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# LABOUR FORCE IN THE REPUBLIC OF CROATIA, 2022 - ANNUAL AVERAGE

The Labour Force Survey results are presented for the annual period from January to December 2022.

According to the Labour Force Survey, there were 1 707 thousand employed persons in the Republic of Croatia in 2022, which was an increase of 29 thousand, or 1.7% as compared to 2021. In the same reference period, the number of unemployed persons in the Republic of Croatia amounted to 128 thousand, which was a decrease of 10 thousand, or 7.6% as compared to 2021.

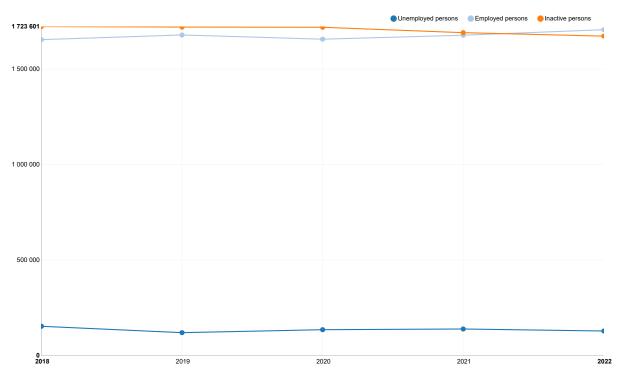
In 2022, the employment rate for persons aged 15 to 64 years was 64.9%, which was an increase of 1.5 percentage points compared to 2021. The ILO unemployment rate for persons aged 15 to 64 years was 7.1%, which was 0.5 percentage points less than last year.

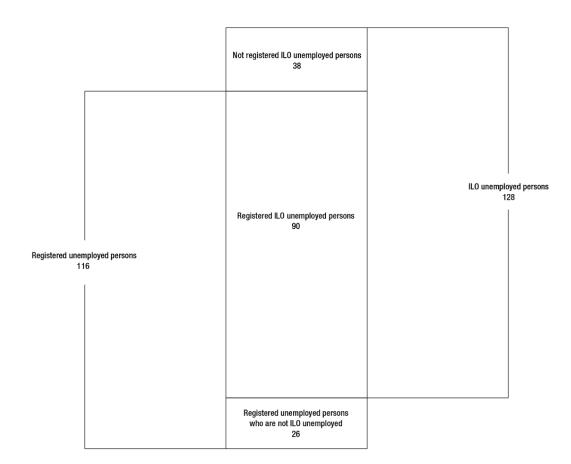
Having in mind that the Labour Force Survey methodology is harmonised with the methodology prescribed by the Statistical Office of the European Union (Eurostat), the results for the Republic of Croatia are comparable to the results of all EU Member States. A continuous application of the methodological concept, as prescribed by Eurostat and the International Labour Organisation, ensured that the Labour Force Survey results clearly point to the labour market trends of the Republic of Croatia.

More detailed results of the Labour Force Survey can be downloaded also at Eurostat's webpage.

Data presented for the period from 2018 to 2022 are averages of four quarterly results.

### G-1 CHANGES IN CATEGORIES OF WORKING-AGE POPULATION, 2018 – 2022





The comparison of unemployment data obtained by the Labour Force Survey with those according to the Croatian Employment Service (CES) and those obtained from other administrative data records shows that the average unemployment rate for 2022, according to the administrative records, was lower (6.7%) than the ILO unemployment rate (7.0%). In the same period, the average number of unemployed persons according to the Labour Force Survey was 12 000 persons higher than the number obtained from the CES. Since interviewed persons provided information on their registration with the CES, the data comparison shows that 90 000, or 70.5%, out of the total of 128 000 unemployed persons were registered with the CES, 29.5% of persons who were classified as unemployed in the Labour Force Survey were not interested in registering with the CES. At the same time, 26 000, or 22.5%, of the total of 116 000 persons who were registered with the CES did not fulfil the international criteria of unemployment.

