

DECREASE IN UNEMPLOYMENT WITH RECOVERY IN MANUFACTURING AND CONSTRUCTION

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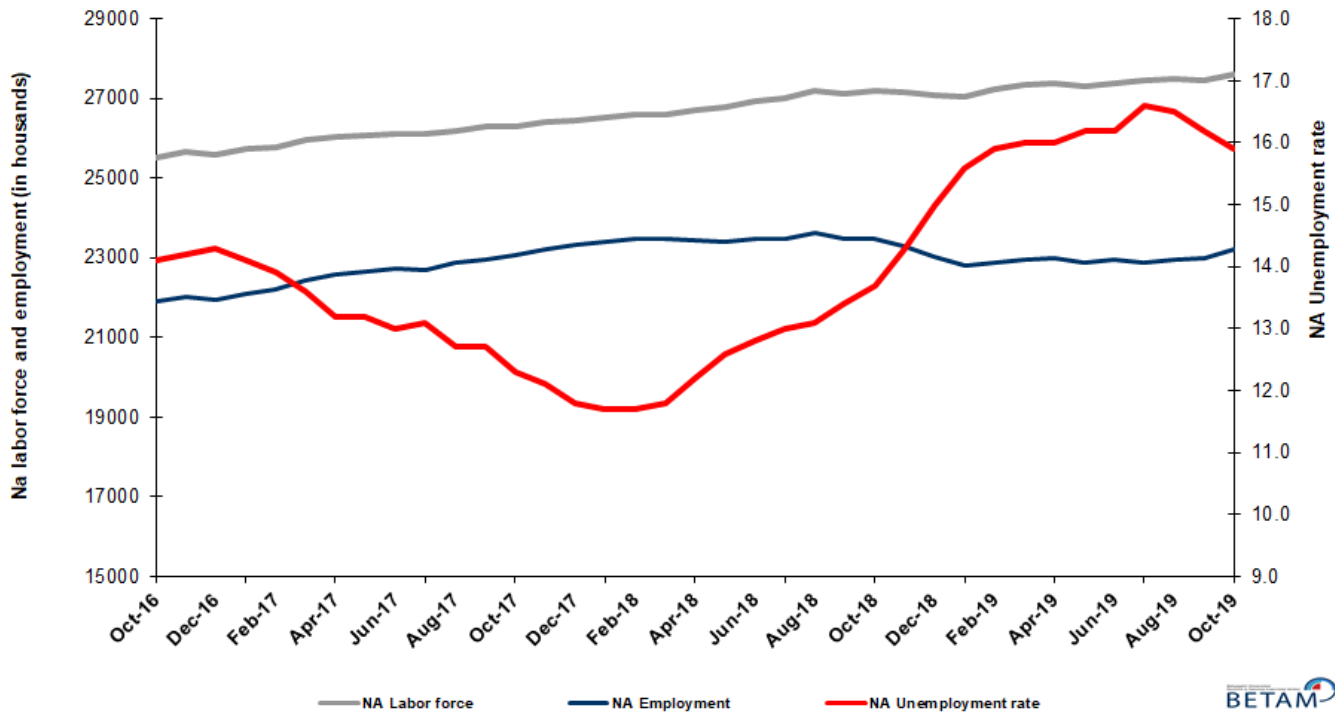
Executive Summary

Seasonally adjusted labor market data shows that in the period of October 2019, non-agricultural unemployment rate turned out to be 15.9 percent, with 0.3 percentage point decrease compared to September 2019. In this period, non-agricultural employment increased by 214 thousand and non-agricultural labor force increased by 157 thousand. According to sectorial data, the only sector showing decrease in employment is agriculture, decreasing by 92 thousand. Construction employment increased by 45 thousand and service employment increased by 49 thousand. The only sector showing the most significant increase (120 thousand) in employment is manufacturing. Based on the seasonally adjusted data, male non-agricultural employment increased by 130 thousand and female non-agricultural employment increased by 39 thousand.

