



LABOUR MARKET RESEARCH IN THE FEDERATION OF BIH

2021 / 2022



IMPROVING LABOUR MARKET RESEARCH

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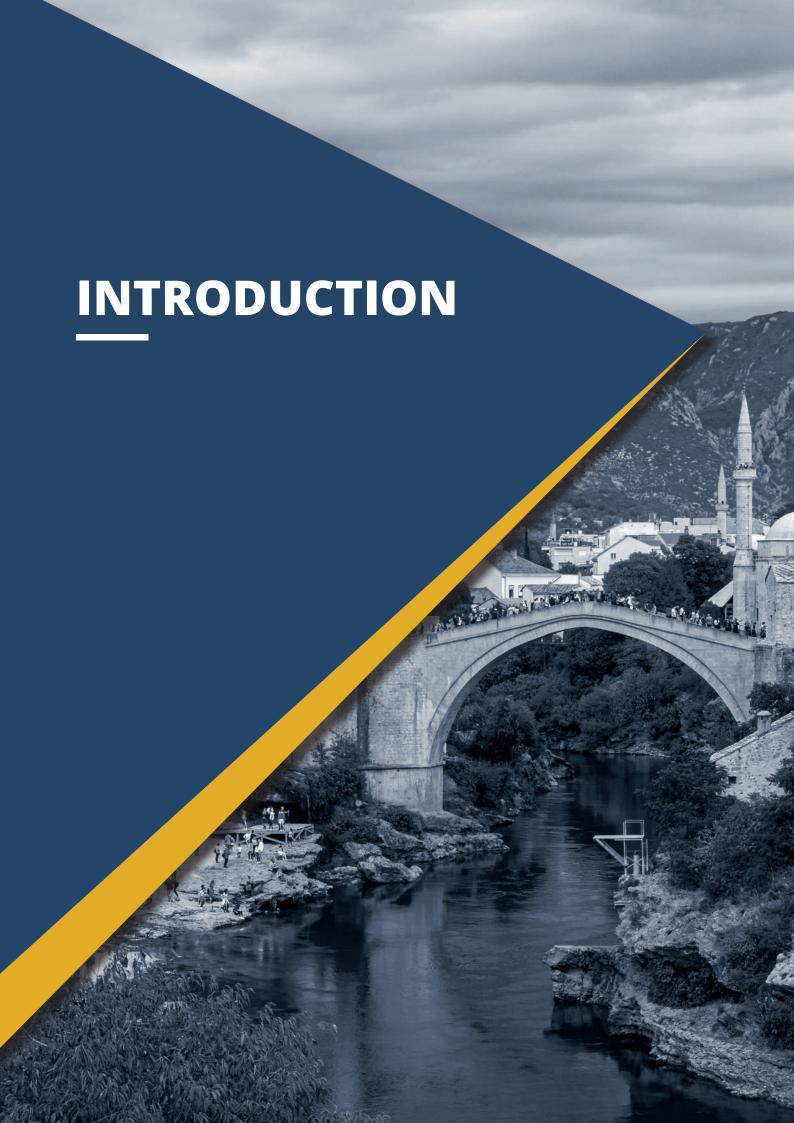
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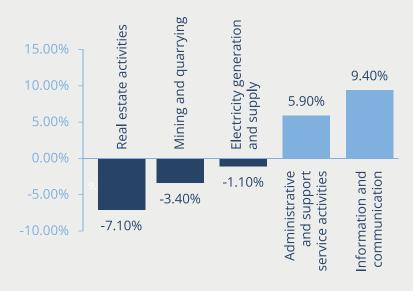
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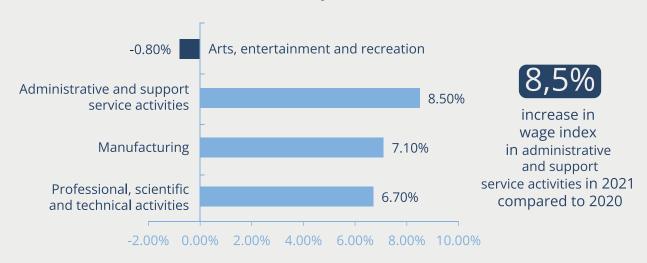
Most significant changes in index of persons in employment in 2021 compared to 2020



9,4%

increase in employment index in information and communication activities in 2021 compared to 2020

Most significant changes in wage index in 2021 compared to 2020

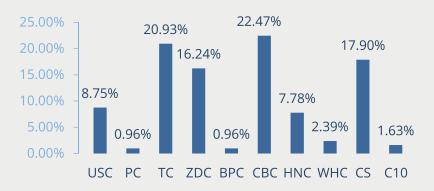


% of persons deleted from unemployment register in relation to FBiH



INTRODUCTION

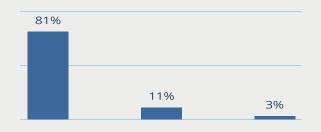
% of persons deleted from unemployment register in relation to FBiH



22,47%

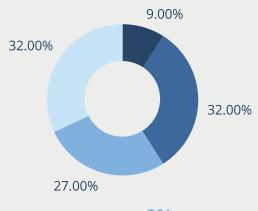
of persons deleted from unemployment register in Central Bosnia Canton in relation to total number of persons deleted from unemployment registers in FBiH

Structure of sampled employers by type of organisation



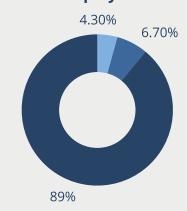
Limited liability company **81%**Craft **11%**Joint stock company **3%**

Structure of sampled employers by activity group



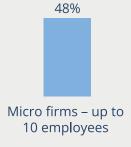
- Construction 9%
- Industrial activities 32%
- Trade **27%**
- Service activities 32%

Length of existence of surveyed employers



- Firms younger than 3 years 4.3%
- Firms aged 3 to 5 years 6.7%
- Firms older than 5 years 89%

Structure of sampled employers by size









INTRODUCTION

The Federation of BiH labour market research is conducted as a joint activity of the Federal Employment Institute and the cantonal employment services to obtain quantitative and qualitative data required for providing adequate information on the labour market trends. Under Article 8 of the Law on Job Brokerage and Social Security of Unemployed Persons ("Official Gazette of the Federation of BiH", numbers 41/01, 22/05, and 9/08), the Federal Employment Institute issues instruction to the cantonal employment services for periodic assessment of the labour market, i.e., conduct of the labour market research. Based on the data collected, relevant information and report on this activity's results are prepared at the Federation of BiH level.

A Report on the 2021/2022 Labour Market Research Results was prepared as a kind of analysis of the labour market trends and needs in the Federation of BiH in late February 2022, when the COVID-19 pandemic was still present but with a relaxation of anti-COVID measures tendency in a host of countries around the world.

The preparations for conducting the labour market research were made in the last quarter of 2021, through the preparation of a methodology and a design for carrying out this activity. Primary and secondary data sources were used in the preparation of the report. In addition to collecting and processing the data from different administrative data sources (the Federal Employment Institute and the cantonal employment services, the Federal Institute for Statistics, the Tax Administration of the Federation of BiH, the cantonal education ministries, etc.), an employer survey conducted in January 2022 was also organised as part of the labour market research. With support from the EU-funded "Improving labour market research" project, training was organised for the research coordinators and interviewers from the cantonal employment services who carried out the employer survey process. For the purposes of conducting the survey, an appropriate manual was also prepared, which was designed so as to follow the questions through the survey. Upon completion of the data collection process, training was organised on the topic of preparing, processing and analysing, i.e., reporting the collected data.

The labour market researches are very important for employment policymaking, especially considering the shocks and changes occurring in the economic flows. For example, the declaration of the pandemic in 2020 had a negative impact especially on the hospitality hotel industry, manufacturing and transportation industry, but also on other activities subsequent to that as a result of the chain reaction that was set off. This period has remained marked by mass employee layoffs, but also by a strong fight to preserve jobs through the use of all available resources and measures. However, 2021 saw economic recovery, a growth in the exports and overall economic activities, a growth in the number of persons in employment and average wage, as well as in the collection of the taxes and contributions, but also a decrease in the number of unemployed persons, which is at its lowest level in the last 17 years.

In addition to the trends in the number of persons in employment and wage by industry, as well as the trends in the number of unemployed persons, the Report presents the most numerous occupations in the employment service registers by different parameters, as well as the occupations with the highest number of deletions from the employment service registers. Based on the employer survey results, the Report also presents the 2022 employer forecasts of their performance and labour demand, i.e., the forecasts of new employee hiring, as well as an overview of the sought-after occupations and employee competences and the capacity to organise practical instruction and training for pupils, students, and unemployed persons. In that context and as part of the research, a special thematic report will be published on the education policies, with an overview of the secondary schools and number of students enrolled in the 2021/2022 school year by all majors in the Federation of BiH.

In keeping with its policy, the Federal Employment Institute publishes this report on its www.fzzz.ba portal and shares it with the institutions and organisations relevant to the fields of employment and education while using the research findings as inputs for policymaking and implementation of activities to stabilise the labour market situation, in line with its competences and in cooperation with the cantonal employment services.



2021 FEDERATION OF BIH LABOUR MARKET SITUATION

This section of the Report provides an overview of the labour market situation based on analysis of the data available in the databases of the Federal Employment Institute and the cantonal employment services, the Federal Institute for Statistics, the Tax Administration of the Federation of BiH, etc.

2021 Federation of BiH Employment

Following a break in the multi-year growth trend of the number of persons in employment from April 2020, the growth in the number of persons in employment in the Federation of BiH resumed in 2021. According to data from the Federal Institute for Statistics, there were on average 525,397 workers employed in 2021 in the Federation of Bosnia and Herzegovina, which is 5,235 workers or 1% more compared to the 2020 average (520,162). The activities with the highest growth index of the number of persons in employment in 2021 compared to 2021 are: information and communication (9.4%), administrative and support service activities (5.9%), and professional, scientific and technical activities (4%). The following activities recorded a decrease in the highest proportion in the index of the number of persons in employment in 2021 compared to 2020: real estate activities (-7.1%), mining and quarrying (-3.4%), and electricity generation and supply (-1.1%).

Table 1: Number of persons in employment in Federation of BiH in 2021 and 2020 by activity¹

	. Number of persons in employment in red	Number of	f persons in syment	Indices
	Sections	Ø 2021	Ø 2020	Ø 2021 Ø 2020
	TOTAL	525,397	520,162	101.0
А	Agriculture, forestry and fishing	10.984	10.743	102,2
В	Mining and quarrying	12.244	12.671	96,6
С	Manufacturing	103.541	101.729	101,8
D	Electricity, gas and steam generation and supply and air conditioning	8.549	8.645	98,9
Е	Water supply; sewerage, waste management and remediation activities	8.446	8.527	99,1
F	Construction	26.334	26.363	99,9
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	95.420	95.570	99,8
Н	Transportation and storage	24.423	24.419	100,0
I	Accommodation and food service activities (hotel and hospitality industry)	24.679	24.473	100,8
J	Information and communication	17.754	16.224	109,4
K	Financial and insurance activities	12.034	12.070	99,7
L	Real estate activities	2.854	3.073	92,9
М	Professional, scientific and technical activities	17.264	16.594	104,0
N	Administrative and support service	13.197	12.464	105,9
0	activities	47.985	48.228	99,5
Р	Public administration and defence; compulsory social security	43.400	43.113	100,7
Q	Education	36.097	35.360	102,1
R	Human health and social work activities	9.571	9.350	102,4
S	Ostale uslužne djelatnosti	10.621	10.546	100,7

After the major negative changes in 2020 caused by the SARS-CoV-2 coronavirus, i.e., COVID-19 pandemic (interruption in a host of foreign trade chains, budget strain, employee layoffs, and many other disruptions in economic activities), the situation still gradually stabilised in 2021, which is also evident through the increase in the number of persons in employment compared to 2020.

Data from the Federal Institute for Statistics - fzs.ba

Number of persons in employment in Federation of BiH in 2019 - 2021 period

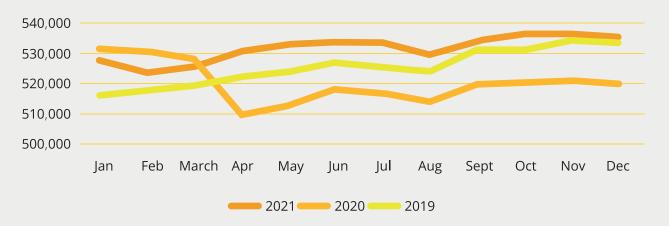
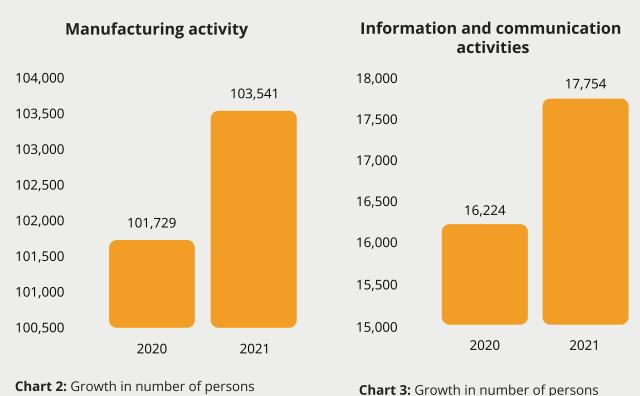


Chart 1: Number of persons in employment in Federation of BiH in 2019 – 2021 period

In terms of absolute numbers in 'Manufacturing' activity, the number of persons in employment in 2021 increased by 1,812 compared to 2020, indicating recovery of this activity, which had a significant decrease in the number of persons in employment in 2020. Also, a continuous and meaningful growth in the number of persons in employment in 'Information and communication' activities by 1,530 compared to 2020 is noticeable and a continuation of the growth in the number of persons in employment can be expected in these activities considering the development of information and communication technologies.

Number of persons in employment



In terms of gender structure, women accounted for 42% of the persons in employment in the Federation of BiH in 2021. Compared to 2020, women recorded a 1.8% growth index, with men recording a 1% growth index.

in employment in activity C

in employment in activity J

Table 2: Active population (persons in employment + unemployed persons) in Federation of BiH in 2021 by gender¹

					Indi	ces		
La di antana	Ø 2	021	Ø 2	020	Ø 20	021		
Indicators					Ø 2020			
	Total	Female	Total	Female	Total	Female		
Active population (persons in employment + unemployed persons)	837.076	404.619	841.743	405.645	99,4	99,7		
Total persons in employment - average	525.397	222.303	520.162	218.280	101,0	101,8		
Persons in employment in legal entities	467.756	198.028	462.410	194.181	101,2	102,0		
Persons in employment in crafts and related activities	57.641	24.275	57.752	24.099	99,8	100,7		
Unemployed persons	311.679	182.316	321.581	187.365	96,9	97,3		
Registered unemployment rate %	37.2	45.1	38.2	46.2				

According to data from the Tax Administration of the Federation of BiH, workers between 36 and 45 years of age (28.8%) were the most numerous among the persons in employment as at 31.12.2021 (533,034 persons in employment) according to age structure.²

Youths up to 30 years of age account for 21% of the total number of persons in employment, while workers 46 years of age and over account for 37% of the total number of persons in employment in the Federation of BiH as at 31.12.2021.

Table 3: Number of persons in employment in Federation of BiH as at 31.12.2021 by age and gender structures

Age structure	Number of persons in employment	% of number of persons in employment	Age structure	%
do 20	9.814	2%		
od 21 - 25	44.242	8%	do 30	21%
od 26 - 30	57.775	11%		
od 31 - 35	71.024	13%	124 1 45	420/
od 36 - 45	153.622	29%	od 31 do 45	42%
od 46 - 55	122.047	23%		
od 56 - 65	73.944	14%	od 46 do 66	37%
od 66	566	0%		
TOTAL	533.034	100%		100,00

Despite all the issues caused by the COVID-19 pandemic, there is still a disbalance between the labour market supply and demand which is indicated as an evident issue by the administrative data from the employment services, but also by employers in the survey conducted as part of this research. The mismatches in terms of knowledge, skills, qualifications or regional distribution are only some of the issues faced by employers when recruiting needed labour.

¹ Data from the Federal Institute for Statistics - fzs.ba

² Report on the work of the Tax Administration of the Federation of BiH for 2021 - pufbih.ba

In addition to the shortage of a specific occupation in a number of cases, the lack of jobspecific knowledge and skills is mainly indicated.

A large number of persons without qualifications but also of those over 50 years of age still participate in the working-age population and labour force, facing the risks of marginalisation, long-term unemployment and reduced chances of employment without programmatic or strategic interventions. The informal economy employment still has a significant share in the total number of persons in employment. Consequently, this gives rise to the issue of understanding the real employment and unemployment rates, but also to the issues of social status and ability of persons working in such environment to exercise their rights.

The education system plays a very important role in solving some of the listed issues. A significant proportion of the labour market issues can be pre-empted through cooperation with employers insofar as it concerns practical instruction and development of curricula tailored to the needs of businesses, as well as through increase in the number of practical instruction hours in secondary vocational education, given the additional knowledge and skills requirements expected by employers from the workforce and in the light of technological development. The results of this research show that a large number of employers express their willingness and offer their resources for organising practical instruction for school pupils and students for specific occupations. All the foregoing, combined with the active employment policy measures carried out by the Federal Employment Institute and the cantonal employment services, with their improvement based on evaluation findings, can affect in some proportion the stabilisation of the labour market situation and provide emergency support in the employment process.

Also, the issue of skilled workforce (both persons in employment and unemployed persons) migration to the European Union member states, especially to Germany, Austria and Slovenia, but also to the Scandinavian countries, should also be emphasised in this context. Private employment agencies intensely advertise themselves on social networks in Bosnia and Herzegovina with offers of employment for different occupations (especially occupations in the medical, construction and metal sectors) in the above countries and provision of assistance in the performance of administrative activities in the employment process. The smaller-scale increase in the number of persons in employment compared to the decrease in the number of unemployed persons indicates that some of the workforce goes abroad.

Germany's announcement about needing to employ 400,000 foreign workers annually also poses a potential risk with significant consequences for the labour market in Bosnia and Herzegovina, as does the German Government's decision on increasing the minimum hourly wage in 2022 from EUR 9.82 to EUR 12. Also, the seasonal employment of workers from Bosnia and Herzegovina in neighbouring countries affects in particular the shortage of workers in 'Hotel and accommodation' industry.

Consequently, the overall labour market relationships in the context of supply and demand are potentially destabilised, as are the overall demographic indicators, given the decreased natality, i.e., the natural increase, and overall population ageing. In that regard, it is important to emphasise that the employer associations and the chambers of commerce in the Federation of BiH are announcing an increased demand for foreign labour and pointing to the need to liberalise legislation regulating the employment of foreigners in order to compensate for the shortage of domestic skilled workforce, resulting also from their going abroad among other things, by employing foreign workers.

The solving of the above labour market issues requires synergistic action of all relevant institutions, which should lead to an improvement of the business environment in terms of adequate reduction of the tax and contribution burden, increase in the wages and improvement of the working conditions, facilitation of starting a business, strengthening of the active employment policy measures (training, entrepreneurship, employment of harder-to-employ categories of unemployed persons), linking of educational institutions and legal entities in the context of delivering practical instruction, and stimulation of research and development.

2021 Federation of BiH Wages

Wages and labour cost are among many factors affecting the labour demand. The labour market, wage value and living standard are inextricably linked factors. According to data from the Federal Institute for Statistics, the average net wage in the Federation of BiH in 2021 grew by 4.2% compared to 2020, while the average gross wage grew by 4.8%.

The following activities recorded the highest average nominal wage in 2021: electricity generation and supply (BAM 1,718), financial and insurance activities (BAM 1,710), and information and communication activities (BAM 1,479).

By activity, the following activities recorded the highest percentage increase in the average net wage: administrative and support service activities (8.5%), manufacturing (7.1%), and professional, scientific and technical activities (6.7%).

Only 'Arts, entertainment and recreation' activities recorded a decrease in the average net wage (-0.8%).



