

## PAUSE IN UNEMPLOYMENT INCREASE, EMPLOYMENT LOSSES IN INDUSTRY AND CONSTRUCTION

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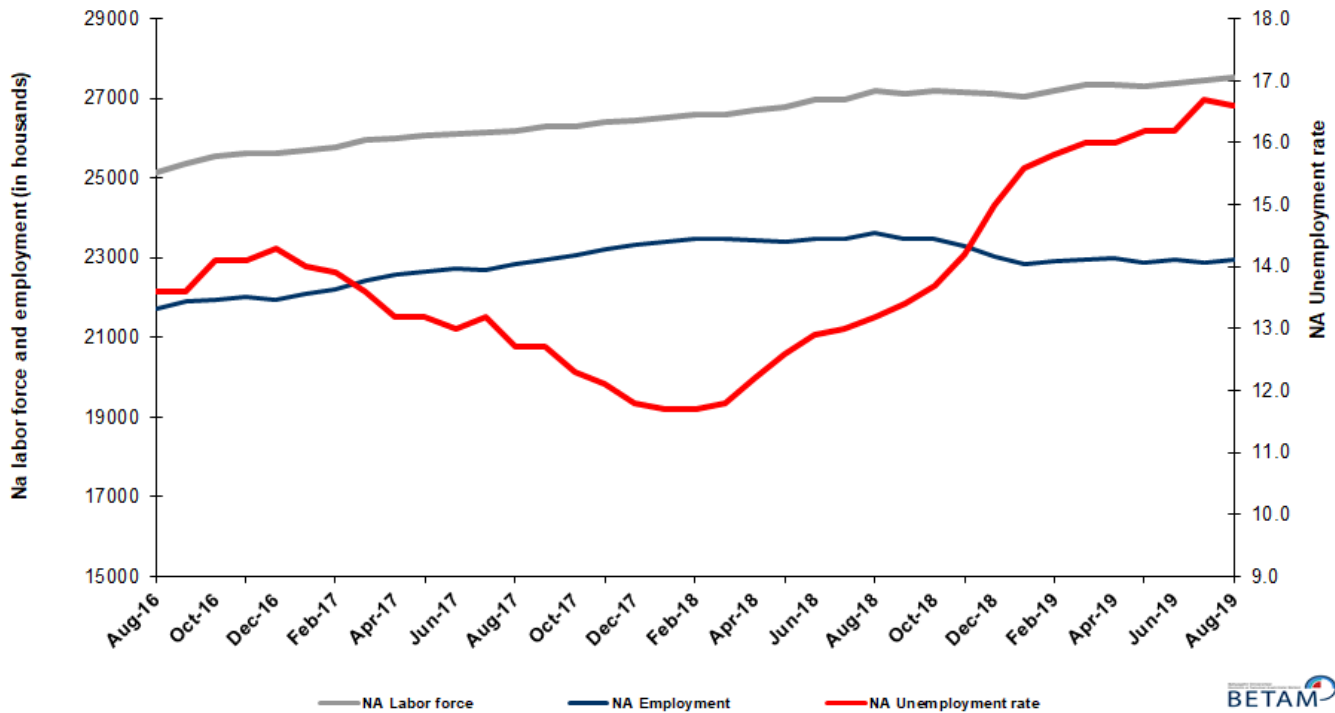
### Executive Summary

Seasonally adjusted labor market data shows that, in the period of August 2019, non-agricultural unemployment rate turned out to be 16.6 percent, with 0.1 point decrease compared to July 2019. In this period, non-agricultural employment increased by 69 thousand and non-agricultural labor force increased by 50 thousand. According to sectorial data, the only sector showing increase in employment with 141 thousand is services, and the sector showing the most significant decrease with 49 thousand is industry. While agricultural employment decreased by 3 thousand, construction lost 24 thousand workers. Based on the seasonally adjusted data, male employment had a net loss in employment for the 12<sup>th</sup> consecutive period and female employment increased by 25 thousand. Apparently, the decreases in male employment is affected by the losses in construction employment.