Decrease in non-agricultural unemployment

Seasonally adjusted data shows that non-agricultural labor force reached 27 million 602 thousand by an increase of 157 thousand in October 2019, while non-agricultural employment reached 23 million 213 thousand following an increase of 214 thousand (Figure 1, Table 1). As a result, non-agricultural unemployment decreased by 57 thousand and reached 4 million 389 thousand, and non-agricultural unemployment rate dropped to 15.9 percent.

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



Source: Turkstat, Betam

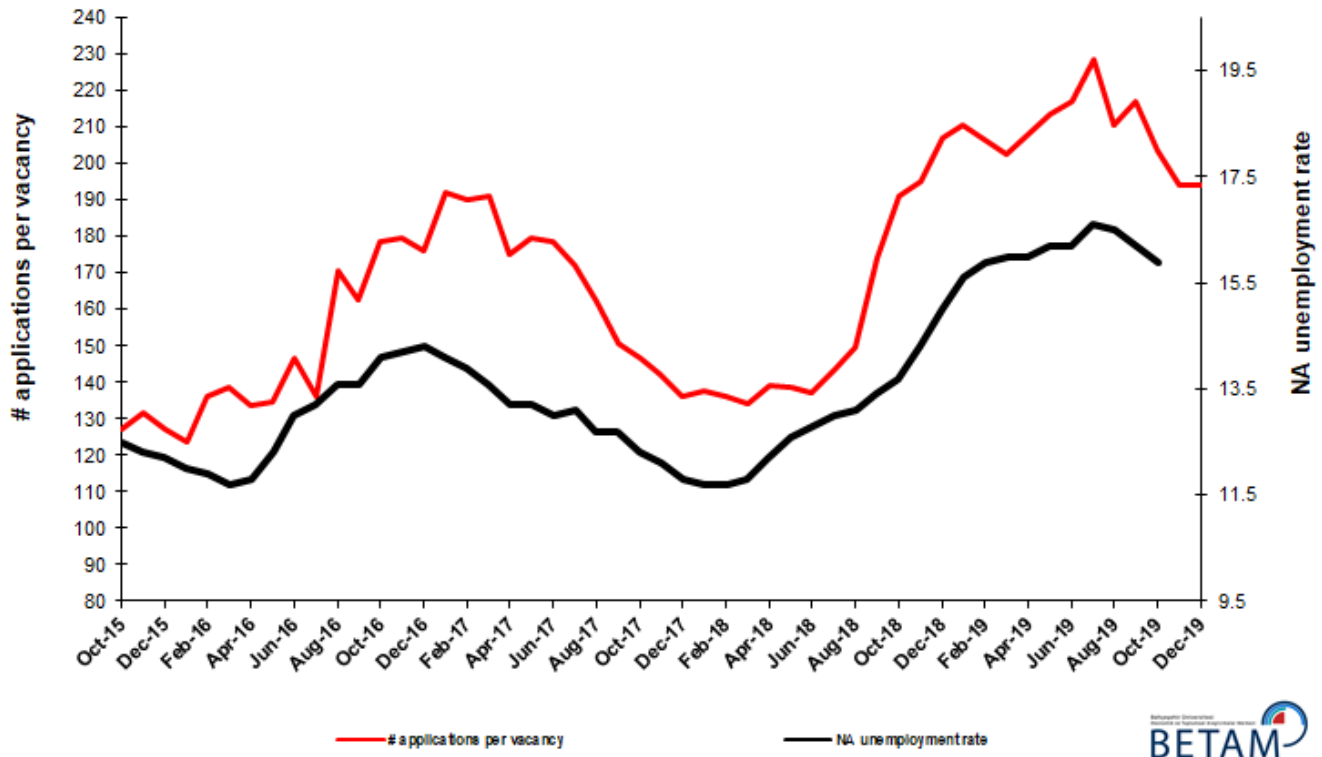
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Unemployment rate is expected to decrease in November 2019

Betam's forecasting model had predicted that non-agricultural unemployment rate would be 16.0 for October 2019 but it decreased indeed to 15.9 percent. Our forecasting model predicts a decrease of 0.2 percentage point in non-agricultural unemployment rate to 15.7 percent in November 2019. 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 Figure 3. 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.