 Table 4: Federation of BiH wages by activity

	1	Neto plaće			Bruto plać	9
Federation of BiH wages by activity ¹	Ø 2021	Ø 2020	Ø 2021	Ø 2021	Ø 2020	Ø 2021 Ø 2020
TOTAL	996	956	104,2	1.543	1.472	104,8
A-Agriculture, forestry and fishing	934	912	102,4	1.444	1.389	104,0
B-Mining and quarrying	1.076	1.054	102,1	1.653	1.623	101,8
C-Manufacturing	742	693	107,1	1.126	1.046	107,6
D-Electricity, gas and steam generation and supply and air conditioning	1.718	1.691	101,6	2.763	2.641	104,6
E-Water supply; sewerage, waste management and remediation activities	948	931	101,8	1.494	1.422	105,1
F-Construction	696	657	105,9	1.071	994	107,7
G-Wholesale and retail trade; repair of motor vehicles and motorcycles	738	712	103,7	1.138	1.087	104,7
H-Transportation and storage	913	888	102,8	1.401	1.360	103,0
I-Accommodation and food service activities (hotel and hospitality industry)	550	521	105,6	831	788	105,5
J-Information and communication	1.479	1.399	105,7	2.324	2.191	106,1
K- Financial and insurance activities	1.710	1.655	103,3	2.701	2.602	103,8
L-Real estate activities	856	805	106,3	1.314	1.241	105,9
M-Professional, scientific and technical activities	1.125	1.054	106,7	1.758	1.641	107,1
N-Administrative and support service activities	680	627	108,5	1.043	957	109,0
O-Public administration and defence; compulsory social security	1.384	1.356	102,1	2.157	2.108	102,3
P-Education	1.013	982	103,2	1.571	1.518	103,5
Q-Human health and social work activities	1.389	1.335	104,0	2.159	2.086	103,5
R-Arts, entertainment and recreation	714	720	99,2	1.111	1.103	100,7
S-Other service activities	1.129	1.092	103,4	1.748	1.683	103,9

Data from the Federal Institute for Statistics

2021 Federation of BiH Unemployment

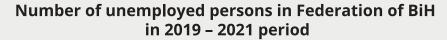
Following a major increase in the number of unemployed persons in 2020 due to the increased employee layoffs as a result of the COVID-19 pandemic, the number of unemployed persons in the Federation of BiH declined again in 2021. Therefore, the average number of unemployed persons in 2021 was 311,679, which is 9,902 persons, i.e., 3% less compared to the 2020 average (321,581).

Table 5: Overview of core 2021 Federation of BiH unemployment indicators

	. Overview of core 2021 reacrat												
Indica	tors	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1.	Number of persons in employment	516.137	517.693	519.334	522.139	523.852	526.919	525.292	524.009	531.024	530.989	534.119	533.260
2.	Number of unemployed persons	324.862	321.668	318.648	315.019	311.752	311.389	313.574	312.018	305.395	304.592	301.513	299.717
2.1.	Female	188.862	187.059	185.868	184.434	182.789	182.070	183.753	183.130	178.699	178.383	176.884	175.866
3.	Qualified persons	226.401	223.631	221.142	218.245	215.628	215.996	218.457	217.586	211.926	211.595	209.199	207.577
4.	Unqualified persons	98.461	98.037	97.506	96.774	96.124	95.393	95.117	94.432	93.469	92.997	92.314	92.140
5.	First-time job seekers	103.252	101.815	100.326	98.664	97.231	99.050	100.087	99.332	97.993	77.666	96.323	94.655
6	Persons registered in registers	868'6	7.630	9.379	8.023	7.019	11.201	11.996	14.239	13.912	14.130	12.964	12.983
6.1.	Persons registered in registers due to termination of their employment relationships	7.285	5.431	6.649	6.170	5.305	5.643	7.744	6.894	986.9	6.323	5.642	6.461
7.	Persons deleted from registers	8.280	10.824	12.399	11.652	10.286	11.564	9.811	15.795	20.535	14.933	16.043	14.779
7.1.	Persons deleted from registers due to employment	5.075	6:859	8.320	8.024	7.246	8.985	7.419	7.593	10.315	6.455	7.068	5.756

8.	Cash benefit beneficiaries	14.741	13.437	13.289	12.568	12.144	11.518	11.213	11.731	12.103	10.696	10.248	9.911
9.	Health insurance beneficiaries	227.786	225.751	223.694	220.940	218.247	217.036	218.086	217.189	213.173	209.961	211.025	210.431
10.	Demobilised veterans	40.779	40.581	40.246	39.845	39.627	39.460	39.368	39.118	38.702	31.393	38.302	38.233

Out of the total average number (311,679) of unemployed persons in the Federation of BiH in 2021, 182,316 were unemployed women, which is a decrease by 5,049 or 2.70% compared to the previous year. Out of the total number of unemployed persons in the Federation of BiH in 2021, men accounted for 42%, with women accounting for 58%.



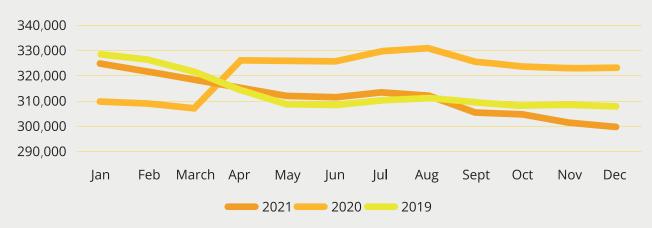


Chart 4: Number of unemployed persons in Federation of BiH in 2019 – 2021 period

According to qualification structure, persons with level 3 secondary education – skilled labour accounts for the lion's share of unemployed persons (98,371 or 32%), followed by unskilled labour, of whom there are as many as 90,130 or 29%. Out of the total number of unemployed persons, persons with university degrees account for 8%.

Table 6. Overview of number of unemployed persons in Federation of BiH in 2021 by level of education

Level of	Uns	killed perso	ns	Skilled persons						
Level of education			Semi- skilled	Skilled	Secondary education	Highly- skilled	Associate degree	University degree		
Average number of unemployed persons in 2020 – total	423	93.170	5.114	101.507	89.839	1.034	5.840	24.654		
Average number of unemployed persons in 2021 – total	379	90.130	4.721	98.371	86.765	903	5.946	24.464		

According to age structure, persons between 30 and 49 years of age were the most numerous (42%) among registered unemployed persons in 2021, followed by persons over 50 years of age (34%), and youths up to 30 years of age (24%). In 2021, 133,734 persons were registered in the employment service registers in the Federation of BiH, which is 9,310 persons less compared to 2020. Out of the total number of persons registered in the registers, 75,933 persons were registered following the termination of their employment relationships. In the same period, 156,901 persons were deregistered, i.e., deleted from the employment service registers in the Federation of BiH on a variety of grounds, which is 30,142 persons more compared to 2021.

Table 7. Overview of core indicators on changes in unemployment registers in Federation of BiH in 2021¹ (Source: 12/21 Bulletin)

	red sters	mo	l in ving ent		ns for term syment rel	nination of ationship	ame
Canton	Total number of newly registered persons in unemployment registers	Number of persons deleted from registers	Number of persons registered in unemployment registers following termination of their employment relationships	Bankruptcy, winding up, restructuring, privatisation	Technological or organisational redundancy	Other (termination of fixed-term contract, consensual termination of contract, misconduct and like)	Persons from registers who became employed
Una-Sana	11.373	13.729	5.645	10	1.411	4.224	4.401
Posavina	1.249	1.504	607	0	330	277	965
Tuzla	26.258	32.835	17.354	154	3.210	13.990	20.450
Zenica-Doboj	21.682	25.476	15.071	152	2.650	12.269	16.701
Bosnian-Podrinje	1.333	1.505	941	3	129	809	1.295
Central Bosnia	33.078	35.257	6.875	194	3.546	3.135	9.947
Herzegovina-Neretva	10.207	12.203	7.337	237	2.359	4.741	8.772
West Herzegovina	3.339	3.753	1.959	73	735	1.151	2.617
Sarajevo	22.553	28.084	18.689	0	4.682	14.007	22.704
Canton 10	2.302	2.555	1.455	42	234	1.179	1.263
Federation of BiH	133.374	156.901	75.933	865	19.286	55.782	89.115

Source: 12/21 Bulletin of the Federal Employment Institute

Table 7.1: Overview of persons deleted from employment service registers due to employment in Federation of BiH in 2021 by qualification structure and gender

Level of education	University degree	Associate degree	Secondary	Lower- skilled	Highly- skilled	Skilled	Semi- skilled	Unskilled
Broj brisanih sa evidencije nezaposlenih osoba zbog zaposlenja - ukupno	16.881	2.578	30.945	40	207	28.103	479	9.882
Broj brisanih sa evidencije nezaposlenih osoba zbog zaposlenja - žene	11.926	1.675	15.835	32	50	9.970	213	5.049

Most Numerous Occupations in the Unemployment Registers in the Federation of BiH in 2021

In terms of the overview of the most numerous occupations by level of education as at 31.12.2021, economists and lawyers were the most numerous among persons with university degrees in the employment service registers in the Federation of BiH, but they were also among the most numerous in the group of persons deleted from the registers due to employment, while economic technicians and grammar school graduates were the most numerous among persons with level 4 secondary education. Salespersons, hairdressers, auto mechanics and drivers were the most numerous among skilled labour. The labour marker supply still exceeds the demand for these occupations.

Table 8: Overview of most numerous occupations by canton, level of education and gender (as at 31.12.2021)

				U	NA-S	SANA CANTO	V				
UNIVERSITY DEGREE	TOTAL	FEMALE	ASSOCIATE DEGREE	TOTAL	FEMALE	SECONDARY EDUCATION	TOTAL	FEMALE	SKILLED AND HIGHLY-SKILLED	TOTAL	FEMALE
Economist	221	113	Economist	90	38	Economy technician	1025	742	Salesperson	1870	1332
Lawyer	173	92	Textile technology engineer	31	14	Grammar school graduate	850	531	Auto mechanic	754	436
Nurse	114	46	Preschool children's teacher	21	9	Mechanical technician	769	476	Tailor	689	431
Secondary school English language teacher	78	31	Nurse	19	7	Nurse	680	443	Cook	631	415
Food technology engineer	65	26	Wood technology engineer	13	6	Agriculture technician	440	229	Locksmith	521	287

				РО	SAV	INA CANTON					
UNIVERSITY DEGREE	TOTAL	FEMALE	ASSOCIATE DEGREE	TOTAL	FEMALE	SECONDARY EDUCATION	TOTAL	FEMALE	SKILLED AND HIGHLY-SKILLED	TOTAL	FEMALE
Lawyer	16	12	Economist	14	11	Commercialist	107	70	Salesperson	217	152
Economist	12	7	Criminalist	14	10	Economist	83	63	Locksmith	181	1
Culture social worker	8	5	Computer scientist	13	4	Nurse	80	63	Auto mechanic	135	1
Agronomy engineer	7	2	Lawyer	10	7	Agriculture technician	80	41	Hairdresser	85	72
Physio- therapist	5	5	Social worker	8	8	Administrative officer	66	39	Textile seamster	67	51

					TU	ZLA CANTON					
UNIVERSITY DEGREE	TOTAL	FEMALE	ASSOCIATE DEGREE	TOTAL	FEMALE	SECONDARY EDUCATION	TOTAL	FEMALE	SKILLED AND HIGHLY-SKILLED	TOTAL	FEMALE
Economist	627	469	Economist			Grammar school graduate	2115	1561	Salesperson	4443	4126
Lawyer	529	395	Primary school class teacher	hool 35 3		Economy technician	2095	1798	Hairdresser	1330	1280
Pedagogue	166	149	Lawyer	26	23	Mechanical technician	1902	782	Cook	1193	901
Secondary school class teacher	143	133	Economic officer	10	6	Nurse	1776	1381	Locksmith	1159	22
Chemical technology engineer	142	110	Sports coach	9	0	Chemical technician	866	737	Auto mechanic	1145	14

				ZENI	CA -	DOBOJ CANT	ON				
UNIVERSITY DEGREE	TOTAL	FEMALE	ASSOCIATE DEGREE	TOTAL	FEMALE	SECONDARY	TOTAL	FEMALE	SKILLED AND HIGHLY-SKILLED	TOTAL	FEMALE
Lawyer	461	359	Economist	66	47	Economy technician	2338	1921	Salesperson	3037	2709
Economist	396	298	Lawyer	31	22	Grammar school 1736 1256 Hai graduate		Hairdresser	1950	1873	
Mechanical engineer	156	71	Preschool children's teacher	16	15	Mechanical technician	hanical 968 421 Loc		Locksmith	1136	42
Secondary school English language teacher	113	88	Mechanical engineer	11	4	Nurse	rse 914 715		Cook	1033	851
Social pedagogue	89	84	Primary school class teacher	8	4	Textile technician	452	400	Auto mechanic	828	10
			ВО	SNIA	N - F	PODRINJE CA	NTON				
UNIVERSITY DEGREE	TOTAL	FEMALE	ASSOCIATE DEGREE	TOTAL	FEMALE	SECONDARY	TOTAL	FEMALE	SKILLED AND HIGHLY-SKILLED	TOTAL	FEMALE
Lawyer	39	31	Early childhood education teacher	3	2	Economy technician	123	3 92	Tailor	139	112
Psychologis	t 19	19	Civil engineer	1	0	Mechanica technician		5 49	Salesperson	138	119
Bachelor of managemen	1 14	13	Lawyer	1	0	Agriculture technician		67	Chemist	67	55
Mechanical engineer	17	10	Primary school history and geography teacher	1	1	Grammar school graduate	99	56	Driver	59	2
Political scientist	9	6	Primary school biology and chemistry teacher	1	1	Chemical technician	78	60	Hairdresser	59	47

				CEN	TRAL	BOSNIA CANT	ΓΟN				
UNIVERSITY DEGREE	TOTAL	FEMALE	ASSOCIATE DEGREE	TOTAL	FEMALE	SECONDARY EDUCATION	TOTAL	FEMALE	SKILLED AND HIGHLY-SKILLED	TOTAL	FEMALE
Economist	165	91	Economist	248	184	Economy technician	1727	1287	Salesperson	2586	1851
Lawyer	116	71	Lawyer	54	34 Grammar school graduate		1624	856	Locksmith	957	29
Secondary school English language teacher	43	23	Class teacher	35	15	Medical technician	869	627	Garment worker	567	485
Social worker	45	21	Transport engineer	34	5	Mechanical technician	845	422	Joiner	382	62
Agriculture engineer	41	Food technology engineer		32	8	Electrical technician	144	22	Mechanical locksmith	135	2

			HER	RZEGO	VINA	- NERETVA C	ANTO	J			
UNIVERSITY DEGREE	TOTAL	FEMALE	ASSOCIATE DEGREE	TOTAL	FEMALE	SECONDARY EDUCATION	TOTAL	FEMALE	SKILLED AND HIGHLY-SKILLED	TOTAL	FEMALE
Lawyer	353	266	Economic officer			Economy technician	1691	1158	Salesperson	1809	1461
Economist	216	160	Lawyer	177	124	Grammar school graduate	1602	996	Women's hairdresser	874	821
Secondary school English language teacher	159	129	Preschool children's teacher	71	70	Mechanical technician	770	241	Cook	793	482
Agronomy engineer	133	78	Criminalist	67	31	Tourist animator	520	314	Locksmith	708	11
Pedagogue	100	95	Civil engineer	55	26	Electrical technician	474	89	Auto mechanic	600	1

				NEST	HERZ	EGOVINA CAI	NTON				
UNIVERSITY DEGREE	TOTAL	FEMALE	ASSOCIATE DEGREE	TOTAL	FEMALE	SECONDARY	TOTAL	FEMALE	SKILLED AND HIGHLY-SKILLED	TOTAL	FEMALE
Economist	190	136	Economist	169	121	Economist	912	664	Salesperson	1809	1461
Lawyer	131	89	Lawyer	yer 44 32 sc		Grammar school graduate	667	391	Hairdresser	874	821
Secondary school Croatian language teacher	48	41	Preschool children's teacher	30	30	Mechanical technician	ical 202 130 Cook		Cook	793	482
Secondary school English language teacher	48	41	Class teacher	28	24	Electrical technician 164 42 Locksmith		708	11		
Political scientist	60	58	Pedagogue	17	17	Road transport technician	89	36	Auto mechanic	600	1

				S	ARAJ	EVO CANTON					
UNIVERSITY DEGREE	TOTAL	FEMALE	ASSOCIATE DEGREE	TOTAL	FEMALE	SECONDARY EDUCATION	TOTAL	FEMALE	SKILLED AND HIGHLY-SKILLED	TOTAL	FEMALE
Economist	1189	780	Economist	omist 186		Grammar school graduate	3136	2116	Salesperson	2905	2422
Lawyer	981	713	Lawyer	91	71	Economy technician	2028	1668	Hairdresser- wig maker	905	542
Social worker	340	312	Early childhood education teacher	37	35	Mechanical technician	1653	612	Driver	895	20
Political scientist	339	199	Primary school class teacher	19	18	Textile technician	682	574	Auto mechanic	732	4
Journalist	264	207	Civil engineer	19	9	Graphic technician	616	378	Locksmith	585	30

					C	ANTON 10					
UNIVERSITY DEGREE	TOTAL	FEMALE	ASSOCIATE DEGREE	TOTAL	FEMALE	SECONDARY EDUCATION	TOTAL	FEMALE	SKILLED AND HIGHLY-SKILLED	TOTAL	FEMALE
Economist	67	51	Economist	23 18		Grammar school graduate	364	211	Salesperson	359	289
Lawyer	45	24	Textile technology engineer	10	6	Economy technician	178	148	Electrical mechanic	201	40
Pedagogue	41	36	Lawyer	7	5	Mechanical technician	122	48	Locksmith	178	10
Primary school teacher	26	25	Agronomy engineer	6		Economist	116	71	Cook	149	100
Social worker	14	12	Early childhood education teacher	1 4 1		Forestry technician	79	24	Auto mechanic	137	1

Table 9: Core Federation of BiH labour market indicators

Table 9: Core Fede	racio	II OI L	JII I Ia	Doui	mai	KCUI	ilaica		na 20	21					
	Jan	Feb	Mar	Apr	Мау	Jun	lul	Aug	Sep	Oct	Nov	Dec	Ø2021	Ø2020	Ø2021 Ø2020
Persons in employment Total	516.137	517.693	519.334	522.139	523.852	526.919	525.292	524.009	531.024	530.989	534.119	533.260	525.397	520.162	1,01%
Gross wage	1.511	1.473	1.548	1.410	1.418	1.546	1.541	1.548	1.543	1.546	1.583	1.616	1.543	1.472	4,80%
Net wage	974	951	966	920	976	666	962	1.000	866	666	1.022	1.046	966	926	420%
Unemployed persons Total	324.862	321.668	318.648	315.019	311.752	311.389	313.574	312.018	305.395	304.592	301.513	299.717	311.679	321.581	-3,18%
Unemployed persons Female	188.862	187.059	185.868	185.868	182.789	182.070	183.573	183.130	178.699	178.383	176.884	175.866	182.421	187.365	-2,71%
Newly registered in registers Total	9.898	7.630	9.379	8.023	7.019	11.201	11.966	14.239	13.912	14.130	12.964	12.983	11.112	11.804	-6,23%
Newly registered in registers Female	4.670	3.688	4.463	4.024	3.299	5.141	6.367	6.779	6.520	6.697	5.880	5.742	5.273	6.255	-18,63%
Persons registered following termination of their employment relationships Total	7.285	5.431	6.469	5.528	5.305	5.643	7.744	6.894	6.376	6.323	5.266	6.421	6.224	7.851	-26,15%
Persons registered following termination of their employment relationships Female	3.585	2.593	3.181	2.715	2.573	2.625	4.345	3.588	3.185	3.059	2.638	2.762	3.071	3.975	-29,45%
Persons deleted from registers Total	8.280	10.824	12.399	11.652	10.286	11.564	9.811	15.795	20.535	14.933	16.043	14.779	13.066	10.521	19,48%
Persons deleted from registers Female	3.977	5.491	5.654	5.458	4.944	5.860	4.684	7.402	10.951	7.013	7.528	6.736	6.308	5.225	17,17%

Persons									5				_		. 0
deleted from registers due to employment Total	5.075	6:859	8.320	8.024	7.246	8.985	7.419	7.593	10.31	6.455	7.068	5.790	7.429	7.333	1,29%
Persons deleted from registers due to employment Female	2.380	3.558	3.641	3.722	3.475	4.508	3.460	3.891	6.298	3.301	3.642	2.782	3.722	4.206	-13,02%
Unemployed first-time job seekers Total	103.252	101.815	100.326	98.664	97.231	99.050	100.087	99.332	97.993	97.473	96.323	94.655	98.850	106.047	-7,28%
Unemployed first-time job seekers Female	69.109	68.313	67.483	66.623	65.872	66.500	66.860	68:389	65.493	65.252	64.684	63.787	66.364	71.353	-7,52%
Number of labour needs Total	2.169	1.244	2.180	1.929	2.519	3.434	2.709	2.762	1.629	2.828	3.467	3.653	2.544	2.009	21,02%
Number of labour needs Female	620	490	999	999	502	732	556	752	643	603	1.020	597	646	736	-14,02%
Cash benefit beneficiaries Total	14.741	13.437	13.289	12.568	12.144	11.518	11.213	11.731	12.103	10.696	10.248	9.911	11.967	14.620	-22,17%
Cash benefit beneficiaries Female	6.579	5.839	5.934	5.796	5.644	5.283	5.504	5.922	6.087	5.353	4.843	4.505	5.607	6.161	%28'6-
Health insurance beneficiaries Total	227.786	225.751	223.694	220.940	218.247	217.036	218.080	217.189	213.173	200.001	211.025	210.431	216.946	221.208	-1,96%
Health insurance beneficiaries Female	127.317	126.286	125.632	124.647	123.423	122.492	123.038	123.421	120.500	118.027	110.027	110.220	121.253	123.330	-1,71%
Pension and disability insurance beneficiaries	246	375	390	379	410	410	419	423	438	438	459	464	404	472	-16,76%

Occupations with the Highest Number of Deletions from the Employment Service Registers in the Federation of BiH in 2021

In 2021, persons whose occupation is that of salesperson were most frequently deleted from the employment service registers in the Federation of BiH due to employment (4,343 times). They are followed by auto mechanics (2,353) and hairdressers (2,316) in the structure of skilled labour by number of deletions from the registers due to employment. Economy technicians (2,920), grammar school graduates (2,860) and mechanical technicians (2,503) are in the structure of labour with secondary education by number of deletions from the employment service registers due to employment. As for persons with university degrees, economists were deleted 2,126 times, while lawyers were deleted 1,374 times. Teaching occupations, i.e., occupations related to educational institutions participate significantly in the list of occupations of persons with university degrees, given that it is noticeable that these institutions terminate the employment relationships with the employees-teachers at the end of the school year and then re-enter into the employment relationships at the beginning of the school year.

