

## NON-AGRICULTURAL EMPLOYMENT STAGNATES

Seyfettin Gürsel\* Gökçe Uysal\*\* and Ayşenur Acar\*\*\*

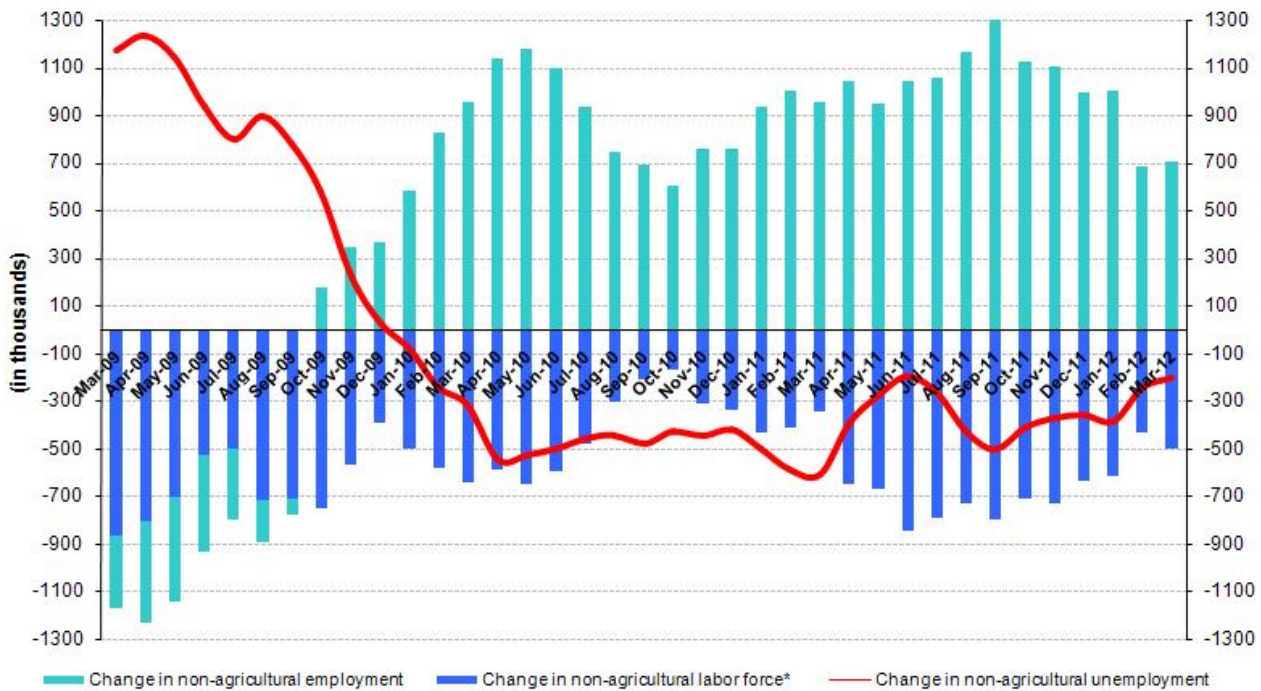
### Executive Summary

According to the labor market statistics released by Turk-Stat, non-agricultural unemployment rate decreased from 12.7 percent to 12.1 percent. Seasonally adjusted labor market data shows that non-agricultural unemployment rate decreased from 11.4 percent to 11.3 percent in the period of March 2012. Non-agricultural unemployment rate declined slightly following an increase in non-agricultural employment which was counterbalanced with an increase in non-agricultural labor force. The increase in non-agricultural employment is mostly driven by a 71 thousand increase in service employment. Increases in manufacturing and construction employment remains limited.

