

SEVERE LOSSES IN LABOR FORCE AND EMPLOYMENT

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Executive Summary

Seasonally adjusted labor market data shows that in the period of April 2020, non-agricultural unemployment rate turned out to be 16.1 percent, with 0.9 percentage point increases compared to March 2020. In this period, non-agricultural employment decreased by 934 thousand while non-agricultural labor force decreased by 837 thousand. According to sectorial data, employment losses occurred in all sectors. While agriculture employment decreased by 34 thousand, manufacturing employment and construction employment decreased by 164 thousand and by 123 thousand respectively. The most significant decreases in employment occurred in services that attained 647 thousand. Over the last two periods, employment losses in this sector amounted to 1 million 341 thousand. Based on the seasonally adjusted data, while female non-agricultural employment decreased by 289 thousand, non-agricultural labor force decreased by 353 thousand. As the result of this decreases in female labor force and employment, non-agricultural female unemployment rate stood unchanged at 17.8 percent. Male labor force and employment decreased by 499 thousand and 643 thousand respectively. Since the decline in male employment was higher than the male labor force, male non-agricultural unemployment rate increased by 1.2 percentage points to 15.1 percent.

Decreases in all non-agricultural labor market indicators

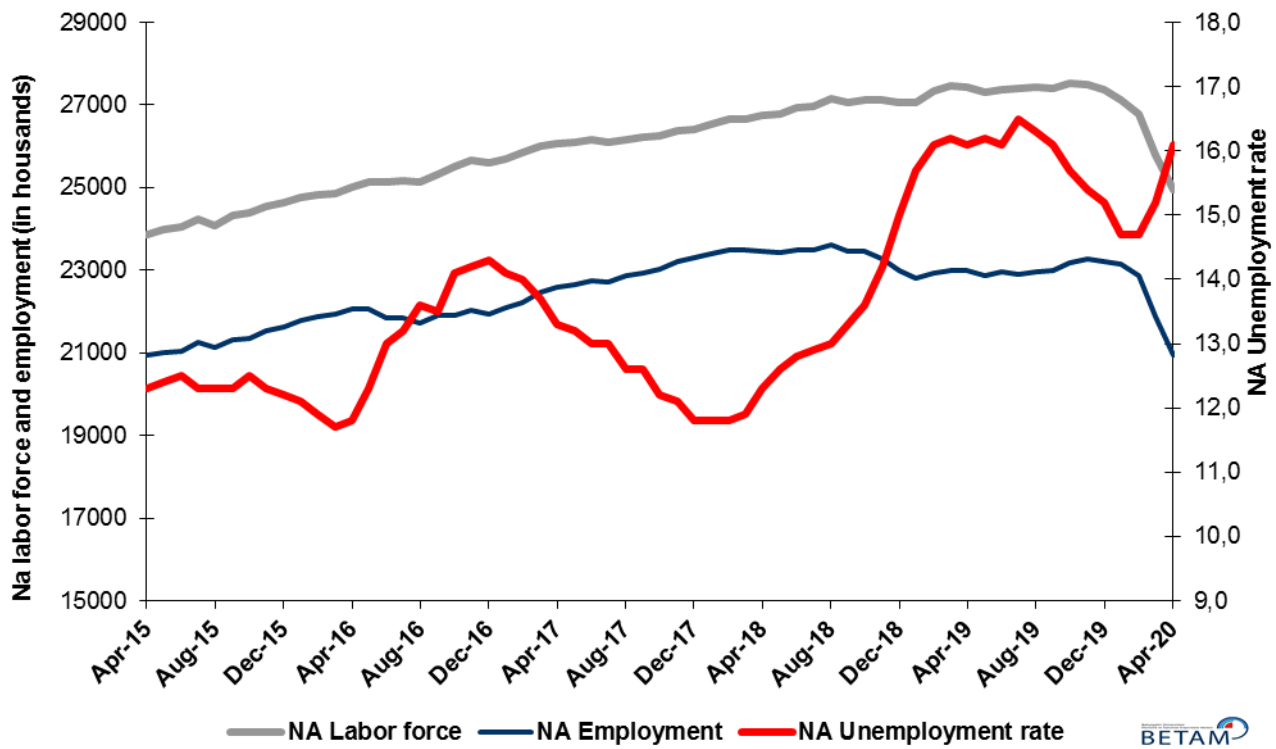
Seasonally adjusted data shows that, non-agricultural labor force decreased to 24 million 959 thousand after a loss of 837 thousand in April 2020 period (March-April-May) compared to March 2020 period (February-March-April). Over the last two periods, decreases in labor force amounted to 1 million 835 thousand. Non-agricultural employment declined to 20 million 941 thousand along with a decrease of 934 thousand. So, decreases in employment amounted to 1 million 915 thousand over the last two periods. As a result of this striking decline in employment and labor force, the number of non-agricultural unemployed increased only by 97 thousand to 4 million 18 thousand, and the non-agricultural unemployment rate rose to 16.1 from 15.2 percent.

