

## SERVICES PULL EMPLOYMENT

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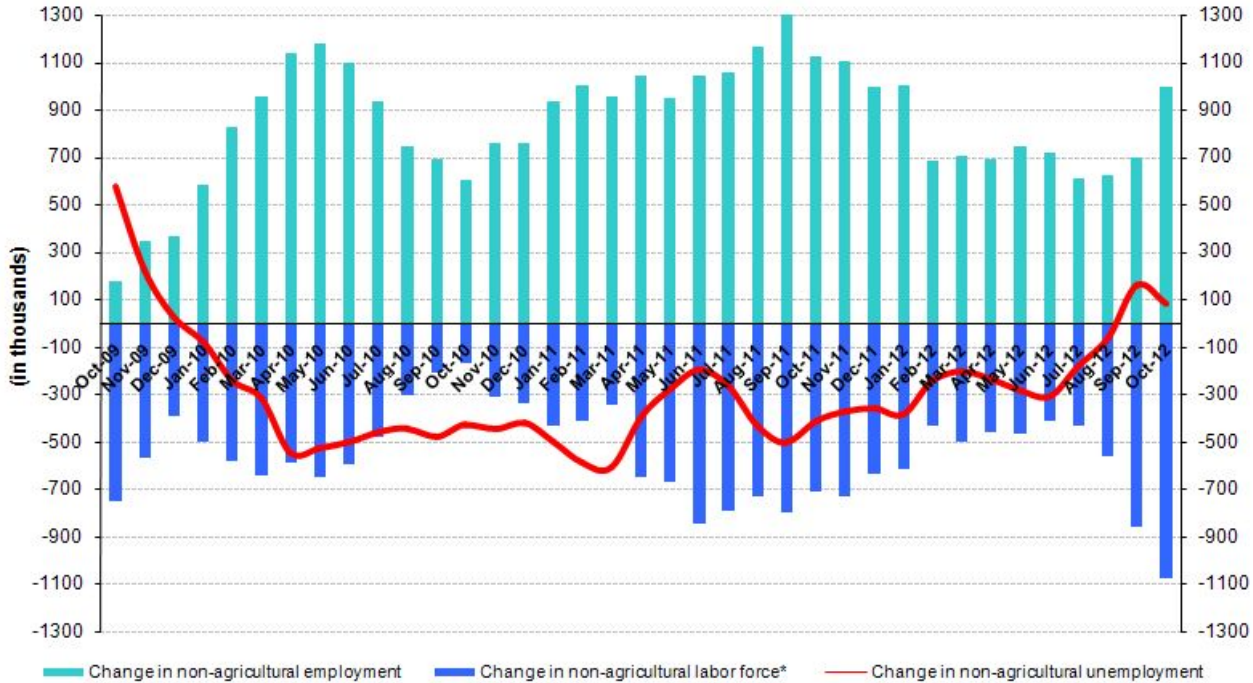
### Abstract

Seasonally adjusted labor market data shows that non-agricultural unemployment decreased from 11.7 percent in September 2012 to 11.5 percent in October 2012. We have not observed a sizeable increase in non-agricultural unemployment for a year. Increases in non-agricultural employment mostly stem from increases in service employment. Half of the increases in service employment are due to the increases in following sub-sectors: administrative and support service activities, public administration and defense, education, human health and social work activities.

### Strong increases in non-agricultural labor force and non-agricultural employment

According to the data released by TurkSTAT, non-agricultural labor force increased by 1 million 74 thousand (5.2 percent), the non-agricultural employment increased by 993 thousand (5.5 percent) and non-agricultural unemployment increased by 81 thousand to 2 million 469 thousand persons in the period of October 2012 on a year on year basis (Figure 1).

