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# UNEMPLOYMENT RISES FOLLOWING A REMARKABLE INCREASE IN LABOR FORCE

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#### **Executive Summary**

Seasonally adjusted labor market data shows that, in the period of February 2019, non-agricultural unemployment rate increased by 0.3 percentage points and reached 15.8 percent. In this period, losses in non-agricultural employment stopped and employment increased. However, the non-agricultural labor force which had decreased in the last three periods, increased as well. As such, the number of unemployed reached 4.3 million. In manufacturing, employment losses were limited to 4 thousand, losses continued in construction, and employment increased in services. Parallel to the acceleration in female labor force participation, the gender gap in non-agricultural unemployment widened.

# Number of unemployed reaches 4 million 307 thousand

According to seasonally adjusted labor market data, in the period of February 2019 compared to January 2019, the non-agricultural labor force increased by 204 thousand to 27 million 259 thousand, and the number of employed in non-agricultural sectors increased by 91 thousand to 22 million 952 thousand. Thereby, the number of unemployed in non-agricultural sectors increased by 113 thousand and reached 4 million 307 thousand and thus the non-agricultural unemployment rate rose to 15.8 percent (Figure 1, Table 1). Note that February 2019 is the average of January, February and March; thus, it represents to the first quarter of 2019. In the period of February 2019, the employment losses stopped and the decreasing labor force started to increase again. The substantial increase in labor force is behind the increase in unemployment.

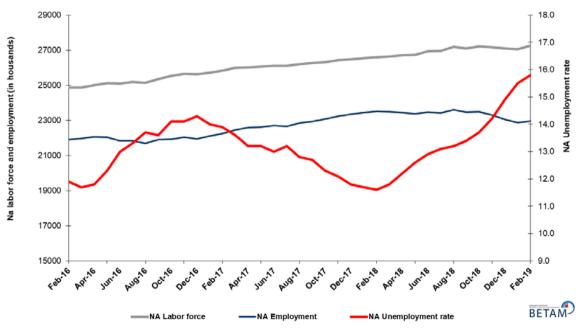


Figure 1. Seasonally adjusted non-agricultural labor force, employment, and unemployment

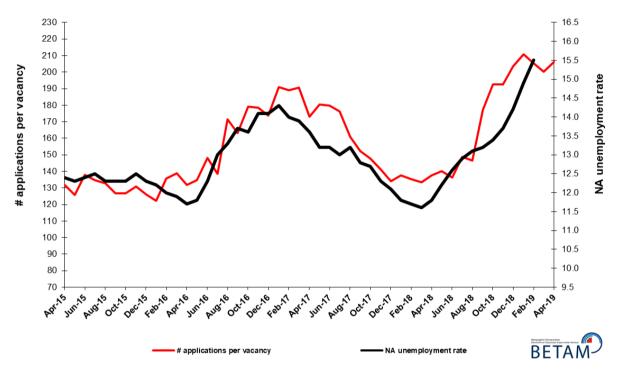
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# Unemployment rate is expected to be a constant in March 2019

Betam's forecasting model had predicted that the seasonally adjusted non-agricultural unemployment rate would increase by 0.2 percentage points to reach 15.7 percent in February 2019. In fact, non-agricultural unemployment increased by 0.3 percentage points and reached 15.8 percent. Betam's forecasting model predicts that the seasonally adjusted non-agricultural unemployment rate will stay constant at 15.8 percent in the period of March 2019. 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.





Source: Kariyer.net, Turkstat, Betam

#### Substantial employment increase in services

According to seasonally adjusted sectoral labor market data, employment decreased significantly in the period of February 2019 compared to January 2019 in all sectors except services (Figure 3, Table 2).<sup>3</sup> While employment in construction decreased by 14 thousand, employment losses in agriculture and industry amounted to 23 thousand, and 4 thousand, respectively. On the other hand the employment in services increased by 108 thousand. The employment losses in manufacturing observed in last three periods (from November 2018 to January 2019) slowed down in February 2019 (Table 2). Employment in construction has been continuously decreasing for a year (since the period of February 2018). Total employment loss has reached 551 thousand. In the service sector, employment had increased by 108 thousand following losses in recent periods.

<sup>&</sup>lt;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.