To better capture the extraordinary decrease in non-agricultural labor force, we added a new figure that features seasonally adjusted LFPR, employment rate and non-agricultural unemployment rate into our Labor Market Outlook reports. Decreases in both the labor force and the employment rates that occurred in the periods of February and March, continued in April as well. Combining with the steady increases in the non-institutional population, decreases in labor force and employment caused LFPR to decrease to 47.5 percent, a level not seen since August 2012. As for employment rate, it declined to 41.0 percent, taking it back to its March 2010 level. It is worthy to note that those striking losses is a new phenomenon in Turkish labor market; The employment rate had reached 47.9 percent in February 2018 and the labor force participation rate 53,5 percent in March 2019 (Table 4).

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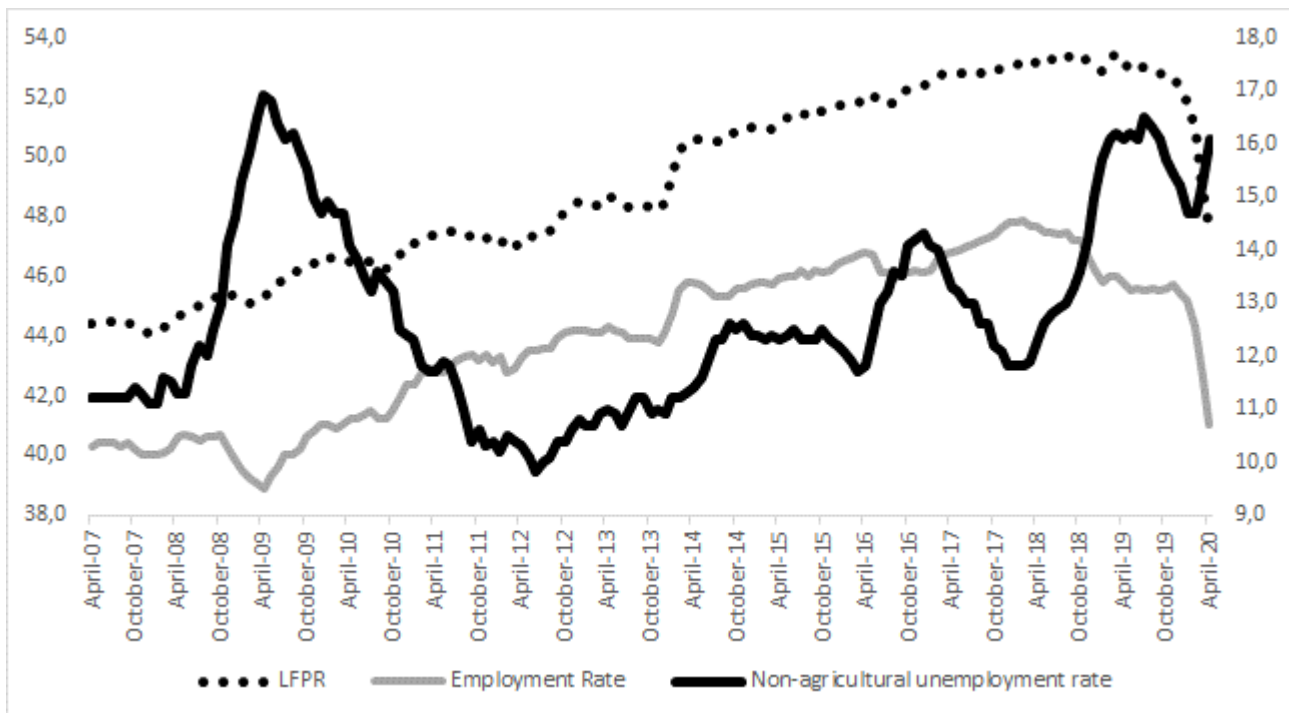
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Figure 1. Seasonally adjusted non-agricultural labor force, employment, and unemployment



Source: Turkstat, Betam

Figure 2. Seasonally adjusted LFPR, employment rate and non-agricultural unemployment rate

