

THE END OF 2-YEAR-LONG INCREASE IN MANUFACTURING EMPLOYMENT COUPLED WITH THE DECREASE IN LABOR FORCE AND UNEMPLOYMENT

Seyfettin Gürsel^{*}, Hamza Mutluay^{}, Mehmet Cem Şahin^{***}**

Executive Summary

According to the seasonally adjusted data, the number of employed persons increased by 123 thousand compared to the previous quarter and rose to 30 million 787 thousand in 2022 Q3, and the unemployment rate decreased from 10.7% to 10.0% following the decrease in the level of unemployed by 234 thousand. QoQ employment growth was 0.4%, implying a substantial deceleration in the employment growth. The deceleration in the employment growth is in line with the predictions that the QoQ economic growth will slow down.

Seasonally adjusted sectoral employment data reveals that, after lasting two years, the growth in manufacturing employment came to a halt. While the level of manufacturing employment fell by 107 thousand (by 1.6 percent) due to the decrease in male employment (119 thousand), the number of employed in the services sector increased by 247 thousand (by 1.4 percent). Lastly, while the level of agricultural employment went down by 26 thousand, the construction employment displayed a limited increase of 8 thousand.

The seasonally adjusted youth unemployment rate (ages 15-24) decreased by 0.8 pp to 19.1% thanks to the increases in the number of employed youths. The gender gap in unemployment rates for young females and males remained at 8.8 pp.

According to the seasonally unadjusted data, the unemployment rate of the “less than high school” and “high school” graduates dropped, whereas the unemployment rate of the “vocational high school” and “higher education” graduates rose. The increase of 3.1 pp in the unemployment rate of female higher education graduates is especially striking.

^{*} Prof. Dr. Seyfettin Gürsel, Betam, Director, seyfettin.gursel@eas.bau.edu.tr

^{**} Hamza Mutluay, Betam, Research Assistant, hamza.mutluay@eas.bau.edu.tr

^{***} Mehmet Cem Şahin, Betam, Research Assistant, mehmetcem.sahin@eas.bau.edu.tr

In the third quarter of 2022, the long-term unemployment rate decreased by 0.1 pp compared to the previous quarter and reached 24.4%. It is observed that the long-term unemployment rate for females decreased by 3.3 pp to 28.3%, and the long-term unemployment rate for males increased by 1.8 pp to 21.2%.

Introduction

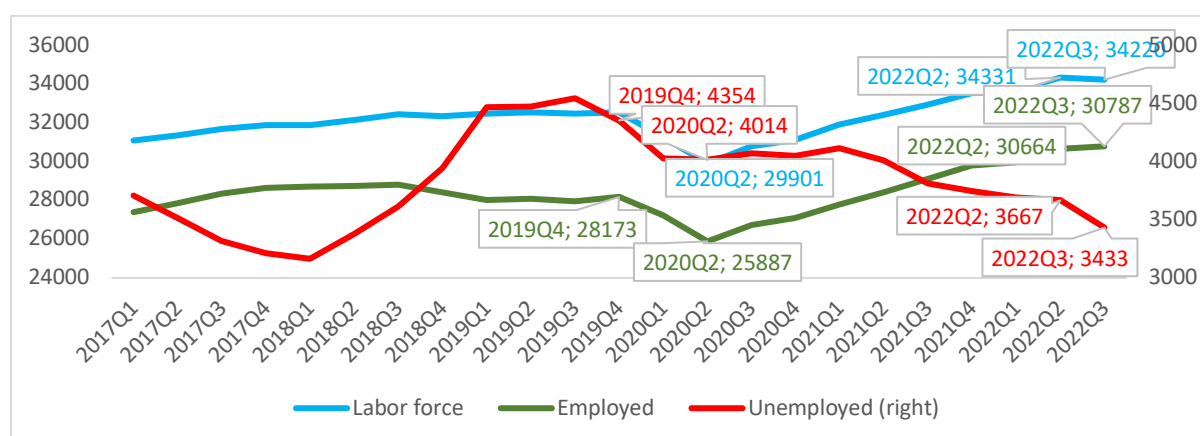
In addition to its monthly Labor Market Outlook (LMO) reports, Betam publishes its quarterly LMO notes since November 2021. In January 2021, TurkStat started to publish monthly labor force statistics with "monthly" data instead of "quarterly averages". However, since the monthly data excludes many issues such as education levels, enrollment, and unemployment periods, TurkStat decided to publish quarterly statistics with much wider coverage starting in 2021. Then, after observing the highly erratic behavior of the monthly sectorial employment data, TurkStat left these data out of the scope of the monthly statistics and transferred them to the quarterly statistics.