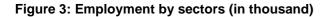
http://betam.bahcesehir.edu.tr/tr/2014/06/kariyer-net-verisiyle-kisa-vadeli-tarim-disi-issizlik-tahmini/

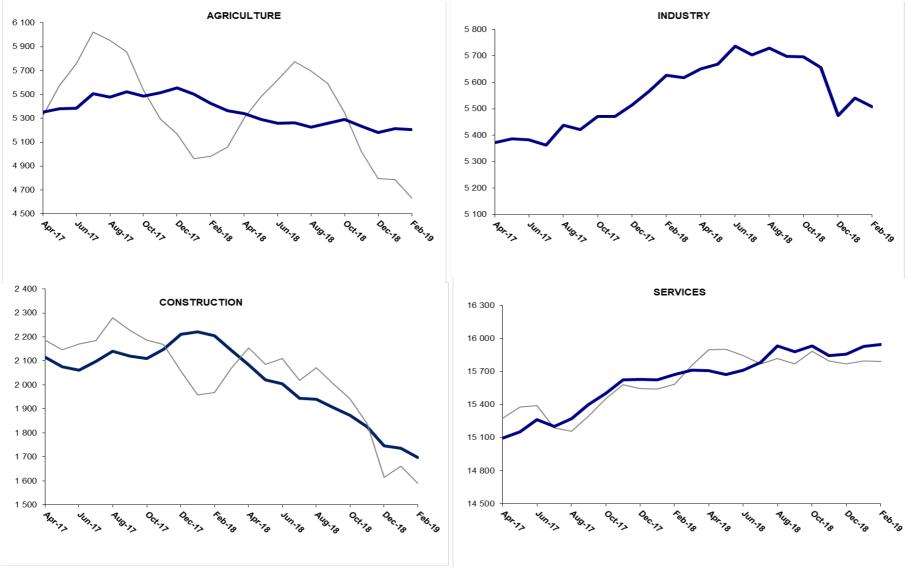
Soybilgen, B., "Mevsim Etkilerinden Arındırılmış İşsizlik Tahmini", Betam Research Brief 14

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

<sup>&</sup>lt;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>&</sup>lt;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.





Source: TURKSTAT, Betam

# The number of non-agricultural employed within a year decreased

From February 2018 to February 2019 non-agricultural labor force increased by 784 thousand (3 percent) and nonagricultural employment decreased by 514 thousand (-2.2 percent) (Figure 4). Year on year increase in labor force continues its usual trend. On the other hand, non-agricultural employment decreased within the past year. Thus, nonagricultural unemployed increased by 1 million 298 thousand and reached 4 million 610 thousand.

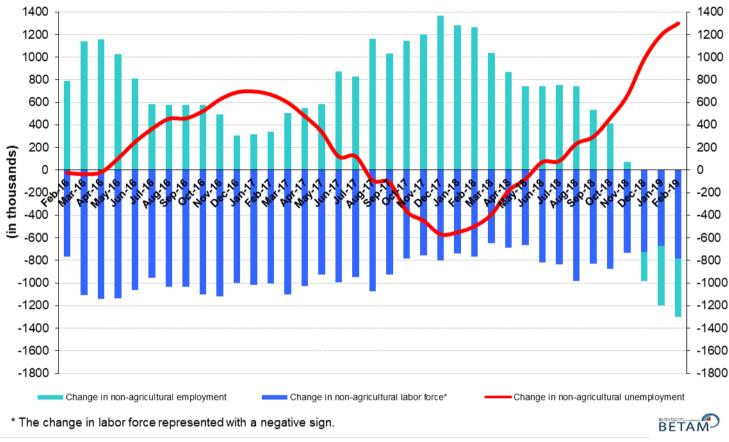


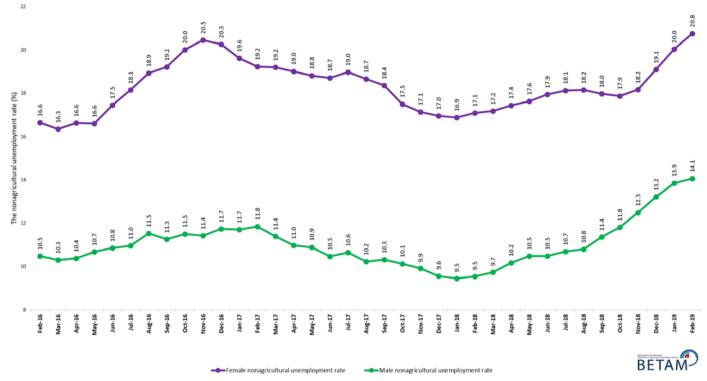
Figure 4 Year-on-year changes in non-agricultural labor force, employment, and unemployment

