

3. Labour Market

There is a noticeable stagnation in the labour market. The basic labour market indicators (activity, employment, and unemployment) were unchanged both in relation to the previous quarter and in relation to the same quarter of the previous year. Informal employment accounted for 14% of total employment. After the decline in the number of informally employed during 2020 and 2021, there was a noticeable increase in the number of informally employed, although that number did not return to the level before 2020. The trend of employment is in line with the trend of economic activity, registered employment increased by 0.9% according to the data of the Central Register of Compulsory Social Insurance and 0.6% according to the data of the Labour Force Survey. Observed by ownership, there was a noticeable slowdown in the growth of employment in the private sector, and the growth of employment in the private and public sectors was equal, around 1% year-on-year. The average net wage was 75 thousand dinars (or 634 EUR) and was higher in real terms by 1.3% compared to the same quarter of the previous year, but lower by 2.9% compared to the previous quarter. Stagnation and declining wages were noticeable in all activities. Although Information and Communications achieved a huge year-on-year growth of 20% compared to the previous quarter, their growth was 1.5% compared to the previous quarter. It is the only activity that achieved growth compared to the previous quarter, while all other activities had a real decrease in wages. Nominal salary growth in the public sector amounted to 7% year-on-year and was completely devalued by inflation of 13.3%. Real labour productivity declined slightly, while real unit labour costs rose slightly.

We expect that at the beginning of next year, adjustments in the labour market will be greater in wages than in employment

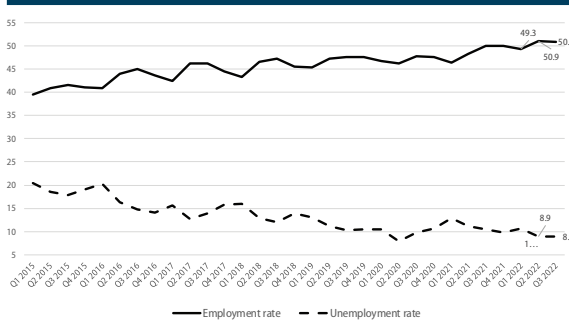
Due to the continuous labour shortage, we do not expect an increase in unemployment, and we expect the trend of moderate employment growth to continue

Basic labour market indicators show a stagnation

Employment rate was 50.8%

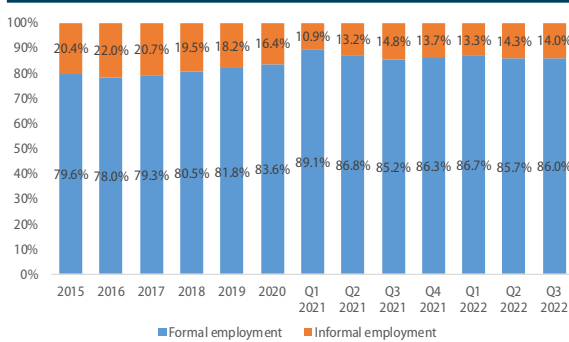
Unemployment rate was 8.9%

Graph T3-1. Trends in Employment and Unemployment Rates, 15+



Note: Break in the 2021 series.
Source: SORS, LFS

Graph T3-2. Formal and Informal Employment in % of Total Employment, 15+



Note: Break in the 2021 series.
Source: SORS, LFS

Employment and Unemployment

Basic labour market indicators according to the Labour Force Survey (LFS) show slight changes compared to the same quarter of the previous year, and an unchanged situation compared to the previous quarter. The employment rate was 50.8% in Q3 2022, while the unemployment rate was 8.9%. The activity rate was unchanged compared to the same quarter of the previous year and compared to the previous quarter and amounted to 55.8%. However, although the rates of activity and inactivity were unchanged, there was a drop in both the number of inactive and the number of active persons by the same percentage. The number of active and inactive persons decreased by 1.1% in Q3 2022 compared to Q3 2021, i.e. by 0.3% compared to Q2 2022. According to LFS data, the total number of employed persons was slightly less than 3 million (2,942 thousand). The number of the employed increased by 17.5 thousand compared to Q3 2021, while the number of the unemployed decreased by as much as 52.6 thousand in the same period. The number of active people decreased as a result of a slight relative increase in the number of employees and a significant decrease in the number of unemployed persons.