In parallel to these developments, Betam also publishes quarterly LMO notes to analyze sectorial employment levels, the unemployment rate by the educational status as well as the long-term unemployment rate.

The employment level went up, but the level of labor force decreased

According to the seasonally adjusted data, the number of persons in employment increased by 123 thousand compared to the previous quarter, and reached 30 million 787 thousand. In the same period, the number of unemployed persons fell by 234 thousand to 3 million 433 thousand; as a result, the labor force decreased by 111 thousand and reached 34 million 220 thousand (Figure 1, Table 1). The QoQ employment increase turned out to be 0.4 %, which is significantly lower than the QoQ employment increase of the previous quarter. The implication of it is that the employment growth is about to stop soon.

Figure 1 : Seasonally adjusted main labor force indicators (000)



Source: Turkstat, Betam

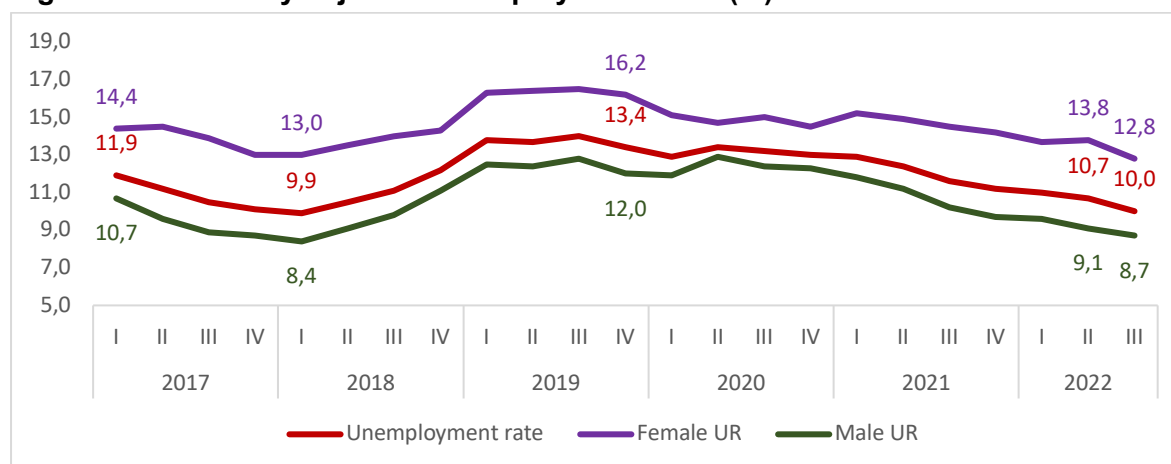
The reversal of the two-year-long increase of male employment

According to the seasonally adjusted data, the headline unemployment rate decreased by 0.7 pp to 10.0 % in 2022 Q3 compared to the previous quarter. In the same period, while female employment increased by 126 thousand, the number of unemployed females decreased by 234 thousand (Table 2). As a result, the female unemployment rate decreased by 1.0 pp QoQ to 12.8%. Over the last five quarters, the female labor force increased by 1 million 162 thousand, while female employment increased by 1 million 158 thousand (Table 2).

In comparison, the male unemployment rate declined QoQ by 0.4 pp to 8.7% as the decrease in male employment (3 thousand) is relatively small compared to the decrease in male labor force (118 thousand). While male employment increased by 1 million 216 thousand over the last five quarters, the number of unemployed males decreased by 495 thousand and the male labor force increased by 721 thousand.