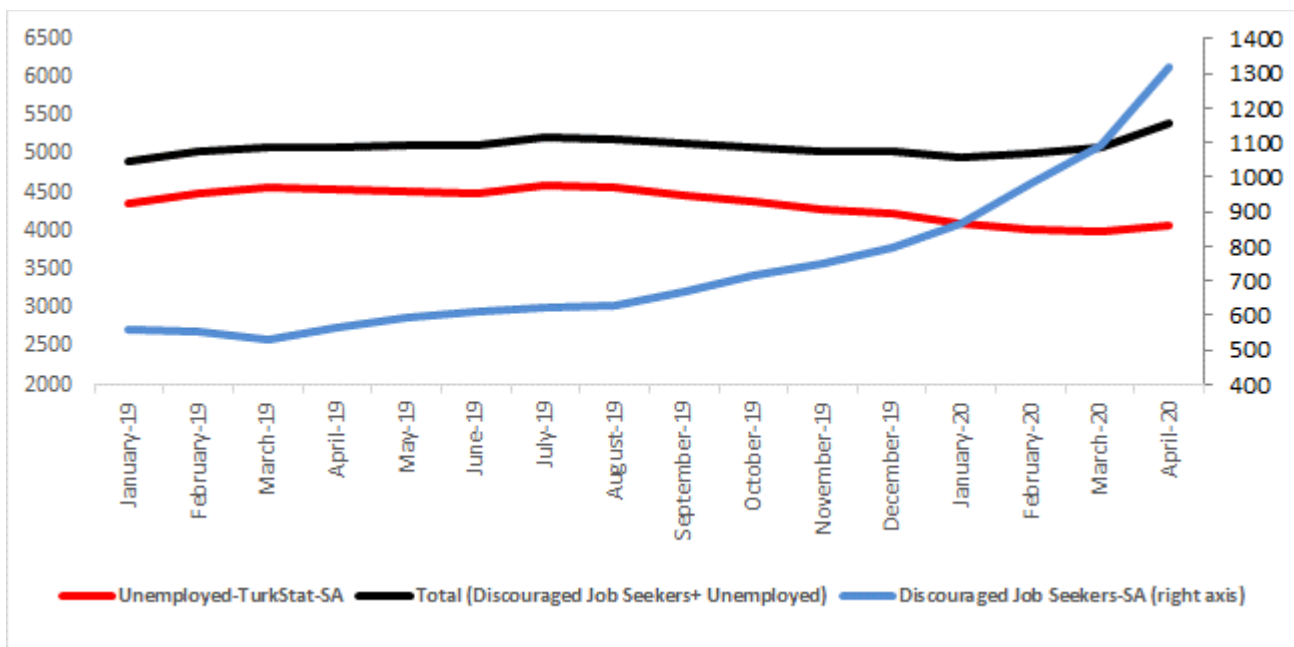


Source: Turkstat, Betam

Significant increase in the number of discouraged workers

The level of labor force, by definition, is the summation of the level of employed people and the level of job seekers (unemployed). The unusual developments in the labor market, cause loss of confidence among individuals who desire to work but they are not actively seeking a job as they think that they could not find any one. Those individuals that quit seeking for jobs and labor force due to loss of confidence are referred as 'Discouraged workers' by TurkStat. As can be seen from Figure 3 that features discouraged workers, the number of discouraged workers nearly doubles from the period of January 2019 and exceeded 1 million 300 thousand within a year.

Figure 3. The number of unemployed people, discouraged workers and summation of both, SA