### There is a slowdown in the annual increase in non-agricultural employment

According to the labor market statistics released by TurkStat on June 15th, in the period of March 2012 (February – March – April) non-agricultural labor force only increased by 502 thousand ( 2.5 percent), non-agricultural employment increased by 704 thousand (4 percent) and the number of unemployed persons in non-agricultural decreased by 202 thousand to 2 million 506 thousand on a year-on-year basis (Figure 1). Annual increases in non-agricultural labor force had been over 600 thousand in the past periods. Thanks to strong annual increases of almost 1 million in non-agricultural employment, non-agricultural unemployment was decreasing rapidly. Increases in non-agricultural labor force and in non-agricultural employment have been slowing down since February 2012. Hence, the decline in unemployed has been slowing down as well.

**Figure 1 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

\* Prof. Seyfettin Gürsel, Betam, Director, seyfettin.gursel@bahcesehir.edu.tr

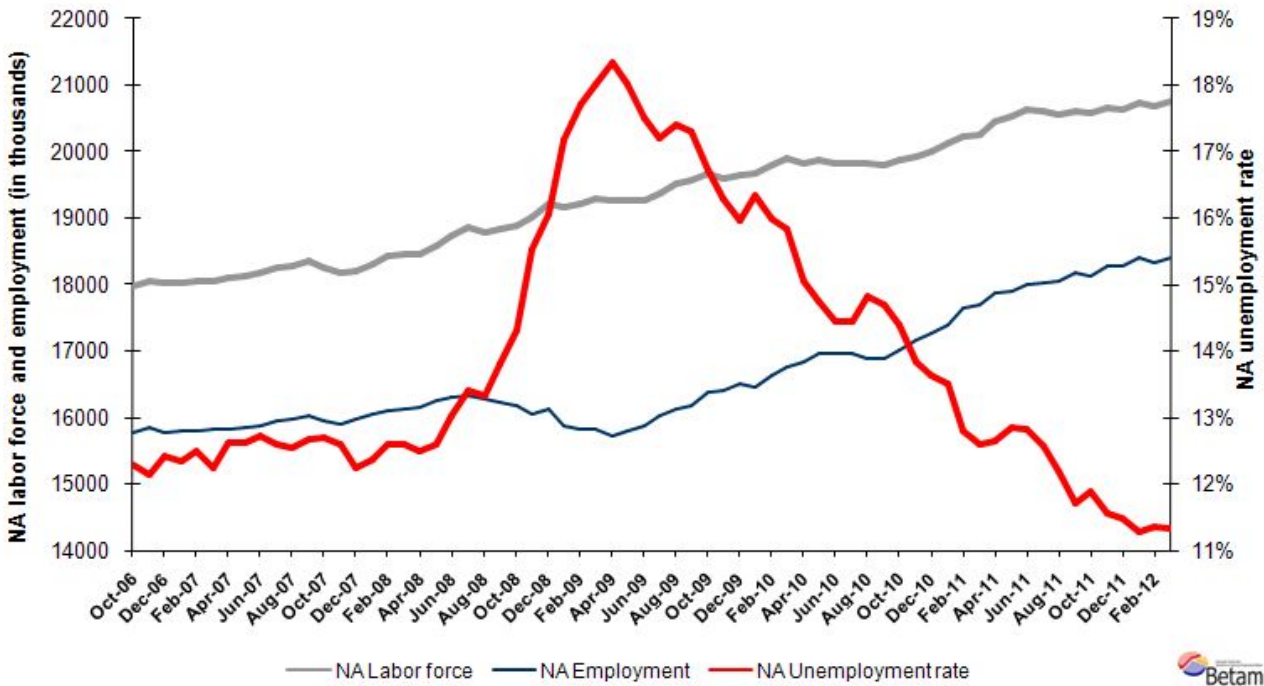
\*\* Assoc. Prof. Gökçe Uysal, Betam, Vice Director, gokce.uysal@bahcesehir.edu.tr

\*\*\* Ayşenur Acar, Betam, Research Assistant, aysenur.acar@bahcesehir.edu.tr

## Seasonally adjusted non-agricultural unemployment remained stagnant

According to seasonally adjusted series, non-agricultural labor force increased by 89 thousand to 20 million 763 thousand in the period of March compared to the period of February 2012 (Figure 2, Table 1). Non-agricultural employment increased by 87 thousand and reached to 18 million 412 thousand. Consequently, the number of unemployed persons in non-agricultural sectors increased by 2 thousand and seasonally adjusted non-agricultural unemployment rate decreased by 0.1 percentage point from 11.4 percent to 11.3 percent (Figure 2).