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

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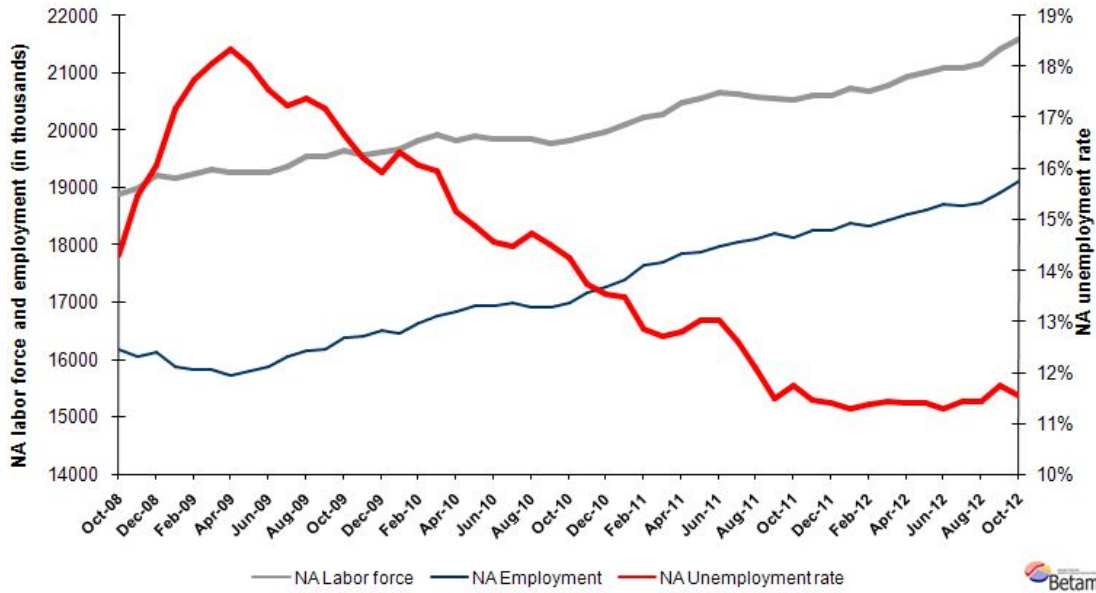
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## An increase in seasonally adjusted non-agricultural unemployment

According to seasonally adjusted data, compared to the period of September 2012, non-agricultural labor force increased by 176 thousand to 21 million 598 thousand in the period of October 2012 (Figure 2, Table 1). Non-agricultural employment increased by 201 thousand to 19 million 107 thousand. Consequently, the number of persons in non-agricultural decreased by 25 thousand, non-agricultural unemployment rate decreased from 11.7 percent to 11.5 percent.

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

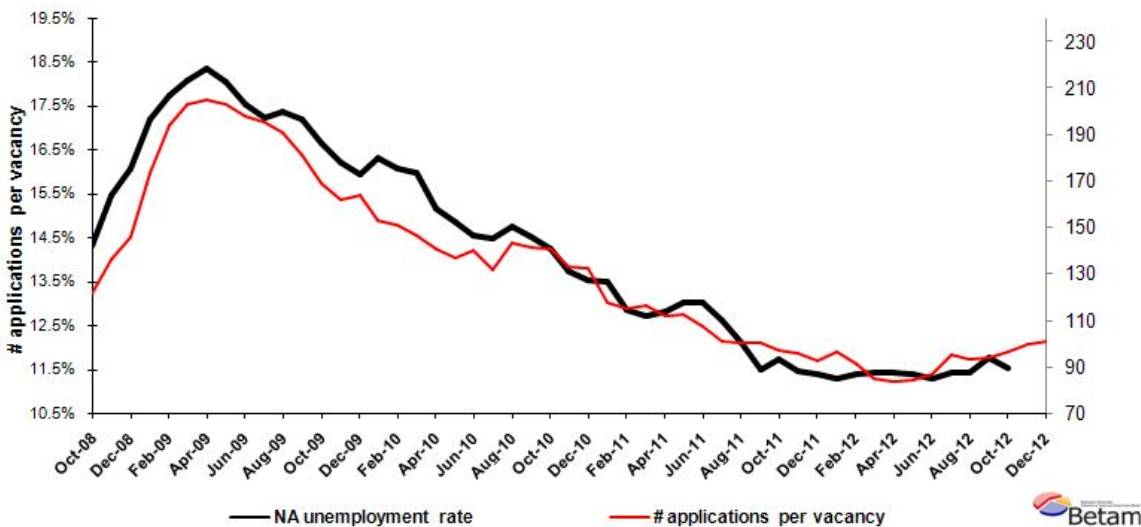


Source: TurkStat, **Betam**

## According to Kariyer.net data, increase in non-agricultural unemployment continues

Application per vacancy calculated by using series released by Kariyer.net<sup>1</sup> indicates that non-agricultural unemployment rate will increase slightly in the period of November 2012.