As the decrease in the female unemployment rate was stronger than the fall of male unemployment rate, the gender gap in unemployment rates dropped by 0.6 pp to 4.1%

Figure 2: Seasonally adjusted unemployment rates (%)



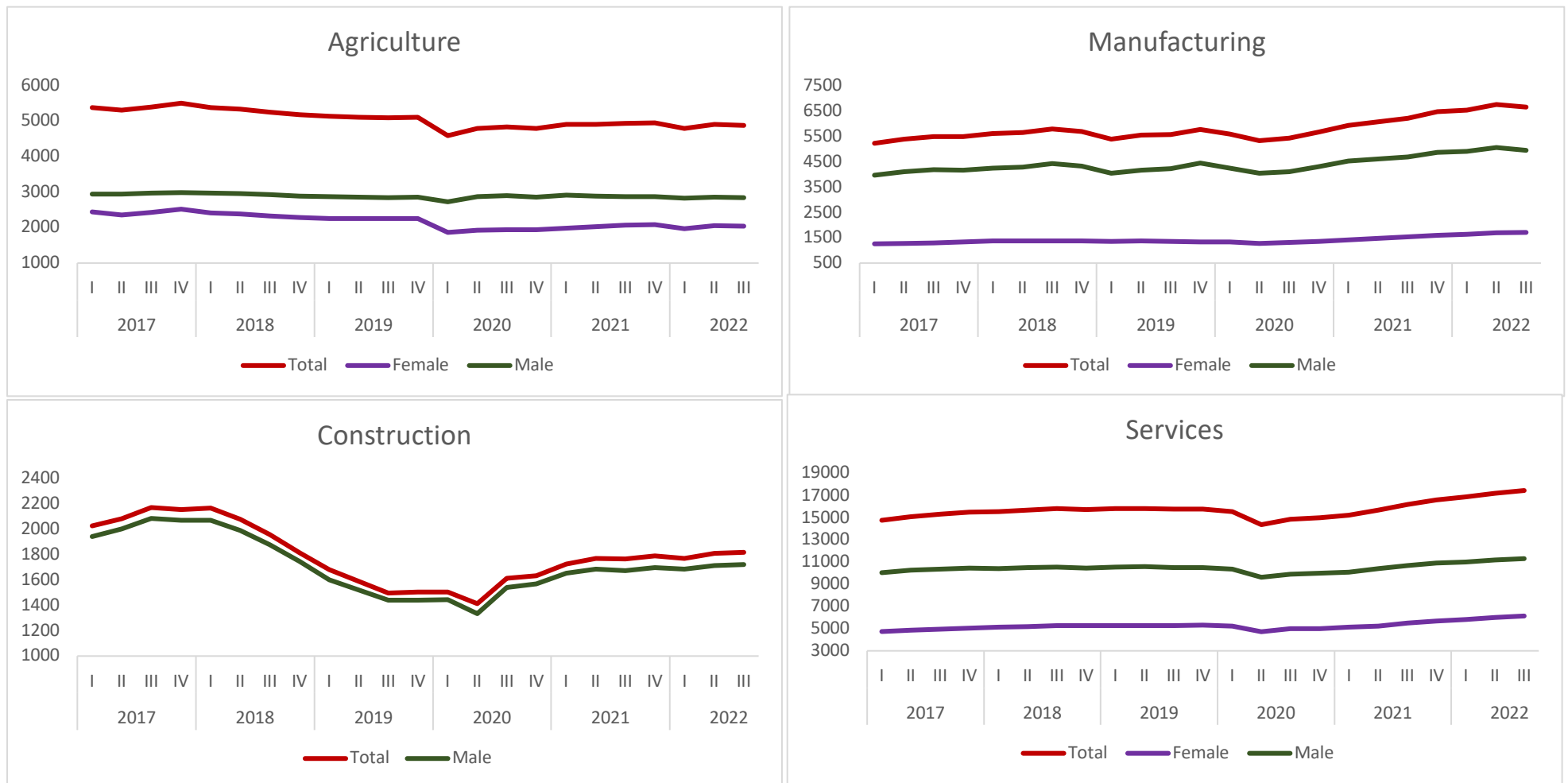
Source: Turkstat, Betam

The manufacturing employment decreased for the first time since 2020Q2

The seasonally adjusted sectoral employment data shows that the increase in services employment more than compensated the decrease in manufacturing employment. Although the female manufacturing employment increased by 12 thousand, the male employment decreased by 119 thousand. The decline in manufacturing employment (1.6 percent) reflects the three-month-average decline in the seasonal and calendar adjusted industrial production (4.1 percent). In the services sector, male employment increased by 119 thousand, female employment by 128 thousand, and total employment went up by 247 thousand (2.3%) to 17

million 447 thousand. The employment in the agricultural sector decreased by 26 thousand QoQ, the employment in the construction sector increased only by 8 thousand (0.4%).