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



Source: TurkStat, **Betam**

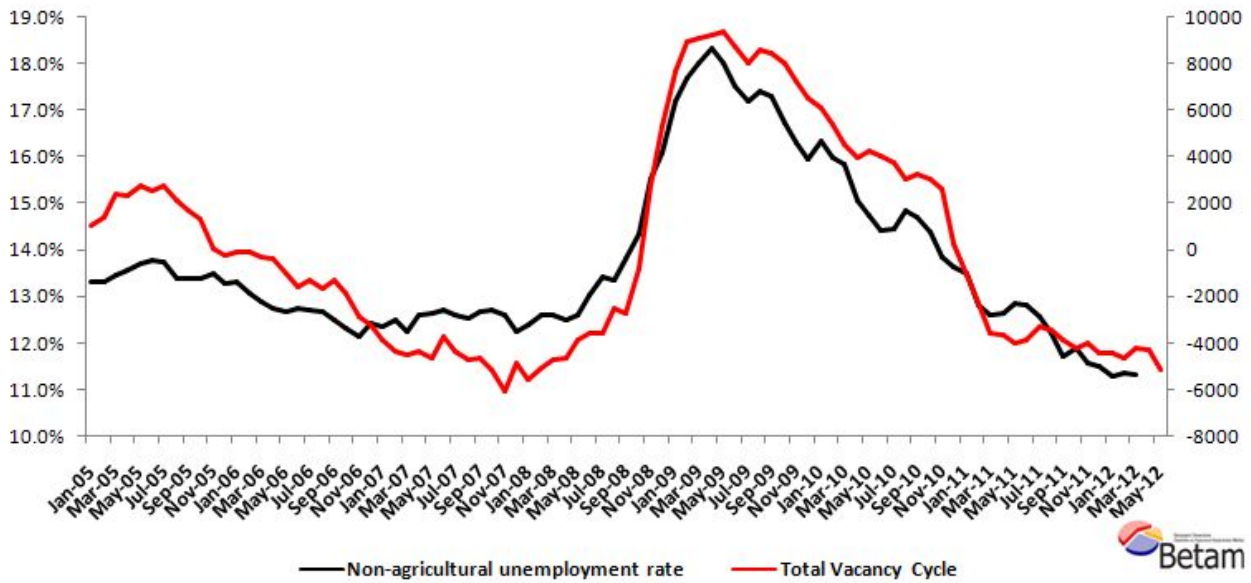
## According to Kariyer.net series non-agricultural employment will increase in the period of April 2012

In the previous research briefs, we used seasonal and calendar adjusted application per vacancy series released by Kariyer.net. However, we have been using total vacancy series in this brief due to technical difficulties as the total application series contains a structural break since April 2012<sup>1</sup>.

According to data released by Kariyer.net the vacancy series provided by the firms has a significant increase in May. In light of this data, we believe that non-agricultural employment will have stronger increase in the period of April 2012 (March – April – May).

<sup>1</sup> Seasonal and calendar adjustment procedure is applied to total vacancy series released by Kariyer.net. Total vacancy series is continuously increasing given that the customers base of Kariyer.net is widening overtime. Therefore we calculate the cycle of the series by subtracting the absolute number from the trend calculated by a Hodrick-Prescott filter. Since the changes in the number of vacancies are negatively correlated with the changes in unemployment we use the inverse of total vacancy series by multiplying it with -1. Although this vacancy series are not as strong forecasters as the application per vacancy series, it gives an idea for the direction of non-agricultural unemployment.