Figure 2 Seasonally adjusted non-agricultural unemployment rate and application per vacancy



Source: Kariyer.net, Turkstat, Betam

Employment gains in all sectors except agriculture

According to seasonally adjusted sectorial labor market data, employment increased in the period of October 2019 compared to September 2019 in all sectors except agriculture (Figure 3, Table 2).³ After the increase of 3 thousand in September 2019, employment in agriculture sector decreased by 92 thousand in October 2019. With the increase of 32 thousand in September 2019, the number of employed in services sector increased by 49 thousand in October 2019. On the other hand, employment in manufacturing and in construction increased by 120 thousand and by 45 thousand respectively in October 2019.

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". For the innovations in the model please see Betam Research Brief 14 titled as "Mevsim Etkilerinden Arındırılmış İşsizlik Tahmini".

Soybilgen, B., "Kariyer.net Verisiyle Kısa Vadeli Tarım Dışı İşsizlik Tahmini", Betam Research Brief 168.

<http://betam.bahcesehir.edu.tr/tr/2014/06/kariyer-net-verisiyle-kisa-vadeli-tarim-disi-issizlik-tahmini/>

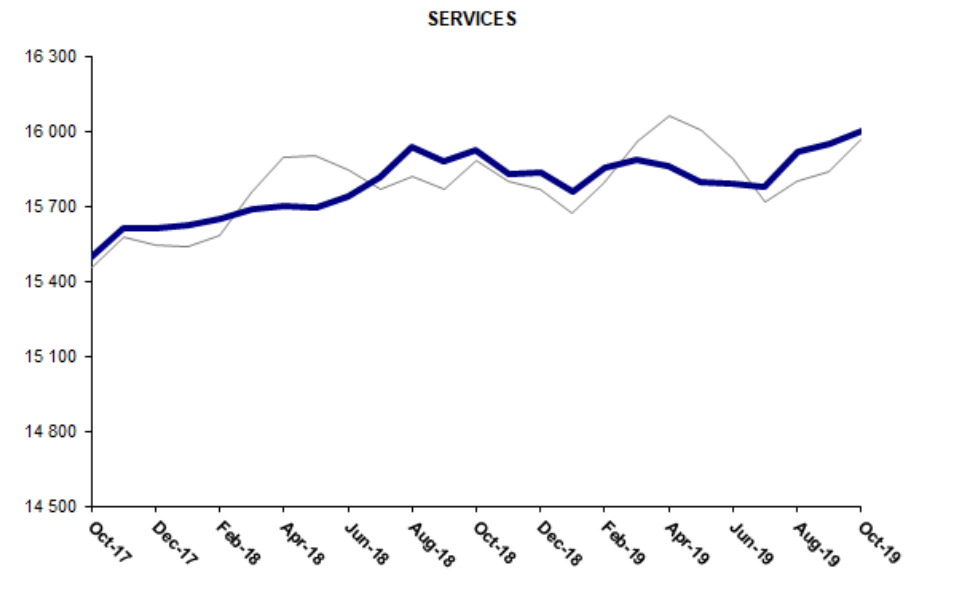
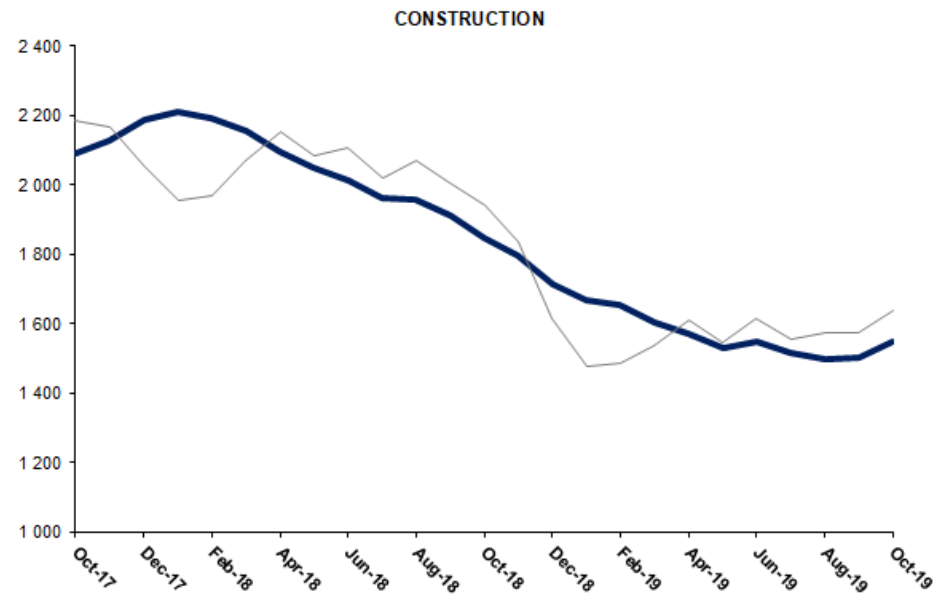
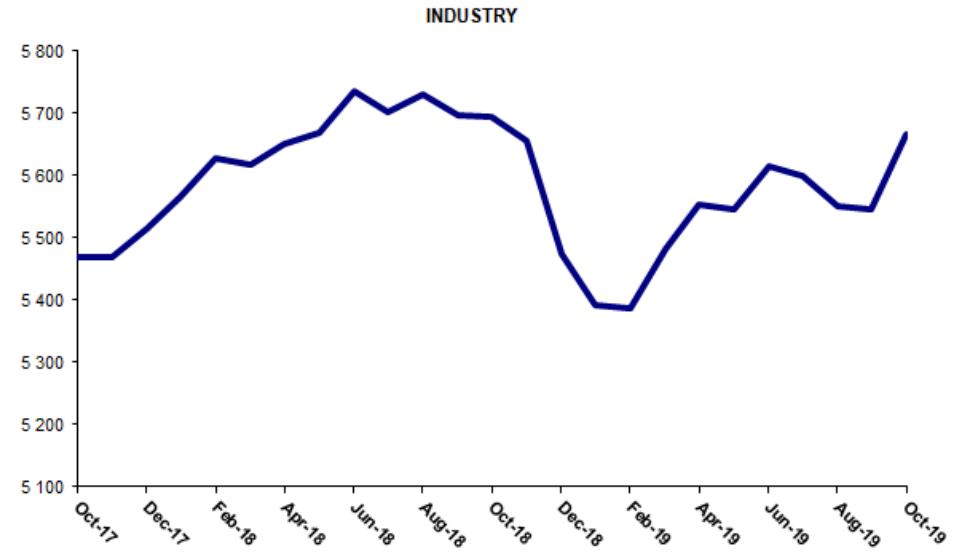
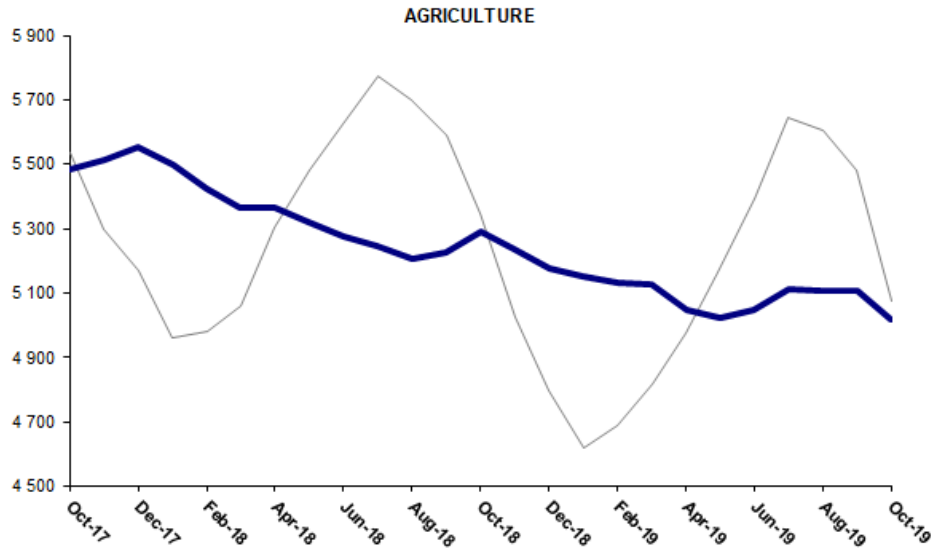
Soybilgen, B., "Mevsim Etkilerinden Arındırılmış İşsizlik Tahmini", Betam Research Brief 14