Figure 3: Seasonally adjusted sectorial employment (000), Total¹



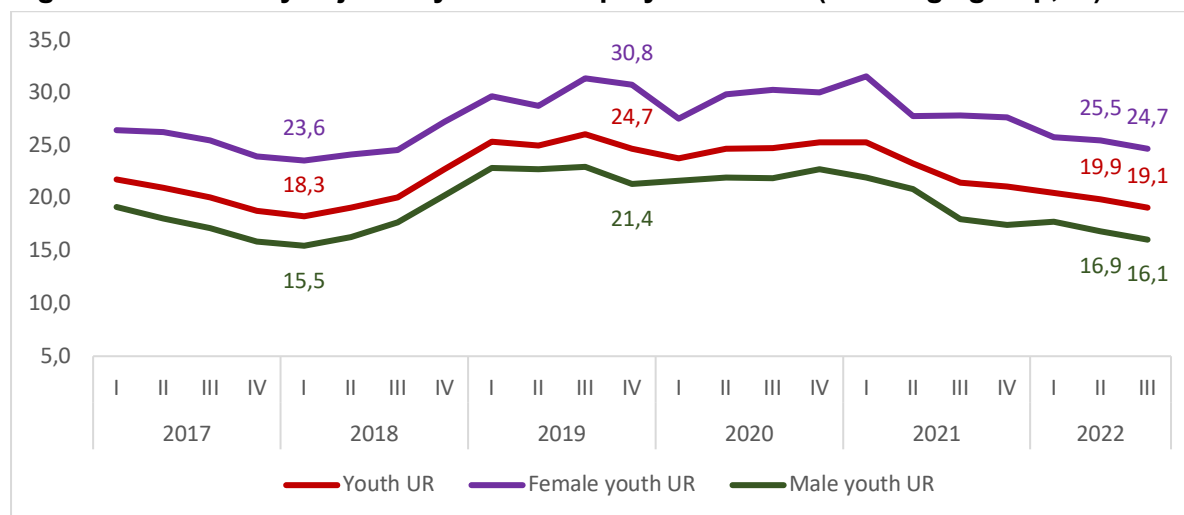
Source: Turkstat, Betam

¹Since the female employment in the construction sector is very low, we did not depict it.

Unemployment falls in youth males and females

Seasonally adjusted youth (ages 15-24) labor force indicators show that the youth unemployment rate decreased by 0.8 pp to 19.1%. In this period, the youth employment rate rose to 34.7% with an increase of 0.2 pp. Nevertheless, it is still 1.1 pp below its maximum level in 2018 Q3 (35.8 %). While the youth unemployment rate of females decreased by 0.8 pp to 24.7 %, the employment rate increased by 0.2 pp to 23.0%. The youth employment rate of females is 1.0 pp below its 2018 Q3 level (24.0%). The youth employment rate of males rose by 0.2 pp, and the unemployment rate strongly fell by 0.8 pp to 16.1%. The youth employment rate of males (45.9%) is 1.4 pp below its level of the 2018Q3 (47.3%) (Table 4).

Figure 4: Seasonally adjusted youth unemployment rates (15-24 age group, %)