# 1 WORKING-AGE POPULATION, BY ACTIVITY AND SEX

Labour force  1798  1792  1816  1833    Persons in employment  1667  1667  1678  1707    Unemployed persons  119  135  138  122    Inactive population (15+)  1671  1720  1692  1677    Activity rate  51,1  51,0  51,8  52,3    Employment/population ratio  47,7  47,2  47,8  48,3    Unemployment rate  6.6  7,5  7,6  7,7    Vorking-age population (15+)  1682  1679  1678  1679    Labour force  968  973  978  9776    Persons in employment  909  901  907  9168    Unemployed persons  6.6  7,2  7,1  66    Inactive population (15+)  1682  1679  1679  1676    Unemployed persons  6.6  7,2  7,1  66  7,3  66,1  55,6  58,3  58,3  58,2  58,3  58,3  58,3					'000'
Working-age population (15+)  3 519  3 508  3 508    Labour force  1798  1792  1 816  1 838    Persons in employment  1679  1 657  1 678  1 700    Unemployed persons  119  1 355  1 38  1 28    Inactive population (15+)  1 720  1 720  1 692  1 675    Kativity rate  51,1  51,0  51,8  52,2    Employment/population ratio  47,7  47,2  47,8  48,3    Unemployed persons  66  7,5  7,6  7,0    Unemployed persons  66  7,7  7,8  7,0    Vorking-age population (15+)  1682  1679  1678  1679    Labour force  968  973  978  976    Persons in employment  909  901  907  916    Unemployed persons  60  7,2  7,1  66    Inactive population (15+)  57,6  58,0  58,3  58,2    Employment/population (		2019	2020	2021	2022
Labour force  1798  1792  1816  1833    Persons in employment  1667  1667  1678  1707    Unemployed persons  119  135  138  122    Inactive population (15+)  1671  1720  1692  1677    Activity rate  51,1  51,0  51,8  52,3    Employment/population ratio  47,7  47,2  47,8  48,3    Unemployment rate  6.6  7,5  7,6  7,7    Vorking-age population (15+)  1682  1679  1678  1679    Labour force  968  973  978  9776    Persons in employment  909  901  907  9168    Unemployed persons  6.6  7,2  7,1  66    Inactive population (15+)  1682  1679  1679  1676    Unemployed persons  6.6  7,2  7,1  66  7,3  66,1  55,6  58,3  58,3  58,2  58,3  58,3  58,3			Total		
Persons in employment  1679  1677  1679  1670  1671  1670	Working-age population (15+)	3 519	3 512	3 508	3 508
Unemployed persons  119  135  138  122    Inactive population (15+)  1721  1720  1692  1673    Activity rate  51,1  51,0  51,8  52,5    Employment/population ratio  47,7  47,2  47,8  48,7    Unemployment rate  6,6  7,5  7,6  47,7    Working-age population (15+)  1682  1679  1678  1679    Labour force  968  973  978  977    Persons in employment  909  901  907  918    Unemployed persons  60  7,2  7,1  60    Inactive population (15+)  714  706  701  60    Inactive population (15+)  714  705  70,3  63,4  58,2    Employment/population ratio  53,6  58,0  58,3  58,2  58,4  58,4  58,4  58,4  58,4  58,4  58,4  58,4  58,4  58,4  58,4  58,4  58,4  58,4 </td <td>Labour force</td> <td>1 798</td> <td>1 792</td> <td>1 816</td> <td>1 835</td>	Labour force	1 798	1 792	1 816	1 835
Inactive population (15+)  1721  1720  1692  1673    Activity rate  51,1  51,0  51,8  52,3    Employment/population ratio  47,7  47,2  47,8  48,3    Unemployment rate  6.6  7,5  7,6  7,7    Working-age population (15+)  1682  1679  1678  678    Labour force  909  901  907  918    Persons in employment  909  901  907  918    Unemployed persons  600  72  71  600    Inactive population (15+)  77,6  78,8  58,3  58,4    Employment/population ratio  57,6  58,0  58,3  58,4    Unemployment rate  67,6  58,0  58,3  58,4    Unemployment/population ratio  53,6  58,3  58,3  58,4    Unemployment rate  67,6  58,0  58,3  58,3  58,4    Unemployment rate  63,0  58,3  58,3  58,3	Persons in employment	1 679	1 657	1 678	1 707