**Figure 1 Seasonally adjusted non-agricultural unemployment rate and application per vacancy**



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

<sup>1</sup> 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.

## Increase in service employment continues

Seasonally adjusted data shows that service employment increased by 160 thousand in October 2012 compared to September 2012 (Table 2, Figure 4)<sup>2</sup>. Manufacturing employment increased by only 9 thousand, while construction employment increased by 8 thousand in this period.

Employment increased by 1 million 19 thousand in the past year. Approximately 800 thousand of the increase stems from increases in service employment. To study the driving factors behind the increase, we seasonally adjust service employment data by subsectors (Table 3).<sup>3</sup> Increases in service employment are concentrated in certain sub-sectors. We grouped those sub-sectors, which are administrative and support service activities (N), public administration and defence (O), education (P) and human health and social work activities (Q). This group created 652 thousand jobs in service employment, which is 80 percent of the 820 thousand increase in service employment in the past year. This group constitutes 72 thousand of the 148 thousand increases in service employment from October 2012 to September 2012 as well.

Seasonally adjusted service employment series show that share of this group (administrative and support service activities (N), public administration and defence (O), education (P) and human health and social work activities (Q)) in total service employment has been increasing regularly. While the share of the group is 31.1 percent in October 2009, it increased to 36.4 percent in October 2012. In other words, more employment was created in this group relative to other sub-sectors.

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<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.

<sup>3</sup> Seasonal adjustment procedure is applied to each sub-sector of service employment separately. Hence the sum of these series may differ from the seasonally adjusted series of total service 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
September-09	19549	16189	3360	17.2%			
October-09	19642	16371	3271	16.7%	93	182	-89
November-09	19569	16396	3174	16.2%	-72	25	-98
December-09	19622	16496	3125	15.9%	52	101	-48
January-10	19672	16461	3211	16.3%	50	-36	86
February-10	19816	16635	3181	16.1%	144	174	-30
March-10	19936	16754	3182	16.0%	119	119	1
April-10	19832	16827	3005	15.2%	-104	73	-177
May-10	19894	16938	2957	14.9%	63	111	-48
June-10	19837	16949	2887	14.6%	-58	11	-69
July-10	19854	16980	2875	14.5%	18	31	-13
August-10	19846	16920	2926	14.7%	-8	-59	51
September-10	19773	16908	2866	14.5%	-73	-13	-60
October-10	19823	16998	2825	14.2%	49	90	-41
November-10	19890	17160	2729	13.7%	67	162	-95
December-10	19970	17267	2704	13.5%	81	106	-26
January-11	20108	17397	2711	13.5%	138	131	7
February-11	20235	17635	2599	12.8%	127	238	-111
March-11	20285	17706	2580	12.7%	50	70	-20
April-11	20470	17849	2620	12.8%	184	144	41
May-11	20549	17872	2677	13.0%	79	23	56
June-11	20669	17980	2689	13.0%	120	108	12
July-11	20641	18042	2600	12.6%	-28	62	-89
August-11	20586	18099	2487	12.1%	-55	57	-112
September-11	20568	18205	2362	11.5%	-18	107	-125
October-11	20532	18123	2409	11.7%	-35	-82	47
November-11	20616	18253	2363	11.5%	84	130	-46
December-11	20608	18261	2346	11.4%	-8	8	-17
January-12	20723	18388	2335	11.3%	115	126	-11
February-12	20679	18326	2353	11.4%	-44	-62	18
March-12	20794	18418	2375	11.4%	115	92	22
April-12	20928	18542	2386	11.4%	134	124	11
May-12	21014	18620	2395	11.4%	86	78	8
June-12	21080	18701	2379	11.3%	65	81	-16
July-12	21081	18672	2409	11.4%	1	-29	30
August-12	21159	18743	2417	11.4%	79	71	8
September-12	21422	18906	2516	11.7%	263	163	99
October-12	21598	19107	2491	11.5%	176	201	-25