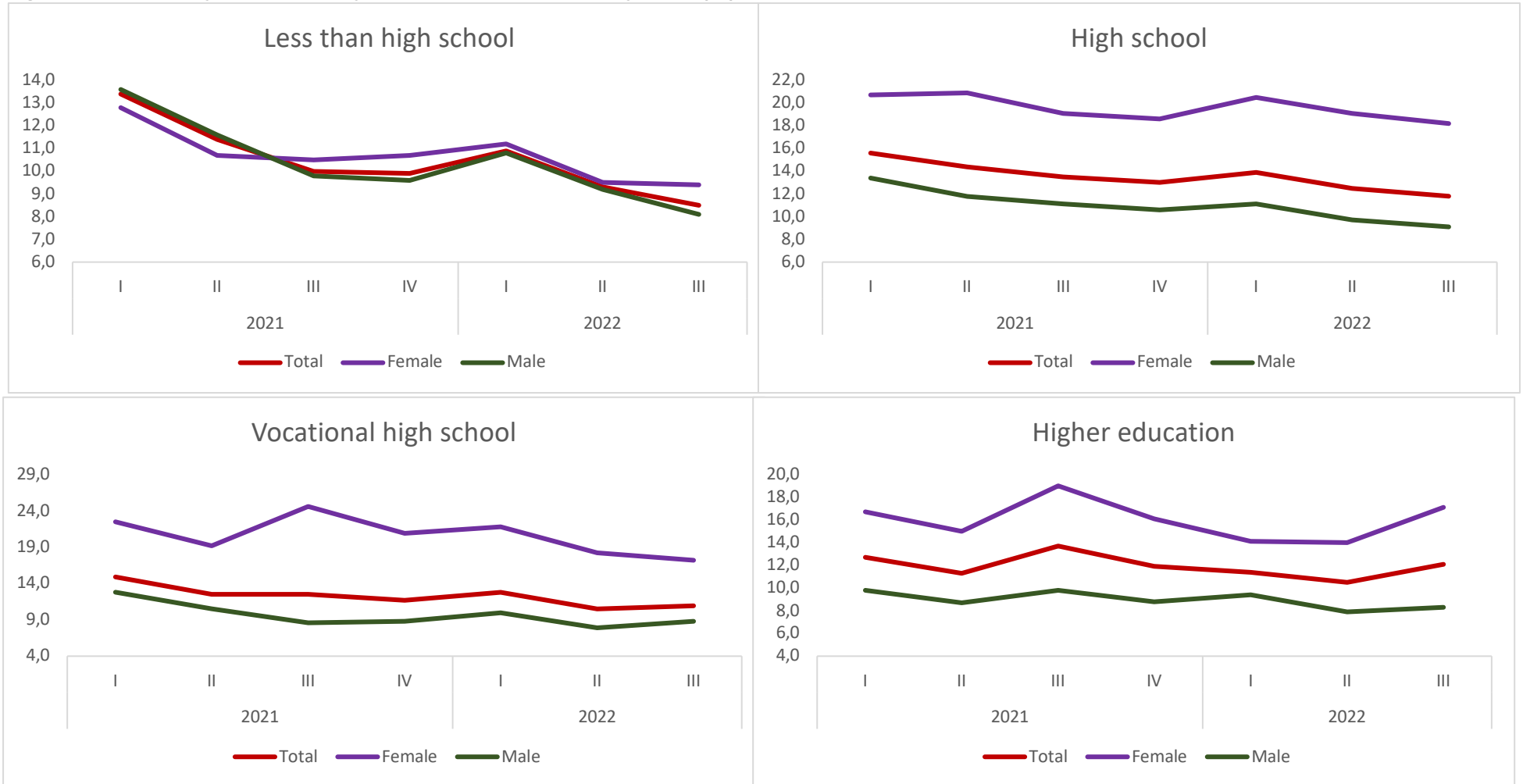
Source: Turkstat, Betam

Unemployment decreased among low education levels but increased among high education graduates

According to the seasonally unadjusted data, the headline unemployment rate decreased among lower than high school and high school graduates while increased among vocational high school and higher education graduates. in 2022 Q3 compared to the previous quarter². The "higher education" group experienced the most striking quarterly increase in the unemployment rate following the jump from 10.5% to 12.1% (1.6 pp). While unemployment rates of "less than high school" and "high school" graduates decreased by 0.8 and 0.7 pp, respectively, the unemployment rate of "vocational high school" graduates rose by 0.4 pp to 10.9% (Table 5).

² As TurkStat does not back date these series to 2014, it is possible to seasonally adjust them.

Figure 5: Unemployment rates by educational level, Unadjusted (%)



Source: Turkstat, Betam

Compared to the previous quarter, the female unemployment rate decreased in all groups but the “higher education” graduates. While the unemployment rate of female higher education graduates jumped sharply by 3.1 pp to 17.1%, The unemployment rate of “lower than high school”, “high school”, and “vocational high school” graduates decreased by 0.1, 0.9 and 1.0 pp to 9.4%, 18.2%, and 17.2%, respectively.

As for males, the unemployment rate of “lower than high school” and “high school” graduates decreased by 1.1 and 0.6 percent, respectively taking down the male unemployment rate to 8.1% and to 9.1%. However, the unemployment rate of “vocational high school” and “higher education” graduates increased by 0.9 and 0.4 pp, respectively rising up the unemployment rates to 8.8% and to 8.3%. The unemployment gender gap in the higher education group increased from 6.1 points to 8.8 points in three months. Thus, the high unemployment problem among higher education-graduate females worsened.