Occupations with the highest number of deletions from the registers due to employment are at the same time also the most numerous in the employment service registers. The labour market supply still exceeds the demand for these occupations

Table 10: Overview of occupations by number of deletions from employment service registers due to employment

UNIVERSITY DEGREE	TOTAL	ASSOCIATE DEGREE	TOTAL	SECONDARY EDUCATION	TOTAL	SKILLED AND HIGHLY- SKILLED	TOTAL
Economist	2,126	Economist	258	Economy technician	2,920	Salesperson	4,343
Lawyer	1,374	Primary school class teacher	154	Grammar school graduate	2,860	Auto mechanic	2,353
Secondary school class teacher	902	Lawyer	22	Mechanical technician	2,503	Hairdresser/ wig maker	2,316
Secondary school English language teacher	513	Computer scientist	48	Nurse	1,696	Driver of goods vehicle	1,809
Social worker	417	Preschool children's teacher	43	Electrical technician	1,037	Cook	1,775

Secondary school Bosnian language teacher	398	Road transport engineer	40	Agriculture technician	911	Locksmith	1,546
Pedagogue	396	Civil engineer	37	Rail vehicle designer technician	998	Waiter	1,090
Civil engineer	395	Nurse	37	Power supply technician	889	Welder	1,086
Medical doctor	369	Criminalist	37	Fitter of waterworks and sewage system	663	Electrical mechanic	976
Secondary school physical and health culture teacher	369	Mechanical engineer	30	Road transport technician	658	Tailor	868
Nurse	324	Physiotherapist	24	Textile technician	570	Driver of passenger car/ motor vehicle	803
Agriculture engineer	308	Economist of management	22	Wood technician	549	Joiner	989
Political scientist	308	Primary school chemistry teacher	22	Tourist animator	548	Heating and air conditioning fitter	561
Pharmacist	302	Textile technology engineer	19	Building technician	455	Electrical fitter	441
Mechanical engineer	288	Electrical engineer	18	Chemical technician	451	Lathe operator	344
Electrical engineer	261	Primary school mother tongue teacher	91	Construction foreman	416	Auto electrician	323
Radiological systems technician	256	Primary school physical and health culture teacher	15	Sewn product controller	405	Mechanical locksmith	292
Secondary school mathematics teacher	246	Primary school biology teacher	15	Computer technician	388	Maintenance electrician	285
Veterinarian	242	Food technology engineer	12	Graphic technician	373	Plumber and gas fitter	276
Dentist	214	Primary school mathematics teacher	12	Physiotherapist	347	Bricklayer	272
Journalist	212	Secondary school class teacher	12	Pharmacy technician	338	Mining machinery mechanic	247

Secondary school philosophy teacher	185	Primary school religion teacher	18	Forestry technician	329	Boot/ shoemaker	223
Secondary school history teacher	169	Class teacher	10	Transport technician	271	Textile tailor	216
Psychologist	134	Forestry engineer	6	Beautician	255	Car-body mechanic	216
Secondary school geography teacher	133	Wood technology engineer	8	Tourist guide	244	Milling machine operator	212
Road transport engineer	130	Agronomist engineer	8	Veterinary technician	233	Tiler	197
Food technology engineer	125	Ecologist	8	Food technician	229	Confectioner	187
Biologist	124	Computer science engineer	8	Dental technician	222	Textile seamster	174
Computer scientist	122	Telecommunications engineer	∞	Mining technician	198	Mining facility operator	159
Secondary school German language teacher	120	Primary school geography teacher	9	Economist of management	195	Driver of light delivery vehicle	129



2021 / 2022 FEDERATION OF BIH EMPLOYER **SURVEY**

As part of the Federation of BiH labour market research, which is conducted as a joint activity of the Federal Employment Institute and the cantonal employment services to obtain quantitative and qualitative data required for providing adequate information on the labour market trends, an employer survey on an adequate sample was organised, in addition to using administrative data.

By conducting employer surveys, the cantonal employment services, i.e., the municipal employment bureaus realise direct cooperation with employers, while creating the conditions for strengthening their primary function of job brokerage and collecting relevant data required for improving their services, developing policies and providing support in the labour market.

Employer Survey's Objective and Tasks

The survey's objective is to collect information directly from employers on their performance and changes in employment during 2021, reported performance estimates, needs for hiring new or laying off existing employees in 2022, as well as on their structure by occupation, qualification, level of education and skill. Also, the objective is to collect other relevant data required for understanding the labour market trends as follows: how new employees are recruited and how employee redundancies are addressed, capacity to organise professional training for unemployed persons and school pupil/student traineeship within business entities, as well as service quality evaluation of the public employment services in the Federation of BiH from employers' perspective.

Methodology and Sample

A survey methodology was used to examine employers' attitudes in the Federation of BiH in 2021/2022. Based on a master sample obtained from the Tax Administration of the Federation of BiH and comprising ca 10,000 employers registered in the Federation of BiH with five (5) and more employees, which were sorted as small, medium and large employers by activity and which have been regularly paying compulsory taxes and contributions, the Federal Employment Institute used stratified random sampling method to extract a sample comprising 1,661 employers (larger by 30% than that from the previous year due to expected 75% response rate from the previous research). For a 95% confidence level, this sample size yields results within a 2.5% margin of error. In keeping with the practice of international organisations (ETF, CEDEFOP), the sample did not include employers in the following activities: agriculture, forestry and fishing; public administration and defence; education; human health and social work.

With support from the EU-funded "Improving labour market research" project, the research methodology was harmonised at the level of Bosnia and Herzegovina, so the questionnaire used in the Federation of BiH was identical to the questionnaire used in the employer surveys conducted by the Public Employment Service of the Republika Srpska and the Public Employment Service of the Brčko District of BiH. Moreover, training was organised for the labour market research coordinators and interviewers from the cantonal employment services and an Interviewer Manual was developed. An electronic questionnaire with computer or tablet assisted instant data entry into the database was used during the survey (CAPI/TAPI Computer/Tablet Assisted Personal Interviewing). The survey process, coordinated by the Federal Employment Institute, was conducted by 90 adequately trained interviewers from the cantonal employment services. The data collection was organised in the 10 January to 04 February 2022 period.

Questions in the questionnaire were divided into the following thematic units:

- General information
- 2021 performance assessment and employee hiring challenges
- 2022 performance estimation and employee hiring
- Capacity to organise practical instruction for school pupils and students
- Cooperation with the Federal Employment Institute and the cantonal employment services.

Structure of Surveyed Employers

After analysing the quality of collected data, the responses from 1,288 employers were usable and were used for drawing the conclusions. It has turned out that the increase of the basic sample (1,246 companies) to account for estimated 75% respondent response rate, i.e., the sample was increased by 25-30% to 1,661 companies. Ultimately, the employers' response rate was 77.5% and collected number of the survey questionnaires was fully consistent with the required number for valid analysis.

The lion's share of employers were surveyed in the Tuzla Canton (292 or 23% of the sample) and the Canton of Sarajevo (286 or 22% of the sample), which is consistent with the size and economic power of these two cantons.

Limited liability companies (77.2%) account for the highest number of sampled entities, with the highest proportion of those registered in the Canton of Sarajevo (220) and the Tuzla Canton (218) as economic centres, followed by crafts (11.5%), which are also the most represented in these two cantons.

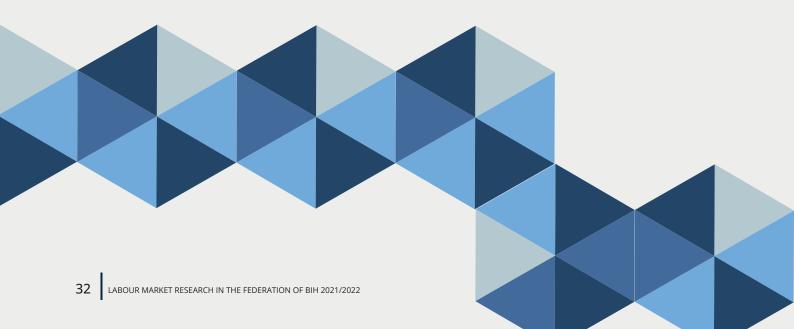


Table 11: Structure of employers by type of organisation

Canton	UJLC	LLC	JSC	ΡI	PE	CA	Craft	Coop.	PHF	Other	Total
Una-Sana	2	76	1	2	1	1	17	1	3	4	108
Posavina	14	7	1	0	0	0	1	0	0	1	24
Tuzla	0	218	8	4	7	3	50	0	0	2	292
Zenica-Doboj	0	154	4	2	2	1	11	0	1	8	183
Bosnian-Podrinje	0	10	3	1	1	0	2	0	0	0	17
Central Bosnia	3	100	3	2	1	1	19	0	0	1	130
Herzegovina-Neretva	0	121	3	2	1	2	14	0	1	4	148
West Herzegovina	0	56	2	1	1	0	3	0	1	0	64
Sarajevo	5	220	5	5	1	11	30	0	1	8	286
Canton 10	3	32	0	0	0	0	1	0	0	0	36
Federation of BiH	27	994	30	19	15	19	148	1	7	28	1,288
%	1%	81%	3%	1%	1%	1%	11%	0%	1%	0%	100%

UJLC– Unlimited joint liability company CA – Citizen association

LLC– Limited liability company Craft – Craft

JSC– Joint stock company Coop. – Cooperative

PI– Public institution PHF – Private health facility

PE- Public enterprise Other - Other

When looking at activity groups, out of 1,288 employers covered by the survey, the lion's share of employers are in industrial activities (32%), with just as many in service activities (32%). They are followed by employers in trade (27%) and construction (9%).

Table 12: Structure of employers by activity group

Canton	Construction	Industrial activities	Trade	Service activities	Total	
Una-Sana	10	36	29	33	108	
Posavina	3	7	7	7	24	
Tuzla	26	104	76	86	292	
Zenica-Doboj	20	82	44	37	183	
Bosnian-Podrinje	0	7	4	6	17	
Central Bosnia	11	63	25	31	130	
Herzegovina-Neretva	14	33	41	60	148	
West Herzegovina	6	21	21	16	64	
Sarajevo	26	46	84	130	286	
Canton 10	1	15	12	8	36	
Federation of BiH	117	414	343	414	1.288	
%	9%	32%	27%	32%	100%	

According to size, out of 1,232 employers covered by the survey, the lion's share are micro employers (48%). Small firms (10 to 50 employees) account for 35% of the total number of respondents. They are followed by medium-sized firms (10.6%), while large employers employing over 250 employees account for 6.4%.

This proportion of employers by size corresponds to the proportion of employers by size in the master sample.

Table 13: Structure of employers by size

Canton	Micro firms – up to 10 employees	Small firms – 10 to 50 employees	Medium firms – 50 to 250 employees	Large firms – over 250 employees	
Una-Sana	58	37	10	3	
Posavina	12	9	2	1	
Tuzla	149	100	26	17	
Zenica-Doboj	69	79	22	13	
Bosnian-Podrinje	5	6	3	3	
Central Bosnia	49	43	22	16	
Herzegovina-Neretva	78	52	12	6	
West Herzegovina	26	22	11	5	
Sarajevo	155	92	21	18	
Canton 10	17	12	7	0	
Federation of BiH	618	452	136	82	
%	48%	35%	10,6%	6,4%	

When looking at surveyed employers according to how long they have been in existence, the lion's share of firms surveyed are those that have been in operation for more than five years. As many as 89% are such firms. There are only 6.7% of employers who have been in operation between three and five years in the sample.

There are also 4.3% of firms that have been in operation for less than three (3) years among surveyed employers. The average age of surveyed employers is 19 years.

Table 14: Length of existence of employers surveyed

Canton	Firms under 3 years of age	3-5 years	More than 5 years	
Una-Sana	7	13	88	
Posavina	0	1	2	
Tuzla	9	15	25	
Zenica-Doboj	10	14	23	
Bosnian-Podrinje	0	1	0	
Central Bosnia	5	6	14	
Herzegovina-Neretva	2	7	15	
West Herzegovina	2	4	6	
Sarajevo	11	31	83	
Canton 10	1	3	3	
Federation of BiH	55	86	1.147	
%	4,3%	6,7%	89%	

At the time of the survey's conduct, employers had 74,412 employees employed and/or engaged, accounting for 14% of the total number of persons in employment in the Federation of BiH as at 31.12.2021 (533,260), which is at the level of the last year's employer survey. Out of that, 59% were men, while 41% were women, indicating that the percentage of sampled women in employment roughly corresponds to the percentage of women in employment in the population according to the formal register of persons in employment (42.3%).

The lion's share of employees were with employers in the Canton of Sarajevo – 16,553, followed by the Tuzla Canton – 14,264, the Central Bosnia Canton – 12,766, and the Zenica-Doboj Canton – 12,531. The highest proportion of women in the number of persons in employment with surveyed employers were recorded in the Bosnian-Podrinje Canton with a 48.5% share and the Central Bosnia Canton with a 46.8% share, which was expected given the share of a higher number of firms in which female workforce is more represented (textile industry, production of garments and shoes).



Table 15: Overview of number of employees with employers during survey by age group and gender

Canton	Total number of employees	Out of which women	Share of women in total number of employees in canton	Number of employees under 30 years of age	Share of youths in total number of employees	Out of which women	Number of employees over 60 years of age	Share of persons over 60 years of age in total number of employees	Out of which women
Una-Sana	3,065	1,278	42%	962	31%	398	131	4	18
Posavina	869	389	45%	232	27%	106	16	2%	2
Tuzla	14,264	4,152	29%	3,311	23%	856	1,148	8%	159
Zenica-Doboj	12,531	4,372	35%	3,459	28%	1,800	493	4%	118
Bosnian-Podrinje	2,182	1,058	49%	558	26%	270	50	2%	18
Central Bosnia	12,766	5,977	47%	2,655	21%	1,174	250	2%	70
Herzegovina- Neretva	6,634	2,000	30%	1,204	18%	390	280	4%	102
West Herzegovina	4,527	1,411	31%	931	21%	236	232	5%	52
Sarajevo	16,553	9,541	58%	5,176	31%	2,028	612	4%	197
Canton 10	1,021	439	43%	287	28%	141	40	4%	2
Federation of BiH	74,412	30,617	41%	18,775	25%	7,399	3,252	4%	738

Youths account for 18,775 or 25% of the total number of employees with surveyed employers, meaning that, on average, every fourth employee is under 30 years of age. Youths up to 30 years of age account for 21% of the total number of persons in employment in the Federation of BiH, indicating that the sample is representative. Out of 18,775 employees in the youth category, 39% are women.

Out of a total of 74,412 persons in employment with surveyed employers, 3,252 employees or 4% are employees over 60 years of age, whose jobs will be freed in the period of up to five (5) years due to retirement. Out of 3,252 employees aged 60 years and over, only 23% are women.

When looking at activity groups, out of the total number of employees with surveyed employers, the lion's share are employed in industrial activities (39,412 or 53%), followed by trade with a total of 19,326 employees or 26%. A total of 12,660 employees or 17% are with surveyed employers in service activities, while the fewest are employed in construction (3,014 or 4%).

Table 16: Overview of number of employees with employers during survey by activity

Activity group	Total employees	Out of which women	% of women
Construction	3,014	299	10%
Industrial activities	39,412	13,948	35%
Trade	19,326	11,118	58%
Service activities	12,660	5,252	42%
Total	74.412	30.617	41%

When looking at employer size, 60% of the total number of persons in employment in surveyed companies are employed in large companies, followed by 21% in medium and 14% in small companies.

Table 17: Overview of number of employees with employers during survey by employer size

Size of employer	Total employees	% of women
Micro	3,014	6%
Small	39,412	14%
Medium	19,326	21%
Large	12,660	60%
Total	74,412	100%

When looking at individual activities, the lion's share of employees, in absolute and percentage values, are with employers in activity C - 'Manufacturing' (32,962 or 44.3%) and activity G - 'Trade' (19,326 or 26%).

The structure of employees corresponds to data from the Federal Institute for Statistics according to which the lion's share of persons in employment are engaged in industrial activities (sections B, C, D and E) and amount to 39.6%, followed by trade with 27.1%, which are further followed by services with 26.4% and construction with 6.8% of the total number of persons in employment. It can be concluded based on this comparison that surveyed sample reflects the actual situation in the economy and that the research results can be generalised for the entire population¹.

In terms of individual activities, the percentage share of women is higher in the following activities: other service activities (69.3%), arts, entertainment and recreation (62.3%), financial and insurance activities (59.4%), and trade (57.5%).