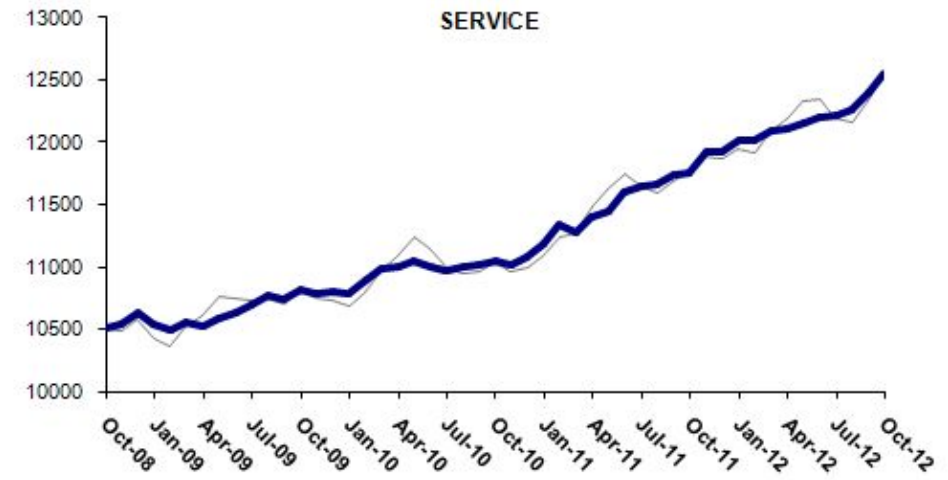
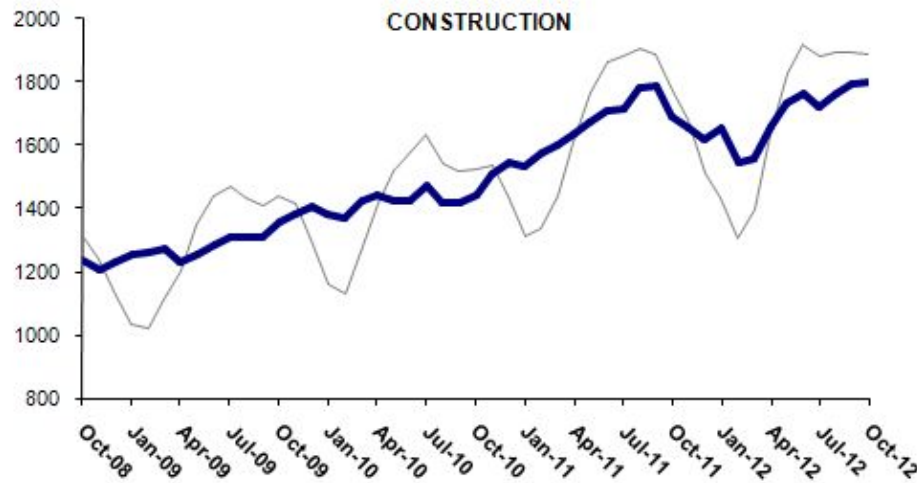
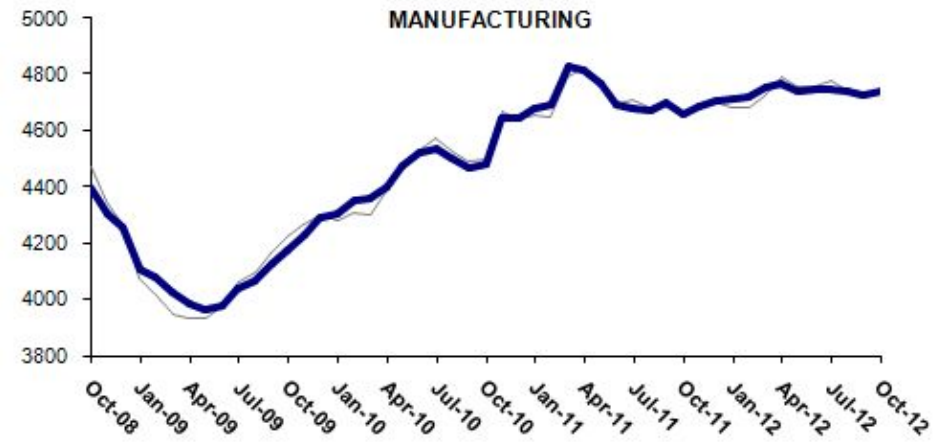
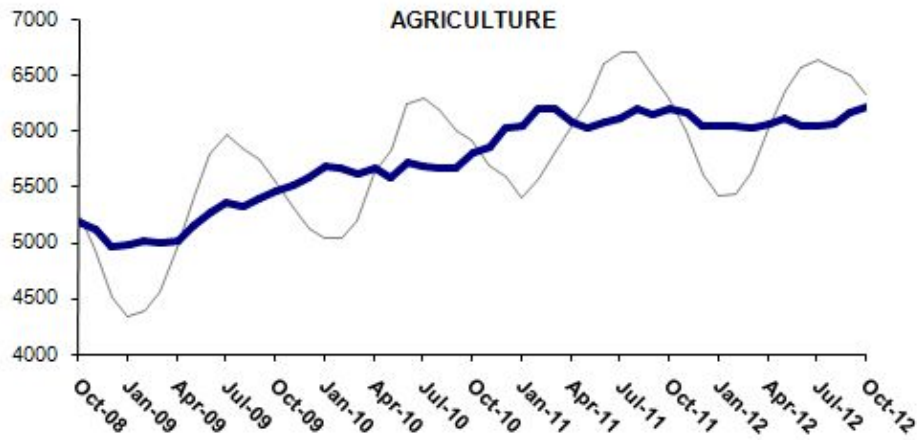
Source: TurkStat, **Betam**