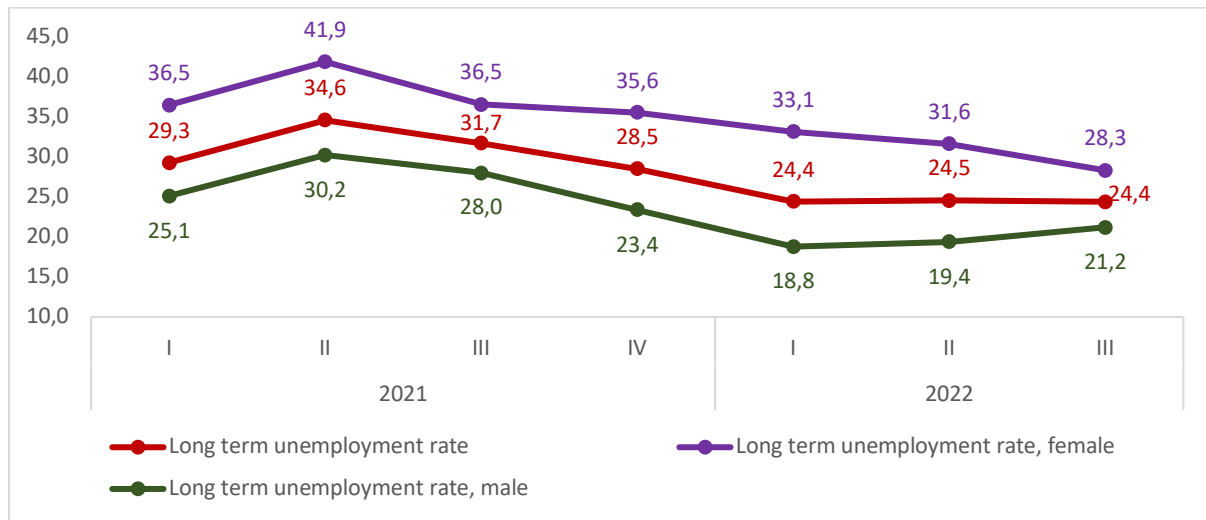
Long-term unemployment decreased among females and increased among males

The long-term unemployment rate denotes the share of the number of persons unemployed for one year or longer in the total number of unemployed persons. As of 2020 Q1, activity restrictions, within the scope of Covid-19 epidemic measures significantly reduced the demand for labor, especially in the services sector. As a result, the period of the currently unemployed persons lingered, and the share of this group in the total unemployed reached its highest level in 2021 Q2 (Figure 7). Following the end of the activity restrictions, this number tended to decrease because of the rapid increase in employment. Another factor in the decrease in the long-term unemployment rate was the rise in labor force entry with the relaxation of the activity restrictions. As a result, the share of the number of long-term unemployed persons in the total unemployed was in decline.

In 2022 Q3, the long-term unemployment rate decreased by 0.1 pp in total compared to the previous quarter and reached 24.4%. According to the seasonally unadjusted data, while the total number of unemployed increased by 29 thousand from 2022 Q2 to Q3, the increase in the number of long-term unemployed persons was limited to 3 thousand. On one side, the number of unemployed females increased by 121 thousand while the number of long-term unemployed persons decreased by 14 thousand. As a result, the share of long-term unemployed females decreased by 3.3 pp to 28.3%. On the other side, the number of unemployed males decreased by 88 thousand while the number of long-term unemployed males decreased by 14 thousand. Because of the relatively high decrease in the denominator, the long-term unemployment rate for males increased by 1.8 points to 21.2%.

Although long-term unemployment for females remained substantially higher than for males, it is improving.