**Figure 3 Seasonally adjusted non-agricultural unemployment rate and total vacancy cycle**



Data source: Kariyer.net, TurkStat, **Betam**

### **Strong increase in service employment<sup>2</sup>**

According to seasonally adjusted figures, sectoral employment data points to significant employment increases in services. Employment in this sector increased by 71 thousand in the period of March 2012 compared to February 2012. While construction employment suffered significant losses (110 thousand) in the period of February, it increased by 11 thousand in the period of March 2012 (Table 2, Figure 4). Employment in manufacturing increased only by 3 thousand in the period of March. This is consistent with the decline in manufacturing production index.

Decline in agricultural employment has been continuing. Hence, we believe that increase in agricultural employment observed in the past 3 years has been coming to an end.

<sup>2</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.

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

	Labor force	Employment	Unemployment	Unemployment rate	Monthly changes		
					Labor force	Employment	Unemployment
February-09	19224	15821	3403	17.7%			
March-09	19289	15814	3475	18.0%	65	-7	72
April-09	19255	15724	3531	18.3%	-33	-90	56
May-09	19265	15795	3471	18.0%	10	71	-61
June-09	19257	15885	3371	17.5%	-9	91	-100
July-09	19360	16029	3331	17.2%	104	143	-40
August-09	19518	16123	3395	17.4%	157	94	63
September-09	19564	16180	3384	17.3%	46	57	-11
October-09	19668	16380	3288	16.7%	104	201	-96
November-09	19597	16402	3195	16.3%	-71	21	-93
December-09	19636	16501	3135	16.0%	40	100	-60
January-10	19676	16462	3215	16.3%	40	-40	80
February-10	19805	16638	3167	16.0%	129	176	-47
March-10	19909	16755	3155	15.8%	104	117	-13
April-10	19821	16838	2982	15.0%	-89	83	-172
May-10	19880	16950	2930	14.7%	60	112	-52
June-10	19822	16962	2861	14.4%	-58	12	-70
July-10	19828	16962	2866	14.5%	6	1	5
August-10	19829	16887	2942	14.8%	0	-75	75
September-10	19799	16890	2909	14.7%	-30	2	-32
October-10	19865	17005	2860	14.4%	66	116	-50
November-10	19929	17170	2759	13.8%	64	164	-100
December-10	19998	17272	2726	13.6%	69	102	-33
January-11	20116	17400	2716	13.5%	118	128	-10
February-11	20228	17638	2589	12.8%	112	238	-126
March-11	20257	17705	2552	12.6%	30	67	-37
April-11	20452	17868	2585	12.6%	195	163	33
May-11	20526	17889	2637	12.8%	74	22	52
June-11	20642	17997	2644	12.8%	116	108	7
July-11	20602	18013	2589	12.6%	-40	15	-55
August-11	20560	18052	2508	12.2%	-42	40	-81
September-11	20597	18186	2411	11.7%	37	134	-97
October-11	20586	18139	2447	11.9%	-11	-47	36
November-11	20663	18273	2389	11.6%	76	134	-58
December-11	20643	18272	2371	11.5%	-20	-1	-19
January-12	20732	18396	2336	11.3%	89	124	-34
February-12	20674	18325	2349	11.4%	-58	-70	13
March-12	20763	18412	2351	11.3%	89	87	2