Ketivity rate  51,1  51,0  51,8  52,3    Employment/population ratio  47,7  47,2  47,8  48,7    Unemployment rate  6,6  7,5  7,6  7,7    Working-age population (15+)  1682  1679  1678  978    Labour force  909  901  907  9168    Unemployment  600  72  71  660    Inactive population (15+)  7,6  7,6  7,6    Unemployment/population (15+)  7,14  706  700  701    Mative population (15+)  7,14  706  700  701    Mative population ratio  57,6  58,0  58,3  58,4    Employment/population ratio  54,0  58,6  58,4  58,4    Unemployment rate  62,2  7,5  7,3  6,4    Unemployment rate  62,2  7,5  7,3  6,4    Unemployment rate  63,0  819  838  857    Persons in employment  7	Unemployed persons	119	135	138	128
Activity rate51,151,051,852,2Employment/population ratio47,747,247,848,7Unemployment rate6,67,57,67,0Working-age population (15+)16,82167916,789,77Labour force9,689,739,789,77Persons in employment0,909,019,019,16Unemployed persons6,07,27,16,0Inactive population (15+)7,147,067,07,0Inactive population (15+)6,27,57,36,1Unemployment rate6,27,57,36,1Unemployment/population ratio54,053,658,358,2Employment/population (15+)18,3818,3318,3018,25Labour force8,308,198,388,55Persons in employment17,877,717,85Unemployed persons6,26,26,65Inactive population (15+)10,0710,419,29Unemployed persons6,26,26,65Inactive population (15+)10,0710,419,29Unemployed persons6,26,26,65Inactive population (15+)10,0710,419,29Unemployed persons6,26,26,65Inactive population (15+)10,0710,419,29Unemployed persons6,26,26,65Inactive population (15+)10,0710,419,29U	Inactive population (15+)	1 721	1 720	1 692	1 673
Implyment/population ratio  47,7  47,2  47,8  48,7    Unemployment rate  6.6  7,5  7,6  7,0    Working-age population (15+)  1682  1679  1678  6675    Labour force  968  973  978  9775    Persons in employment  909  901  907  918    Unemployed persons  660  72  71  60    Inactive population (15+)  714  766  70  70    Inactive population (15+)  7,7  7,8  58,8  58,2  58,2  58,2  58,2  58,2  58,2  58,2  58,2  58,2  58,3  58,2			%		
Unemployment rate  6,6  7,5  7,6  7,0    Working-age population (15+)  1682  1679  1678  1679    Labour force  968  973  978  978    Persons in employment  909  901  907  916    Unemployed persons  6,6  7,2  7,1  6,6    Inactive population (15+)  7,14  7,6  7,0  7,0    More population (15+)  7,14  7,6  7,0  7,0  7,0    Inactive population (15+)  7,14  7,06  7,0  7,0  7,0  7,0    Ketivity rate  5,7,6  5,8,0  5,8,3  5,8,	Activity rate	51,1	51,0	51,8	52,3
Morking-age population (15+)  1 682  1 679  1 678  1 679    Labour force  968  973  978  978    Persons in employment  909  901  907  918    Unemployed persons  60  72  71  660    Inactive population (15+)  714  706  700  701    Activity rate  57,6  58,0  58,3  58,2  58,3  58,2    Employment/population ratio  64,0  53,6  54,1  54,7	Employment/population ratio	47,7	47,2	47,8	48,7
Working-age population (15+)  1 678  1 679  1 678  1 679    Labour force  968  973  978  978    Persons in employment  909  901  907  918    Unemployde persons  600  72  71  66    Inactive population (15+)  714  706  700  701    Activity rate  57,6  58,0  58,3  58,2  58,2  58,3  58,2  58,3  58,2  58,3  58,2  58,3  58,2  58,3  58,2  58,3  58,2  58,3  58,2  58,3  58,3  58,2  58,3  58,2  58,3  58,3  58,3  58,3  58,2  58,3  58,2  58,3  58,2  58,3  58,5  58	Unemployment rate	6,6	7,5	7,6	7,0
Labour force  968  973  978  977    Persons in employment  909  901  907  918    Unemployed persons  60  72  71  60    Inactive population (15+)  714  706  700  701    Activity rate  57,6  58,0  58,3  58,2  58,3  58,2    Employment/population ratio  6,2  7,5  7,3  6,1  54,4  54,7  54,8  55,7  54,1  54,7  54,7  54,7			Men		