¹ Federal Institute for Statistics (2021). First Release of Structural Business Statistics – final results, 31.12.2021. - fzs.ba

Table 18: Overview of number of employees with employers during survey by activity

Activity	Number of employers	Total number of employees	Out of which women	Share of women in total number of employees	Number of employees under 30 years of age	Share of youths in total number of employees	Out of which women	Number of employees over 60 years of age	Share of persons of 60 years of age in total number of employees	Out of which women
	Z	Totalı	no	Shar	in N	Shaı	no 	Nump	Sha ye nur	nO
В	14	5.148	655	12,7%	816	15,9%	58	659	12,8%	55
С	375	32.962	13.125	39,8%	8.805	26,7%	3531	1.343	4,1%	326
D	5	152	24	15,8%	13	8,6%	0	10	6,6%	2
Е	20	1.150	144	12,5%	134	11,7%	14	87	7,6%	17
F	117	3.014	299	9,9%	690	22,9%	77	131	4,3%	9
G	343	19,326	11,118	57.5%	4,120	21.3%	2217	624	3.2%	214
Н	76	3,209	597	18.6%	461	14.4%	105	146	4.5%	12
I	121	1,574	853	54.2%	548	34.8%	266	60	3.8%	24
J	49	2,904	1,610	55.4%	1,592	54.8%	564	22	0.8%	9
К	7	1,111	660	59.4%	139	12.5%	89	71	6.4%	42
L	8	125	25	20.0%	19	15.2%	3	4	3.2%	1
М	79	846	458	54.1%	262	31.0%	129	36	4.3%	8
N	31	2,008	482	24.0%	889	44.3%	165	34	1.7%	8
R	17	639	398	62.3%	224	35.1%	144	16	2.5%	5
S	26	244	169	69.3%	63	25.8%	37	9	3.7%	6
Total	1288	74,412	30,617	41.1%	18,775	25.2%	7,399	3,252	4.4%	738

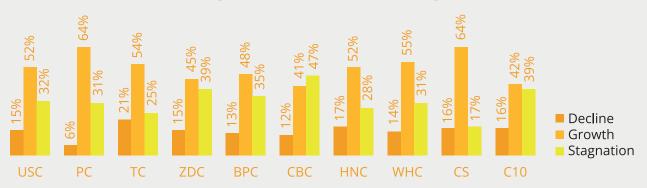
B – Mining	G – Trade	L – Real estate activities
C – Manufacturing	H – Transportation, storage	M– Professional, scientific and technical activities
D – Electricity generation and supply	I – Hospitality	N – Administrative and support service activities
E – Water supply	J – Information and communication	R – Arts, entertainment and recreation
F – Construction	K – Financial and insurance activities	S – Other service activities



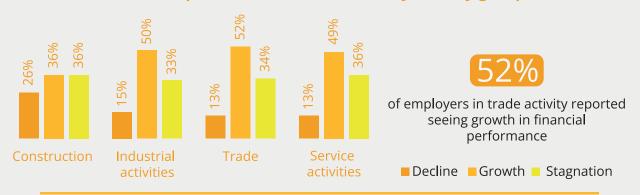


2021 (a year in review)

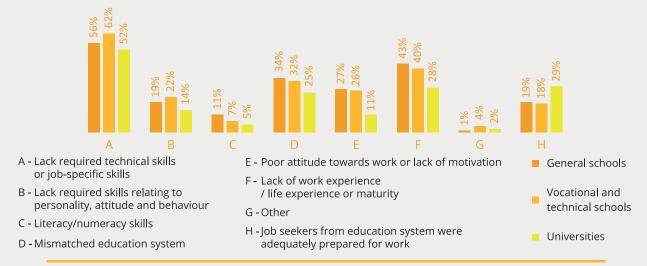
Financial performance assessment by canton



Financial performance assessment by activity group



What job seekers coming from education system lack

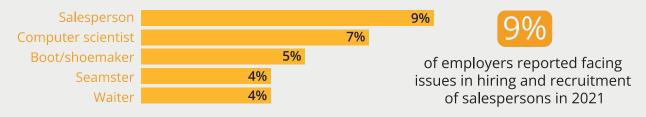


Most common reasons that were barriers to hiring and recruitment of needed labour

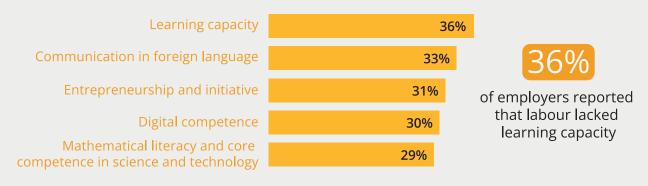


2021 (a year in review)

Occupations with which employers faced most challenges in hiring and recruitment in 2021



Most common knowledge and skills lacked by labour according to EU Framework for Competences



What job seekers coming from education system lack

From universities
From vocational technical schools
From general secondary schools
Any level of education

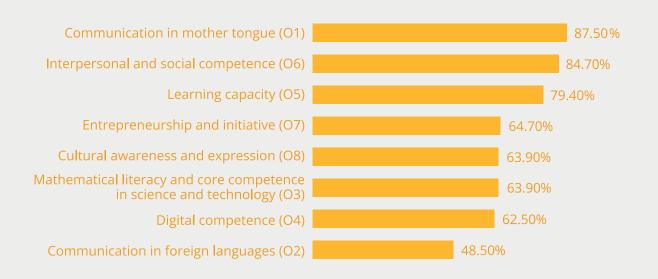
13%	76%	11%
17%	73%	10%
9%	79%	12%
28%	69%	
	Yes No No answer	

of employers hired labour directly

from universities

Employee quality assessment

Employers' satisfaction with employees' competences



2021 BUSINESS TRENDS

2021 Business Volume and Financial Performance

Out of 1,288 respondents, 1,276 employers or 99% of surveyed employers answered the question on 2021 business volume. A growth in the production, sales and services was seen by 50% of sampled employers compared to 26% in 2020 according to the last year's research results. Such results indicate that a higher percentage of employers recovered in terms of the 2021 business volume. A stagnation in the business volume has been recorded by 35% (32% according to the 2020 research results), whereas a decline has been recorded by 14% of employers (43% according to the 2020 research results). This indicates a significant recovery of the economy and its potential, confirming positive employer expectations reported in the previous survey. This growth percentage roughly corresponds to employer expectations from the last year's research, where 55% of employers had reported that they expected the business volume to increase in 2021.¹

Table 19: Assessment of 2021 business volume (production, sales, services) and comparison with 2020 performance

Assessment	Number of employers in 2021	%	Number of employers in 2020	%
Decline	182	14%	516	42%
Growth	647	50%	312	25%
Stagnation	447	35%	382	31%
No answer	12	1%	22	2%
Total	1,288	100%	1,232	100%

From the aspect of activity group, 53% of employers in industrial activities reported that they saw a growth in the business volume. The same percentage was also recorded in trade activity group, while 50% of employers in service activities group reported that they saw a growth in the business volume. When it comes to a decline in the business volume, the highest result was recorded in construction (21%).

Table 20: Assessment of 2021 business volume (production, sales, services) by activity group

Assessment	Construction	%	Industrial activities	%	Trade	%	Service activities	%	% Total
Decline	25	21%	55	14%	43	13%	59	14%	14%
Growth	48	41%	216	52%	178	52%	205	50%	50%
Stagnation	42	36%	137	33%	122	36%	146	35%	35%
No answer	2	2%	6	1%	0	0%	4	1%	1%
Total	117	100%	414	100%	343	100%	414	100%	100%

Federal Employment Institute (2021). 2020/2021 Federation of BiH Labour Market Research - publication - fzzz.ba

Out of the total number of respondents at the level of cantons, 67% of employers in the West Herzegovina Canton and 64% of employers in Canton 10 reported that they saw a growth in the business volume, unlike the previous survey when the highest percentage of employers in these cantons had reported a decline in the business volume. They are followed by the Una-Sana Canton with 57% and the Herzegovina-Neretva Canton with 55%. When it comes to a decrease in the business volume, 21% of employers in the Posavina Canton reported that they saw a decrease in the business volume, while less than 20% of employers in other cantons reported that they saw a decrease in the business volume in 2021.

Table 21: Assessment of 2021 business volume (production, sales, services) by canton

Canton	No answer	%	Decline	%	Growth	%	Stagnation	%
Una-Sana	1	1%	15	14%	62	57%	30	28%
Posavina	0	0%	5	21%	13	54%	6	25%
Tuzla	2	1%	40	14%	136	47%	114	39%
Zenica-Doboj	2	1%	22	12%	92	50%	67	37%
Bosnian-Podrinje	0	0%	3	18%	9	53%	5	29%
Central Bosnia	2	2%	20	15%	69	53%	39	30%
Herzegovina-Neretva	0	0%	20	14%	81	55%	47	32%
West Herzegovina	1	2%	9	14%	43	67%	11	17%
Sarajevo	4	1%	46	16%	119	42%	117	41%
Canton 10	0	0%	2	6%	23	64%	11	31%
Federation of BiH	12	0,93%	182	14%	647	50%	447	35%

When it comes to 2021 financial performance assessment, the majority of employers at the Federation of BiH level (49%) reported that they saw a growth, which is an increase given that only 24% of employers had reported an increase in the financial performance in 2020. These results correspond to the business volume data, with all this indicating an improvement and a stabilisation of the economic situation. A decrease in the financial performance was seen by only 15% of employers, which is a significant improvement given that 42% of employers had reported a decline in the financial performance in 2020. This growth percentage roughly corresponds to employer expectations from the previous research, where 54% of employers in the last year's research had reported that they expected the financial performance to increase in this year.

Table 22: Assessment of 2021 financial performance and comparison with 2020 research results

Assessment	Number of employers in 2021	%	Number of employers in 2020	%
Decline	190	14.8%	515	42%
Growth	628	48.8%	287	23%
Stagnation	443	34.4%	405	33%
No answer	27	2.1%	25	2%
Total	1,288	100%	1,232	100%

From the aspect of activity group, 52% of employers in 'Trade' activity reported that they saw a growth in the financial performance. Almost the same percentage was also recorded in 'Industrial activities' group (50%), while 49% of employers in 'Service activities' group reported that they had a growth in the financial performance. When it comes to a decline in the financial performance, the highest number of employers in 'Construction' activity group (26%) reported a decline, while a decrease in the financial performance in other activities was reported by 13-15% of employers.

Table 23: Assessment of 2021 financial performance by activity group

Assessment	Construction	%	Industrial activities	%	Trade	%	Service activities	%	% Total
Decline	30	26%	62	15%	44	13%	54	13%	30
Growth	42	36%	205	50%	177	52%	204	49%	42
Stagnation	42	36%	136	33%	118	34%	147	36%	42
No answer	3	3%	11	3%	4	1%	9	2%	3
Total	117	100%	414	100%	343	100%	414	100%	117

Most of surveyed employers in almost all cantons (over 50%) reported a growth, while the percentage of employers who reported a growth in the financial performance in the Bosnian-Podrinje Canton is 48%, with 45% in the Zenica-Doboj Canton and between 41 and 42% in two cantons (C10 and CBC). Out of the total number of respondents at the level of cantons, the lion's share of employers (64%) in the Canton 10, with the same percentage of employers (64%) in the Posavina Canton reporting that they saw a growth in the financial performance in 2021.

Table 24: Assessment of 2021 financial performance

Canton	No answer	%	Decline	%	Growth	%	Stagnation	%
Una-Sana	1	1%	16	15%	56	52%	35	32%
Posavina	0	0%	2	6%	23	64%	11	31%
Tuzla	0	0%	5	21%	13	54%	6	25%
Zenica-Doboj	2	1%	44	15%	132	45%	114	39%
Bosnian-Podrinje	8	4%	23	13%	88	48%	64	35%
Central Bosnia	0	0%	2	12%	7	41%	8	47%
Herzegovina-Neretva	3	2%	22	17%	68	52%	37	28%
West Herzegovina	1	1%	20	14%	81	55%	46	31%
Sarajevo	2	3%	10	16%	41	64%	11	17%
Canton 10	10	3%	46	16%	119	42%	111	39%
Federation of BiH	27	2%	190	15%	628	49%	443	34%

The above data on the business volume (production, sales, services) and financial performance of surveyed employers clearly indicate a stabilisation of the situation in the economy in 2021 and positive business trends, which is also directly manifested in the labour market.

Current Employees' Knowledge and Skills Quality Assessment

In order to analyse employee training capacity for development of missing competences inhouse in the company or in cooperation with publicly recognised adult education organisers, the employers rated how satisfied they were with the competences of employees employed by them, on a scale from 1 (completely dissatisfied) to 5 (completely satisfied). In the context of current employees' knowledge and skills quality assessment, the employers are the most satisfied with communication in mother tongue (91% 4 and 5 ratings), while they rated communication in foreign language as the weakest (49% 4 and 5 ratings). Communication in foreign language is not relevant for 18.8% of employers, while mathematical literacy and core competence in science and technology and digital competence are not relevant for 10-11% of employers.

Table 25: Employee qualifications, knowledge and skills quality assessment against EU Framework for Competences (sample size N = 1288)

for Competences (sample size in	- 1200)						
EU Framework for Competences	No answer	Not applicable / relevant	1 (Completely dissatisfied)	2 (Dissatisfied)	3 (Neither satisfied nor dissatisfied)	4 (Satisfied)	5 (Completely satisfied)
Communication in mother tongue (A1)	0.7%	2.0%	0.6%	0.4%	5.2%	33.8%	57.3%
Communication in foreign language (A2)	2.9%	18.8%	2.8%	6.8%	20.2%	28.0%	20.5%
Mathematical literacy and core competence in science and technology (A3)	3.7%	10.9%	0.5%	3.6%	17.3%	38.0%	25.9%
Digital competence (A4)	3.3%	10.2%	0.7%	4.5%	18.7%	34.6%	27.9%
Learning capacity (A5)	1.9%	1.6%	0.5%	2.3%	14.3%	43.9%	35.5%
Interpersonal and social competence (A6)	2.0%	1.4%	0.4%	1.2%	10.2%	39.4%	45.3%
Entrepreneurship and initiative (A7)	3.5%	7.1%	0.9%	4.9%	18.9%	37.2%	27.5%
Cultural awareness and expression (A8)	7.6%	9.9%	0.5%	3.0%	15.1%	32.8%	31.1%

Table 26: Employee qualifications, knowledge and skills quality assessment against EU Framework for Competences (sample size N = 1288), aggregated responses

EU Framework for Competences	No answer	Not applicable / relevant	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied
Communication in mother tongue	0.7%	2.0%	1.0%	5.2%	91.1%
Communication in foreign language	2.9%	18.8%	9.6%	20.2%	48.5%
Mathematical literacy and core competence in science and technology	3.7%	10.9%	4.1%	17.3%	63.9%
Digital competence	3.3%	10.2%	5.2%	18.7%	62.5%
Learning capacity	1.9%	1.6%	2.9%	14.3%	79.3%
Interpersonal and social competence	2.0%	1.4%	1.6%	10.2%	84.7%
Entrepreneurship and initiative	3.5%	7.1%	5.7%	18.9%	64.7%
Cultural awareness and expression	7.6%	9.9%	3.5%	15.1%	63.9%

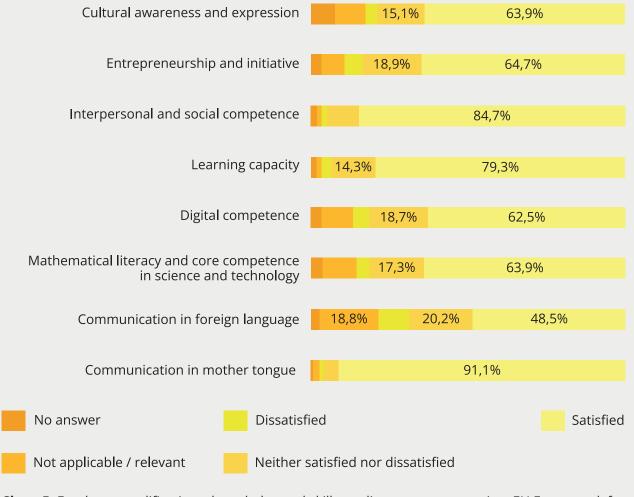


Chart 5: Employee qualifications, knowledge and skills quality assessment against EU Framework for Competences (sample size N=1288)

ISSUES IN HIRING AND RECRUITMENT OF **NEEDED LABOUR IN 2021**

During the survey, 475 employers (37% of the respondents) reported facing issues in hiring and recruitment of needed labour of a specific profile in 2021, which is 13% more compared to 2020, indicating an increasing prominence of the issue of mismatch between the labour market supply and demand. Despite a large number of registered unemployed persons with different qualifications, the employers have reported facing some issues when hiring and recruiting new employees in 2021. The activity group that has been especially affected is construction, where ca 50% of employers reported facing issues in recruitment of needed labour in 2021, in comparison with 41% of employers in industrial activities, 34% of employers in service activities, and 31% of employers in trade activities. This Chapter presents responses relating to the reasons that make it more challenging for employers to recruit adequate labour, number of such labour, and occupations with which they faced such situation.

Table 27: Issues in hiring and recruitment of needed labour in 2021 by activity group

Activity group	Yes	%	No	%	No answer	No answer	Total	%
Construction	58	50%	56	48%	3	2%	117	9%
Industrial activities	168	41%	244	59%	2	0%	414	32%
Trade	107	31%	233	68%	3	1%	343	27%
Service activities	142	34%	265	64%	7	2%	414	32%
Total	475	37%	798	62%	15	1%	1,288	100%

The above 475 employers faced issues in hiring and recruitment of 4,525 employees with relevant occupations in 2021. According to level of education, they faced the biggest issues in hiring and recruitment of skilled labour (62.2%) and labour with secondary education (21%).

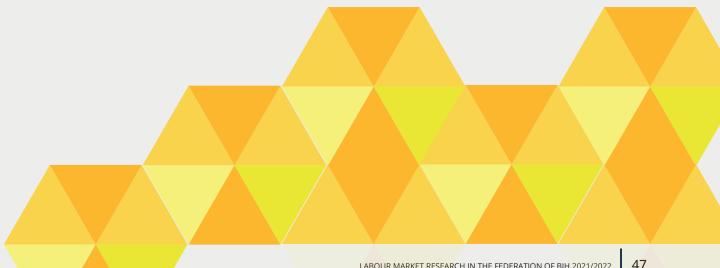


Table 28: Issues in hiring and recruitment of needed labour in 2021 by level of education

Level of education	Number of persons	%
Unskilled – without education and primary school not completed	146	3%
Semi-skilled, lower-skilled – primary school	43	1%
Skilled, highly-skilled – secondary school of up to 3 years, mastership examination	2813	62%
Secondary education – secondary school of 4 and more years and grammar school	932	21%
Associate degree – level 1 university, tertiary education and two-year post-secondary school	12	0%
University degree – university (bachelor's degree), academy	193	4%
Master's degree	15	0%
Doctorate	1	0%
Not specified	370	8%
Total	4,525	100%

In 2021, the employers faced the biggest challenges in hiring and recruitment of salespersons – 392 or 9%, computer scientists – 303 or 7% and boot/shoemakers – 230 or 5%, as well as seamsters and waiters (4% each).

Table 29: Overall overview of occupations with which employers faced challenges in hiring in 2021

Table 23: Over all over view or occupations with which	· · · · · · · · · · · · · · · · · · ·	
Zanimanje	Broj osoba	%
Salesperson	392	9%
Computer scientist	303	7%
Boot/shoemaker	230	5%
Seamster	189	4%
Waiter	159	4%
Carpenter	151	3%
Auxiliary production worker	134	3%
Welder	134	3%
Joiner	123	3%
Locksmith	119	3%
Galvaniser	102	2%
Economy technician	102	2%
Cook	100	2%
Mechanical technician	99	2%
Bricklayer	95	2%

In construction, the employers faced issues in hiring and recruitment of the following occupations: carpenter (32% of the total number of sought employees in this activity in 2021), bricklayer (16%), and reinforcement concrete worker (10%).

In industrial activities group, occupations were not specified for 18% of labour, with 11% relating to occupation of boot/shoemaker. They are followed by seamsters (8%) and welders (5%).

Trade included salespersons (47%), warehousers (4%), and drivers of goods vehicles (4%), while service activities included computer scientists (24%), waiters (9%), and economy technicians (8%).

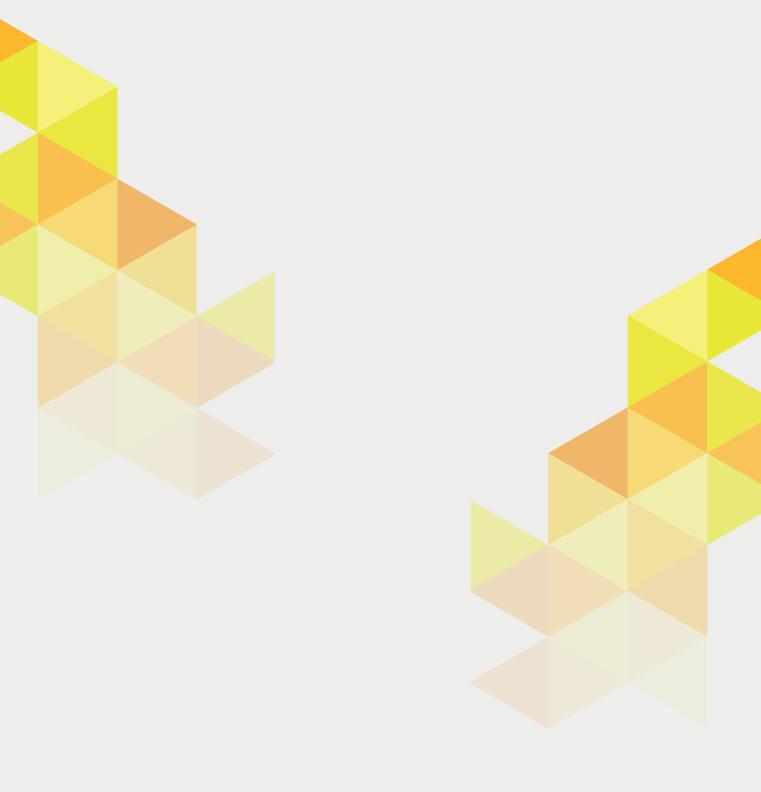


Table 30: Overview of 10 most numerous occupations with which employers faced challenges in hiring by activity group

Till ling by activity group					
Occupation	Number of persons	%	% Occupation		%
Construction	433	10%	Industrial activities	2,095	46%
Carpenter	137	32%	Boot/ shoemaker	230	11%
Bricklayer	71	16%	Seamster	171	8%
Reinforcement concrete worker	42	10%	Welder	114	5%
Plasterer	32	7%	Auxiliary production worker	113	5%
Construction machinery operator	13	3%	Locksmith	110	5%
Elementary worker	12	3%	Galvaniser	vaniser 102	
Tinsmith	11	3%	Joiner	100	5%
Building technician	11	3%	Mechanical technician	97	5%
Electrical technician	10	2%	Elementary worker	69	3%
Trade	731	16%	Service activities	1,266	28%
Salesperson	347	47%	Computer scientist	300	24%
Warehouse worker - warehouser	29	4%	Waiter	113	9%
Driver of goods vehicle	28	4%	Economy technician	101	8%
Auto mechanic	19	3%	Cook	73	6%
Waiter	19	3%	Guard	60	5%
Seamster	18	2%	Bus driver	35	3%
Commercialist	18	2%	Truck driver	33	3%
Joiner	17	2%	Mechatronician - CNC operator	31	2%
Cleaner	15	2%	Security guard	30	2%

As the reasons that were barriers to hiring and recruitment of needed labour, the employers that faced issues in recruitment of labour have especially emphasised a shortage of human resources with sought occupation (68% of employers with issues in recruitment of labour), indicating structural and geographic mismatch between the labour market supply and demand.