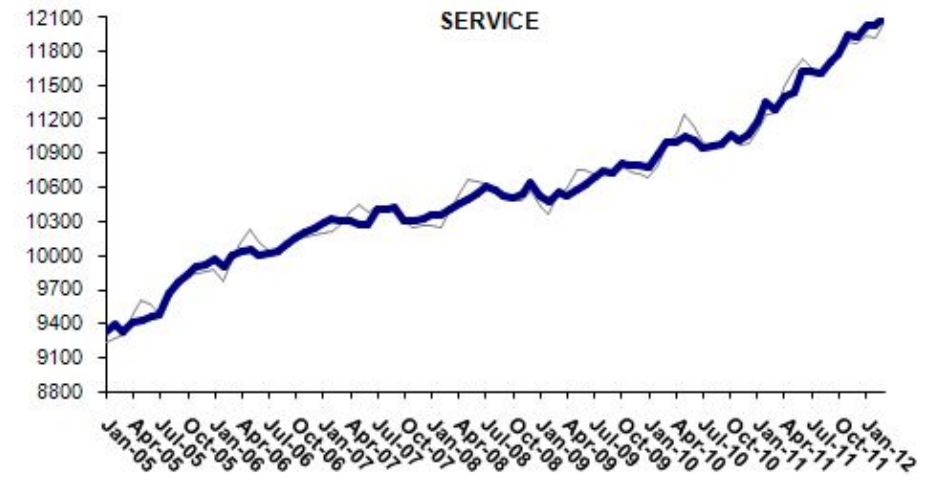
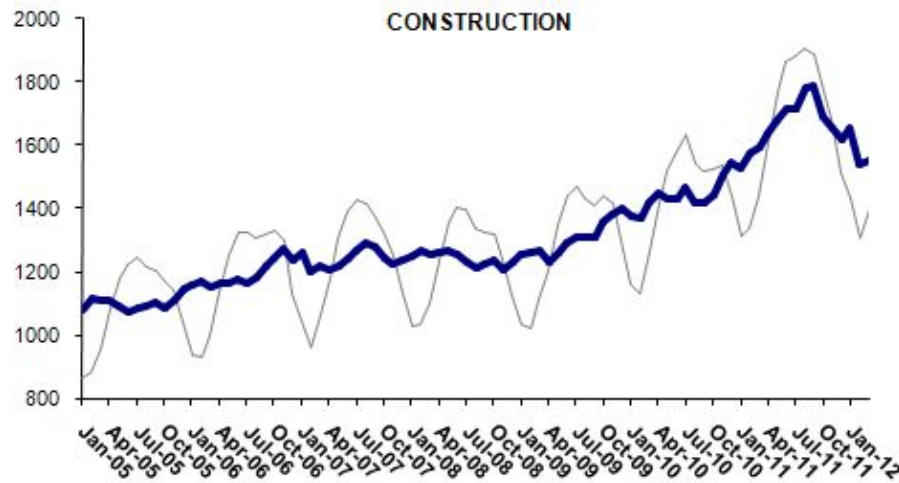
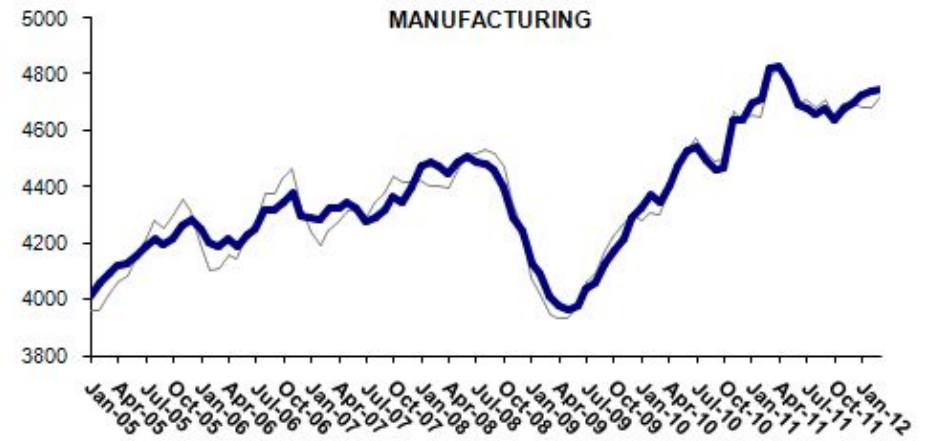
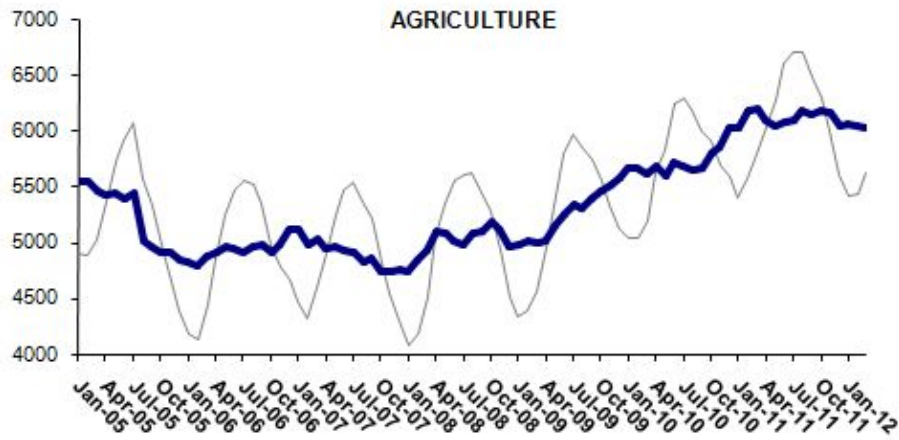
Source: TurkStat, **Betam**