Source: Turkstat, Betam

Warning regarding the forecast of unemployment rate

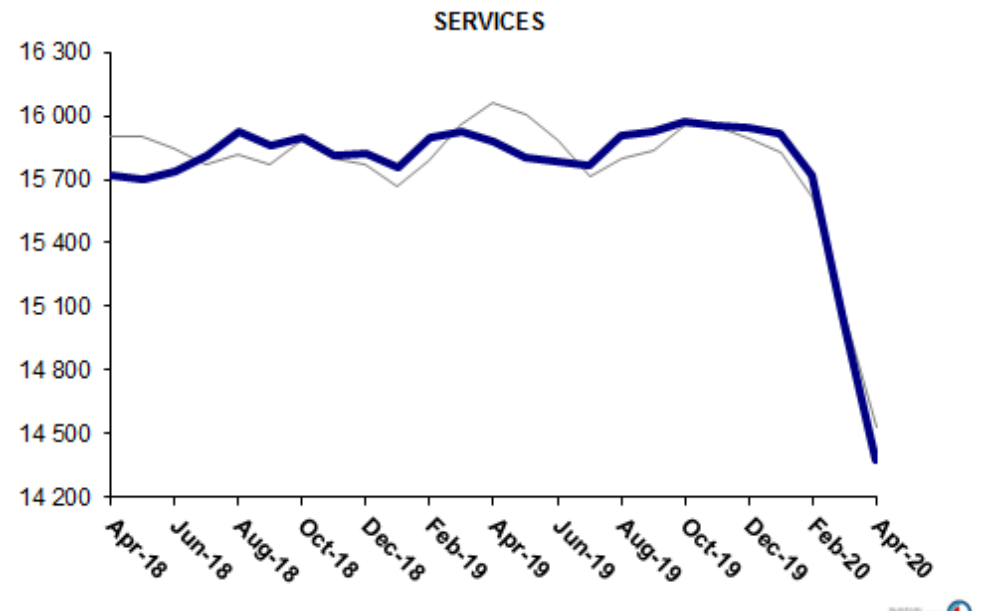
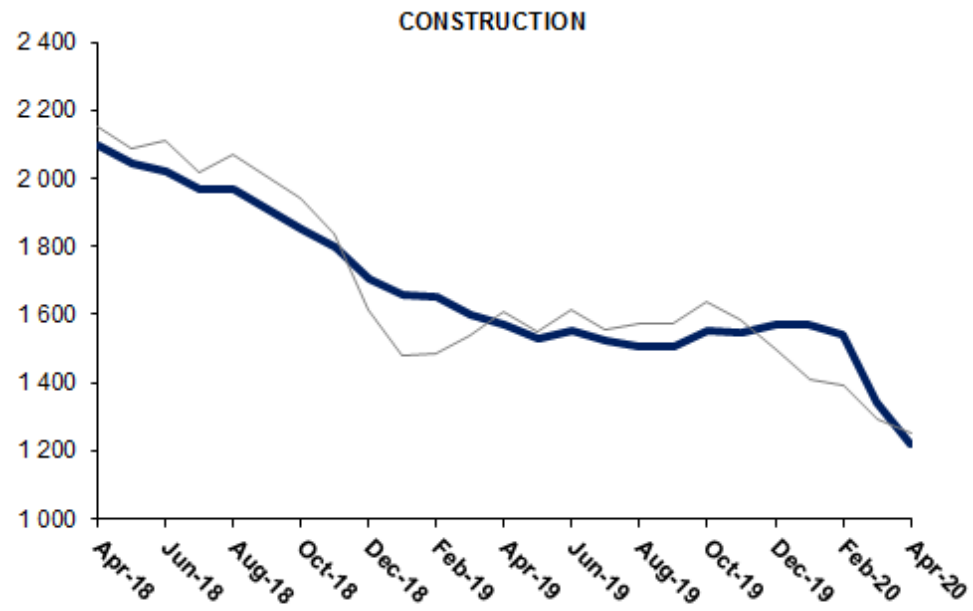
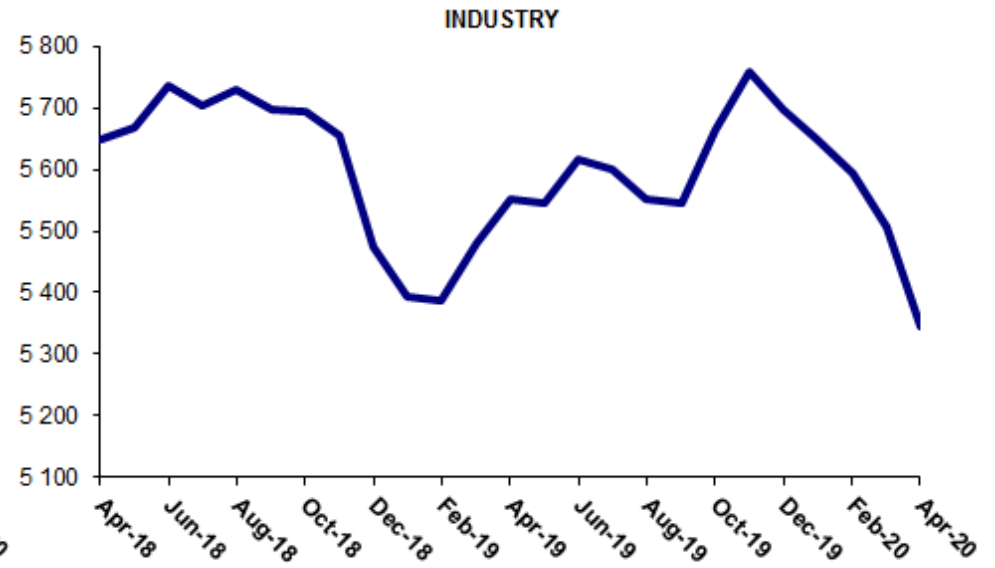
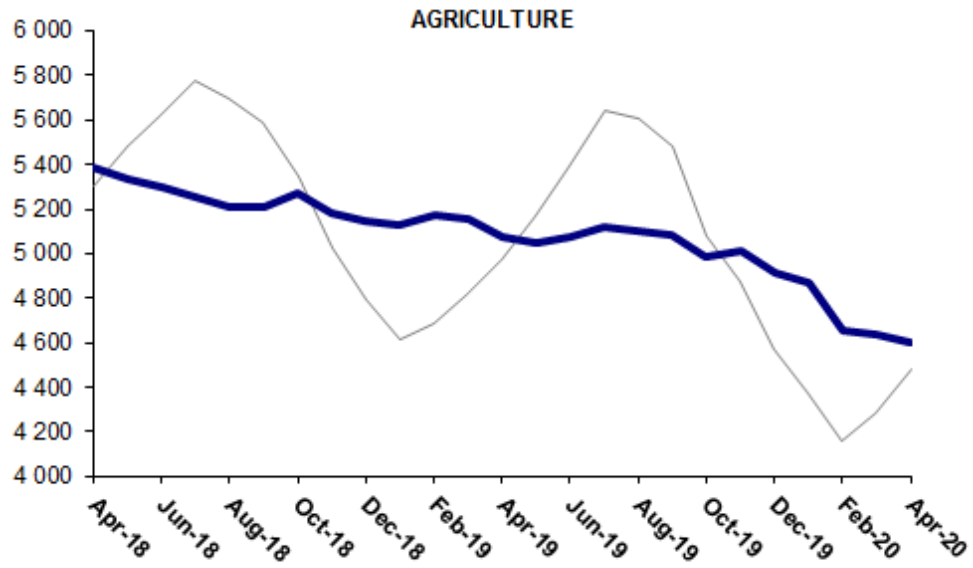
In order to restrict the adverse impact of the corona pandemic on employment, instead of short-time working allowance and layoff measures, furloughs considerably invalidate the relationship between the economic activity level and employment. Additionally, the relatively high correlation between the employment losses and the number of unemployed also lost its function. We believe that these developments significantly increased the standard error interval of the Betam unemployment forecast model. As in the case of previous research brief, we prefer not to publish our May 2020 forecast in our Labor Market Outlook report for the period of April 2020. However, we would like to share with our readers that Betam's forecasting model predicted that non-agricultural unemployment rate would remain unchanged at 16.2 percent in May 2020.