Also, the employers have indicated a shortage of human resources with expertise and skills required for job (48%), and a shortage of human resources with relevant work experience (44%).

The inabilities to meet the needs for labour with specific occupations in production should also be sought, inter alia, in the working conditions that are offered and not only in the limitations related to the education system or workforce competence.

Table 31: Reasons that were barriers to hiring and recruitment of needed labour

Reasons	Number of employers	%
Shortage of human resources with sought occupation	288	61%
Shortage of human resources with expertise and skills required for job	230	48%
Shortage of human resources with relevant work experience	211	44%
Disinterest of individuals in working in specific job	185	39%
Dissatisfaction of candidates with offered salary level	62	13%
Dissatisfaction of candidates with working hours and working conditions	29	6%
Distance between workplace and candidate's place of residence	34	7%
Lack of training and employment incentive funds	54	11%
Tax policy (high tax and contribution outlays)	89	19%
General economic conditions	72	15%
Insufficient information on workforce	20	4%
Ekonomski tehničar	102	2%
Kuhar	100	2%
Mašinski tehničar	99	2%
Zidar	95	2%

Note: 475 employers faced barriers in hiring and recruitment of needed labour and they answered this question. The percentages are percentage representation of the chosen answer in relation to this number of employers.

With the possibility of multiple choice of offered options, 36% of the employers who reported a shortage of human resources with required expertise and skills as a barrier to hiring and recruitment of labour (230 employers) have emphasised that labour lacked learning capacity. This is followed by communication in foreign language (33%), entrepreneurship and initiative (31%), and digital competence (30%).

Table 32: Most common knowledge and skills lacked by labour according to EU Framework for Competences

Competences according to EU Framework	Number of employers	%
Communication in mother tongue	15	7%
Communication in foreign language	75	33%
Mathematical literacy and core competence in science and technology	67	29%
Digital competence	68	30%
Learning capacity	83	36%
Interpersonal and social competence	32	14%
Entrepreneurship and initiative	71	31%
Cultural awareness and expression	20	9%

In the context of labour hiring in 2021, 28.1% of surveyed employers hired labour directly from the education system, with any level and type of education, i.e., after completing secondary general or technical school or university. Considered individually, the lion's share of employers (17.2%) hired labour from vocational technical schools, followed by universities (13.5%), and general secondary schools (9.5%).

Tabela 33: Broj poslodavaca koji je u 2021. godini zapošljavao radnike direktno iz obrazovnog sistema

Answers	Any level of education	From general secondary schools	From vocational technical schools	From universities
Yes	362 (28%)	123 (9%)	221 (17%)	174 (13%)
No	891 (69%)	1,012 (79%)	940 (73.0%)	976 (76%)
No answer	35 (3%)	153 (12%)	127 (10%)	138 (11%)
Total	1,288 (100%)	1,288 (100%)	1,288 (100%)	1,288 (100%)

While analysing what job seekers coming to employers directly from the education system lacked, the highest proportion of employers have emphasised that what such job candidates lacked the most were technical skills or job-specific skills. Lack of work experience and mismatched education system are in the second place.

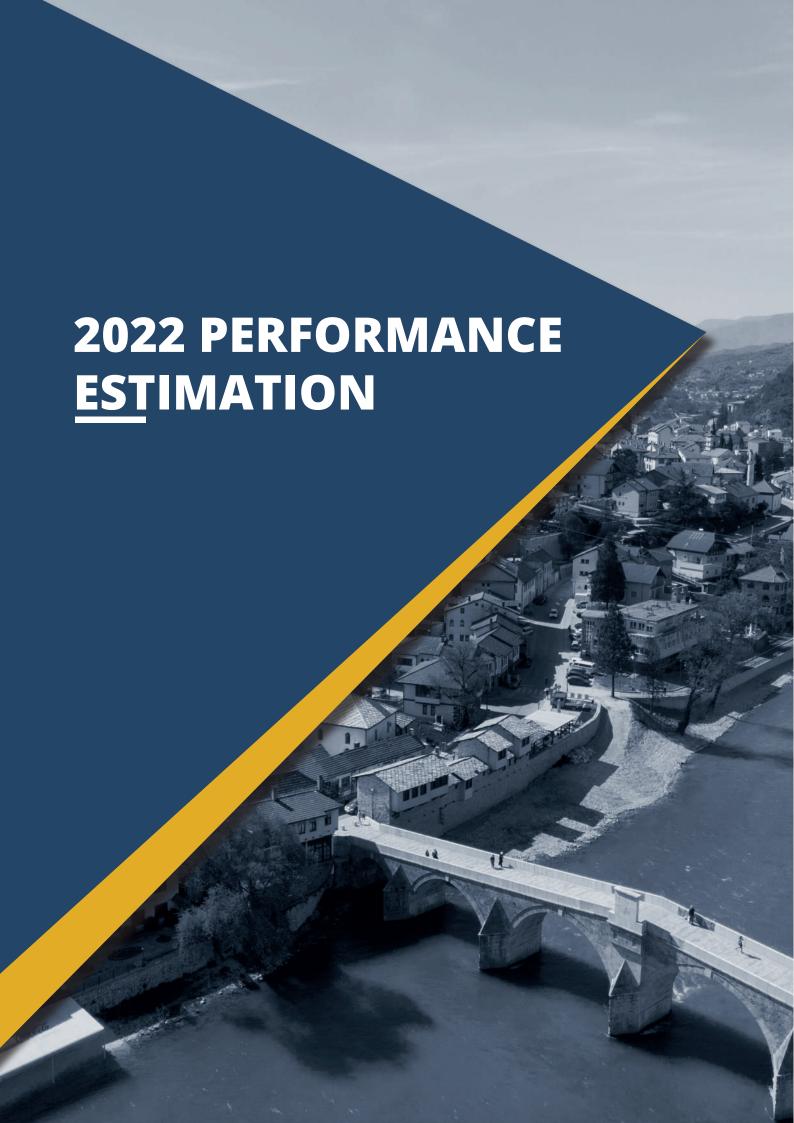
However, in the case of candidates coming to employers with completed university, in 29% of cases the employers believe that they are adequately prepared for work.

Table 34: What job seekers coming from education system lack

Job seekers coming from education system lack	General schools	%	Vocational and technical schools	%	Universities	%
Lack required technical skills or job-specific skills	69	56%	136	62%	90	52%
Lack required skills relating to personality, attitude and behaviour (communication, interpersonal, stress and time management skills)	23	19%	49	22%	24	14%
Literacy/numeracy skills	13	11%	16	7%	8	5%
Mismatched education system	42	34%	71	32%	43	25%
Poor attitude towards work or lack of motivation (e.g., poor work ethic, punctuality, manners)	33	27%	58	26%	19	11%
Lack of work experience / life experience or maturity (including general knowledge)	53	43%	87	40%	49	28%
Other	1	1%	8	4%	4	2%
Job seekers from education system were adequately prepared for work	23	19%	39	18%	51	29%

Note: The number of employers who reported hiring labour directly from the education system is 123 (general secondary schools), 136 (vocational and technical schools), and 90 (universities). The percentages are percentage representation of the chosen challenge in relation to the number of employers who answered this question, i.e., hired job seekers directly from the education system.





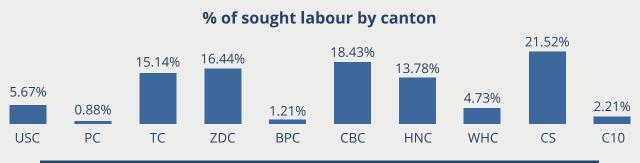
2022 (forecasts)

2022 financial performance estimate by canton

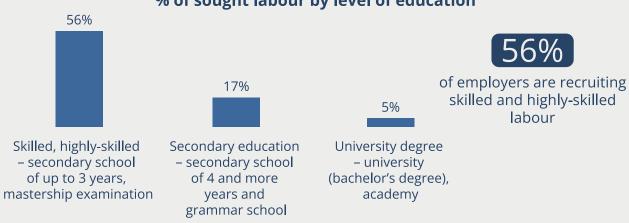


% of employers with reported new labour hiring needs by activity



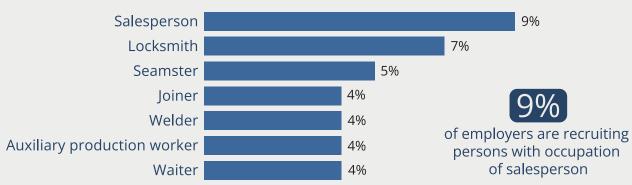


% of sought labour by level of education

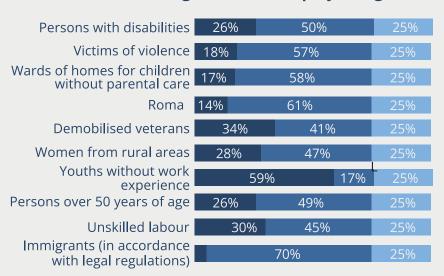


2022 (forecasts)

Most sought-after occupations in 2022



Hiring harder-to-employ categories



59%

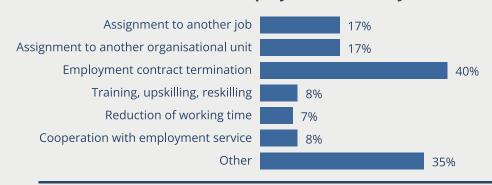
of employers are willing to hire youths without work experience

■ Yes

■ No

■ No answer

Employee redundancy



4,6%

of employers reported that they would have employee redundancies in 2022

Capacity to organise practical instruction for school pupils and students



40%

of employers have at least one of specified resources and reported willingness to organise practical instruction for school pupils and students

2022 PERFORMANCE ESTIMATION

2022 Business Volume and Financial Performance Estimation

A total of 1,282 employers or 99% of surveyed employers answered the question on expected business volume in 2022.

A growth in the business volume, i.e., in the production, sales and services, is expected by as many as 72% of the sampled employers, which is a significant optimism, especially if compared with the percentage of employers who had expected a growth in 2021 (55%). A stagnation in the business volume is expected by 22%, while a decline in the business volume is expected by only 6% of employers. This indicates a significant recovery of the economy and confirms positive employer expectations reported in the previous survey.

Table 35: Business volume (production, sales, services) expected in 2022 and comparison with 2021 expectations

Assessment	Number of employers (2022)	0/2		%
Decline	76	6%	140	11%
Growth	920	72%	681	55%
Stagnation	286	22%	374	30%
No answer	6	0%	37	3%
Total	1,288	100%	1,232	100%

From the aspect of activity group, 72% of employers in 'Construction' activity reported expecting a growth in the business volume in 2022, while between 50-52% of employers in other activities expect a growth.

Table 36: Business volume (production, sales, services) expected in 2022 by activity group

Assessment	Construction	%	Industrial activities	%	Trade	%	Uslužne djelatnosti	%	% Total
Decline	9	8%	29	14%	17	13%	21	14%	6%
Growth	84	72%	294	52%	243	52%	299	50%	72%
Stagnation	22	19%	90	33%	83	36%	91	35%	22%
No answer	2	2%	1	1%	0	0%	3	1%	0%
Total	117	100%	414	100%	343	100%	414	100%	100%

In the Canton 10, as many as 81% of employers and 80% in the Herzegovina-Neretva Canton expect a growth in the business volume (production, sales and services) in 2022. They are followed by the Central Bosnia Canton with 76% and the Tuzla Canton with 75%.

Table 37: Business volume (production, sales, services) expected in 2022 by canton

Canton	No answer	%	Decline	%	Growth	%	Stagnation	%
Una-Sana	0	0%	7	6%	67	62%	34	31%
Posavina	0	0%	2	8%	15	63%	7	29%
Tuzla	0	0%	22	8%	220	75%	50	17%
Zenica-Doboj	1	1%	9	5%	126	69%	47	26%
Bosnian-Podrinje	0	0%	2	12%	10	59%	5	29%
Central Bosnia	2	2%	7	5%	99	76%	22	17%
Herzegovina-Neretva	0	0%	5	3%	119	80%	24	16%
West Herzegovina	0	0%	5	8%	44	69%	15	23%
Sarajevo	3	1%	15	5%	191	67%	77	27%
Canton 10	0	0%	2	6%	29	81%	5	14%
Federation of BiH	6	0,93%	76	6%	920	72%	286	22%

When it comes to 2022 financial performance estimates, the majority of employers at the Federation of BiH level (70%) reported expecting a growth, which is an increase in optimism in this year compared to the 2021 expectations. Such results correspond to the business volume data, with all this indicating an improvement and a stabilisation of the economic situation. Only 15% of employers had a decrease in the financial performance.

Table 38: Financial performance expected in 2022 and comparison with 2021 expectations

	•			
Assessment	Number of employers (2022)	%	Number of employers (2021)	%
Decline	78	6%	144	12%
Growth	906	70%	671	54%
Stagnation	292	23%	381	31%
No answer	12	1%	36	3%
Total	1,288	100%	1,232	100%

From the aspect of activity group, 70% of employers in 'Trade' activity reported forecasting a growth in the financial performance. Almost the same percentage was also recorded in 'Industrial activities and construction' group (70%), while 71% of employers in 'Service activities' group have estimated that they would see a growth in the financial performance in 2022.

Table 39: Financial performance expected in 2022 by activity group

Assessment	Construction	%	Industrial activities	%	Trade	%	Uslužne djelatnosti	%	% Total
Decline	8	7%	30	7%	17	5%	23	6%	6%
Growth	82	70%	290	70%	239	70%	295	71%	70%
Stagnation	24	21%	93	23%	84	24%	91	22%	23%
No answer	3	2%	1	0%	3	1%	5	1%	1%
Total	117	100%	414	100%	343	100%	414	100%	100%

In the Canton 10, as many as 81% of employers have estimated a growth in the financial performance, almost as many as in the Herzegovina-Neretva Canton (80%). The lowest percentage of employers who expect a growth in the financial performance is in the Posavina Canton (58%) while, at the same time, pessimism in terms of the expectation of a decline in the financial performance is the greatest in those two cantons.

Table 40: Financial performance expected in 2022 by canton

Canton	No answer	%	Decline	%	Growth	%	Stagnation	%
Una-Sana	0	0%	6	6%	67	62%	35	32%
Posavina	1	4%	3	13%	14	58%	6	25%
Tuzla	1	0%	23	8%	215	74%	53	18%
Zenica-Doboj	2	1%	8	4%	124	68%	49	27%
Bosnian-Podrinje	0	0%	2	12%	10	59%	5	29%
Central Bosnia	1	1%	7	5%	100	77%	22	17%
Herzegovina-Neretva	0	0%	6	4%	119	80%	23	16%
West Herzegovina	0	0%	5	8%	44	69%	15	23%
Sarajevo	7	2%	15	5%	184	64%	80	28%
Canton 10	0	0%	3	8%	29	81%	4	11%
Federation of BiH	12	1%	78	6%	906	70%	292	23%

2022 Wage Growth Estimation

The questionnaire also included a question on wages since wage is one of the important motivating factors in the labour market and the cause for leaving or accepting some jobs, but not the factor that is among the first ones that get affected in crisis situations.

Within the questionnaire, the employers responded to a question on their plans to increase wages in 2022 for specific occupation groups.

This question was answered by 1,272 employers or 99% of respondents. Out of that, 66% reported planning to increase their employees' wages in 2022. One third of respondents do not expect to increase wages.

This indicator will certainly be affected by the Federation of BiH Government's Decision of January 07th, 2022, setting the net amount of the minimum wage for the 01 January – 31 December 2022 period at BAM 534, which is a BAM 136 or 34% increase compared to the previous amount.

Table 41: Number of employers planning to increase wages in 2022

Assessment	Number of employers	%
Yes	847	66%
No	425	33%
No answer	16	1%
Total	1,288	100%

In the total number of employers who reported that they would increase employee wages in 2022, mostly by up to 10%, the employers in activity C – 'Manufacturing' account for one third. Also, out of the total number of employers by individual activity, 80% of employers in activity C - 'Manufacturing', 75% in 'Real estate activities', 70% in 'Construction' activity, and 69% in 'Hotel and hospitality industry' plan to increase wages in 2022

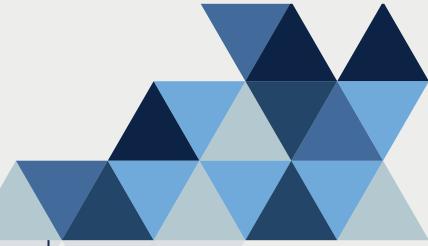


Table 42: Number of employers with reported 2022 wage growth estimates by individual activity

Ukupno	92	8	189	130		100	82	47	152	26	847	, %99
v	23	~	2	1	0		0		4	0	13	20%
~	3	0	2	0	0	_	0	0	1	0	7	41%
z	2	0	4	0	_	1	2	0	7	0	17	55%
Σ	4	0	9	4	0	3	3	1	18	1	40	51%
_		0		0	0	0	_	1	2	1	9	75%
×	0	0	0	0	0	0	0	0	3	0	3	43%
_	1	0	4	3	1	0	5	1	12	0	27	55%
-	12	m	18	6	_	8	12	3	17	1	84	%69
Ι	33	0	12	10	1	7	3	4	2	2	47	62%
ט	25	9	52	31	2	20	22	16	41	8	223	65%
ш	6	2	16	16	0	7	2	9	18	1	82	70%
ш	0	0	2	2	1	3	0	2	0	0	10	50%
Q	0	0	0	1	0	2	1	0	0	0	4	80%
U	29	9	69	52	4	46	24	11	24	11	276	74%
ш	1	0	_	1	0	1	2	1	0	1	8	57%
Canton	Una-Sana	Posavina	Tuzla	Zenica-Doboj	Bosnian-Podrinje	Central Bosnia	Herzegovina-Neretva	West Herzegovina	Sarajevo	Canton 10	Federation of BiH	1%

1 – In relation to the total number of employers in the activity

B - Mining

C – Manufacturing

D – Electricity generation and supply

E – Water supply

F – Construction

G – Trade

H – Transportation, warehousingstorage

I – Hospitality

J – Information and communication

K – Financial and insurance activities

L – Real estate activities

M – Professional, scientific and technical activities

N – Administrative and support service activities

R – Arts, entertainment and recreation

S – Other service activities

The highest number of employers who have estimated that they would increase wages in 2022 is in the Tuzla Canton, i.e., 189 or 22% of the total number of employers who reported that they would increase wages. They are followed by 18% of employers in the Canton of Sarajevo and 15% of employers in the Zenica-Doboj Canton.

Table 43: Number of employers planning to increase wages in 2022 by canton

			,	
Canton	YES	NO	No answer	Total
Una-Sana	92	16	0	108
Posavina	18	6	0	24
Tuzla	189	101	2	292
Zenica-Doboj	130	51	2	183
Bosnian-Podrinje	11	6	0	17
Central Bosnia	100	27	3	130
Herzegovina-Neretva	82	63	3	148
West Herzegovina	47	16	1	64
Sarajevo	152	129	5	286
Canton 10	26	10	0	36
Federation of BiH	847	425	16	1,288
%	66%	33%	1%	100%

The highest proportion of the employers reported estimating an increase in the wages by 10%, mostly for managerial employees, technicians, and craft workers.