**Tablo 2** Seasonally adjusted employment by sector (in thousands)

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
September-09	5393	4129	1309	10734				
October-09	5455	4178	1355	10811	62	49	46	77
November-09	5503	4227	1384	10790	48	49	29	-21
December-09	5574	4294	1403	10794	71	67	20	4
January-10	5673	4304	1379	10789	99	10	-24	-5
February-10	5663	4353	1371	10895	-10	50	-9	105
March-10	5617	4359	1423	10991	-46	5	53	96
April-10	5670	4401	1445	10996	53	42	22	5
May-10	5572	4473	1423	11049	-97	73	-22	53
June-10	5712	4526	1423	11006	139	52	0	-43
July-10	5681	4538	1471	10968	-30	12	48	-38
August-10	5662	4504	1417	10998	-19	-34	-54	30
September-10	5660	4469	1419	11011	-2	-34	2	14
October-10	5805	4482	1441	11048	145	13	22	36
November-10	5855	4647	1507	11015	49	165	66	-33
December-10	6027	4645	1548	11072	173	-2	42	57
January-11	6032	4681	1531	11187	5	36	-17	115
February-11	6189	4691	1576	11336	156	11	44	149
March-11	6201	4831	1600	11279	12	139	25	-57
April-11	6080	4817	1638	11399	-121	-13	38	120
May-11	6017	4767	1675	11445	-63	-51	37	45
June-11	6082	4690	1706	11601	65	-77	31	157
July-11	6107	4680	1718	11652	24	-10	12	50
August-11	6190	4673	1783	11661	83	-7	65	9
September-11	6136	4697	1787	11732	-54	25	4	71
October-11	6187	4659	1692	11756	51	-38	-95	24
November-11	6159	4688	1655	11919	-28	29	-37	163
December-11	6044	4707	1618	11931	-116	18	-36	11
January-12	6048	4711	1653	12021	5	4	35	90
February-12	6042	4722	1544	12010	-6	11	-110	-10
March-12	6029	4751	1560	12091	-14	30	17	81
April-12	6062	4766	1658	12113	33	15	98	22
May-12	6107	4744	1734	12155	45	-22	76	41
June-12	6040	4751	1764	12207	-67	7	30	52
July-12	6043	4746	1721	12210	3	-5	-43	3
August-12	6053	4739	1766	12258	10	-7	45	48
September-12	6163	4730	1795	12396	110	-9	29	139
October-12	6215	4739	1803	12556	52	9	8	160