### Limited decrease in the number of non-agricultural unemployed

Seasonally adjusted data shows that non-agricultural labor force reached 27 million 518 thousand by an increase of 50 thousand in August 2019, while non-agricultural employment went up to 22 million 950 thousand after an increase of 69 thousand in August 2019 (Figure 1, Table 1). As a result, the number of unemployed decreased by 19 thousand and went down 4 million 568 thousand, and non-agricultural unemployment rate declined to 16.6 percent.

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



Source: Turkstat, Betam

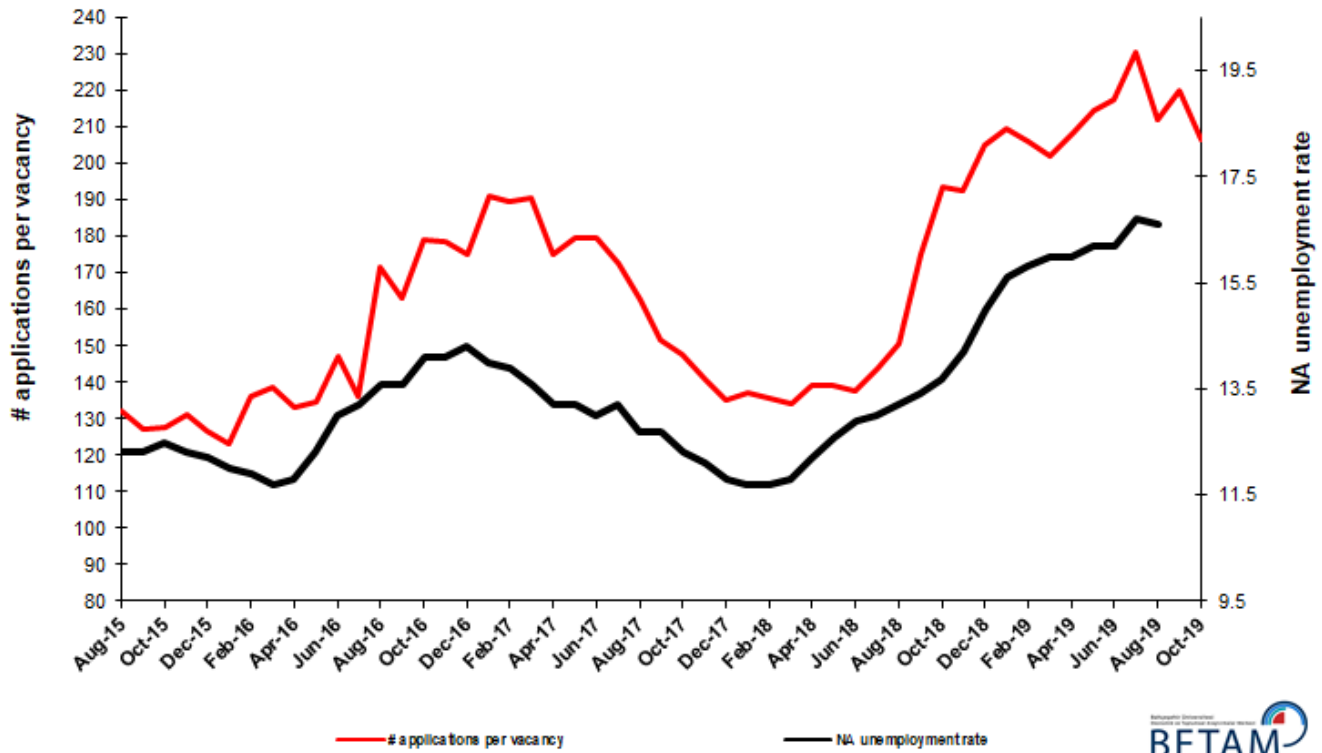
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## Unemployment rate is expected to increase in September 2019