Source: Turkstat, Betam

# Non-agricultural unemployment rate for females exceeded 20 percent

Figure 5 shows seasonally adjusted non-agricultural unemployment rate for males (green) and for females (purple)<sup>4</sup>. In the period of February 2019, the non-agricultural female unemployment rate increased by 0.8 percentage points and reached 20.8 percent while the non-agricultural male unemployment rate increased by 0.2 percentage points to 14.1 percent. Male employment decreased by 8 thousand in February 2019 compared to January 2019 (Table 3). On the other hand, the increase in female non-agricultural employment was limited to one thousand. Female labor force increased by 78 thousand and male labor force increased by 36 thousand. The gender gap in non-agricultural unemployment rates increased from 6.2 to 6.7 percentage points in the period of February.

<sup>4</sup> 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

	Labor						
	force	Employment	Unemployment	Unemployment rate	Monthly change		jes
February-16	24856	21898	2958	11.9%	Labor force	Employment	Unemployment
March-16	24871	21961	2910	11.7%	15	63	-48
April-16	25010	22059	2951	11.8%	139	98	41
May-16	25121	22031	3090	12.3%	111	-28	139
June-16	25101	21838	3263	13.0%	-20	-193	173
July-16	25180	21831	3349	13.3%	79	-7	86
August-16	25148	21703	3445	13.7%	-32	-128	96
September-16	25351	21903	3448	13.6%	202	200	2
October-16	25529	21929	3600	14.1%	178	26	152
November-16	25647	22031	3616	14.1%	119	102	17
December-16	25621	21957	3664	14.3%	-26	-74	48
January-17	25714	22114	3600	14.0%	93	157	-64
February-17	25826	22236	3590	13.9%	112	122	-10
March-17	25987	22453	3534	13.6%	161	217	-56
April-17	26023	22588	3435	13.2%	36	135	-99
May-17	26058	22618	3440	13.2%	35	30	5
June-17	26101	22708	3393	13.0%	44	90	-46
July-17	26109	22663	3446	13.2%	8	-45	53
August-17	26200	22846	3354	12.8%	90	183	-93
September-17	26271	22935	3336	12.7%	72	89	-17
October-17	26310	23074	3236	12.3%	39	139	-100
November-17	26430	23232	3198	12.1%	120	158	-38
December-17	26465	23342	3123	11.8%	35	110	-75
January-18	26542	23437	3105	11.7%	78	95	-17
February-18	26602	23516	3086	11.6%	59	79	-20
March-18	26626	23484	3142	11.8%	24	-32	56
April-18	26706	23448	3258	12.2%	80	-36	116
May-18	26735	23366	3369	12.6%	28	-82	110
June-18	26928	23454	3474	12.9%	193	88	105
July-18	26961	23429	3532	13.1%	33	-25	58
August-18	27188	23599	3589	13.2%	227	170	57
September-18	27105	23473	3632	13.4%	-83	-126	43
October-18	27217	23488	3729	13.7%	112	15	97
November-18	27164	23307	3857	14.2%	-52	-181	129
December-18	27099	23061	4038	14.9%	-66	-246	180
January-19	27054	22861	4193	15.5%	-44	-200	156
February-19	27259	22952	4307	15.8%	204	91	113