Table 44: Number of employers with reported 2022 wage growth estimates by occupation group

					J 1	0 1
Occupation groups	No answer	I am not planning to	I am not hiring	1-10% increase	11-20% increase	Over 20%
Managers	20%	6%	6%	50%	15%	4%
Technicians	28%	5%	12%	41%	12%	3%
Craft and related workers	26%	3%	11%	42%	14%	4%
Machine and vehicle operators and product assemblers	32%	3%	14%	37%	12%	3%
Elementary workers	30%	4%	12%	40%	12%	3%
Office workers and tellers	32%	6%	13%	36%	11%	3%
Service and sales occupations	31%	5%	15%	33%	13%	3%



2022 HIRING NEEDS

726 employers, i.e., 56.4% of the total number of respondents reported hiring needs in 2022. These employers reported the need to hire 6,349 employees in 2022.

Reported Hiring Needs in 2022 by Activity Group

Out of a total of 1,288 employers surveyed, 726 or 56.4% reported new labour hiring needs, which is 4.4% employers more compared to the previous survey. These employers have estimated that they would have the need to hire 6,349 employees, which is 1,789 or 39% more compared to the last year's research.

This data point indicates that the employers are optimistic about the improvement of the situation in the economy and their performance in the coming period, which will result in an increased labour demand. Percentagewise by activity group, 62% of employers in Industrial activities and 60% of employers in construction plan new hires in 2022. In terms of individual activities, the greatest new hiring needs, namely 57%, were reported in manufacturing activity, which is 14% more compared to the last year's employer survey.

Table 45: Number of employers wit	h reported new labour hirir	ng needs in 2022 by activity group

Assessment	Construction	%	Industrial activities	%	Trade	%	Uslužne djelatnosti	%	% Total
Yes	70	60%	256	62%	178	52%	222	54%	726
No	45	38%	151	36%	157	46%	186	45%	539
No answer	2	2%	7	2%	8	2%	6	1%	23
Total	117	100%	414	100%	343	100%	414	100%	1.288

When looking at the cantons, out of the total reported demand for 6,349 employees, surveyed employers in the Canton of Sarajevo will have the highest labour demand in 2022, namely the demand for 1,366 employees or 22%. They are followed by the employers in the Central Bosnia Canton, with the demand for 1,170 employees or 18% and the Zenica-Doboj Canton, with the demand for 1,044 employees or 16%. When looking at individual activities, the highest demand, as much as 48%, is expected in manufacturing.



 Table 46: Number of sought employees in 2022 by activity and canton

Toral S Z Z Y —	36 5 0 0 3 24 18 4 360	4 0 0 0 0 0 0 56	64 5 0 0 34 4 2 0 961	17 20 0 0 4 0 0 3 1.044	4 0 0 0 0 2 1 0 77	39 0 0 0 0 25 21 1 1.170	111 39 0 13 28 10 1 0 875	4 0 0 0 1 0 1 0 300	79 382 75 6 23 54 7 15 1.366	15 0 0 3 1 0 0 0 140	373 451 75 22 94 119 51 23 6.349	6% 7% 1% 0% 1% 2% 1% 0% 100%
± 5	59 12 3	14	125 47 6	116 41 1	5 2	169 45 3	86 24 1	78 5	468 7 7	54 5 1	1.174 189 3	18% 3% 6
ш	0 37	6 0	3 112	9 59	1 0	17 33	0 85	6 54	0 84	0 3	36 476 1	1% 7%
۵	0	0	0	4	0	0	4	0	0	0	∞	%0
U	162	28	475	299	62	818	462	149	166	52	3.044	48%
ω	0	0	06	104	0	2	12	2	0	4	214	3%
Canton	Una-Sana	Posavina	Tuzla	Zenica-Doboj	Bosnian-Podrinje	Central Bosnia	Herzegovina-Neretva	West Herzegovina	Sarajevo	Canton 10	Federation of BiH	%

B – Mining	G – Trade	L – Real estate activities
C – Manufacturing	H – Transportation, storage	M – Professional, scientific and technical activities
D – Electricity generation and supply	I – Hospitality	N – Administrative and support service activities
E – Water supply	J – Information and communication	R – Arts, entertainment and recreation
F – Construction	K – Financial and insurance activities	S – Other service activities

The highest number of employers with the estimated 2022 hiring needs in relation to the total number of surveyed employers in the Federation of BiH is in the Canton of Sarajevo (21%), followed by the Tuzla Canton (20%) and the Zenica-Doboj Canton (16%). The greatest needs for new hiring have been reported by the employers in manufacturing (33%), trade activity (25%), and transport transportation and warehousing storage activities (6%).



Tabela 47: Broj poslodavaca sa iskazanim potrebama za zapošljavanjem novih radnika po pojedinačnim djelatnostima i kantonu

Canton	В	C	۵	ш	ш	9	Ι	-	_	~	_	Σ	z	~	v	Total
Una-Sana	0	20	0	0	9	18	4	∞	-	0	0	7	2	2	m	99
Posavina	0	9	0	0	_	5	_	33	0	0	0	0	0	0	0	16
Tuzla	1	29	0	2	14	30	12	15	2	0	0	2	1	1	0	139
Zenica-Doboj	1	45		2	14	20	11	4	2	0	0	2	0	0		103
Bosnian-Podrinje	0	9	0	1	0	4	1	1	0	0	0	0		1	0	15
Central Bosnia	_	36	0	2	5	19	9	6	0	0	0	0	2	2	_	83
Herzegovina-Neretva	2	21	—	0	7	21	5	17	∞	0	_	7	2	_	0	93
West Herzegovina	1	6	0	3	4	13	2	2	0	0	0	1	0	1	0	36
Sarajevo	0	26	0	0	18	40	4	13	13	2	2	16	6	3	2	151
Canton 10	1	6	0	0	1	8	1	2	0	0			0	0	0	24
Federation of BiH	7	237	2	10	70	178	47	74	26	2	4	31	17	11	10	726
%	1%	33%	%0	1%	10%	25%	%9	10%	4%	%0	1%	4%	2%	7%	1%	100%

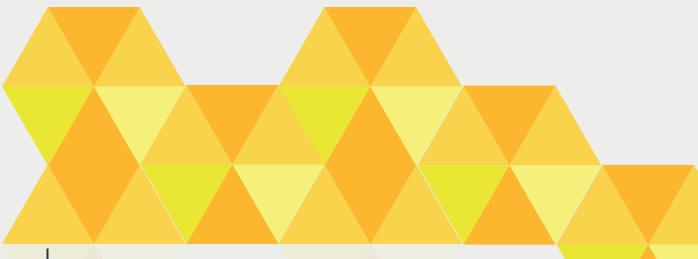
B – Mining	G – Trade	L – Real estate activities
C – Manufacturing	H – Transportation, storage	M – Professional, scientific and technical activities
D – Electricity generation and supply	l – Hospitality	N – Administrative and support service activities
E – Water supply	J – Information and communication	R – Arts, entertainment and recreation
F – Construction	K – Financial and insurance activities	S – Other service activities

Out of the total number of respondents, 726 employers or 56.4% reported that they would hire new labour in 2022. As the reason for the planned new labour hiring in 2022, 87% of employers who reported that they would hire new labour in 2022 have reported an expected increase in the business volume, while 10-11% of employers have reported a change in the business system and other reasons. The business volume increase is the main reason for the planned hiring in all activity groups.

Table 48: Number of employers with reported new labour hiring needs in 2022 by activity group

Activity groups	Increase in business volume	%	Changes in business system	%	Other	%
Construction	60	86%	9	13%	7	10%
Industrial activities	227	89%	25	10%	28	11%
Trade	152	85%	27	15%	14	8%
Service activities	194	87%	19	9%	26	12%
Total	633	87%	80	11%	75	10%

Note: The percentages are the proportion of employers who specified reason for 2022 hiring in relation to the total number of employers planning to hire in 2022 in the activity considered. The employers could choose more than one answer, so the sum of the percentages can be higher than 100%.



Reported Labour with Advanced IT Expertise Hiring Needs in 2022, by Activity Group

Out of a total of 726 employers who reported new labour hiring needs in 2022, two thirds, i.e., 549 or 76% of employers reported that they did not have a need for hiring labour with advanced IT expertise, while 153 or 21% of employers reported that they had a need for labour with advanced IT expertise.

In 2022, labour with advanced IT expertise will be the most sought after in service activities group (60 employers, i.e., 39.2% of the total number of employers planning to hire in 2022), followed by industrial activities (31.4%), trade (23.5%), and construction (5.9%). However, when looked at within activities, 27% of employers in service activities, 20% in trade activities, 19% in industrial activities, and 13% in construction activities plan to hire labour with advanced IT expertise in 2022.

Table 49: Number of employers with reported new labour with advanced IT expertise hiring needs in 2022 by activity group

III ZOZZ By deti		<u>'</u>							
Assessment	Construction	%	Industrial activities	%	Trade	%	Uslužne djelatnosti	%	% Total
Yes	9	13%	48	19%	36	20%	60	27%	153
No	58	83%	205	80%	132	74%	154	69%	549
No answer	3	4%	3	1%	10	6%	8	4%	24
Total	70	100%	256	100%	178	100%	222	100%	726

The above 153 employers reported the need to hire 434 employees with advanced IT expertise in 2022. When looking at individual activities, labour with advanced IT expertise will be the most sought after in information and communication activities (34% of the total demand in this context), which is only expected given that IT companies are in these activities. Most of this labour will be sought in the Canton of Sarajevo, specifically in information and communication activities.

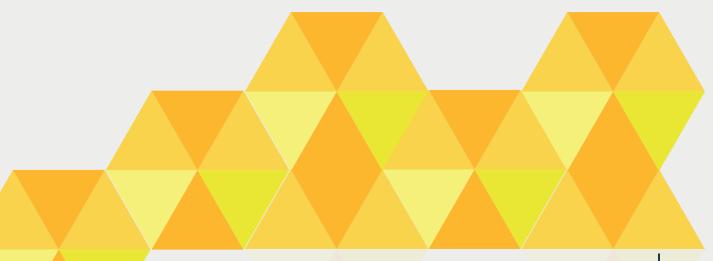


Table 50: Number of sought employees with advanced IT expertise in 2022 by activity and canton

Una-Sana 0 17 0 0 7 0 5 0 1 1 Posavina 0	Canton	ω	U	۵	ш	ш	ט	Ξ	-	_	×	-	Σ	z	œ	S	Total
ina 0 0 0 0 0 11 2 1 2 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	la-Sana	0	17	0	0	0	7	0	0	5	0	0	-	-	-	0	32
an-Podrinje 0 24 0 0 11 2 1 2 4 0 0 0 0 3 and and an analysis of the responsion of BiH of the re	savina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 0 9 0 0 0 2 9 1 0 0 20 0 3 1 0 3 0 0 3 3 1 1 1 1 1 0 3 0 0 3 3 1 1 1 1	zla	0	24	0	0	7	2	_	2	4	0	0	0	0	0	0	44
etva	nica-Doboj	0	6	0	0	2	6	—	0	20	0	0	m	0	0	-	45
etva	snian-Podrinje	0	М	0	0	0	0	0	0	0	0	0	0	0	0	0	m
etva 0 12 0 0 3 1 5 1 57 0 0 22 a 0 7 0 1 1 1 6 0 0 0 0 0 0 1 0 2 0 0 8 20 2 0 86 10 7 9 0 6 0 0 0 3 5 11 0 0 0 0 0 0 8 0 0 3 5 11 0 0 36 0 90 0 2 25 61 25 5 142 10 0 36 0 80 88	ntral Bosnia	0	10	0	~	0	13	11	-	0	0	0	0	_	0	0	37
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21% 0% 6% 14% 6% 1% 34% 2% 0% 8%	deration of BiH	0	06	0	2	25	61	25	5	142	10	0	36	32	2	4	434
		%0	21%	%0	%0	%9	14%	%9	1%	34%	2%	%0	%8	%/	%0	1%	100%

B – Mining	G – Trade	L – Real estate activities
C – Manufacturing	H – Transportation, storage	M – Professional, scientific and technical activities
D – Electricity generation and supply	l – Hospitality	N – Administrative and support service activities
E – Water supply	J – Information and communication	R – Arts, entertainment and recreation
F – Construction	K – Financial and insurance activities	S – Other service activities

Reported Hiring Needs in 2022 by Level of Education

According to reported 2022 hiring estimates, out of a total of 6,349 estimated employees, the employers will mostly hire skilled labour (56%), followed by labour with secondary education (17%).

Table 51: Overview of sought labour in 2022 by level of education

Level of education	Number of persons	%
Unskilled – without education and primary school not completed	249	4%
Semi-skilled, lower-skilled – primary school	205	3%
Skilled, highly-skilled – secondary school of up to 3 years, mastership examination	3,553	56%
Secondary education – secondary school of 4 and more years and grammar school	1,058	17%
Associate degree – level 1 university, tertiary education and two-year post- secondary school	14	0%
University degree – university (bachelor's degree), academy	333	5%
Master's degree	21	0%
Not specified	916	15%
Total	6,349	100%

According to cantonal structure and level of education of labour whose hiring in 2022 has been estimated by the employers, the situation is as follows:

Table 52: Reported labour needs in 2022 by level of education

Canton	Unskilled	Lower- skilled, semi- skilled	Skilled, highly- skilled	Secondary education	Associate degree, university degree	Not specified	Total
Una-Sana	10	4	187	112	13	34	360
Posavina	0	0	49	7	0	0	56
Tuzla	31	6	466	125	24	309	961
Zenica-Doboj	48	106	715	58	21	96	1044
Bosnian-Podrinje	0	0	68	5	3	1	77
Central Bosnia	120	11	785	66	13	175	1170
Herzegovina-Neretva	7	55	469	33	52	259	875
West Herzegovina	3	1	117	136	16	27	300
Sarajevo	24	22	593	501	211	15	1366
Canton 10	6	0	104	15	15	0	140
Federation of BiH	249	205	3553	1058	368	916	6349
%	4%	3%	56%	17%	6%	14%	100%

As in previous years, surveyed employers' high demand for labour with level 3 and 4 secondary education, i.e., skilled labour and labour with secondary education, has been confirmed.

Reported Hiring Needs in 2022 by Occupation

As in 2021, salespersons will be the most sought-after labour in the Federation of BiH in 2022 according to the needs reported by surveyed employers. In terms of the number of planned hires, occupation of locksmith is in the second place while seamsters, who were in the second place in the last year's survey in terms of the demand, i.e., number of the needs reported by surveyed employers, are in the third place in terms of the demand. In terms of the number of reported hiring needs, they are followed by joiners, welders, and auxiliary production workers. The occupations in this overview correspond to some extent to the overview of the occupations deleted from the employment service registers due to employment.

Although due to the COVID-19 pandemic's effects, the hospitality and hotel sector suffered major consequences, waiters and cooks are still among the occupations with a pronounced demand by the employers in the Federation of BiH according to the results of this research. Also, the employers reported a high demand for economy technicians, boot/shoemakers, electrical technicians, carpenters, computer scientists and mechanical technicians, with the need for 172 (auxiliary) elementary workers also reported. The employers did not specify occupations for 855 employees.

 Table 53: Overview of estimated most sought-after occupations in 2022

Table 33. Overview of estimated most sought-after occu	1	1
Occupation	Number of persons	%
Salesperson	587	9%
Locksmith	446	7%
Seamster	314	5%
Joiner	271	4%
Welder	255	4%
Auxiliary production worker	235	4%
Waiter	230	4%
Economy technician	214	3%
Elementary worker	172	3%
Boot/shoemaker	170	3%
Electrical technician	147	2%
Carpenter	139	2%
Cook	135	2%
Computer scientist	134	2%
Mechanical technician	123	2%

An overview of the 2022 most sought-after occupations in the Federation of BiH by estimated number of employees and by activity group is provided below.

 Table 54: Overview of estimated most sought-after occupations in 2022 by activity group

Table 54: Overview of es		dgnt-arter occ	upations in 2022 b	y activity grou	Ρ
Occupation	Number of persons	%	Occupation	Number of persons	%
Construction	433	10%	Industrial activities	2,095	46%
Carpenter	123	26%	Locksmith	423	13%
Bricklayer	93	20%	Seamster	290	9%
Reinforcement concrete worker	43	9%	Joiner	242	7%
Construction machinery operator	37	8%	Welder	234	7%
Plasterer	12	3%	Auxiliary production worker	223	7%
Building technician	11	2%	Boot/ shoemaker	170	5%
Civil engineer	11	2%	Elementary worker	152	5%
Tinsmith	11	2%	Electrical technician	124	4%
Elementary worker	10	2%	Mechanical technician	120	4%
Locksmith	8	2%	CNC operator	91	3%
Truck driver	8	2%	Tailor	72	2%
Electrician	8	2%			
Trade	731	16%	Service activities	1,266	28%
Salesperson	536	46%	Economy technician	204	15%
Warehouse worker – warehouser	76	6%	Waiter	161	12%
Driver of goods vehicle	51	4%	Computer scientist	130	9%
Commercialist	37	3%	Cook	93	7%
Pharmacist	32	3%	Economist	75	5%
Waiter	27	2%	Programmer	39	3%
Pharmacy technician	24	2%	Electrical 38 engineer		3%
Auto mechanic	21	2%	IT developer	34	2%
Electronic equipment installer	20	2%	Security guard	27	2%
Seamster	19	2%	Driver of goods vehicle	22	2%
Cleaner	18	2%	System engineer	22	2%

In terms of the structure of reported hiring needs by canton, level of education and occupation, the situation is as follows:

Table 55: Overview of estimated most sought-after occupations in 2022 by level of education and
 canton

Canton	Level of education	Occupation 1	Number	Occupation 2	Number	Occupation 3	Number
						Electrical engineer	1
						Accountant	1
	University degree, associate	Pharmacist	3	Bookkeeper	2	Agriculture engineer - agronomist	1
USC	degree					Civil engineer	1
						IT developer	1
						Commercialist	1
	Secondary education, skilled	Welder	87	Security guard	15	Waiter	15
PC	University degree, associate degree	/	/	/	/	/	/
	Secondary education, skilled	Boot/ shoemaker	I III I LOCKEMITO I		8	Salesperson	8
TC	University degree, associate degree	Pharmacist	5	Chemical technology engineer	3	Mechanical engineer	3
	Secondary education, skilled	Locksmith	40	Carpenter	39	Seamster	36
ZDC	University degree, associate degree	Electrical engineer	6	Economist	4	Mechanical engineer	3
	Secondary education, skilled	Locksmith	139	Seamster	121	Welder	80

	University degree, associate	Agriculture engineer – agronomist	1	Mining engineer	1	Lawyer	1
BPC	degree Secondary education, skilled	Seamster	25	Auxiliary production worker	20	Installer	15
CBC	University degree, associate degree	Economist	6	Mechanical engineer	1	Electrical engineer and bookkeeper	1
	Secondary education, skilled	Joiner	96	Seamster	67	Salesperson	67
HNC	University degree, associate degree	System engineer	22	Mechanical engineer	13	Civil engineer	8
	Secondary education, skilled	Locksmith	195	Waiter	51	Auxiliary production worker	40
	University					Lawyer Chemical technology engineer	1
WHC	degree, associate degree	Commercialist	5	Economist	5	Pharmacist Civil engineer Architect Computer	1 1 1
	Secondary education, skilled	Electrical technician	100	Carpenter	33	scientistr Driver of goods vehicle	20
CS	University degree, associate degree	Economist	68	Electrical engineer	41	Programmer	29
	Secondary education, skilled	Salesperson	319	Economy technician	207	Computer scientist	110
C10	University degree, associate degree	Pharmacist	6	Administrator	2	Economist	2
	Secondary education, skilled	Waiter	30	Salesperson	23	Auxiliary production worker	17

Reported Hiring Needs in 2022 by Employer Size

According to firm size, out of a total of 6,349 employees that surveyed employers reported as the estimated 2022 need, 2,605 employees or 41% are related to the needs of large firms, followed by small firms with 23%, and medium-sized firms with 21% of the total labour demand.