Betam's forecasting model had predicted that non-agricultural unemployment rate would be 16.6 percent for August 2019 and the unemployment rate decreased indeed to 16.6 percent. Our forecasting model predicts an increase of 0.2 percentage points in non-agricultural unemployment rate for September 2019 that would reach 16.8 percent. Forecasting model details are available on Betam's website.<sup>1</sup> Kariyer.net<sup>2</sup> 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 increases in services, declines in industry and construction

According to seasonally adjusted sectorial labor market data, employment decreased in the period of August 2019 compared to July 2019 in all sectors except services (Figure 3, Table 2).<sup>3</sup> After showing an increase of 16 thousand in July 2019, employment in industry sector decreased by 49 thousand in August 2019. With the decrease of 13 thousand in July 2019, employment loss in services sector increased by 141 thousand in August 2019. As for the construction, the employment increase observed in the period of June after continuous decreases since February 2018, reversed in July and August 2019 to decreases; During these two consecutive periods employment losses attained 57 thousand.

<sup>1</sup> 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/2014/06/kariyer-net-verisiyle-kisa-vadeli-tarim-disi-issizlik-tahmini/>

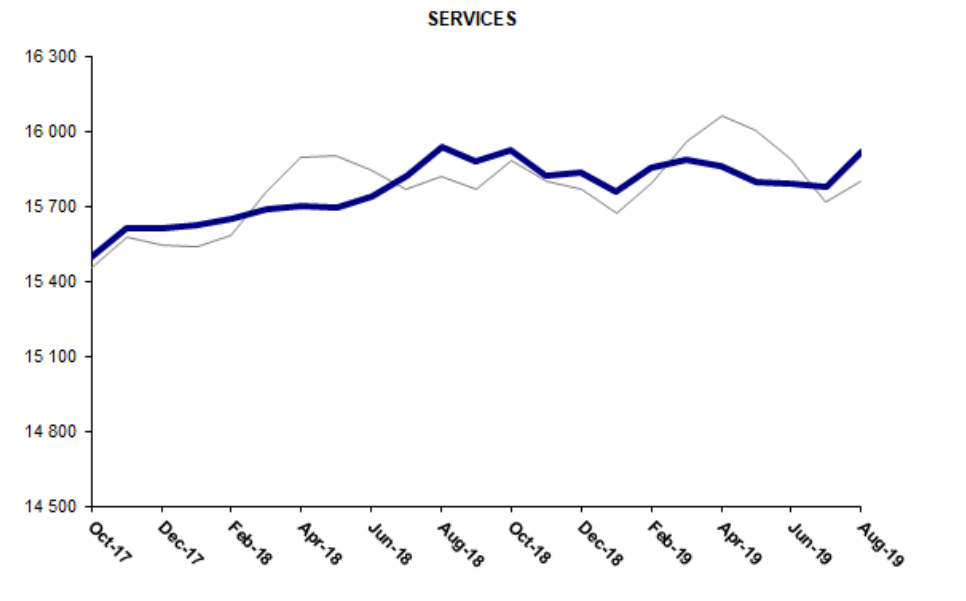
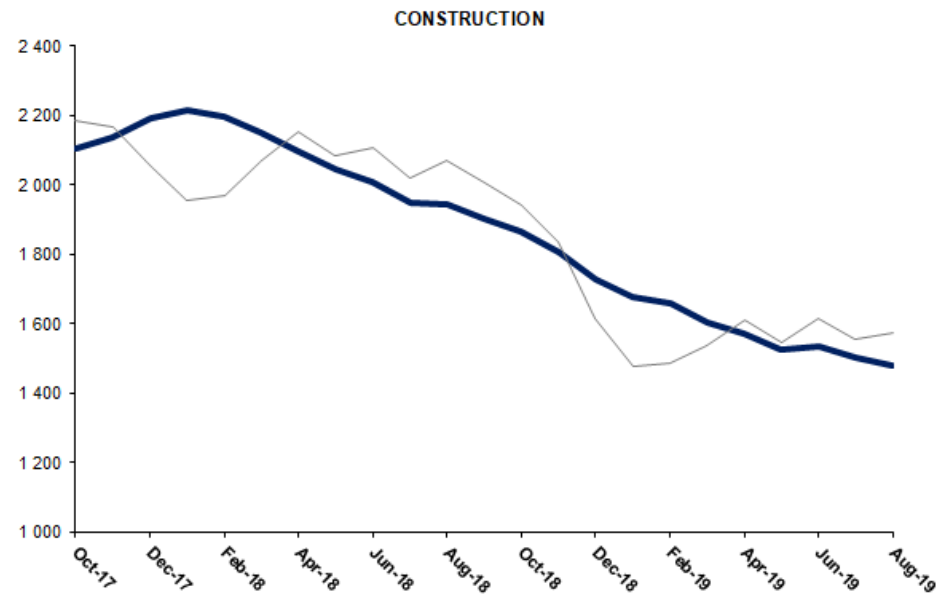
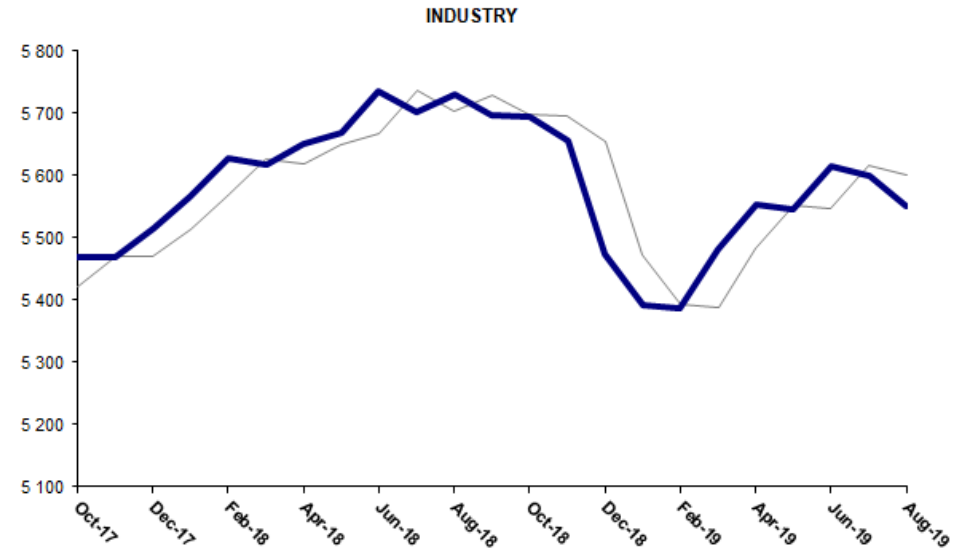
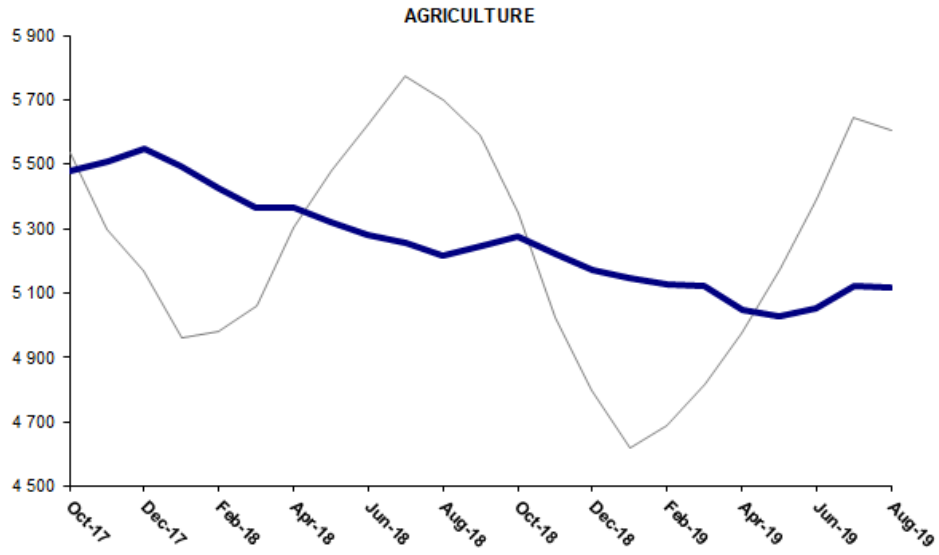
Soybilgen, B., "Mevsim Etkilerinden Arındırılmış İşsizlik Tahmini", Betam Research Brief 14

<http://betam.bahcesehir.edu.tr/2015/08/mevsim-etkilerinden-arindirilmis-tarim-disi-issizlik-tahmini/>

<sup>2</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. 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.

