached 17 million 500 thousand. Raw labor market statistics reveal that non-agricultural labor force increased by 347 thousand (1.7 percent) and non-agricultural employment increased by 956 thousand (5.8 percent) in March 2011. On the other hand, non-agricultural unemployment decreased from 16.7 percent to 13.4 percent during the same period (Figure 1).

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



<sup>\*</sup> The increases in labor force represented with a negative sign.

Source: TurkStat, Betam

Betam

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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 29 thousand in March compared to its level in February and reached 20 million 172 thousand. On the other hand, non-agricultural employment increased by 68 thousand to reach 17 million 630 thousand. Consequently, non-agricultural unemployment decreased by 39 thousand and non-agricultural unemployment rate decreased to 12.6 percent, the level in April 2008. Interestingly, unemployment rate has been decreasing steadily since reaching its maximum in April 2009 (Figure 2).

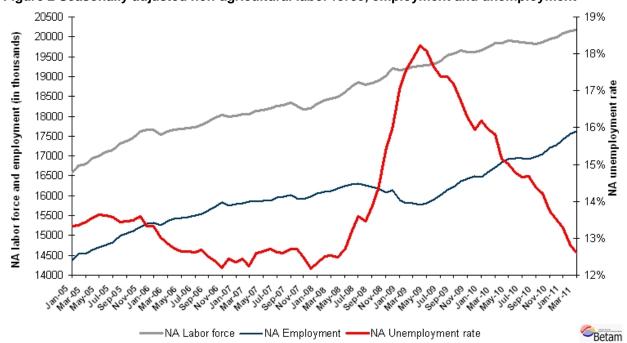


Figure 2 Seasonally adjusted non-agricultural labor force, employment and unemployment

Source: TurkStat, Betam

#### Kariyer.net data signals a slow down in unemployment decrease

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. 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).

The decrease in application per vacancy series slowed down in March and has been more or less steady at this level since then. Hence, a slow down in non-agricultural unemployment rate decrease is highly probable in the upcoming months.

<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.

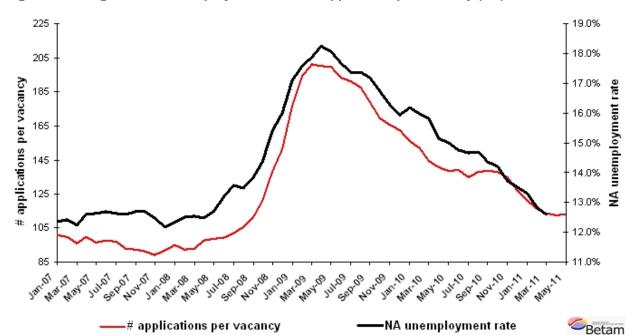


Figure 3 Non-agricultural unemployment rate and application per vacancy (SA)

Data source: Kariyer.net, TurkStat, Betam

## Strong increase in manufacturing employment

According to the seasonally adjusted figures, manufacturing employment increased by 164 thousand in March 2011 (App. 1 Table 2, App. 2 Figure 4).<sup>3</sup> On the other hand, both capacity utilization ratio and manufacturing production index exhibit a decreasing trend for the last couple of months and these suggest that the increase in manufacturing employment may slow down in following periods. Employment in agriculture and construction increased and there is a minor decrease in service sector employment in March 2011.

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<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.

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

Ī	Labor force	Employment	Unemployment	Unemployment rate	<b>\</b>	Monthly changes			
February-08	18411	16108	2303	12.5%	Labor force	Employment	Unemployment		
March-08	18441	16129	2312	12.5%	30	21	9		
April-08	18487	16179	2307	12.5%	46	51	-5		
May-08	18604	16242	2362	12.7%	117	62	55		
June-08	18757	16286	2471	13.2%	154	45	109		
July-08	18857	16295	2562	13.6%	100	9	91		
August-08	18788	16257	2531	13.5%	-70	-38	-31		
September-08	18830	16220	2610	13.9%	42	-37	79		
October-08	18893	16176	2716	14.4%	62	-44	107		
November-08	19011	16083	2928	15.4%	118	-93	212		
December-08	19200	16131	3070	16.0%	189	48	142		
January-09	19160	15887	3273	17.1%	-40	-243	203		
February-09	19190	15815	3375	17.6%	30	-72	103		
March-09	19254	15811	3442	17.9%	63	-4	67		
April-09	19273	15759	3514	18.2%	20	-52	72		
May-09	19286	15802	3484	18.1%	13	43	-30		
June-09	19300	15890	3410	17.7%	14	88	-74		
July-09	19379	16012	3367	17.4%	79	122	-43		
August-09	19523	16131	3393	17.4%	144	118	26		
September-09	19575	16213	3362	17.2%	51	83	-31		
October-09	19662	16375	3287	16.7%	87	162	-75		
November-09	19608	16419	3189	16.3%	-54	44	-98		
December-09	19621	16493	3128	15.9%	13	75	-61		
January-10	19662	16477	3185	16.2%	40	-16	57		
February-10	19748	16596	3152	16.0%	86	119	-33		
March-10	19845	16707	3138	15.8%	97	111	-14		
April-10	19833	16829	3005	15.1%	-11	122	-133		
May-10	19897	16911	2986	15.0%	63	82	-19		
June-10	19879	16944	2935	14.8%	-18	33	-51		
July-10	19861	16950	2912	14.7%	-18	6	-23		
August-10	19844	16931	2914	14.7%	-17	-19	2		
September-10	19828	16979	2849	14.4%	-16	49	-65		
October-10	19867	17045	2822	14.2%	39	65	-26		
November-10	19945	17209	2736	13.7%	78 164		-86		
December-10	19979	17280	2700	13.5%	34	71	-36		
January-11	20089	17419	2670	13.3%	110 139		-29		
February-11	20143	17562	2581	12.8%	53	143	-90		
March-11	20172	17630	2542	12.6%	29	68	-39		