Figure 6: Long term unemployment rates (Female, Male, Total) (%)



Source: Turkstat, Betam

Table 1: Seasonally adjusted main labour force indicators

		Labor force	Employed	Unemployed	Unemployment rate
2017	I	31093	27388	3706	11.9
	II	31366	27853	3513	11.2
	III	31666	28346	3320	10.5
	IV	31866	28650	3216	10.1
2018	I	31878	28712	3165	9.9
	II	32135	28755	3380	10.5
	III	32432	28816	3616	11.1
	IV	32354	28412	3942	12.2
2019	I	32471	28005	4466	13.8
	II	32545	28074	4471	13.7
	III	32484	27939	4544	14.0
	IV	32526	28173	4354	13.4
2020	I	31263	27235	4028	12.9
	II	29901	25887	4014	13.4
	III	30799	26729	4070	13.2
	IV	31134	27088	4047	13.0
2021	I	31897	27784	4113	12.9
	II	32420	28413	4008	12.4
	III	32934	29123	3810	11.6
	IV	33541	29796	3745	11.2
2022	I	33656	29966	3691	11.0
	II	34331	30664	3667	10.7
	III	34220	30787	3433	10.0

Source: Turkstat, Betam

Table 2: Seasonally adjusted main labour force indicators by gender

		Employed	Unemployed	UR (%)	Employed, female	Unemployed, female	Female UR (%)	Employed, male	Unemployed, male	Male UR (%)
2017	I	27388	3706	11.9	8517	1434	14.4	18870	2272	10.7
	II	27853	3513	11.2	8543	1451	14.5	19310	2061	9.6
	III	28346	3320	10.5	8735	1405	13.9	19611	1914	8.9
	IV	28650	3216	10.1	8988	1340	13.0	19662	1877	8.7
2018	I	28712	3165	9.9	9006	1348	13.0	19706	1817	8.4
	II	28755	3380	10.5	9036	1414	13.5	19720	1966	9.1
	III	28816	3616	11.1	9034	1468	14.0	19782	2148	9.8
	IV	28412	3942	12.2	8994	1505	14.3	19419	2437	11.1
2019	I	28005	4466	13.8	8960	1747	16.3	19045	2719	12.5
	II	28074	4471	13.7	8959	1760	16.4	19114	2711	12.4
	III	27939	4544	14.0	8904	1754	16.5	19035	2791	12.8
	IV	28173	4354	13.4	8947	1727	16.2	19226	2626	12.0
2020	I	27235	4028	12.9	8477	1506	15.1	18757	2523	11.9
	II	25887	4014	13.4	8022	1377	14.7	17864	2637	12.9
	III	26729	4070	13.2	8300	1464	15.0	18429	2607	12.4
	IV	27088	4047	13.0	8366	1416	14.5	18722	2630	12.3
2021	I	27784	4113	12.9	8605	1545	15.2	19179	2568	11.8
	II	28413	4008	12.4	8818	1539	14.9	19595	2468	11.2
	III	29123	3810	11.6	9198	1559	14.5	19925	2251	10.2
	IV	29796	3745	11.2	9449	1559	14.2	20346	2186	9.7
2022	I	29966	3691	11.0	9522	1514	13.7	20443	2177	9.6
	II	30664	3667	10.7	9850	1579	13.8	20814	2088	9.1
	III	30787	3433	10.0	9976	1461	12.8	20811	1973	8.7

Source: Turkstat, Betam

Table 3: Seasonally adjusted sectorial employment by gender (000)

		MALE					FEMALE				
		Total	Agriculture	Manufacturing	Construction	Services	Total	Agriculture	Manufacturing	Construction	Services
2017	I	18870	2944	3964	1944	10018	8517	2439	1258	83	4737
	II	19310	2948	4110	2003	10251	8543	2357	1266	79	4841
	III	19611	2968	4189	2085	10369	8735	2422	1288	85	4940
	IV	19662	2984	4163	2069	10446	8988	2518	1326	84	5061
2018	I	19706	2977	4235	2072	10423	9006	2407	1367	94	5138
	II	19720	2953	4279	1989	10499	9036	2380	1368	90	5198
	III	19782	2921	4418	1877	10566	9034	2327	1365	82	5259
	IV	19419	2887	4325	1747	10459	8994	2285	1368	65	5274
2019	I	19045	2872	4042	1602	10528	8960	2258	1349	80	5274
	II	19114	2850	4167	1520	10577	8959	2249	1383	70	5257
	III	19035	2847	4227	1441	10520	8904	2250	1348	57	5250
	IV	19226	2855	4435	1440	10496	8947	2249	1334	65	5299
2020	I	18757	2725	4247	1444	10341	8477	1863	1332	60	5224
	II	17864	2865	4036	1334	9629	8022	1925	1279	79	4740
	III	18429	2896	4109	1542	9882	8300	1934	1319	73	4974
	IV	18722	2859	4311	1569	9983	8366	1934	1353	66	5013
2021	I	19179	2910	4515	1653	10101	8605	1989	1419	74	5123
	II	19595	2881	4600	1685	10429	8818	2024	1477	83	5234
	III	19925	2871	4681	1673	10700	9198	2067	1534	92	5506
	IV	20346	2872	4862	1698	10914	9449	2078	1603	90	5679
2022	I	20443	2828	4907	1686	11023	9522	1965	1631	84	5841
	II	20814	2855	5055	1714	11189	9850	2048	1696	94	6011
	III	20811	2845	4936	1722	11308	9976	2033	1708	95	6139