<sup>3</sup> 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)**

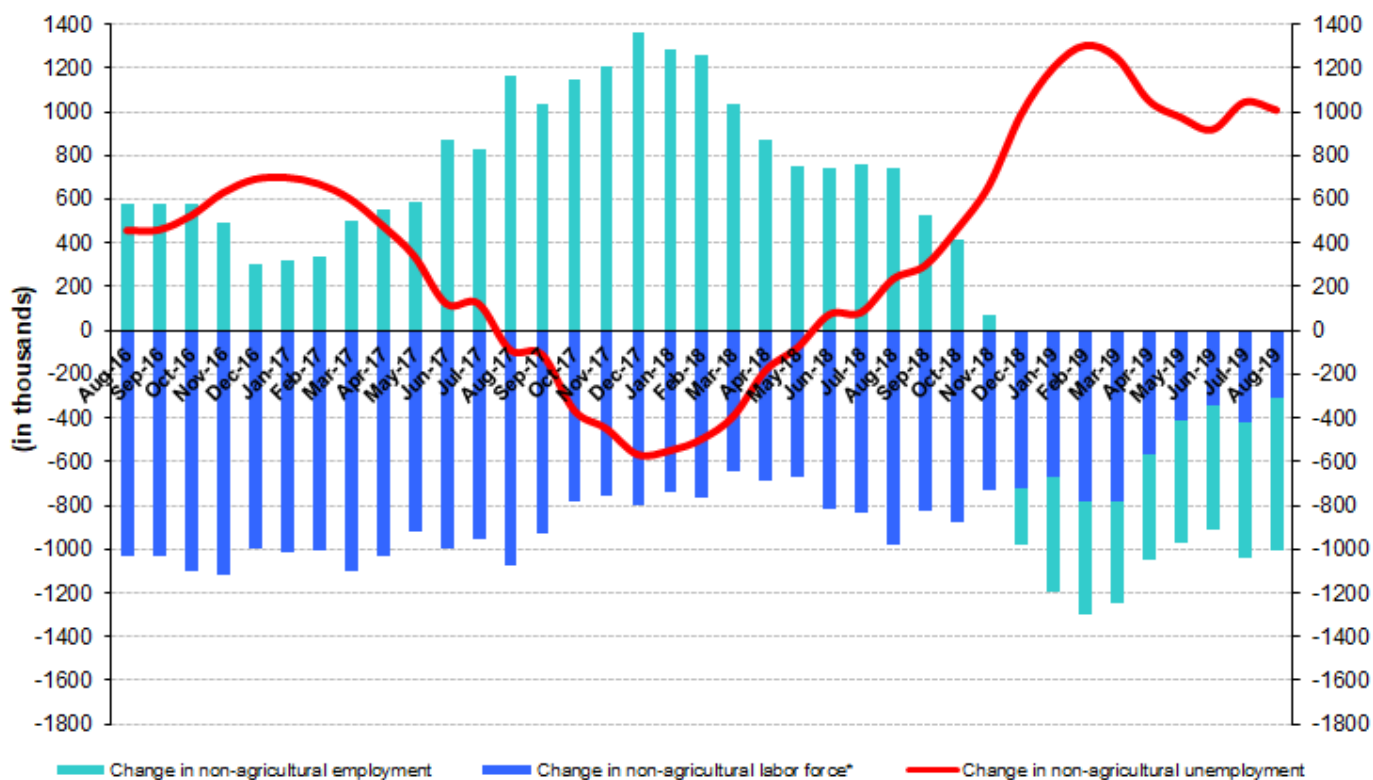


Source: TURKSTAT, Betam

## Year-on-year decline in non-agricultural employment continues

From August 2018 to August 2019 non-agricultural labor force increased by 309 thousand (1.1 percent) and non-agricultural employment decreased by 695 thousand (-2.9 percent) (Figure 4). Annual labor force growth slowed down along with employment losses and deviated from its structural trend. On the other hand, non-agricultural employment has been declining for ninth consecutive month. Thus, compared to August 2018, the number of non-agricultural unemployed increased by 1 million 4 thousand.