<http://betam.bahcesehir.edu.tr/2015/08/mevsim-etkilerinden-arindirilmis-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 Employment in each sector is seasonally adjusted 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.

Figure 3: Employment by sectors (in thousand)

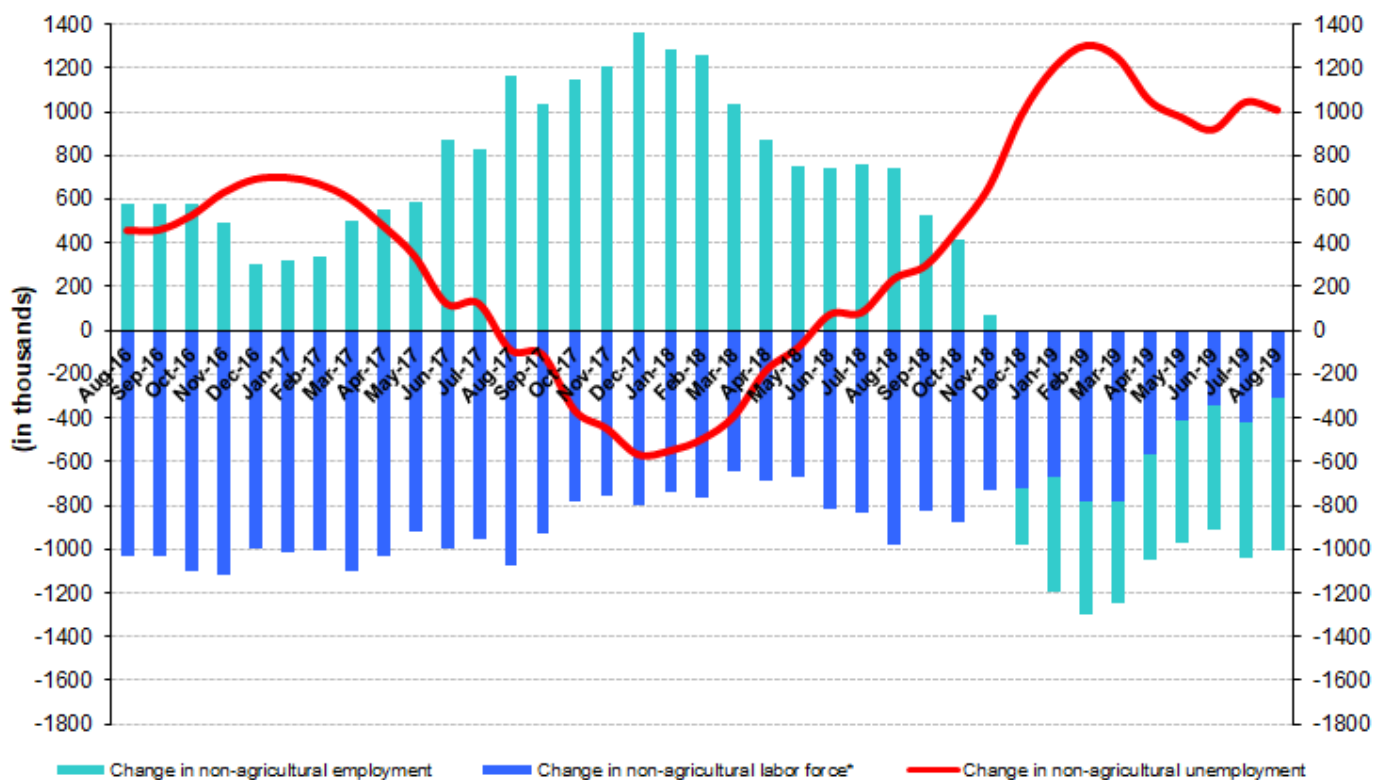


Source: TURKSTAT, Betam

Non-agricultural employment continues to decline year-on-year

Compared to October 2018, non-agricultural labor force increased by 372 thousand (1.4 percent) and non-agricultural employment decreased by 258 thousand (-1.1 percent) (Figure 4). Although periodical labor force growth recorded a remarkable increase from September to October, the annual growth rate remained well below its normal tendency. However, year-on-year decrease in employment continued for the 