Sharp decreases in services sector

According to seasonally adjusted sectorial labor market data, in the period of April 2020 compared to March 2020, employment losses occurred in all sectors (Figure 4, Table 2).¹ In the period of April 2020, while employment decreases in manufacturing sector accelerated, employment decreases in construction sector decelerated. Manufacturing employment decreased by 164 thousand in the period of April 2020 after the decrease of 85 thousand in the previous period. Employment in construction sector decreased further by 123 thousand in April after a decrease of 202 thousand in March. Agricultural employment decreased by 34 thousand. Following the decrease of 694 thousand in March 2020, the number of employed in services sector decreased strongly again by 647 thousand in April 2020. Since February 2020, employment in services decreased by 1 million 341 thousand (8.5% of services employment in February 2020). As expected, the services sector is the most affected by the measures taken against the spread of the Coronavirus pandemic.

¹ 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 4: Employment by sectors (in thousand)



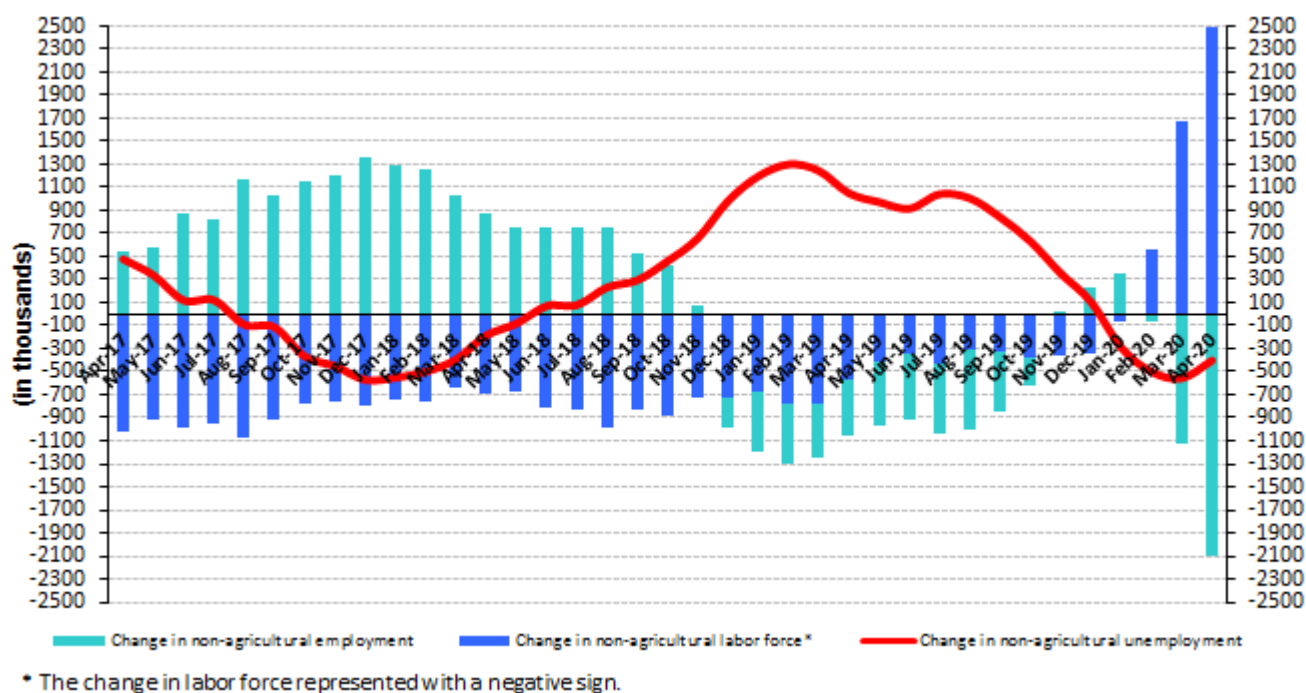
Source: TURKSTAT, Betam



Yearly strong decreases in non-agricultural labor force participation and employment