Source: TurkStat, **Betam**

Figure 2 Employment by sectors (in thousands)<sup>4</sup>



Source: TurkStat, Betam

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

**Tablo 3 Service employment, seasonally adjusted (thousand)**

	Whole-sale and retail trade (G)	Transportation and storage (H)	Accommodation and food service activities (I)	Information and communication (J)	Financial and insurance activities (K)	Real estate activities (L)	Professional, scientific and technical activities (M)	Administrative and support service activities (N)	Public administration and defence (O)	Education (P)	Human health and social work activities (Q)	Arts, entertain-ment and recreation (R)	Other social, community and personal service activities (S+T+U)	Total service employment
Jan-09	3387	976	1053	163	284	58	378	509	1203	960	608	145	836	10561
Feb-09	3355	982	1043	162	278	61	370	538	1188	959	598	143	831	10507
Mar-09	3361	975	1036	173	278	61	377	548	1206	962	602	146	818	10543
Apr-09	3328	980	1022	185	290	57	376	554	1225	965	606	135	822	10545
May-09	3363	983	1021	187	276	58	393	559	1228	967	600	136	829	10598
Jun-09	3331	995	1024	169	280	59	401	583	1215	971	590	129	876	10624
Jul-09	3396	992	1047	154	269	59	416	608	1203	973	582	127	870	10697
Aug-09	3426	977	1054	139	276	60	427	626	1195	975	588	124	874	10742
Sep-09	3400	996	1074	132	268	61	422	633	1201	977	590	119	864	10737
Oct-09	3393	1004	1070	140	262	64	402	661	1215	979	589	118	868	10766
Nov-09	3370	1000	1081	141	265	73	404	671	1218	983	586	119	865	10776
Dec-09	3372	1009	1071	162	269	67	411	715	1234	984	578	112	827	10810
Jan-10	3323	992	1071	174	275	59	423	723	1249	986	586	108	838	10808
Feb-10	3319	999	1075	199	271	47	422	733	1299	996	592	107	838	10896
Mar-10	3320	1004	1090	200	282	54	423	742	1308	1004	593	103	859	10982
Apr-10	3348	1008	1076	195	275	58	443	748	1305	1006	590	109	841	11002
May-10	3331	1014	1099	186	287	65	444	766	1329	1010	585	103	841	11059
Jun-10	3353	1003	1092	187	265	62	435	754	1317	1015	596	109	815	11003
Jul-10	3317	1021	1093	202	265	61	413	764	1298	1022	603	108	816	10982
Aug-10	3335	1022	1086	215	264	62	418	764	1288	1029	596	107	818	11003
Sep-10	3345	1016	1076	222	269	66	427	789	1271	1037	583	101	824	11026
Oct-10	3350	991	1083	216	277	68	434	789	1264	1050	578	88	839	11027
Nov-10	3336	996	1075	218	271	67	433	793	1251	1054	590	91	829	11002
Dec-10	3350	998	1097	201	269	87	422	763	1277	1065	608	96	848	11079
Jan-11	3397	1003	1109	204	259	106	418	763	1290	1071	616	102	839	11178
Feb-11	3466	997	1127	199	278	121	424	751	1287	1076	628	101	868	11322
Mar-11	3433	1011	1125	199	268	126	414	748	1280	1078	641	96	857	11278
Apr-11	3468	1023	1152	197	263	137	408	747	1296	1087	653	94	880	11404
May-11	3457	1039	1146	196	271	149	398	764	1282	1096	674	99	866	11436
Jun-11	3525	1039	1151	202	280	149	410	779	1298	1105	679	101	864	11583
Jul-11	3517	1033	1139	215	290	155	411	788	1348	1111	695	102	864	11668
Aug-11	3464	1056	1144	223	283	166	435	788	1357	1124	708	102	833	11683
Sep-11	3487	1054	1132	232	284	175	437	791	1397	1132	729	104	809	11762
Oct-11	3465	1069	1129	224	287	181	451	797	1401	1136	749	99	783	11771
Nov-11	3517	1078	1140	226	287	180	459	813	1430	1148	754	100	793	11924
Dec-11	3510	1076	1142	229	283	177	473	828	1410	1156	761	102	805	11951
Jan-12	3517	1097	1146	221	283	173	476	847	1406	1169	766	101	797	11998
Feb-12	3493	1101	1148	210	273	180	490	863	1398	1179	773	103	769	11979
Mar-12	3527	1100	1159	205	270	179	504	888	1402	1189	772	102	766	12064
Apr-12	3505	1090	1177	209	268	179	504	920	1397	1200	777	109	750	12086
May-12	3509	1077	1181	229	259	171	509	921	1414	1211	787	103	751	12120
Jun-12	3464	1087	1200	247	266	182	511	933	1450	1219	801	99	723	12182
Jul-12	3455	1090	1206	246	264	188	531	929	1460	1232	809	101	721	12231
Aug-12	3472	1044	1225	248	263	190	506	950	1500	1237	820	102	737	12294
Sep-12	3480	1095	1252	248	262	184	514	955	1501	1250	834	110	756	12442
Oct-12	3519	1109	1278	264	253	186	527	958	1521	1260	847	112	755	12591