 Table 56: Number of needed employees by canton and employer size

Canton	Micro firms – up to 10 employees	Small firms - 10 to 50 employees	Medium firms - 50 to 250 employees	Large firms – over 250 employees
Una-Sana	85	100	83	92
Posavina	19	15	22	0
Tuzla	272	291	92	306
Zenica-Doboj	64	243	248	489
Bosnian-Podrinje	6	9	35	27
Central Bosnia	92	242	235	601
Herzegovina-Neretva	135	253	341	146
West Herzegovina	15	39	68	178
Sarajevo	237	223	140	766
Canton 10	48	23	69	0
Federation of BiH	973	1,438	1,333	2,605
%	15%	23%	21%	41%

Reported Harder-to-Employ Labour Category Hiring Needs in 2022

With regard to willingness of the employers to hire a person from any of harder-to-employ or specific categories, with the possibility of multiple choice of answers, the highest number reported willingness to hire youths without work experience (59%), whereas they were the least willing to hire migrants as potential new labour force in the Federation of BiH labour market. Willingness to hire demobilised veterans was reported by 34% of employers, even though that category included older persons, while 28% of employers would give employment opportunity to women from rural areas. Willingness to hire persons over 50 years of age and persons with disabilities was reported by 26% of employers.

Table 57: Willingness of employers to hire any of harder-to-employ labour categories

Category of persons	YES	%	NO	%	No answer	%
Persons with disabilities	331	26%	638	50%	319	25%
Victims of violence	235	18%	734	57%	319	25%
Wards of homes for children without parental care	216	17%	753	58%	319	25%
Roma	185	14%	784	61%	319	25%
Demobilised veterans	439	34%	530	41%	319	25%
Women from rural areas	359	28%	610	47%	319	25%
Youths without work experience	755	59%	214	17%	319	25%
Persons over 50 years of age	339	26%	630	49%	319	25%
Unskilled labour	383	30%	586	45%	319	25%
Immigrants (in accordance with legal regulations)	69	5%	900	70%	319	25%

Expected Employee Redundancies in 2022

According to the surveyed employers' responses, the expected employee redundancy in 2022 is not concerning. Only 60 or 4.6% of employers reported that they would have a redundancy of 150 employees, mainly because of a decrease in the business volume, out of which no occupation has been specified for 60 persons, while 59 are related to elementary workers. The remaining number is related to auxiliary production workers.

An overview of the number of employers who specified how they addressed employee redundancies is provided below by canton.

Table 58: Number of employers by how they address employee redundancy

Canton	Assignment to another job	Assignment to another organisational unit	Employment contract termination	Training, upskilling, reskilling	Reduction of working time	Cooperation with employment service	Other
Una-Sana	0	1	2	0	0	0	1
Posavina	0	0	0	0	0	0	0
Tuzla	4	4	3	3	1	0	5
Zenica-Doboj	1	1	4	2	0	0	5
Bosnian-Podrinje	0	0	0	0	0	0	0
Central Bosnia	0	0	3	0	1	2	3
Herzegovina-Neretva	1	0	1	0	1	2	0
West Herzegovina	0	1	2	0	0	0	0
Sarajevo	4	3	8	0	1	1	7
Canton 10	0	0	1	0	0	0	0
Federation of BiH	10	10	24	5	4	5	21
%	4%	3%	56%	17%	6%	14%	100%

 $The \, employers \, will \, address \, employee \, redundancy \, mostly \, through \, termination \, of \, employment \, contracts.$

Table 59: Number of employers by how employee redundancy is addressed

How employee redundancy is addressed	% of employers
Assignment to another job	17%
Assignment to another organisational unit	17%
Employment contract termination	40%
Training, upskilling, reskilling	8%
Reduction of working time	7%
Cooperation with employment service (taking care of workers in the process of bankruptcy, liquidation, etc)	8%
Other	35%

Additional Employee Training Needs in 2022

340 employers (26% of the respondents) reported additional employee training needs in 2022 in accordance with their plans to introduce new technologies and changes in the working process, i.e., changes in the technology and work organisation, which is 17% more compared to the last year.

Table 60: Number of employers planning to introduce new technologies and changes in working process in 2022

Assessment	Number of employers	%
Yes	340	26%
No	927	72%
No answer	21	2%
Total	1,288	100%

In terms of activity groups, the highest number of employers with reported plans to introduce new technologies is in industrial activities group (39% of all employers who plan to introduce new technologies and changes in the working process).

Table 61: Number of employers planning to introduce new technologies and changes in working process in 2022 by activity group

Activity group	Number of employers	%
Construction	31	9%
Industrial activities	133	39%
Trade	78	23%
Service activities	98	29%
Total	340	100%

These employers have the biggest need for organising on-the-job job-specific training, followed by computer training and foreign language training.

Table 62: Number of employers with reported additional employee training and capacity building need by type of training

Required type of training	Number of employers	%
On-the-job job-specific training	268	79%
Computer or other IT training	81	24%
Foreign languages	27	8%
Operating high category vehicle	35	10%
Project management	43	13%
Upskilling and reskilling	62	18%
Other	31	9%

The structure of the employers with reported training needs by canton is as follows.

Table 63: Additional employee training and capacity building needs of employers planning to introduce new technologies in working process

Canton	A1	A2	A3	A4	A5	A6	A7
Una-Sana	22	6	5	5	4	3	1
Posavina	2	0	0	0	1	2	0
Tuzla	40	12	3	6	7	7	3
Zenica-Doboj	41	12	2	4	1	10	1
Bosnian-Podrinje	5	1	0	3	0	0	0
Central Bosnia	30	8	0	4	4	7	8
Herzegovina-Neretva	35	17	7	4	8	14	1
West Herzegovina	13	4	3	6	8	5	2
Sarajevo	73	18	7	3	9	13	14
Canton 10	7	3	0	0	1	1	1
Federation of BiH	268	81	27	35	43	62	31

A1 – On-the-job job-specific training

A2 – Computer or other IT training

A3 – Foreign languages

A4 – Operating high category vehicle

A5 – Project management

A6 – Upskilling and reskilling

A7 – Other

Capacity to Organise Practical Instruction for Pupils and Students in 2022

In the context of capacity to support organising practical instruction, 776 employers or 60% of the total number of respondents reported that they did not have capacity (mentor, equipment, premises and materials) to take school pupils and students for practical instruction.

However, it is telling that, as part of this research, a large number of employers reported willingness and offered resources for organising practical instruction for school pupils and students for specific occupations.

Namely, 512 employers (40%) reported having at least one of specified resources and reported willingness to organise practical instruction for school pupils and students, mostly for the following occupations: salesperson, seamster, waiter, cook, auto mechanic, CNC operator, and joiner.

Table 64: Number of employers who have capacity and conditions to take school pupils and students for practical instruction in 2022

Resources	Number of employers	%
We can ensure mentor for practical instruction	424	33%
We can ensure equipment for practical instruction	371	29%
We can ensure materials for practical instruction	341	27%
We can ensure premises for practical instruction	364	28%
No, we do not have such capacity	776	60%

In terms of cantons, the lion's share of such employers are in the Canton of Sarajevo (178), followed by the Zenica-Doboj Canton (163), and the Tuzla Canton (156). Linking of these employers with educational institutions is of exceptional significance in the context of increasing competence and employability of school pupils and students.

Table 65: Number of employers willing to offer practical instruction for school pupils and students in 2022 by resource and canton

Canton	We can ensure mentor	We can provide equipment	We can provide materials	We can provide premises	We do not have such capacity
Una-Sana	40	31	29	32	65
Posavina	7	7	7	9	14
Tuzla	67	62	62 58 65		216
Zenica-Doboj	88	80	74 69		88
Bosnian-Podrinje	6	6	5	5 6	
Central Bosnia	48	42	36	45	68
Herzegovina-Neretva	35	24	21	21	81
West Herzegovina	38	36	35	36	26
Sarajevo	78	65	60	64	190
Canton 10	17	18	16	17	17
Federation of BiH	424	371	341	364	776

The following is an overview of occupations for which the employers are willing to provide carrying out of practical instruction.

Table 66: Most numerous occupations for which employers are willing to offer practical instruction by canton

Canton	Occupations
Una-Sana	Salesperson, food technician, locksmith, hairdresser, welder, bricklayer, waiter, cook, mechanical technician, electronic equipment installer
Posavina	Locksmith, welder, salespersons, auto mechanic, seamster, confectioner, waiter
Tuzla	Joiner, CNC operator, welder, salesperson, locksmith, wood technician, waiter, plumber, textile technician, auto mechanic, tailor, upholsterer
Zenica-Doboj	Seamster, welder, warehouser, salespersons, locksmith, CNC operator, miner, joiner, auto mechanic, welder, butcher, tinsmith
Bosnian-Podrinje	Seamster, pyrotechnician, chemist, plastics worker, auto mechanic
Central Bosnia	Boot/shoemaker, tailor, seamster, joiner, salesperson, locksmith, welder, auto mechanic, cook, waiter
Herzegovina-Neretva	Waiter, cook, CNC operator, locksmith, mechanical engineer, IT developer, galvaniser, salesperson
West Herzegovina	Electrical technician, salesperson, CNC operator, auto mechanic, carpenter
Sarajevo	Joiner, economist, electrical engineer, upholsterer, CNC operator, auto mechanic, plumber, economy technician, cook, waiter, baker
Canton 10	Cook, waiter, salesperson, joiner, joinery fitter, pharmacist, pharmacy technician, auto mechanic, auto electrician

To that end, 212 or 17% of the total number of surveyed employers are willing to offer remuneration to school pupils and students during carrying out of practical instruction.

5% of the respondents are willing to offer the remuneration amounting to up to BAM 100, while 4% of the total number of respondents are willing to offer the remuneration between BAM 100 and 200. 5% of surveyed employers are willing to offer over BAM 300.



Table 67: Level of remuneration that employers are willing to offer to school pupils and students undergoing practical instruction

Canton	Up to BAM 100	BAM 100-200	BAM 200-300	Over BAM 300
Una-Sana	3	12	5	2
Posavina	4	2	0	0
Tuzla	14	6	8	13
Zenica-Doboj	10	13	0	4
Bosnian-Podrinje	0	1	1	0
Central Bosnia	15	4	5	10
Herzegovina-Neretva	8	2	0	5
West Herzegovina	0	5	2	15
Sarajevo	8	7	12	7
Canton 10	0	3	3	3
Federation of BiH	62	55	36	59
% of total sample	5%	4%	3%	5%

Capacity to Organise Training for Unemployed Persons in 2022

Also, in the context of adult training, 331 employers or 26% of the total number of respondents reported that they had at least one of specified resources and that they were willing to organise trainings, vocational training and development for unemployed persons.

Table 68: Number of employers who have capacity to organise training for unemployed persons in 2022 by individual resource

Resources	Number of employers	%
We can ensure mentor for practical instruction	245	19.0%
We can ensure equipment for practical instruction	223	17.3%
We can ensure materials for practical instruction	203	15.8%
We can ensure premises for practical instruction	220	17.1%
No, we do not have such capacity	957	74.3%

In terms of cantons, the lion's share of such employers are in the Canton of Sarajevo, followed by the Zenica-Doboj Canton and the Tuzla Canton. They are a solid base for carrying out trainings, but type of training and regulations governing adult education should be taken into account if the trainings are not for the purposes of a specific employer.

Table 69: Number of employers willing to training for unemployed persons in 2022 by resource and canton

Canton	We can ensure mentor	We can ensure equipment	We can ensure materials	We can ensure premises	We do not have such capacity
Una-Sana	14	11	11	10	91
Posavina	2	2	2	4	20
Tuzla	38	40	36	42	243
Zenica-Doboj	46	46 43		37	132
Bosnian-Podrinje	2	2	2	2	15
Central Bosnia	37	35	33	37	84
Herzegovina-Neretva	11	13	12 11		98
West Herzegovina	24	24	22	22	39
Sarajevo	58	41	36	43	212
Canton 10	13	12	12	12	23
Federation of BiH	245	223	203	220	957

During the survey, the employers emphasised to the largest extent the capacity to provide training to unemployed persons for the following occupations:

Table 70: Most numerous occupations for which employers are willing to provide training for unemployed persons by canton

Canton	Occupation
Una-Sana	Welder, CNC operator, bricklayer, security guard, salesperson, cook, waiter, electrician
Posavina	Boot/shoemaker, seamster, electrical technician, salesperson, waiter
Tuzla	Joiner, upholsterer, cook, waiter, locksmith, blacksmith, mechanical technician, mechanical engineer, auto mechanic, economist, chemical technician, electrical technician, tiler, house painter, CNC operator, seamster, tailor, welder, bricklayer
Zenica-Doboj	Auto mechanic, lathe operator, butcher, salesperson, warehouser, joiner, seamster, CNC operator, furniture fitter, welder, bricklayer
Bosnian-Podrinje	///
Central Bosnia	Boot/shoemaker, tailor, seamster, waiter, CNC operator, salesperson, joiner
Herzegovina-Neretva	Galvaniser, IT developer, tiler, cook, joiner, commercialist, civil engineer
West Herzegovina	Electrical technician, civil engineer, mechanical technician, CNC operator, salesperson
Sarajevo	Electrical technician, architect, computer scientist, programmer, waiter, cook, joiner, upholsterer, carpenter, sanitary technician, bus driver
Canton 10	Auto mechanic, waiter, cook, joinery fitter, joiner, salesperson



ASSESSMENT OF EMPLOYER COOPERATION WITH PUBLIC EMPLOYMENT SERVICES IN THE FEDERATION OF BIH

When it comes to new employee recruitment modality – method and job brokerage and with the possibility of multiple choice of offered options, surveyed employers responded that they most frequently recruited employees through personal contacts (83%), with 41% using brokerage services provided by the employment bureaus.

Table 71: New employee recruitment method

Employee recruitment method	Number of employers	%
Through job brokerage provided by employment bureau	532	41%
Through personal contacts, through acquaintances and references	1,068	83%
Through means of public information	340	26%
Through firm's website	325	25%
By using social networks	354	27%
Through private employment agencies	87	7%
Through educational institutions	45	3%
By using own database	342	27%
Other	22	2%

Job brokerage services through the public employment services are used the most by surveyed employers in the Bosnian-Podrinje Canton (71% of the total number of respondents in the canton), followed by the Posavina Canton (67%), the Herzegovina-Neretva Canton (48%), and the Central Bosnia Canton (51%). It should be noted here that this is a random sample which is representative for all employers, not only for those who cooperated with the Federal Employment Institute and the cantonal employment services.

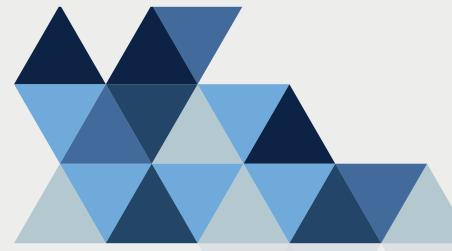
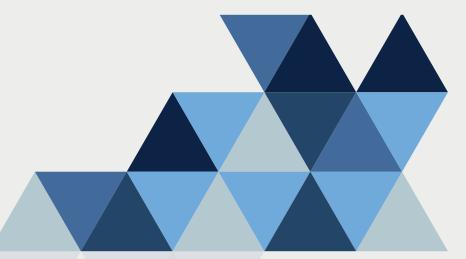


Table 72: New employee recruitment method by canton

Canton	A1	A2	A3	A4	A5	A6	A7	A8	A9
Una-Sana	43	82	25	17	27	3	2	13	0
Posavina	16	23	4	1	7	1	0	3	0
Tuzla	100	258	59	52	55	1	7	125	6
Zenica-Doboj	80	146	70	56	47	5	6	32	2
Bosnian-Podrinje	12	14	2	1	2	1	0	2	0
Central Bosnia	66	107	31	47	44	6	7	53	3
Herzegovina-Neretva	71	133	30	19	42	10	3	21	1
West Herzegovina	26	57	31	22	18	2	8	20	1
Sarajevo	105	215	79	104	104	58	12	54	9
Canton 10	13	33	9	6	8	0	0	19	0
Federation of BiH	532	1,068	340	325	354	87	45	342	22
%	41%	83%	26%	25%	27%	7%	3%	27%	2%

A1 – Through job brokerage provided by employment bureau	A5 – By using social networks
A2 – Through personal contacts	A6 – Through private employment agencies
A3 – Through means of public information	A7 – Through educational institutions
A4 – Through firm's website	A8 – By using own database
	A9 – Other



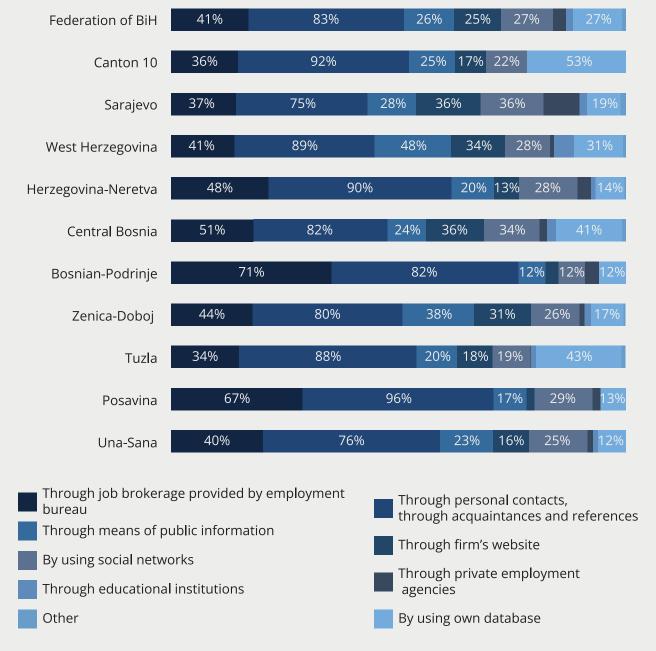


Chart 6: Employee recruitment method in Federation of BiH

In the context of cooperation with the cantonal employment services, most of the employers (55%) emphasised that they realised cooperation within the framework of their participation in the implementation of the employment co-financing programmes, followed by information about labour supply (55%) and vacancy advertising (52%). Required workforce profile job brokerage services were used by 49% of surveyed employers. Realised cooperation with the cantonal employment services and satisfaction with services provided by the employment services were rated on a scale from 1 (completely dissatisfied) to 5 (completely satisfied).

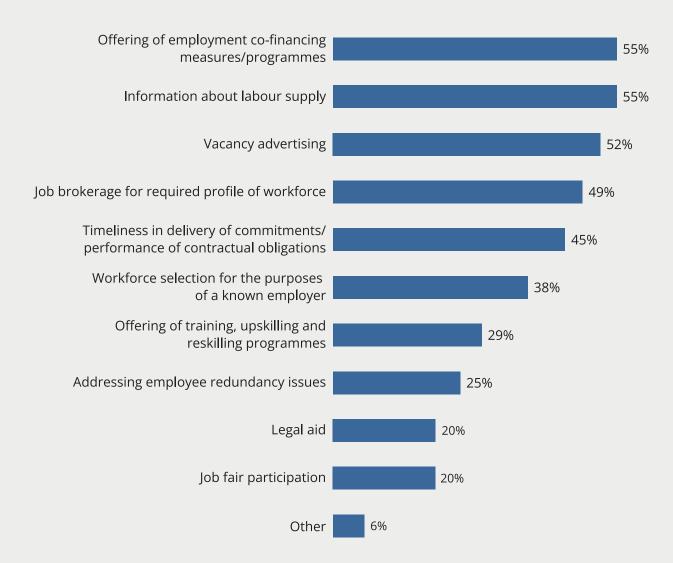


Chart 7: Percentage of employers who used specific services provided by employment services

Table 73: Number of employers who rated their satisfaction with realised cooperation with cantonal employment services with 4 and 5 ratings

Answer	A1	A2	А3	A4	A5	A6	Α7	A8	Α9	A10	A11
No answer	38	48	73	107	59	110	104	121	111	123	938
We have not used services provided by	578	532	589	691	515	802	601	909	919	845	271
cantonal employment services	578	532	589	691	515	802	601	909	919	845	271
I am dissatisfied with services (1 and 2)	39	41	42	38	56	58	46	38	42	34	5
I am neither satisfied nor dissatisfied (3)	115	133	112	112	117	96	91	98	85	82	27
I am satisfied (4 and 5)	518	534	472	340	541	222	446	122	131	204	47

A1 - Vacancy advertising

A2 - Information about services

A3 – Job brokerage

A4 - Workforce selection

A5 – Offering of employment co-financing measures/programmes

A6 – Offering of training programmes

A7 – Timeliness in performance of contractual obligations

A8 – Job fair participation

A9 – Legal aid

A10 – Support in addressing employee redundancy issues

A11 – Other

The following table presents the number of employers who rated specific services with ratings 4 (satisfied) and 5 (completely satisfied).