Compared to April 2019, non-agricultural employment decreased by 2 million 94 thousand in April 2020. Compared to the same period of the previous year, instead of increasing the number of non-agricultural unemployed decreased by 399 thousand. We think that a significant part of this big difference resulted from the increase in the number of discouraged workers. As a result, the number of non-agricultural labor force decreased by 2 million 493 thousand (9.7 percentage point) in April 2020 (Figure 5).

Figure 5 Year-on-year changes in non-agricultural labor force, employment, and unemployment



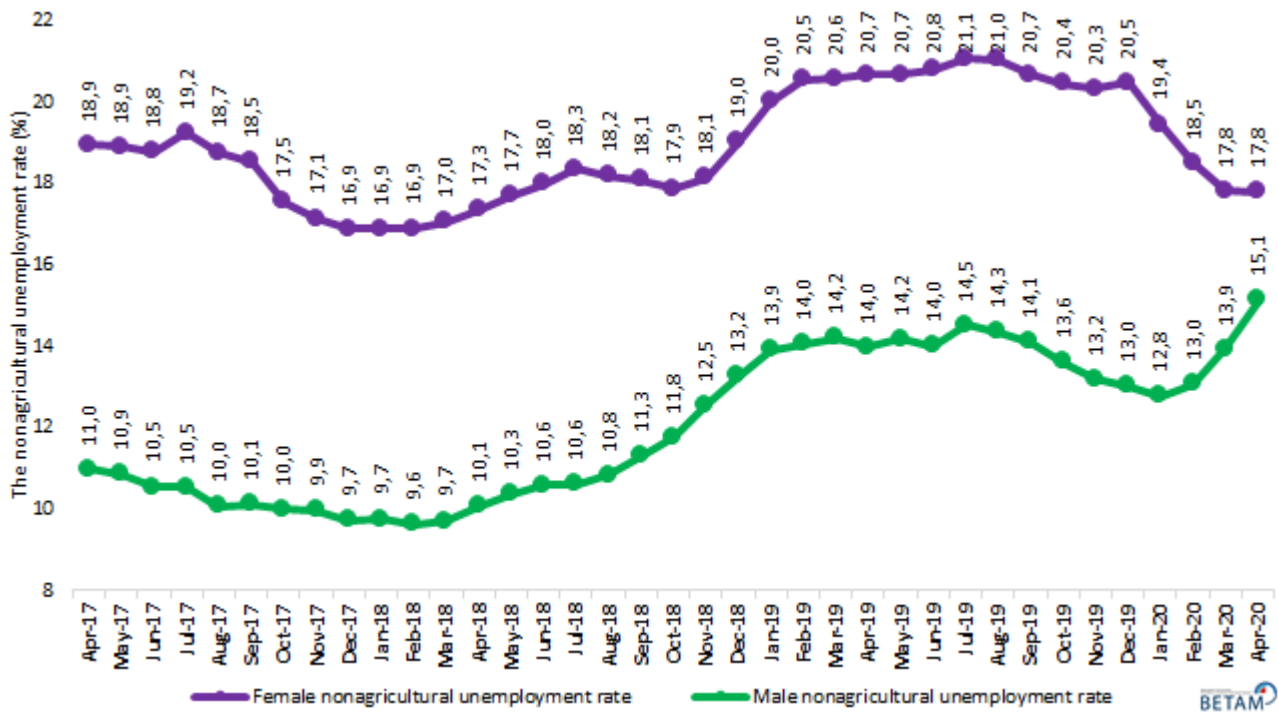
Source: TURKSTAT, Betam

Significant decreases in male employment

Figure 6 shows seasonally adjusted non-agricultural unemployment rate for males (green) and for females (purple)². In the period of April 2020 compared to the previous period, female non-agricultural unemployment rate remained unchanged at 17.8 percent. However, this resulted from a decrease of 353 thousand in the female labor force and a decrease of 289 thousand in employment. Male unemployment rate spiked significantly by 1.2 percent, and reached 15.1 percent. Increase in male unemployment resulted from significant decreases in employment (643 thousand) and lower decreases in labor force (499 thousand). As a result, the gender gap in non-agricultural unemployment rates decreased from 3.9 percent to 2.7 percent points.