Source: Turkstat, Betam

Table 4: Seasonally adjusted youth employment and unemployment rates (%)

		Employment rate			Unemployment rate		
		Total	Female	Male	Total	Female	Male
2017	I	33.7	22.6	44.5	21.8	26.5	19.2
	II	34.2	23.1	45.1	21.0	26.3	18.1
	III	34.6	23.2	45.6	20.1	25.5	17.2
	IV	35.2	23.9	46.2	18.8	24.0	15.9
2018	I	35.3	23.7	46.5	18.3	23.6	15.5
	II	35.5	23.8	46.8	19.1	24.2	16.3
	III	35.8	24.0	47.3	20.1	24.6	17.7
	IV	34.5	23.1	45.5	22.8	27.3	20.3
2019	I	33.6	23.6	43.3	25.4	29.7	22.9
	II	33.7	23.7	43.4	25.0	28.8	22.8
	III	32.5	22.1	42.6	26.1	31.4	23.0
	IV	32.2	21.7	42.5	24.7	30.8	21.4
2020	I	31.1	21.2	40.7	23.8	27.6	21.7
	II	29.1	18.4	39.3	24.7	29.9	22.0
	III	29.6	19.2	39.6	24.8	30.3	21.9
	IV	29.8	19.5	39.6	25.3	30.1	22.8
2021	I	30.6	19.6	41.2	25.3	31.6	22.0
	II	32.0	21.3	42.2	23.3	27.8	20.9
	III	32.6	21.6	43.1	21.5	27.9	18.0
	IV	33.6	22.2	44.4	21.1	27.7	17.5
2022	I	33.6	21.8	44.9	20.5	25.8	17.8
	II	34.5	22.8	45.7	19.9	25.5	16.9
	III	34.7	23.0	45.9	19.1	24.7	16.1

Source: Turkstat, Betam

Table 5: Unemployment Rates by Educational and Gender Breakdown

Total					
		Less than high school	High school	Vocational high school	Higher education
2021	I	13.4	15.6	14.9	12.7
	II	11.4	14.4	12.5	11.3
	III	10.0	13.5	12.5	13.7
	IV	9.9	13.0	11.7	11.9
2022	I	10.9	13.9	12.8	11.4
	II	9.3	12.5	10.5	10.5
	III	8.5	11.8	10.9	12.1
Male					
		Less than high school	High school	Vocational high school	Higher education
2021	I	13.6	13.4	12.8	9.8
	II	11.6	11.8	10.5	8.7
	III	9.8	11.1	8.6	9.8
	IV	9.6	10.6	8.8	8.8
2022	I	10.8	11.1	10.0	9.4
	II	9.2	9.7	7.9	7.9
	III	8.1	9.1	8.8	8.3
Female					
		Less than high school	High school	Vocational high school	Higher education
2021	I	12.8	20.7	22.5	16.7
	II	10.7	20.9	19.2	15.0
	III	10.5	19.1	24.6	19.0
	IV	10.7	18.6	20.9	16.1
2022	I	11.2	20.5	21.8	14.1
	II	9.5	19.1	18.2	14.0
	III	9.4	18.2	17.2	17.1

Source: Turkstat, Betam

Table 6: Long term unemployment rates (Total, Female, Male) (%)

		Long term unemployment rate	Female long term unemployment rate	Male long term unemployment rate
2021	I	29.3	36.5	25.1
	II	34.6	41.9	30.2
	III	31.7	36.5	28.0
	IV	28.5	35.6	23.4
2022	I	24.4	33.1	18.8
	II	24.5	31.6	19.4
	III	24.4	28.3	21.2

Source: Turkstat, Betam