Source: TurkStat, **Betam**

**Tablo 4 Employment by service sub-sectors selected, seasonally adjusted (thousand)**

	N+O+P+Q	Total	N+O+P+Q / Total	Change in N+O+P+Q	Total change in service employment
Jan-09	3280	10561	31.1%		
Feb-09	3283	10507	31.2%	-7	-54
Mar-09	3319	10543	31.5%	29	37
Apr-09	3350	10545	31.8%	18	2
May-09	3353	10598	31.6%	1	53
Jun-09	3360	10624	31.6%	10	26
Jul-09	3366	10697	31.5%	30	73
Aug-09	3384	10742	31.5%	25	44
Sep-09	3401	10737	31.7%	36	-5
Oct-09	3444	10766	32.0%	39	30
Nov-09	3458	10776	32.1%	26	9
Dec-09	3511	10810	32.5%	43	35
Jan-10	3544	10808	32.8%	33	-3
Feb-10	3620	10896	33.2%	80	89
Mar-10	3647	10982	33.2%	42	86
Apr-10	3649	11002	33.2%	-12	20
May-10	3690	11059	33.4%	63	57
Jun-10	3682	11003	33.5%	-15	-56
Jul-10	3686	10982	33.6%	6	-21
Aug-10	3677	11003	33.4%	-17	21
Sep-10	3679	11026	33.4%	-8	23
Oct-10	3681	11027	33.4%	9	1
Nov-10	3688	11002	33.5%	-1	-25
Dec-10	3713	11079	33.5%	47	77
Jan-11	3740	11178	33.5%	39	98
Feb-11	3741	11322	33.0%	20	144
Mar-11	3748	11278	33.2%	4	-43
Apr-11	3783	11404	33.2%	62	126
May-11	3815	11436	33.4%	26	32
Jun-11	3861	11583	33.3%	51	148
Jul-11	3942	11668	33.8%	69	85
Aug-11	3977	11683	34.0%	40	14
Sep-11	4048	11762	34.4%	59	79
Oct-11	4082	11771	34.7%	31	9
Nov-11	4145	11924	34.8%	74	153
Dec-11	4155	11951	34.8%	12	27
Jan-12	4187	11998	34.9%	36	47
Feb-12	4213	11979	35.2%	28	-19
Mar-12	4252	12064	35.2%	49	85
Apr-12	4294	12086	35.5%	61	22
May-12	4332	12120	35.7%	42	34
Jun-12	4403	12182	36.1%	90	63
Jul-12	4430	12231	36.2%	33	49
Aug-12	4507	12294	36.7%	96	63
Sep-12	4540	12442	36.5%	60	149
Oct-12	4586	12591	36.4%	72	148

Source: TurkStat, **Betam**