**Figure 4 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

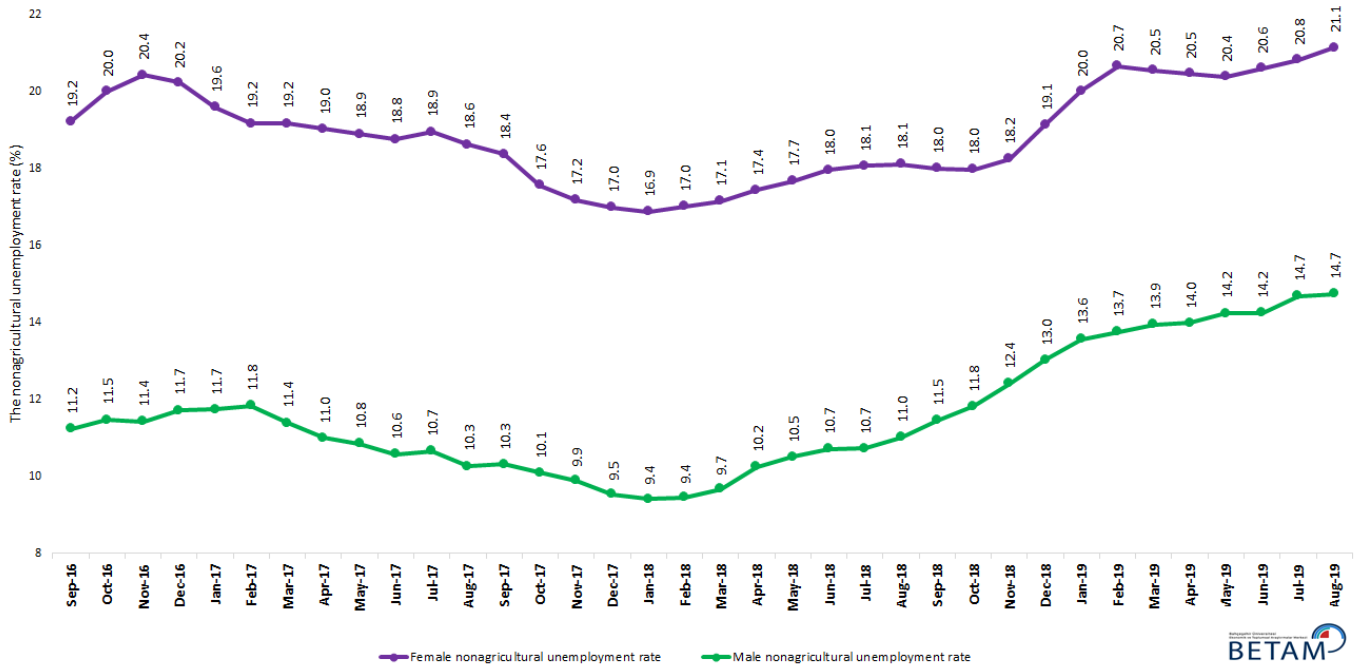
## Male employment has been consecutively decreasing for twelve months

Figure 5 shows seasonally adjusted non-agricultural unemployment rate for males (green) and for females (purple)<sup>4</sup>. In the period of August 2019, compared to the previous period, female non-agricultural unemployment rate increased by 0.3 points and reached 21.1 percent. The male unemployment rate remained unchanged at 14.7 percent. As a result, the gender gap in non-agricultural unemployment rates went up to 6.4 percent.