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

	Agriculture	Manufacturing	Construction	Service		Monthly changes			
February-16	5330	5276	1996	14621	Agriculture	Manufacturing	Construction	Service	
March-16	5389	5295	2019	14643	59	19	23	22	
April-16	5370	5381	2031	14644	-19	86	12	1	
May-16	5328	5386	2054	14589	-42	5	23	-55	
June-16	5185	5330	1952	14556	-143	-56	-102	-33	
July-16	5214	5254	1954	14624	29	-76	2	68	
August-16	5280	5224	1918	14564	66	-30	-36	-60	
September-16	5335	5260	2028	14619	55	36	110	55	
October-16	5268	5282	1994	14659	-67	22	-34	40	
November-16	5279	5316	1997	14726	11	34	3	67	
December-16	5313	5265	1971	14731	34	-51	-26	5	
January-17	5439	5274	1970	14852	126	9	-1	121	
February-17	5479	5251	2022	14956	40	-23	52	104	
March-17	5387	5346	2088	15013	-92	95	66	57	
April-17	5351	5372	2117	15095	-36	26	29	82	
May-17	5380	5386	2075	15154	29	14	-42	59	
June-17	5383	5383	2061	15263	3	-3	-14	109	
July-17	5507	5363	2097	15204	124	-20	36	-59	
August-17	5476	5437	2141	15273	-31	74	44	69	
September-17	5523	5421	2120	15400	47	-16	-21	127	
October-17	5486	5470	2110	15503	-37	49	-10	103	
November-17	5513	5470	2149	15624	27	0	39	121	
December-17	5557	5514	2211	15631	44	44	62	7	
January-18	5501	5567	2221	15623	-56	53	10	-8	
February-18	5424	5627	2205	15672	-77	60	-16	49	
March-18	5365	5618	2145	15711	-59	-9	-60	39	
April-18	5341	5650	2083	15710	-24	32	-62	-1	
May-18	5291	5669	2021	15673	-50	19	-62	-37	
June-18	5259	5737	2004	15713	-32	68	-17	40	
July-18	5263	5703	1944	15785	4	-34	-60	72	
August-18	5226	5730	1941	15934	-37	27	-3	149	
September-18	5257	5698	1905	15879	31	-32	-36	-55	
October-18	5291	5696	1873	15931	34	-2	-32	52	
November-18	5236	5656	1824	15843	-55	-40	-49	-88	
December-18	5182	5474	1747	15859	-54	-182	-77	16	
January-19	5213	5540	1737	15928	31	66	-10	69	
February-19	5206	5507	1698	15948	-8	-33	-39	20	

Table 5: Seaso			agricalitat				Change			
	Female Labor Force	Female Employment	Female Unemployed	Male Labor Force	Male Employmen	Male t Unemployed	in female labor force	Change in female employment	Change in male labor force	Change in male employment
February-16	7039	5868	1171	17766	15905	1861				
March-16	7060	5906	1154	17809	15974	1835	20	38	43	69
April-16	7146	5957	1188	17846	15995	1851	86	51	36	21
May-16	7179	5988	1191	17916	16004	1912	33	30	70	9
June-16	7262	5995	1267	17825	15891	1934	83	7	-91	-112
July-16	7277	5956	1321	17909	15947	1962	15	-39	83	55
August-16	7316	5932	1385	17945	15876	2069	40	-24	37	-70
September-16	7383	5965	1418	18016	15988	2028	67	33	71	112
October-16	7435	5947	1488	18087	16006	2081	52	-18	71	18
November-16	7467	5940	1527	18154	16080	2074	32	-7	67	74
December-16	7453	5943	1510	18185	16051	2133	-14	4	30	-29
January-17	7449	5988	1461	18269	16131	2138	-3	45	84	79
February-17	7505	6061	1444	18286	16120	2166	55	73	18	-11
March-17	7615	6153	1462	18333	16245	2088	110	92	47	125
April-17	7603	6158	1446	18370	16354	2016	-12	5	37	109
May-17	7655	6215	1440	18389	16387	2002	52	57	19	33
June-17	7670	6235	1436	18414	16487	1928	15	20	25	100
July-17	7687	6229	1459	18440	16477	1963	17	-6	26	-10
August-17	7722	6281	1441	18486	16594	1891	35	52	45	117
September-17	7773	6346	1427	18513	16603	1910	51	65	27	9
October-17	7785	6422	1363	18529	16653	1876	12	77	16	50
November-17	7835	6492	1343	18570	16730	1840	50	70	40	76
December-17	7883	6546	1337	18612	16832	1780	48	54	42	103
January-18	7922	6585	1337	18626	16865	1761	39	39	14	33
February-18	7948	6589	1359	18653	16875	1778	26	4	27	10
March-18	7950	6584	1366	18682	16863	1820	2	-5	29	-12
April-18	7988	6595	1393	18715	16811	1904	38	11	32	-52
May-18	8025	6611	1414	18739	16774	1964	37	16	24	-36
June-18	8074	6625	1449	18785	16816	1969	49	14	46	42
July-18	8093	6626	1467	18810	16799	2011	19	1	25	-17
August-18	8201	6713	1489	18854	16818	2036	108	87	45	19
September-18	8172	6703	1469	18864	16721	2143	-29	-9	10	-97
October-18	8265	6788	1478	18891	16660	2231	93	84	26	-61
November-18	8250	6752	1499	18904	16542	2361	-15	-36	13	-118
December-18	8336	6744	1591	18918	16418	2500	85	-7	14	-125
January-19	8365	6689	1676	18935	16311	2623	29	-55	17	-106
February-19	8443	6690	1753	18971	16303	2667	78	1	36	-8