The rate of informal employment outside Agriculture was 7%, while in Agriculture it was over 50%

Informal employment decreased both in comparison to the same quarter of the previous year and in comparison to the previous quarter. The informal employment rate was 14%. The first to be hit by the pandemic were the informally employed, i.e. the number of informally employed was reduced from over 500 thousand in 2019 to 375.5 thousand in 2021. Although we expect informal employment to further decrease in the coming period, it is still slightly higher in the first three quarters of 2022 compared to the first three quarters of 2021. The average for 2022 was 405.9 thousand. Informal employment was most prevalent in agriculture and the rate was 53.8% in Q3 2022.

Employment increased slightly compared to the same period last year according to both data sources

The trend of employment was in line with the trend of economic activity. Employment increased slightly according to both data sources, 0.6% according to LFS and 0.9% according to data from the Central Register of Compulsory Social Insurance (CRCSI). Real gross value added (GVA) increased by 0.7% year-on-year. Employment and GVA declined in Agriculture and Construction. A significant decline was achieved in Construction of 13% according to the LFS. Employment in the Industry increased by 4.2% year-on-year, although the GDP of Industry decreased by 0.3% in real terms. Services achieved growth of 1.8% year-on-year.

The trend of employment was in line with the trend of GVA

Table T3-1. Trends in the Number of Employees (15+) and Real Gross Value Added (GVA) by Sector of Activity, Year-On-Year Change, %

	2017	2018	2019	2020	2021	Q1 2022	Q2 2022	Q3 2022
Total employment CRCSI	2.6%	3.3%	2.0%	1.9%	2.6%	1.6%	1.5%	0.9%
Formal employment LFS	4.5%	2.9%	4.1%	2.1%	2.2%	2.5%	3.0%	1.5%
Total employment LFS	2.8%	1.4%	2.4%	-0.2%	-1.6%	5.4%	4.3%	0.6%
Total GVA	2.1%	4.3%	4.4%	-0.6%	7.4%	3.4%	3.5%	0.7%
Employment- agriculture	-4.9%	-6.3%	0.4%	-6.9%	1.2%	16.2%	-1.5%	-2.6%
GVA-agriculture	-11.4%	15.1%	-1.7%	2.3%	-5.7%	-7.5%	-7.8%	-7.7%
Employment-industry	7.9%	7.7%	3.2%	-0.5%	3.4%	-0.6%	5.0%	4.2%
GVA-industry	-0.8%	4.0%	-23.8%	0.5%	6.3%	2.0%	4.6%	-0.3%
Employment-construction	-0.3%	8.7%	10.8%	11.8%	10.3%	5.5%	11.5%	-13.0%
GVA-construction	5.4%	12.4%	33.6%	-3.3%	17.6%	-5.6%	-7.1%	-12.4%
Employment-services	3.7%	0.8%	2.0%	0.7%	-5.4%	5.4%	4.9%	1.8%
GVA-services	5.8%	2.3%	20.1%	-1.1%	8.5%	5.9%	5.4%	3.7%