In this period, while female labor force increased by 66 thousand, female employment increased by 25 thousand. This development may imply that the “additional workers effect” could have come into play again as it was observed during the past episodes of high unemployment. On the other hand, male labor force decreased by 30 thousand and male employment decreased by 36 thousand (Table 3). It is worthy to note that over the last 12 months male employment decreased by 705 thousand while male labor force decreased by 2 thousand. That is said female labor force increased by 292 thousand in the same period.

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
August-16	25134	21716	3418	13.6%			
September-16	25361	21912	3449	13.6%	227	196	31
October-16	25533	21933	3600	14.1%	172	21	151
November-16	25640	22025	3615	14.1%	107	92	15
December-16	25608	21946	3662	14.3%	-32	-79	47
January-17	25694	22097	3597	14.0%	86	151	-65
February-17	25790	22205	3585	13.9%	96	108	-12
March-17	25962	22431	3531	13.6%	172	226	-54
April-17	26016	22582	3434	13.2%	54	151	-97
May-17	26089	22645	3444	13.2%	73	63	10
June-17	26126	22730	3396	13.0%	38	85	-47
July-17	26146	22695	3451	13.2%	20	-35	55
August-17	26186	22860	3326	12.7%	39	165	-126
September-17	26281	22943	3338	12.7%	95	83	12
October-17	26309	23073	3236	12.3%	28	130	-102
November-17	26415	23219	3196	12.1%	106	146	-40
December-17	26443	23323	3120	11.8%	28	104	-76
January-18	26512	23410	3102	11.7%	69	87	-18
February-18	26583	23473	3110	11.7%	71	63	8
March-18	26599	23460	3139	11.8%	15	-13	28
April-18	26703	23445	3258	12.2%	104	-15	119
May-18	26784	23409	3375	12.6%	81	-36	117
June-18	26962	23484	3478	12.9%	178	75	103
July-18	26982	23474	3508	13.0%	19	-10	29
August-18	27206	23615	3591	13.2%	225	141	84
September-18	27113	23480	3633	13.4%	-93	-135	42
October-18	27211	23483	3728	13.7%	98	3	95
November-18	27145	23290	3855	14.2%	-66	-193	127
December-18	27104	23038	4066	15.0%	-41	-252	211
January-19	27050	22830	4220	15.6%	-54	-208	154
February-19	27200	22902	4298	15.8%	150	72	78
March-19	27350	22974	4376	16.0%	150	72	78
April-19	27361	22983	4378	16.0%	11	9	2
May-19	27291	22870	4421	16.2%	-70	-113	43
June-19	27379	22944	4435	16.2%	88	74	14
July-19	27468	22881	4587	16.7%	89	-63	152
August-19	27518	22950	4568	16.6%	50	69	-19

Source: Turkstat, Betam

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

	Agriculture	Industry	Construction	Service	Monthly changes			
					Agriculture	Industry	Construction	Service
August-16	5274	5224	1919	14573				
September-16	5328	5260	2028	14624	54	36	109	51
October-16	5264	5282	1992	14659	-64	22	-36	35
November-16	5276	5316	1992	14716	12	34	0	57
December-16	5308	5265	1963	14719	32	-51	-29	3
January-17	5434	5274	1969	14854	126	9	6	135
February-17	5477	5251	2017	14937	43	-23	48	83
March-17	5386	5346	2091	14994	-91	95	74	57
April-17	5367	5372	2123	15086	-19	26	32	92
May-17	5400	5386	2089	15170	33	14	-34	84
June-17	5396	5383	2063	15284	-4	-3	-26	114
July-17	5501	5363	2101	15231	105	-20	38	-53
August-17	5468	5437	2143	15281	-33	74	42	50
September-17	5514	5421	2119	15403	46	-16	-24	122
October-17	5478	5470	2105	15498	-36	49	-14	95
November-17	5506	5470	2139	15610	28	0	34	112
December-17	5548	5514	2195	15614	42	44	56	4
January-18	5494	5567	2217	15627	-54	53	22	13
February-18	5422	5627	2196	15651	-72	60	-21	24
March-18	5363	5618	2152	15689	-59	-9	-44	38
April-18	5366	5650	2094	15701	3	32	-58	12
May-18	5321	5669	2045	15695	-45	19	-49	-6
June-18	5279	5737	2007	15740	-42	68	-38	45
July-18	5254	5703	1951	15820	-25	-34	-56	80
August-18	5215	5730	1945	15940	-39	27	-6	120
September-18	5244	5698	1903	15880	29	-32	-42	-60
October-18	5278	5696	1865	15922	34	-2	-38	42
November-18	5223	5656	1808	15825	-55	-40	-57	-97
December-18	5169	5474	1726	15837	-54	-182	-82	12
January-19	5147	5392	1677	15761	-22	-82	-49	-76
February-19	5126	5388	1659	15855	-21	-4	-18	94
March-19	5124	5482	1604	15888	-2	94	-55	33
April-19	5046	5553	1571	15859	-78	71	-33	-29
May-19	5026	5546	1527	15797	-20	-7	-44	-62
June-19	5054	5616	1537	15791	28	70	10	-6
July-19	5121	5600	1504	15778	67	-16	-33	-13
August-19	5118	5551	1480	15919	-3	-49	-24	141