Persons in employment909901907918Unemployed persons60727160Inactive population (15+)714706700700KKtivity rate57.658.058.358.2Employment/population ratio64.053.654.154.7Unemployment rate6.27.57.36.1Working-age population (15+)61.831.8331.8301.829Labour force63.051.953.658.7Persons in employment771757771785Unemployed persons6.56.26.76.6Inactive population (15+)61.0071.01492972Attivity rate45.244.745.846.5Employment/population ratio45.244.745.845.5	Working-age population (15+)	1 682	1 679	1 678	1 679
Unemployed persons  60  72  71  60    Inactive population (15+)  714  706  700  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  702  701  <	Labour force	968	973	978	978
Inactive population (15+)  714  706  700  700    Kativity rate  N </td <td>Persons in employment</td> <td>909</td> <td>901</td> <td>907</td> <td>918</td>	Persons in employment	909	901	907	918
Kativity rate  %    Activity rate  57,6  58,0  58,3  58,5  58,3  58,3  58,5  58,3  58,5  58,3  58,5  58,3  58,5  58,3  58,5  58,3  58,5  58,5  58,3  58,5	Unemployed persons	60	72	71	60
Activity rate  58,0  58,3  58,2    Employment/population ratio  54,0  58,0  58,3  58,2    Employment/population ratio  54,0  53,6  54,1  54,7    Unemployment rate  6,2  7,5  7,3  6,1    Working-age population (15+)  1838  1833  1 830  1 823    Labour force  819  838  857    Persons in employment  6771  757  771  788    Unemployd persons  61007  1014  992  972    Activity rate  445,2  44,7  45,8  46,5    Employment/population ratio  442,0  41,3  42,1  43,1	Inactive population (15+)	714	706	700	701
And the state of the			%		
Unemployment rate  6,2  7,5  7,3  6,7    Unemployment rate	Activity rate	57,6	58,0	58,3	58,2
Working-age population (15+)  1838  1833  1830  1829    Labour force  830  819  838  857    Persons in employment  6771  771  788    Inactive population (15+)  61007  1014  992  972    Activity rate  45,2  44,7  45,8  46,5    Employment/population ratio  642,0  41,3  42,1  43,1	Employment/population ratio	54,0	53,6	54,1	54,7
Working-age population (15+)  1 838  1 833  1 830  1 839 <th< td=""><td>Unemployment rate</td><td>6,2</td><td>7,5</td><td>7,3</td><td>6,1</td></th<>	Unemployment rate	6,2	7,5	7,3	6,1
Labour force  830  819  838  857    Persons in employment  771  757  771  789    Unemployed persons  659  62  67  68    Inactive population (15+)  1007  1014  992  972    K    Activity rate  45,2  44,7  45,8  46,9    Employment/population ratio  42,0  41,3  42,1  43,1			Women		
Persons in employment  771  771  789    Unemployed persons  6100  62  67  68    Inactive population (15+)  1007  1014  992  972    Activity rate <b>%</b> 44,7  45,8  46,9    Employment/population ratio  642,0  41,3  42,1  43,1	Working-age population (15+)	1 838	1 833	1 830	1 829
Unemployed persons  65  62  67  68    Inactive population (15+)  1007  1014  992  972    Kativity rate  Kati	Labour force	830	819	838	857
Inactive population (15+)  1 007  1 014  992  972    w  %  %  46,9    Activity rate  44,7  45,8  46,9    Employment/population ratio  42,0  41,3  42,1  43,1	Persons in employment	771	757	771	789
Ketivity rate  45,2  44,7  45,8  46,2    Employment/population ratio  42,0  41,3  42,1  43,1	Unemployed persons	59	62	67	68
Activity rate  45,2  44,7  45,8  46,5    Employment/population ratio  42,0  41,3  42,1  43,1	Inactive population (15+)	1 007	1 014	992	972
Employment/population ratio 42,0 41,3 42,1 43,1			%		
	Activity rate	45,2	44,7	45,8	46,9
Unemployment rate 7,2 7,6 8,0 7,5	Employment/population ratio	42,0	41,3	42,1	43,1
	Unemployment rate	7,2	7,6	8,0	7,9