Table 74: Number of employers who rated their satisfaction with realised cooperation with cantonal employment services with 4 and 5 ratings by canton

Canton	A1	A2	А3	A4	A5	A6	A7	A8	A9	A10	A11
Una-Sana	50	59	49	31	57	19	46	6	10	24	1
Posavina	23	24	23	23	24	23	24	8	8	21	8
Tuzla	109	107	104	77	125	68	120	20	20	38	6
Zenica-Doboj	79	77	66	53	84	30	61	31	34	40	16
Bosnian-Podrinje	9	12	12	8	15	4	9	1	1	0	0
Central Bosnia	63	58	54	39	50	25	46	25	22	39	6
Herzegovina-Neretva	72	81	52	28	37	5	27	1	8	11	1
West Herzegovina	25	30	22	19	37	12	32	4	4	8	1
Sarajevo	78	68	72	48	86	33	57	23	20	16	7
Canton 10	10	18	18	14	26	3	24	3	4	7	1
Federation of BiH	518	534	472	340	541	222	446	122	131	204	47
%	46%	51%	46%	35%	54%	23%	45%	11%	12%	21%	6%

A1 – Vacancy advertising A6 – Offering of training programmes

A2 – Information about services

A7 – Timeliness in performance of contractual obligations

A3 – Job brokerage A8 – Job fair participation

A4 – Workforce selection A9 – Legal aid

A5 – Offering of employment co-financing measures/programmes A10 – Support in addressing employee redundancy issues

A11 – Other

The majority of surveyed employers gave the best rating to offering of active employment policy measures/programmes (54% of employers), followed by information about labour supply service (51%), and job brokerage service and vacancy advertising (46%).

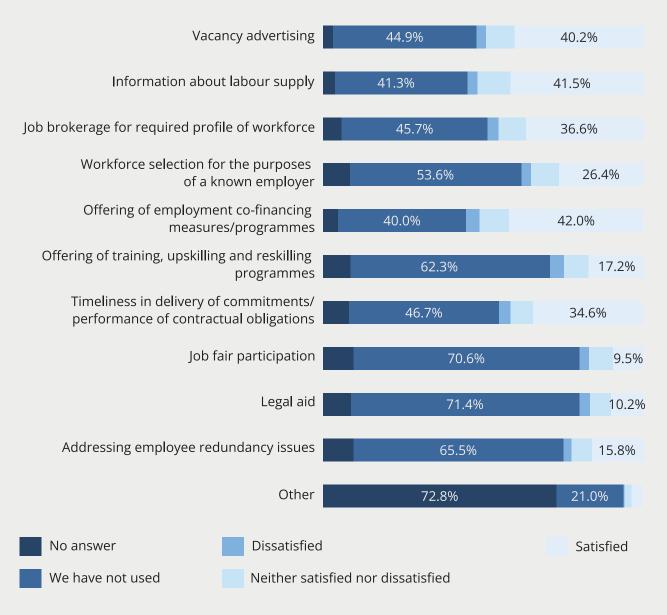
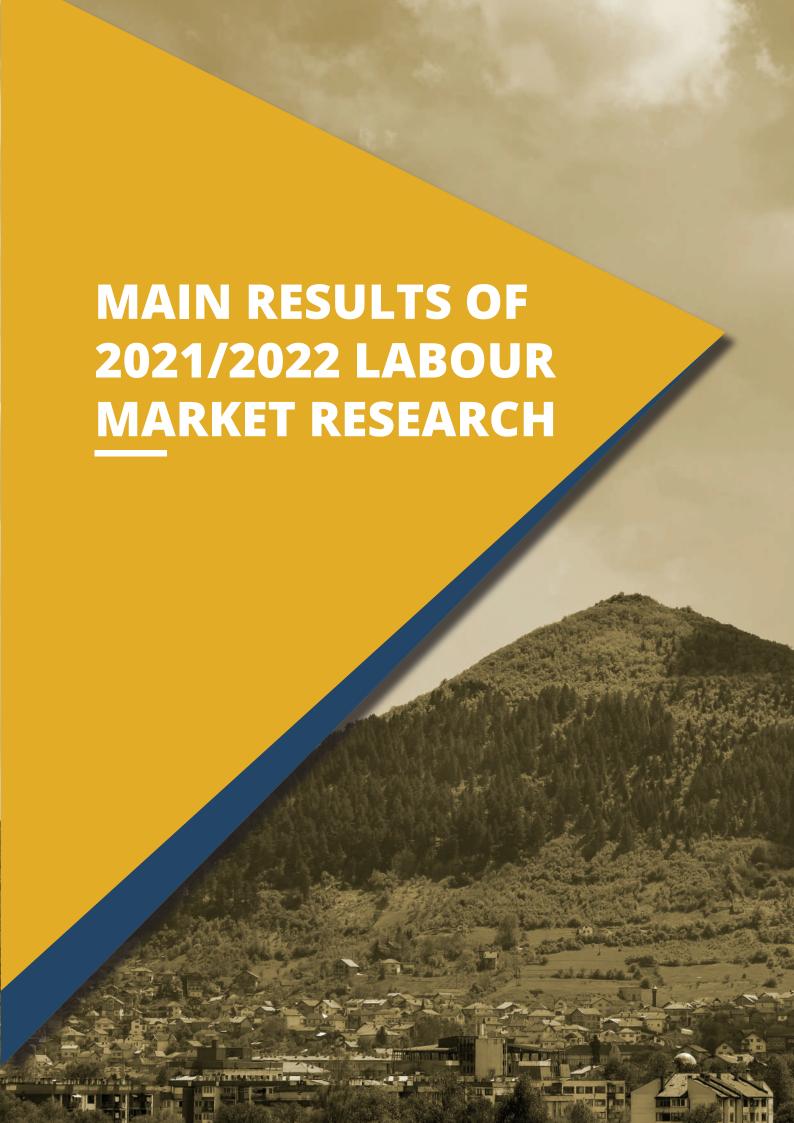


Chart 8: Assessment of services provided by employment services in Federation of BiH

It was expected for some of the measures that they would not be used, like job fairs, because they were not even organised in the previous year due to the COVID-19 pandemic. The employers have not used legal aid because they mostly do not expect it from the employment services, while the larger employers, of which there are fewer than others in the total number, turn to the services with requests for assistance in addressing employee redundancy issues. What is especially noteworthy is a significant number of employers who do not use reskilling, training, upskilling programmes while, on the other hand, there are 26% of employers who reported additional employee training needs in 2022, in accordance with their plans to introduce new technologies and changes in the working process, i.e., changes in the technology and work organisation.



MAIN RESULTS OF 2021/2022 LABOUR MARKET RESEARCH

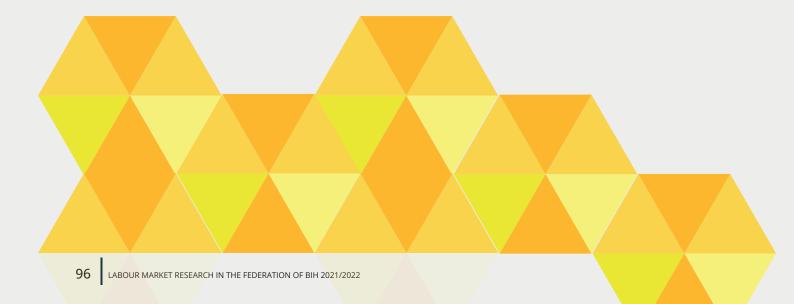
- In addition to analysis of administrative data from the public employment services in the Federation of BiH, the Federal Institute for Statistics, the Tax Administration of the Federation of BiH and the cantonal education ministries, an employer survey in the Federation of BiH was also organised for 2021/2022 labour market research in the 11 January 2021 to 04 February 2022 period;
- In 2021, the number of persons in employment in the Federation of BiH (525,397) increased by 1%, whereas the number of unemployed persons (311,679) decreased by 3%, while the average net wage (BAM 996) increased by 4.2% compared to 2020.
- In 2021, out of the total number of persons in employment in the Federation of BiH, women accounted for 42%, with youths up to 30 years of age accounting for 34%.
- In 2021, 58% of women were among unemployed persons in the Federation of BiH, with youths up to 30 years of age accounting for 24% of the total number of unemployed persons. Economists and lawyers were the most numerous among persons with university degrees, while economy technicians and grammar school graduates were the most numerous among persons with level 4 secondary education. Salespersons, hairdressers, auto mechanics and drivers were the most numerous among skilled labour. These occupations were at the same time also among the most numerous in the group of persons deleted from the registers due to employment.
- The survey covered 1,288 employers registered in the Federation of BiH with five and more employees, out of which 726 or 56% of surveyed employers estimated, i.e., reported the need for hiring 6,349 employees in 2022;
- The lion's share of the firms that were surveyed were the firms that have been in operation for more than five (5) years (89%), while there were also 4% of those who have been in operation for less than three (3) years among surveyed employers;
- The highest number of surveyed employers were limited liability companies (81%), followed by crafts (11%);
- At the time of the survey, the sampled employers employed 74,412 employees or 14% of the total number of persons in employment in the Federation of BiH in December 2021 –59% of men and 41% of women by gender. Out of the total number of persons in employment with surveyed employers, 18,775 or 25% were youths up to 30 years of age, while 3,252 employees or 4% were over 60 years of age. The lion's share of persons in employment were employed with surveyed employers in industrial activities (39,412 or 53%);
- A growth in the business volume of the majority of surveyed employers in 2021 (43%) was evident, as well as a decline in the financial effects (50%), while a growth in the financial performance was reported by 49% of employers, which is a significant increase compared to the last year's results. The employers in industrial activities and trade lead in the recorded growth in the business volume and financial performance;
- Out of the total number of respondents, 475 employers (37%), mostly in industrial activities and service activities, reported facing issues in hiring and recruitment of 4,525 needed employees of a specific profile in 2021. In terms of level of education, they faced

the biggest issues in hiring and recruitment of skilled labour (62.2%) and labour with secondary education (21%). They faced the biggest challenges in hiring and recruitment of salespersons – 392 or 9%, computer scientists – 303 or 7%, and boot/shoemakers – 230 or 5%. The most common reasons for the challenges in hiring were shortage of human resources with sought occupation, shortage of human resources with expertise and skills required for job, as well as with relevant work experience.

- Only 10% of surveyed employers hired labour directly from the education system, i.e., after completing general or technical secondary school or university. The highest proportion of the employers have emphasised that what job candidates coming directly from the education system lack the most are technical skills or job-specific skills, lack of work experience and mismatched education system.
- A growth in the business volume, i.e., production, sales and services in 2022 is expected by as many as 72% of the sampled employers, which is as much as 15% more compared to the employer survey from the previous year. From the aspect of activity group, 72% of employers in construction and 52% of employers in industrial activities group and trade activity reported expecting a growth in the business volume in 2022. When it comes to 2022 financial performance estimates, the majority of the employers (70%) reported expecting a growth. Also, 66% of employers have estimated that they would increase employee wages in 2022, mostly up to 10%, namely mainly in manufacturing and trade.
- In the total number of employers who reported that they would increase employee wages in 2022, mostly up to 10%, the employers in activity C 'Manufacturing' account for one third.
- Out of the total number of 1,288 surveyed employers, 726 or 56.4% reported new employee hiring needs, which is 4.4% employers more compared to the previous survey.
- These employers have estimated that they would have the need to hire 6,349 employees, which is 1,789 or 39% more compared to the last year's research.
- When looking at the cantons, out of the total reported demand for 6,349 employees, surveyed employers in the Canton of Sarajevo will have the highest labour demand in 2022, namely the demand for 1,366 employees or 22%. They are followed by the employers in the Central Bosnia Canton, with the demand for 1,170 employees or 18% and the Zenica-Doboj Canton, with the demand for 1,044 employees or 16%.
- When looking at individual activities, the highest demand, as much as 48%, is expected in manufacturing, followed by trade with 18% and information and communication with 7%.
- According to reported 2022 hiring estimates, out of a total of 6,349 estimated employees, the employers will mostly hire skilled labour (56%), followed by labour with secondary education (17%).
- According to the needs reported by the employers within the framework of this research, the most sought-after level 3 and 4 occupations in 2022 are salespersons. In terms of the number of planned hires, occupation of locksmith is in the second place, while seamsters are in the third place in terms of the demand. In terms of the number of reported hiring needs, they are followed by joiners, welders, and auxiliary production workers;
- According to the needs reported by the employers within the framework of this
 research, the most sought-after university degree occupations are: economist, electrical
 engineer, system engineer, programmer and pharmacists, but they are sought to a
 significantly lesser extent than lower levels of education. The employers in the Canton of

Sarajevo and the Herzegovina-Neretva Canton lead in the demand for human resources with university degrees;

- 340 employers (26% of the respondents) reported additional employee training needs in 2022 in accordance with their plans to introduce new technologies and changes in the working process, mostly in industrial activities group. These employers have the biggest need for organising on-the-job job-specific training, followed by computer training and foreign language training.
- As for harder-to-employ or specific categories, the majority of employers reported willingness to hire youths without work experience, demobilised veterans and women from rural areas, whereas they were the least willing to hire migrants as potential new labour force in the Federation of BiH labour market.
- In the context of capacity to support organising practical instruction, 512 employers or 40% of the total number of respondents reported having at least one of specified resources (mentor, equipment, premises and materials) and reported willingness to take school pupils and students for practical instruction, mostly for the following occupations: salesperson, seamster, boot/shoemaker, waiter, cook, auto mechanic, CNC operator, and joiner. Out of that number of the employers, 212 or 29% are willing to offer remuneration to school pupils and students during carrying out of practical instruction, namely 62 employers are willing to offer up to BAM 100, 5 employers are willing to offer BAM 100 to 200, 36 employers are willing to offer BAM 200 to 300, and 59 employers are willing to offer over BAM 300.
- In the context of capacity to organise training, vocational training and development for unemployed persons, 331 employers or 26% of surveyed employers have the capacity to ensure the conditions for training of unemployed persons, namely mostly for the following occupations: welder, boot/shoemaker, waiter, cook, seamster, CNC operator.
- With the possibility of specifying multiple options, surveyed employers have emphasised that they most frequently recruit new employees through personal contacts, while reporting brokerage through the public employment services in the second place, followed by use of social networks and own database.
- In the context of cooperation with the cantonal employment services, the employers have mostly emphasised that they realise cooperation within the framework of their participation in the implementation of the employment co-financing programmes, followed by information about labour supply, and vacancy advertising and job brokerage.

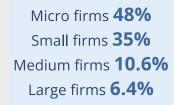




CONCLUSION

Sample

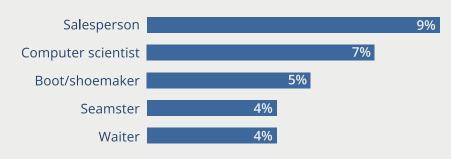






Construction **9%**Industrial activities **32%**Trade **27%**Service activities **32%**

Occupations with which employers faced most challenges in hiring and recruitment in 2021



9%

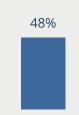
of employers reported facing issues in hiring and recruitment of salespersons in 2021

Most common knowledge and skills lacked by labour according to EU Framework for Competences

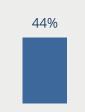
NE



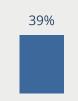
Shortage of human resources with sought occupation



Shortage of human resources with expertise and skills required for job



Shortage of human resources with relevant work experience



Disinterest of individuals in working in specific job



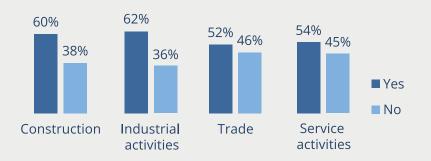
Tax policy (high tax and contribution outlays)

2022 financial performance estimate by canton



CONCLUSION

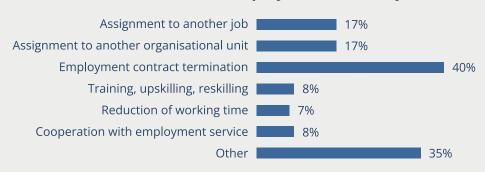
% of employers with reported new labour hiring needs by activity



62%

of employers in industrial activities expect to hire new labour in 2022

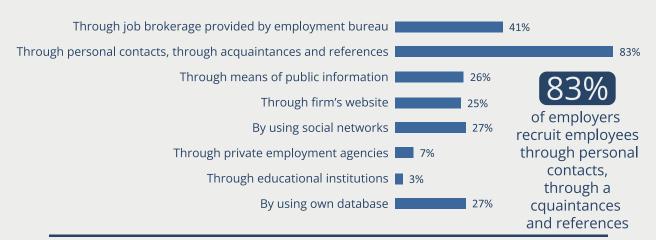
Employee redundancy



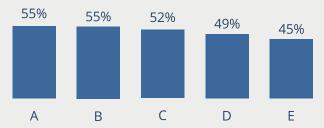
4,6%

of employers reported that they would have employee redundancies in 2022

Employee recruitment method



Use of services provided by cantonal employment services



55%

of employers use employment co-financing measures/programmes and information about labour market supply services

- A Offering of employment co-financing measures/programmes
- B Information about labour supply
- C Vacancy advertising

- D Job brokerage for required profile of workforce
- E Timeliness in delivery of commitments/performance of contractual obligations

RECOMMENDATIONS

The recommendations resulting from this research are mainly related to the following activities of the public employment services but encourage the use of the research results also for other purposes. The recommendations are divided into three key groups: job brokerage, policy development, and cooperation with key stakeholders.

JOB BROKERAGE

- Based on the needs reported by the employers within the framework of the employer survey (both from the aspect of the demand for labour with specific occupations and from the aspect of the sought-after knowledge and skills), the employment services should initiate prompt contact with employers to offer them services in order for them to overcome the challenges that they face in workforce engagement.
- If there is no labour sought by employers in the public employment service registers, employers should be made aware of the active employment measures planned to be implemented this year and examine the potential for labour engagement through them.
- Active work should be done on increasing the public employment services' labour market share through increasing the quantity and quality of vacancies advertised on the websites of the Federal Employment Institute and the employment services for better brokerage and monitoring and analysis of hiring needs, while the technological solutions within the information system for the performance of these activities should be used and improved.
- Improve job brokerage services in the employment services on an ongoing basis (contacting employers and candidates, profiling and categorisation of unemployed persons, selection and choosing of candidates, etc.), and link brokerage and individual counselling services in a more meaningful way and integrate them into financial incentives, i.e., active employment measures.

POLICY DEVELOPMENT

- Improve communication with employers in analysing current issues relating to workforce competence, in order to identify opportunities for support from the public employment services, as well as for improving cooperation and mitigating the mismatch between the labour market supply and demand.
- Implement and improve employment co-financing and on-the-job job-specific training measures (for preventing long-term unemployment and preserving and improving working skills of unemployed persons) in line with the needs reported by the employers, especially in the situations when there is no labour with sought occupation in the employment service register.
- Monitor labour market trends on a regular basis (labour needs, employee layoffs, vulnerable activities, etc.) in time-adjusted period for the development of plans for the next

year, and design or improve services and active employment measures for unemployed persons and employers in accordance with those trends and research findings.

COOPERATION WITH KEY PARTNERS

- Based on the reported employers' willingness to organise practical instruction for school pupils and students, initiate activities at local level through the local employment partnerships (and their establishment where they have not been established) and strengthening of dialogue between the employment services, employers and educational institutions to agree on local- and cantonal-level solutions relating to enrolment policy, curricula and organisation of practical instruction in business entities and other education and labour market related issues. Share collected information with the aforementioned stakeholders in order for specific steps to be undertaken in organising practical instruction for the occupations for which the employers reported having the required resources.
- Improve and adjust educational institutions' enrolment policies and curricula (especially secondary vocational education) in keeping with technological development and employer needs, along with ongoing promotion of lifelong learning.
- Inform cantonal governments about labour needs and initiate establishment of cantonal-level shortage occupation scholarship schemes for school pupils and students.
- Promote information collected through the labour market research and encourage its dissemination and publication on web portals, as well as share it with the Federal and cantonal governments, relevant ministries and institutions, and other stakeholder organisations.
- Cooperate with scientific and research institutions in order for the data collected within the framework of the labour market research to be analysed from different perspectives and to be used for policy and service development.