11th consecutive month. Thus, compared to October 2018, the number of non-agricultural unemployed increased by 630 thousand.

Figure 4 Year-on-year changes in non-agricultural labor force, employment, and unemployment



Source: TURKSTAT, Betam

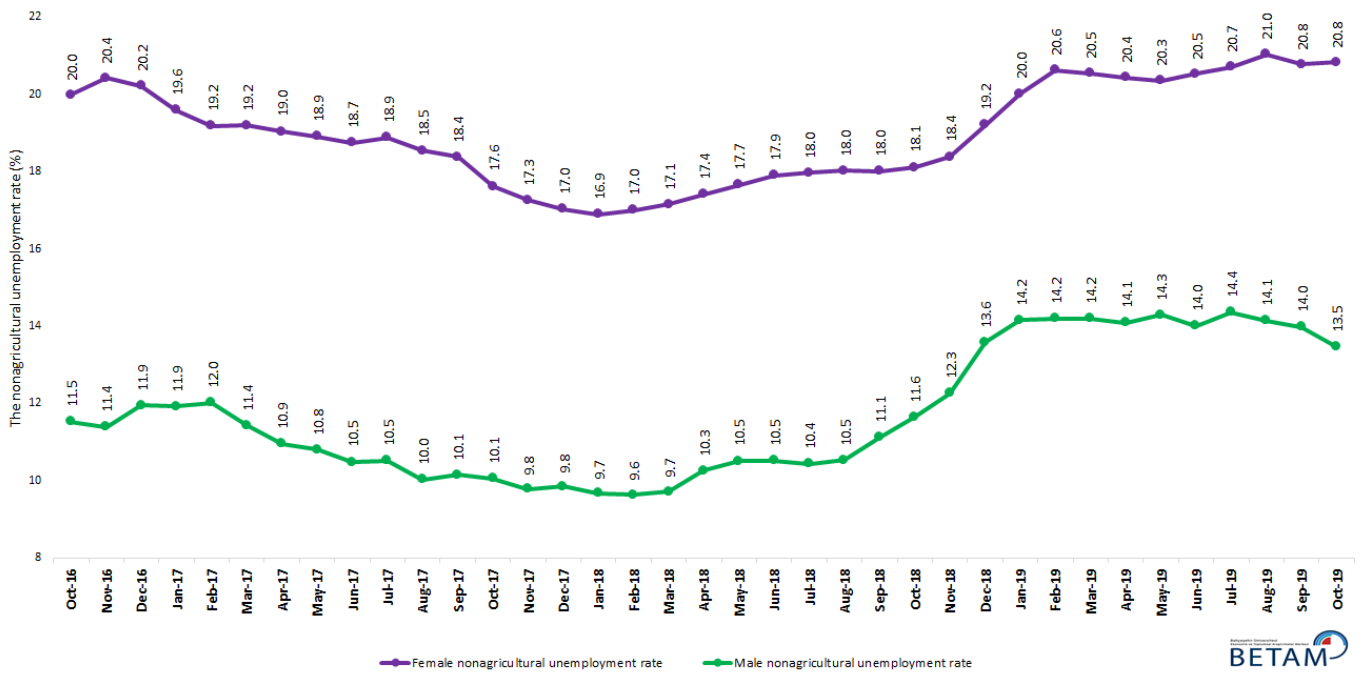
Sharp decrease in male unemployment while female unemployment remains unchanged

Figure 5 shows seasonally adjusted non-agricultural unemployment rate for males (green) and for females (purple)⁴. In the period of October 2019, compared to the previous month, female non-agricultural unemployment remained unchanged at 20.8 percent while male non-agricultural unemployment rate decreased by 0.5 percent to 13.5 percent. As a result, the gender gap in non-agricultural unemployment rates increased from 6.8 percent to 7.3 percent.