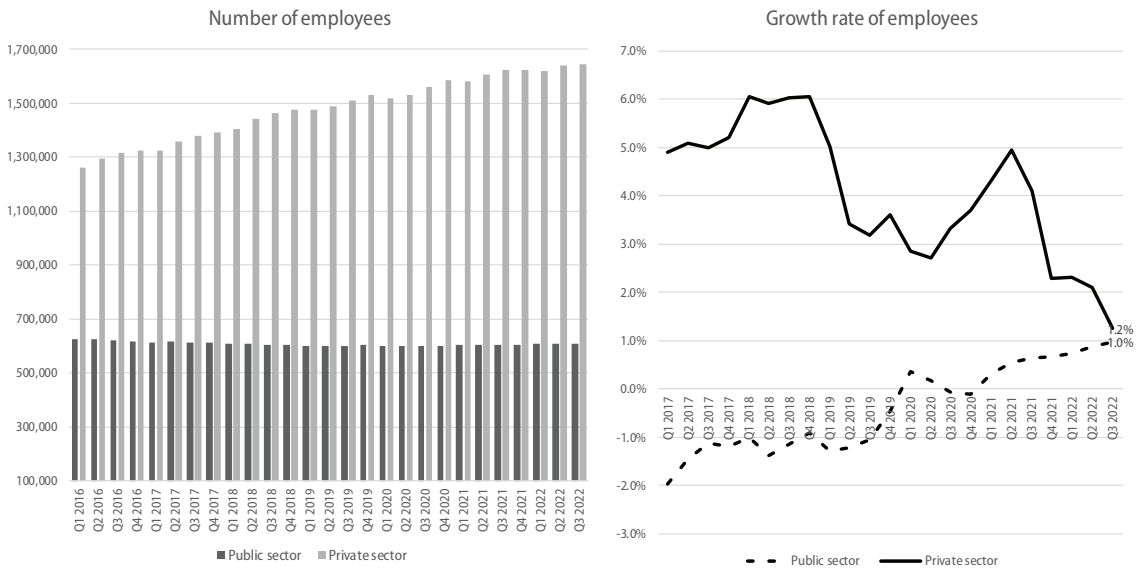
Notes: The source for employment was LFS, except for total employment which was reported by both LFS and CRCSI. Registered employment (CRCSI) includes employees of legal entities, entrepreneurs and their employees, self-employed persons, and registered individual farmers. Annual data for GVA 2020 have been revised, while previous data was used for 2021. GVA quarterly data for 2022 was previous data. Employment according to CRCSI was the previous data in Q3 2022. The LFS methodology was partially changed in 2021, where they do not have more detailed revised data for previous periods, so the year-on-year comparison should be taken with a grain of salt.

Source: SORS, LFS, CRCSI and SNA

According to CRCSI data, the number of registered employees was 2 million and 300 thousand in Q3 2022, slightly higher compared to the same quarter of the previous year and compared to the previous quarter. The number of employees without registered individual farmers increased slightly compared to the same quarter of the previous year (1.2%). Observed according to activities, we see significant differences in employment trends. The largest relative growth in the number of employees was achieved by Information and Communications, 14.9% compared to the same quarter of the previous year. In the framework of Information and Communications, the highest relative growth was recorded by programming activities at 24.4% and information service activities at 13.2% year-on-year, while programming activities and broadcasting and publishing activities achieved growth of less than 1%. Although these activities have been on the rise for years, we assume that part of the increase in employment is a consequence of the arrival of a significant number of emigrants who are mostly IT experts. Computer programming, consulting, and related activities achieved employment growth in 2021 compared to 2020 by 18.9%.

According to CRCSI data, the Construction industry did not show a change in the number of formally employed people, while the number of registered employees in Agriculture was lower by 6.6% compared to the same quarter of the previous year. Mining achieved significant year-on-year growth of 7.2%.

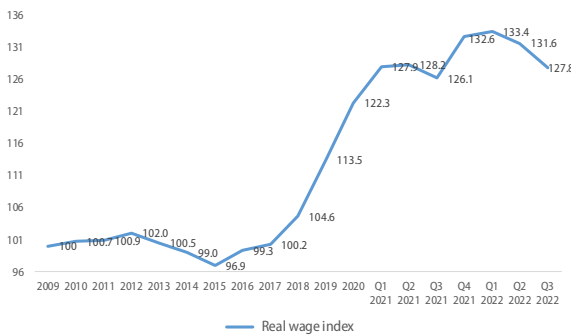
Graph T3-3. Employment Trends in the Public and Private Sector



Note: The data for Q3 2022 is the previous data. Employment includes the number of employees in legal entities, entrepreneurs and their employees, and persons who perform activities independently.
Source: SORS, CRCSI

Slower growth of employment in the private sector

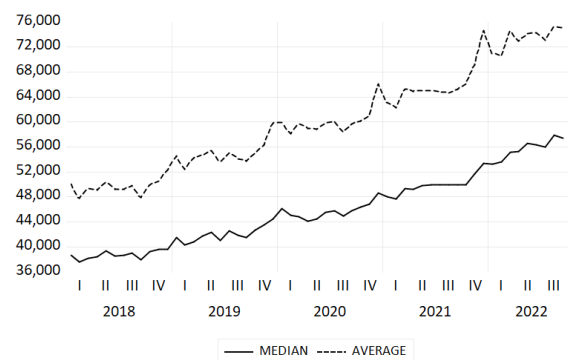
Graph T3-4. Real Wage Index, 2009=100



Note: Break in the 2018 series.
Source: SORS.