² 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 6: 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
April-17	26065	22598	3467	13,3%			
May-17	26091	22647	3444	13,2%	26	49	-23
June-17	26145	22746	3399	13,0%	54	99	-45
July-17	26103	22710	3393	13,0%	-41	-36	-5
August-17	26172	22874	3298	12,6%	68	164	-96
September-17	26237	22931	3306	12,6%	65	57	8
October-17	26240	23039	3201	12,2%	3	108	-105
November-17	26390	23197	3193	12,1%	150	158	-8
December-17	26412	23295	3117	11,8%	21	98	-77
January-18	26517	23388	3129	11,8%	105	93	12
February-18	26647	23503	3144	11,8%	130	115	15
March-18	26658	23486	3172	11,9%	11	-17	28
April-18	26757	23466	3291	12,3%	99	-20	119
May-18	26788	23413	3375	12,6%	31	-53	84
June-18	26947	23498	3449	12,8%	159	85	74
July-18	26963	23485	3478	12,9%	16	-13	29
August-18	27159	23628	3531	13,0%	195	143	52
September-18	27074	23473	3601	13,3%	-85	-155	70
October-18	27137	23446	3691	13,6%	63	-27	90
November-18	27114	23264	3850	14,2%	-22	-182	160
December-18	27064	23004	4060	15,0%	-51	-260	209
January-19	27049	22802	4247	15,7%	-15	-202	187
February-19	27340	22938	4402	16,1%	291	136	155
March-19	27452	23005	4447	16,2%	113	67	46
April-19	27422	23007	4415	16,1%	-30	2	-32
May-19	27301	22878	4423	16,2%	-121	-129	8
June-19	27364	22958	4406	16,1%	63	80	-17
July-19	27413	22890	4523	16,5%	50	-68	118
August-19	27434	22962	4472	16,3%	21	72	-51
September-19	27390	22980	4410	16,1%	-44	18	-62
October-19	27512	23193	4319	15,7%	123	213	-90
November-19	27496	23262	4234	15,4%	-16	69	-85
December-19	27371	23211	4160	15,2%	-125	-51	-74
January-20	27121	23134	3987	14,7%	-251	-77	-174
February-20	26795	22856	3939	14,7%	-326	-278	-48
March-20	25796	21875	3921	15,2%	-999	-981	-18
April-20	24959	20941	4018	16,1%	-837	-934	97

Source: Turkstat, Betam

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

	Agriculture	Manufacturing	Construction	Service	Monthly changes			
					Agriculture	Manufacturing	Construction	Service
April-17	5375	5372	2123	15103				
May-17	5405	5386	2086	15175	30	14	-37	72
June-17	5414	5383	2080	15283	9	-3	-6	108
July-17	5509	5363	2121	15225	95	-20	41	-58
August-17	5472	5437	2169	15269	-37	74	48	44
September-17	5491	5421	2121	15389	19	-16	-48	120
October-17	5471	5470	2090	15480	-20	49	-31	91
November-17	5481	5470	2128	15599	10	0	38	119
December-17	5534	5514	2176	15605	53	44	48	6
January-18	5477	5567	2199	15622	-57	53	23	17
February-18	5446	5627	2190	15686	-31	60	-9	64
March-18	5383	5618	2151	15717	-63	-9	-39	31
April-18	5384	5650	2095	15721	1	32	-56	4
May-18	5333	5669	2045	15700	-51	19	-50	-21
June-18	5296	5737	2023	15738	-37	68	-22	38
July-18	5258	5703	1970	15812	-38	-34	-53	74
August-18	5212	5730	1971	15928	-46	27	1	116
September-18	5212	5698	1912	15864	0	-32	-59	-64
October-18	5268	5696	1849	15901	56	-2	-63	37
November-18	5186	5656	1798	15811	-82	-40	-51	-90
December-18	5151	5474	1704	15825	-35	-182	-94	14
January-19	5126	5392	1657	15754	-25	-82	-47	-71
February-19	5169	5388	1652	15898	43	-4	-5	144
March-19	5158	5482	1602	15922	-11	94	-50	24
April-19	5077	5553	1572	15882	-81	71	-30	-40
May-19	5047	5546	1528	15803	-30	-7	-44	-79
June-19	5072	5616	1553	15789	25	70	25	-14
July-19	5120	5600	1524	15767	48	-16	-29	-22
August-19	5105	5551	1506	15905	-15	-49	-18	138
September-19	5087	5546	1506	15928	-18	-5	0	23
October-19	4986	5666	1555	15972	-101	120	49	44
November-19	5017	5758	1546	15957	31	92	-9	-15
December-19	4914	5699	1571	15942	-103	-59	25	-15
January-20	4873	5649	1572	15913	-41	-50	1	-29
February-20	4656	5593	1544	15719	-217	-56	-28	-194
March-20	4634	5508	1342	15025	-22	-85	-202	-694
April-20	4600	5344	1219	14378	-34	-164	-123	-647