Along with the increase of 55 thousand in female non-agricultural labor force, female non-agricultural employment increased by 39 thousand, while male employment increased by 130 thousand and male labor force increase remained at 37 thousand (Table 3). Since October 2018, male labor force and female labor force increased by 102 thousand and 322 thousand respectively.

⁴ 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 (There should be minimum 36 observations). With the announcement of the period of February 2017 data, the number of observations required for the seasonal decontamination process was provided. From this period Betam generated seasonal adjustment series in terms of gender. Nevertheless, it should not be forgotten that seasonal adjustment may cause extra volatility in the series for at least a while.

Figure 5: Seasonally adjusted non-agricultural unemployment rate by gender



Source: Turkstat, Betam

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

	Labor force	Employment	Unemployment	Unemployment rate	Monthly changes		
					Labor force	Employment	Unemployment
October-16	25525	21926	3599	14.1%			
November-16	25663	22019	3644	14.2%	138	93	45
December-16	25603	21942	3661	14.3%	-60	-77	17
January-17	25719	22093	3626	14.1%	116	151	-35
February-17	25789	22204	3585	13.9%	69	111	-42
March-17	25964	22433	3531	13.6%	176	229	-53
April-17	26018	22584	3434	13.2%	54	151	-97
May-17	26092	22648	3444	13.2%	74	64	10
June-17	26130	22733	3397	13.0%	38	85	-47
July-17	26122	22700	3422	13.1%	-8	-33	25
August-17	26195	22868	3327	12.7%	73	168	-95
September-17	26286	22948	3338	12.7%	92	80	12
October-17	26295	23061	3234	12.3%	9	113	-104
November-17	26404	23209	3195	12.1%	109	148	-39
December-17	26435	23316	3119	11.8%	32	107	-75
January-18	26507	23406	3101	11.7%	72	90	-18
February-18	26582	23472	3110	11.7%	75	66	9
March-18	26600	23461	3139	11.8%	18	-11	29
April-18	26707	23449	3258	12.2%	108	-12	120
May-18	26787	23412	3375	12.6%	80	-37	117
June-18	26939	23491	3448	12.8%	152	79	73
July-18	26993	23484	3509	13.0%	54	-7	61
August-18	27190	23628	3562	13.1%	197	144	53
September-18	27125	23490	3635	13.4%	-65	-138	73
October-18	27189	23464	3725	13.7%	64	-26	90
November-18	27160	23276	3884	14.3%	-29	-188	159
December-18	27091	23027	4064	15.0%	-69	-249	180
January-19	27041	22823	4218	15.6%	-49	-204	155
February-19	27228	22899	4329	15.9%	187	76	111
March-19	27350	22974	4376	16.0%	122	75	47
April-19	27363	22985	4378	16.0%	13	11	2
May-19	27297	22875	4422	16.2%	-66	-110	44
June-19	27391	22954	4437	16.2%	94	79	15
July-19	27452	22895	4557	16.6%	61	-59	120
August-19	27504	22966	4538	16.5%	52	71	-19
September-19	27445	22999	4446	16.2%	-59	33	-92
October-19	27602	23213	4389	15.9%	157	214	-57