**Table 2 Seasonally adjusted sector of employment (in thousands)**

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
February-09	5016	4093	1259	10483				
March-09	4992	4014	1265	10552	-24	-80	6	69
April-09	5011	3975	1233	10525	19	-39	-33	-27
May-09	5154	3961	1262	10582	143	-14	30	57
June-09	5253	3975	1289	10633	99	15	27	51
July-09	5337	4036	1307	10695	84	61	18	62
August-09	5307	4058	1310	10749	-31	22	3	54
September-09	5395	4125	1311	10723	88	66	1	-26
October-09	5451	4172	1355	10822	56	47	44	99
November-09	5502	4218	1383	10792	51	46	28	-30
December-09	5574	4289	1403	10794	72	71	19	3
January-10	5671	4323	1378	10784	97	34	-24	-10
February-10	5656	4374	1369	10904	-15	51	-9	120
March-10	5617	4349	1416	11005	-39	-26	47	101
April-10	5677	4404	1446	11000	60	55	29	-5
May-10	5595	4478	1429	11055	-82	74	-16	55
June-10	5706	4531	1430	11022	111	53	1	-32
July-10	5675	4544	1468	10955	-31	14	38	-67
August-10	5654	4496	1417	10962	-21	-48	-51	7
September-10	5669	4458	1421	10989	15	-38	4	26
October-10	5802	4467	1441	11060	133	9	20	71
November-10	5854	4636	1506	11021	52	169	65	-39
December-10	6027	4640	1548	11068	173	3	41	47
January-11	6030	4699	1530	11191	3	59	-17	123
February-11	6176	4714	1574	11356	147	15	44	165
March-11	6196	4821	1593	11292	20	107	19	-64
April-11	6089	4832	1639	11401	-107	11	45	110
May-11	6046	4774	1681	11445	-43	-58	43	43
June-11	6077	4692	1713	11622	31	-82	32	177
July-11	6099	4682	1715	11628	22	-10	2	6
August-11	6175	4660	1783	11605	76	-22	68	-23
September-11	6143	4682	1789	11704	-32	22	6	99
October-11	6181	4637	1692	11777	38	-44	-97	74
November-11	6157	4676	1654	11944	-24	39	-38	167
December-11	6046	4702	1618	11938	-111	26	-37	-6
January-12	6049	4727	1652	12039	3	25	35	101
February-12	6033	4743	1542	12036	-16	16	-110	-3
March-12	6027	4747	1553	12107	-6	3	11	71

Source: TurkStat, **Betam**

Figure 4 Employment changes in sectors (in thousands)<sup>3</sup>



Source: TurkStat, **Betam**



<sup>3</sup> Grey lines indicate seasonally adjusted series, where dark blue lines represent raw data.