The average net wage was 74.5 thousand dinars

Graph T3-5. Median and Average Wage Trends



Source: SORS

Wages were higher in real terms by 1.3% year-on-year, but lower by 2.9% compared to Q2 2022

The majority of activities have stagnated or had a real drop in wages compared to the same quarter of the previous year

Compared to the previous quarter, only employees in Information and Communications had a slight increase in wages

Observed according to ownership, about 600 thousand employees are in the public sector and one million and 600 thousand employees are in the private sector. There was a noticeable trend of slowing growth in the private sector in the last couple of quarters, which is in line with the slowdown in economic activity. Year-on-year growth in the number of employees in the private sector was 1.2% and in the public sector 1%.

Wages

The average net wage was 74.5 thousand dinars in Q3 2022, nominally higher by 14.8% compared to the same quarter of the previous year, while the real growth was 1.3%. Compared to the previous quarter, wages were 2.9% lower in real terms. For the first 9 months of 2022, compared to the same period of the previous year, real wages were 2.7% higher. There is a noticeable trend of slowing down real wage growth in 2022.

The median wage is still significantly lower than the average salary, and in the third quarter of 2022, it amounted to 57 thousand dinars. The median wage was 23% lower than the average wage.

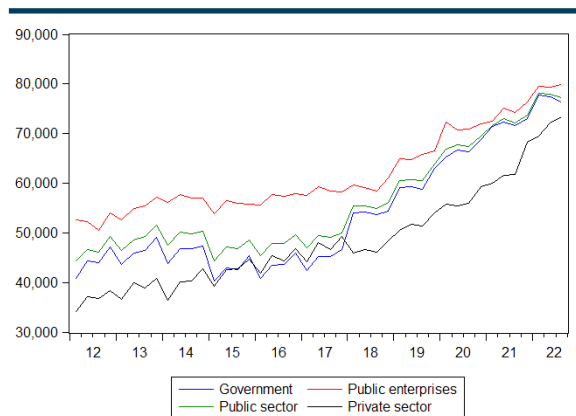
Observed by activities, real wage growth was mostly absent compared to the same quarter of the previous year in most activities. Exceptions are Information and Communications with a real growth of 20% and Professional, Scientific and Technical activities with a growth of 6.2%. Compared to the previous quarter, wages only recorded a slight real growth in the Information

and Communication activity. The biggest real drop compared to the previous quarter was recorded in Finance and Insurance (-6.8%), followed by Education (-5.4%).

The average wages were the highest in public companies, 80 thousand, then in the public sector and the general government sector around 77 thousand, while in the private sector they amounted to 73 thousand in Q3 2022. The salary premium in the private sector compared to the public sector was reduced to only 5%, which represents a historical minimum. The wage premium was slightly higher in public companies compared to

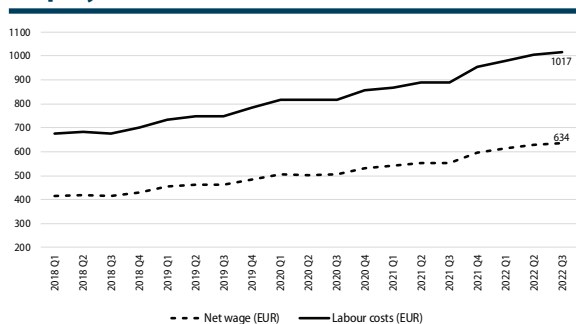
the private sector, amounting to 9% in Q3 2022. The decrease in wage premiums in the public sector compared to the private sector is a consequence of faster wage growth in the private sector, largely caused by shortages in the workforce. During 2022, year-on-year real wage growth was recorded in the private sector, while an interannual decrease in real wages was achieved in the public sector. In Q3 2022, the private sector had a year-on-year growth of 4.7%, while the decrease in wages in the public sector amounted to 5.6%. However, in both sectors, in all three quarters, wages decreased compared to the previous quarter.