Source: Turkstat, Betam

Table 2 Seasonally adjusted employment by sectors (in thousands) *

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
October-16	5269	5282	1985	14659				
November-16	5282	5316	1986	14717	13	34	1	58
December-16	5312	5265	1958	14719	30	-51	-28	2
January-17	5437	5274	1966	14854	125	9	8	135
February-17	5478	5251	2016	14937	41	-23	50	83
March-17	5386	5346	2092	14994	-92	95	76	57
April-17	5367	5372	2126	15086	-19	26	34	92
May-17	5399	5386	2092	15169	32	14	-34	83
June-17	5395	5383	2067	15283	-4	-3	-25	114
July-17	5497	5363	2107	15230	102	-20	40	-53
August-17	5463	5437	2152	15280	-34	74	45	50
September-17	5503	5421	2124	15404	40	-16	-28	124
October-17	5484	5470	2092	15498	-19	49	-32	94
November-17	5514	5470	2129	15610	30	0	37	112
December-17	5553	5514	2187	15614	39	44	58	4
January-18	5497	5567	2212	15627	-56	53	25	13
February-18	5424	5627	2195	15651	-73	60	-17	24
March-18	5365	5618	2154	15689	-59	-9	-41	38
April-18	5366	5650	2098	15701	1	32	-56	12
May-18	5320	5669	2050	15694	-46	19	-48	-7
June-18	5276	5737	2014	15739	-44	68	-36	45
July-18	5247	5703	1961	15819	-29	-34	-53	80
August-18	5207	5730	1959	15939	-40	27	-2	120
September-18	5227	5698	1911	15881	20	-32	-48	-58
October-18	5288	5696	1846	15922	61	-2	-65	41
November-18	5235	5656	1795	15826	-53	-40	-51	-96
December-18	5178	5474	1715	15838	-57	-182	-80	12
January-19	5153	5392	1670	15761	-25	-82	-45	-77
February-19	5130	5388	1656	15855	-23	-4	-14	94
March-19	5126	5482	1604	15888	-4	94	-52	33
April-19	5047	5553	1574	15858	-79	71	-30	-30
May-19	5024	5546	1532	15796	-23	-7	-42	-62
June-19	5049	5616	1548	15790	25	70	16	-6
July-19	5110	5600	1517	15777	61	-16	-31	-13
August-19	5105	5551	1498	15918	-5	-49	-19	141
September-19	5108	5546	1503	15950	3	-5	5	32
October-19	5016	5666	1548	15999	-92	120	45	49

Source: Turkstat, Betam

Table 3: Seasonally adjusted non-agricultural labor force by gender (thousands)

	Female Labor Force	Female Employment	Female Unemployed	Male Labor Force	Male Employment	Male Unemployed
November-16	7466	5942	1524	18155	16088	2067
December-16	7451	5945	1506	18185	16013	2172
January-17	7446	5987	1459	18286	16106	2180
February-17	7495	6058	1437	18290	16092	2199
March-17	7596	6138	1458	18339	16244	2095
April-17	7602	6155	1447	18378	16365	2012
May-17	7667	6217	1450	18388	16401	1986
June-17	7679	6240	1439	18435	16502	1933
July-17	7698	6245	1453	18439	16500	1938
August-17	7720	6289	1431	18490	16634	1855
September-17	7784	6353	1430	18507	16629	1878
October-17	7784	6412	1371	18511	16649	1862
November-17	7835	6483	1352	18561	16745	1816
December-17	7878	6536	1342	18602	16771	1831
January-18	7917	6580	1337	18613	16812	1800
February-18	7934	6585	1349	18631	16835	1796
March-18	7927	6567	1359	18667	16852	1814
April-18	7988	6597	1391	18725	16805	1920
May-18	8042	6622	1420	18750	16779	1971
June-18	8086	6639	1448	18830	16848	1982
July-18	8108	6651	1457	18821	16856	1965
August-18	8197	6719	1477	18910	16919	1991
September-18	8187	6712	1474	18889	16789	2100
October-18	8263	6767	1496	18875	16677	2198
November-18	8252	6735	1517	18875	16562	2313
December-18	8330	6730	1600	18869	16308	2562
January-19	8358	6685	1673	18869	16198	2671
February-19	8425	6687	1737	18913	16228	2685
March-19	8470	6730	1739	18915	16229	2686
April-19	8419	6699	1720	18895	16233	2662
May-19	8377	6672	1705	18893	16194	2699
June-19	8407	6681	1726	18893	16248	2645
July-19	8430	6684	1746	18944	16223	2721
August-19	8488	6703	1785	18921	16247	2674
September-19	8454	6698	1756	18940	16294	2647
November-19	8509	6737	1772	18977	16424	2553

Source: Turkstat, Betam