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
April-17	7625	6181	1444	18440	16418	2022
May-17	7671	6222	1449	18419	16420	1999
June-17	7680	6239	1442	18463	16518	1945
July-17	7681	6203	1478	18469	16524	1944
August-17	7689	6247	1442	18505	16645	1859
September-17	7744	6310	1434	18494	16624	1870
October-17	7764	6403	1361	18473	16629	1843
November-17	7835	6493	1342	18533	16689	1844
December-17	7858	6533	1325	18538	16739	1799
January-18	7941	6602	1340	18593	16783	1810
February-18	7963	6619	1344	18670	16875	1796
March-18	7962	6606	1356	18700	16886	1814
April-18	8005	6617	1389	18739	16852	1887
May-18	8044	6622	1421	18724	16787	1937
June-18	8097	6641	1456	18864	16869	1994
July-18	8105	6619	1486	18886	16886	2000
August-18	8173	6688	1485	19021	16965	2056
September-18	8146	6674	1472	18949	16810	2139
October-18	8227	6757	1470	18902	16679	2223
November-18	8238	6744	1494	18870	16503	2368
December-18	8303	6726	1578	18733	16251	2482
January-19	8379	6704	1675	18684	16087	2597
February-19	8465	6727	1738	18848	16201	2648
March-19	8524	6772	1753	18923	16237	2686
April-19	8475	6723	1752	18938	16292	2647
May-19	8413	6675	1738	18873	16200	2673
June-19	8434	6682	1752	18937	16289	2649
July-19	8426	6652	1774	19019	16260	2759
August-19	8444	6669	1775	19050	16319	2731
September-19	8384	6651	1733	19018	16338	2680
October-19	8447	6720	1726	19056	16463	2593
November-19	8380	6678	1702	19078	16564	2514
December-19	8357	6646	1710	19018	16543	2475
January-20	8292	6680	1612	18855	16449	2407
February-20	8133	6630	1504	18648	16214	2433
March-20	7768	6385	1383	17996	15492	2503
April-20	7415	6096	1319	17497	14849	2647

Source: Turkstat, Betam

Table 4: Seasonally adjusted LFPR, employment rate and non-agricultural unemployment rate (%)

	LFPR	Employment Rate	Non-Agricultural Unemployment Rate
Apr-17	52,8	46,8	13,3
May-17	52,8	46,9	13,2
Jun-17	52,8	47,0	13,0
Jul-17	52,9	47,1	13,0
Aug-17	52,8	47,2	12,6
Sep-17	52,9	47,3	12,6
Oct-17	52,8	47,4	12,2
Nov-17	53,0	47,6	12,1
Dec-17	53,1	47,8	11,8
Jan-18	53,1	47,8	11,8
Feb-18	53,2	47,9	11,8
Mar-18	53,1	47,7	11,9
Apr-18	53,2	47,7	12,3
May-18	53,1	47,5	12,6
Jun-18	53,3	47,5	12,8
Jul-18	53,2	47,4	12,9
Aug-18	53,4	47,5	13,0
Sep-18	53,3	47,2	13,3
Oct-18	53,4	47,2	13,6
Nov-18	53,2	46,7	14,2
Dec-18	53,0	46,2	15,0
Jan-19	52,9	45,8	15,7
Feb-19	53,3	46,0	16,1
Mar-19	53,5	46,0	16,2
Apr-19	53,2	45,8	16,1
May-19	52,9	45,5	16,2
Jun-19	53,0	45,6	16,1
Jul-19	53,0	45,5	16,5
Aug-19	53,0	45,6	16,3
Sep-19	52,8	45,5	16,1
Oct-19	52,7	45,6	15,7
Nov-19	52,7	45,7	15,4
Dec-19	52,3	45,4	15,2
Jan-20	51,8	45,2	14,7
Feb-20	50,8	44,3	14,7
Mar-20	49,0	42,6	15,2
Apr-20	47,5	41,0	16,1

Source: Turkstat

Table 5: Seasonally adjusted discouraged workers, unemployed and sum of both

	Discouraged Workers-SA	Unemployed- TurkStat-SA	Total (Discouraged Workers + Unemployed)
Jan-19	560	4355	4915
Feb-19	555	4487	5042
Mar-19	532	4558	5090
Apr-19	565	4528	5093
May-19	592	4522	5114
Jun-19	614	4501	5115
Jul-19	622	4585	5207
Aug-19	632	4556	5188
Sep-19	669	4473	5142
Oct-19	716	4379	5095
Nov-19	748	4280	5028
Dec-19	799	4233	5032
Jan-20	865	4086	4951
Feb-20	984	4028	5012
Mar-20	1095	4004	5099
Apr-20	1315	4080	5395

Source: Turkstat, Betam