Graph T3-6. Average Wage Trends in the Public Sector, Public Enterprises, the Government and the Private Sector, RSD



Note: Break in the 2018 series.
Source: SORS

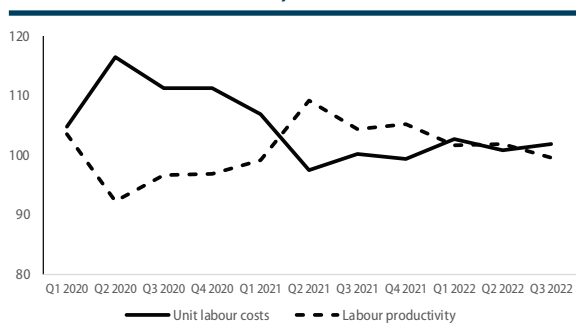
Graph T3-7. Average Net Wages and Employer's Costs in EUR



Note: Break in the 2018 series.
Source: SORS for wages, NBS for exchange rates

Wages amounted to EUR 634, while the employers' costs were slightly over EUR 1,000

Graph T3-8. Trends in Labour Productivity and Real Unit Labour Costs, Year-On-Year Indices



Note: Source for employment was CRCSI, and GVA data for 2022 were previous data.
Source: Author's calculations using SORS data

An average increase of 12.5% in wages in the public sector was announced, which is less than the year-on-year inflation in October, which was 15%. We expect that wages will stagnate (or be slightly higher) at the beginning of next year compared to the same period this year in most activities and in both sectors (public and private). Wages in the public sector will increase in January and will have significant real growth compared to December this year. If there is no additional increase in wages in the public sector during the year, they are likely to stagnate in real terms during 2023 compared to 2022.

Net wage in euros amounted to EUR 634, while the employer's costs amounted to EUR 1,017. Wages and employer's costs in euros increased by 15% year-on-year and 1% compared to the previous quarter. The growth of wages in euros corresponds to the nominal growth in dinars due to the unchanged exchange rate.

Labour Productivity

Labour productivity decreased slightly compared to the same period of the previous year (-0.5%), while unit labour costs increased by 1.2% in real terms. The decline in labour productivity is a consequence of

The growth of unit labour costs corresponds to real wage growth, while labour productivity has slightly declined

the slowdown in the growth of economic activity. GVA increased in real terms by 0.7%, while employment, excluding registered individual farmers, increased by 1.2%. Wages increased in real terms by 1.3% year-on-year, which led to an increase in unit labour costs by 1.2%. Graph 3. 8 shows the movement of real labour productivity and real unit labour costs in the last three years. We see that until the first quarter of 2021, real unit labour costs achieved year-on-year growth, while labour productivity declined. During 2021, labour productivity grew more than real unit labour costs, while during 2022 both labour productivity and real unit labour costs stagnated.

Appendix

Table D3-1. Basic Labour Market Indicators

	2017	2018	2019	2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022
Activity rate (%)	54	54.5	54.6	54	53.1	54.3	55.8	55.4	55.2	55.8	55.8
Employment rate (%)	46.7	47.6	49	49.1	46.3	48.3	50.0	50.0	49.3	50.9	50.8
Unemployment rate (%)	13.5	12.7	10.4	9	12.8	11.1	10.5	9.8	10.6	8.9	8.9
Informal employment rate (%)	20.7	19.5	18.2	16.4	10.9	13.2	14.8	13.7	13.3	14.3	14

Note: Break in the 2021 series.

Source: SORS

Table D3-2. Average Net Wages and Employer's Costs in EUR

	2018	2019	2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022
Average net wages, total, (€)	420	466	511	541	553	552	595	613	628	634
Average net wages, industry, (€)	413	454	485	502	519	514	546	553	575	579
Labour costs, total (€)	684	754	827	869	890	888	955	981	1006	1017
Labour costs, industry (€)	672	734	784	807	835	828	877	884	923	930

Note: Industry includes activities B, C and D, weighted average wages. Dinar exchange rate against the euro, period average (NBS).

Source: Author's calculations using SORS and NBS data