Source: Turkstat, Betam

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

	<b>Female Labor Force</b>	<b>Female Employment</b>	<b>Female Unemployed</b>	<b>Male Labor Force</b>	<b>Male Employment</b>	<b>Male Unemployed</b>
<b>September-16</b>	7385	5966	1419	18010	15988	2021
<b>October-16</b>	7436	5949	1487	18080	16007	2073
<b>November-16</b>	7466	5941	1525	18152	16081	2072
<b>December-16</b>	7451	5944	1507	18181	16052	2129
<b>January-17</b>	7446	5987	1459	18275	16132	2143
<b>February-17</b>	7494	6058	1436	18285	16122	2163
<b>March-17</b>	7596	6140	1456	18333	16247	2086
<b>April-17</b>	7602	6156	1446	18370	16352	2019
<b>May-17</b>	7668	6219	1449	18382	16389	1993
<b>June-17</b>	7681	6240	1441	18431	16483	1948
<b>July-17</b>	7699	6240	1459	18441	16476	1964
<b>August-17</b>	7722	6284	1438	18488	16591	1897
<b>September-17</b>	7775	6347	1428	18510	16602	1908
<b>October-17</b>	7785	6419	1367	18521	16653	1868
<b>November-17</b>	7835	6489	1346	18566	16730	1836
<b>December-17</b>	7880	6541	1338	18607	16834	1774
<b>January-18</b>	7918	6582	1336	18618	16867	1751
<b>February-18</b>	7936	6586	1350	18638	16879	1759
<b>March-18</b>	7929	6570	1360	18672	16868	1804
<b>April-18</b>	7987	6595	1392	18725	16809	1917
<b>May-18</b>	8040	6619	1421	18750	16783	1968
<b>June-18</b>	8086	6634	1452	18819	16805	2014
<b>July-18</b>	8106	6642	1465	18810	16795	2016
<b>August-18</b>	8201	6716	1485	18888	16808	2080
<b>September-18</b>	8176	6705	1471	18877	16715	2161
<b>October-18</b>	8266	6780	1486	18889	16657	2232
<b>November-18</b>	8251	6745	1505	18885	16543	2342
<b>December-18</b>	8332	6738	1594	18882	16423	2459
<b>January-19</b>	8360	6687	1673	18882	16321	2561
<b>February-19</b>	8430	6688	1742	18916	16315	2601
<b>March-19</b>	8476	6734	1742	18914	16276	2638
<b>April-19</b>	8418	6696	1723	18894	16253	2641
<b>May-19</b>	8373	6666	1707	18890	16201	2689
<b>June-19</b>	8405	6673	1732	18880	16190	2690
<b>July-19</b>	8427	6672	1755	18916	16139	2778
<b>August-19</b>	8493	6697	1796	18886	16103	2783

Source: Turkstat, Betam