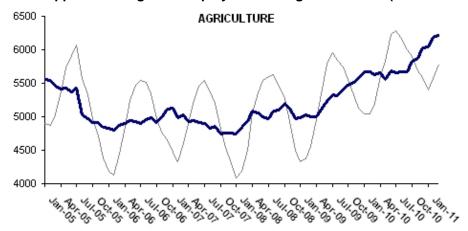
Source: TurkStat, Betam

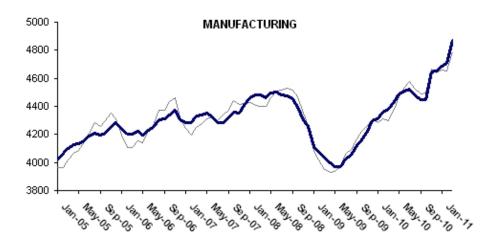
Appendix 1: Table 2 Seasonally adjusted sector of employment (in thousands)

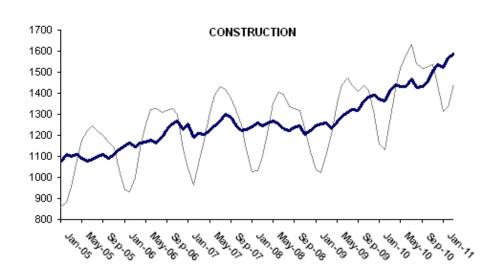
	Agriculture	Manufacturing	Construction	Service	Monthly changes					
February-08	4842	4479	1260	10404				Service		
March-08	4934	4484	1247	10429	92	5	-14	24		
April-08	5091	4464	1259	10466	157	-20	12	37		
May-08	5056	4496	1269	10483	-35	31	10	18		
June-08	4995	4501	1257	10509	-61	6	-12	25		
July-08	4971	4484	1232	10523	-24	-17	-25	14		
August-08	5087	4473	1222	10519	116	-11	-10	-4		
September-08	5101	4454	1235	10512	14	-19	13	-7		
October-08	5196	4393	1245	10525	95	-61	10	14		
November-08	5124	4302	1206	10547	-72	-91	-39	22		
December-08	4966	4257	1221	10601	-159	-45	14	54		
January-09	4986	4112	1246	10566	21	-145	25	-35		
February-09	5023	4081	1252	10546	37	-30	7	-21		
March-09	5003	4034	1258	10572	-20	-47	5	26		
April-09	4996	4000	1230	10571	-7	-34	-28	-1		
May-09	5129	3971	1264	10598	133	-29	34	27		
June-09	5235	3968	1293	10635	106	-3	29	37		
July-09	5325	4025	1308	10675	90	56	15	39		
August-09	5316	4049	1321	10723	-9	25	13	49		
September-09	5400	4119	1320	10735	84	70	-1	12		
October-09	5469	4160	1363	10792	69	41	43	57		
November-09	5520	4225	1382	10809	51	65	19	17		
December-09	5573	4298	1392	10810	53	73	10	2		
January-10	5678	4309	1372	10829	105	12	-20	19		
February-10	5665	4362	1363	10873	-13	53	-9	45		
March-10	5632	4381	1408	10934	-33	18	46	61		
April-10	5657	4437	1442	10965	25	57	34	30		
May-10	5560	4486	1431	10992	-96	49	-12	27		
June-10	5682	4511	1434	11004	122	25	3	11		
July-10	5659	4520	1469	11003	-22	8	35	-1		
August-10	5668	4478	1428	11020	8	-42	-41	17		
September-10	5677	4450	1430	11057	9	-28	2	37		
October-10	5827	4449	1449	11076	150	-1	19	19		
November-10	5879	4643	1505	11098	51	194	56	22		
December-10	6025	4650	1537	11125	146	8	32	27		
January-11	6038	4689	1524	11175	13	39	-13	50		
February-11	6189	4706	1567	11211	151	17	43	36		
Mart 11	6216	4870	1585	11196	27	164	18	-15		

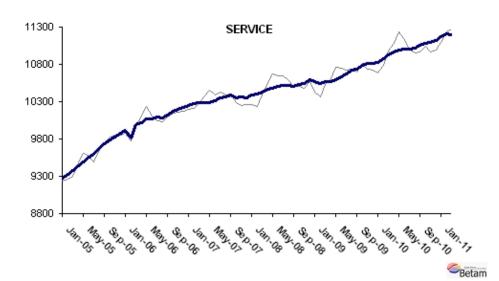
Source: TurkStat, Betam

Appendix 2: Figure 4 Employment changes in sectors (in thousand)<sup>4</sup>









Source: TurkStat, Betam

 $<sup>^{\</sup>rm 4}$  Grey lines indicate seasonally adjusted series, where dark blue lines represent raw data.