# 2 WORKING-AGE POPULATION, BY ACTIVITY, AGE AND SEX

	2019	2020	2021	2022	2019	2020	2021	2022
	2019	Labour fo		LULL	2015	Persons in e		2022
		Labourio		Tota			mpioyment	
Total	1 798	1 792	1 816	1 835	1 679	1 657	1 678	1 70
15 - 24	149	143	142	148	124	113	111	170
25 - 49	1 138	1 1 1 2 7	1 128	1 1 1 2 2	1 060	1 045	1 048	1 049
50 - 64	482	494	515	527	466	472	490	500
65 and over	(30)	(28)	(31)	(37)	(30)	(28)	(29)	(36
55 - 64	273	286	304	315	263	272	291	300
15 - 64	1 768	1 764	1 785	1 797	1 650	1 630	1 649	1 67
20 - 64	1 742	1 740	1 762	1 774	1 631	1 618	1 634	1 650
25 – 29	194	190	185	184	174	165	162	16
15 – 29	343	333	327	332	298	277	273	287
				Mer				
Total	968	973	978	978	909	901	907	918
15 – 24	89	89	85	87	76	72	69	74
25 – 49	601	601	599	592	563	558	557	557
50 - 64	261	265	274	275	252	253	261	263
65 and over	(17)	(18)	(21)	(24)	(17)	(17)	(20)	(23
55 - 64	156	160	165	167	152	154	158	160
15 – 64	951	955	957	954	891	883	887	895
20 - 64	933	942	944	939	878	876	878	883
25 – 29	102	103	101	99	95	92	89	93
15 – 29	191	191	186	186	171	164	159	167
				Wom	en			
Total	830	819	838	857	771	757	771	789
15 – 24	59	54	57	61	48	(41)	42	47
25 - 49	537	525	529	530	497	487	491	492
50 - 64	221	229	242	252	214	219	229	237
65 and over	((13))	((10))	((10))	((14))	((13))	((10))	((9))	((13)
55 - 64	116	125	139	148	111	119	133	140
15 – 64	818	809	828	843	758	747	762	776
20 - 64	808	798	818	835	752	743	756	773
25 – 29	92	87	84	85	79	(73)	73	72
15 – 29	152	141	141	146	126	114	115	119
		Unemployed	persons			Inactive p	opulation	
				Tota	I			
Total	119	135	138	128	1 721	1 720	1 692	1 673
15 - 24	(25)	(30)	(31)	(27)	299	297	289	275
25 - 49	77	82	80	73	188	181	164	154
50 - 64	((17))	(22)	(25)	(27)	402	387	362	346
65 and over				(=/)	831	855	877	898
55 - 64	. ((0))	((12))	. ((12))	. (15)				
55 - 64 15 - 64	((9))	((13))	((13))	(15)	326	313	295	283
	119	134	136	127	890	865	815	775
20 - 64	111	122	128	119	702	680	635	600
25 – 29	((21))	((25))	((23))	((19))	(43)	(41)	(40)	(36
15 – 29	(45)	55	54	45	342	338	329	31′
		70		Mer				=0.
Total	60	72	71	60	714	706	700	70'
15 - 24	((13))	((17))	((16))	((13))	141	137	137	13'
25 - 49	(37)	(44)	(42)	(35)	70	61	55	54
50 - 64	((9))	((12))	((12))	((12))	168	162	151	14
65 and over					335	346	356	368
55 - 64	((4))	((7))	((7))	((8))	132	127	122	120
		70	70	<b>CO</b>	270	360	344	333
15 – 64	59	72	70	60	379	300	544	553

25 – 29	((7))	((11))	((11))	((6))	((18))	((15))	((14))	((13))
15 – 29	((20))	(28)	(27)	(19)	159	152	150	144
				Wor	nen			
Total	59	62	67	68	1 007	1 014	992	972
15 – 24	((12))	((14))	((15))	((14))	158	160	152	144
25 - 49	(40)	(38)	(38)	(38)	118	121	108	99
50 - 64	((7))	((10))	((13))	(15)	234	225	210	198
65 and over	-				497	509	521	530
55 - 64	((5))	((7))	((6))	((8))	194	185	172	164
15 - 64	59	62	66	67	511	505	471	442
20 - 64	56	56	62	63	416	414	382	354
25 - 29	((14))	((14))	((12))	((13))	((24))	((26))	((26))	(23)
15 – 29	(25)	(28)	(27)	(27)	183	186	179	168

# 3 POPULATION ACTIVITY MEASURES, BY AGE AND SEX

		Activity	rates		Em	ployment/po	oulation rate	S		Unemployment rates		
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
						Tota	ıl					
Total	51,1	51,0	51,8	52,3	47,7	47,2	47,8	48,7	6,6	7,5	7,6	7,0
15 – 24	33,2	32,5	33,0	35,0	27,7	25,6	25,7	28,7	(16,6)	(21,1)	(21,9)	(18,0)
25 – 49	85,8	86,1	87,3	88,0	80,0	79,9	81,1	82,3	6,8	7,3	7,1	6,5
50 - 64	54,5	56,1	58,8	60,4	52,6	53,6	55,9	57,2	((3,4))	(4,4)	(4,9)	(5,2)
65 and over	(3,5)	(3,2)	(3,4)	(4,0)	(3,5)	(3,1)	(3,2)	(3,9)				
55 - 64	45,5	47,8	50,8	52,7	44,0	45,5	48,6	50,1	((3,4))	((4,7))	((4,2))	(4,8)
15 – 64	66,5	67,1	68,7	69,9	62,1	62,0	63,4	64,9	6,7	7,6	7,6	7,1
20 - 64	71,3	71,9	73,5	74,7	66,7	66,9	68,2	69,7	6,4	7,0	7,2	6,7
25 – 29	82,0	82,1	82,2	83,7	73,3	71,3	71,9	75,2	((10,6))	((13,2))	((12,5))	((10,2))
15 – 29	50,1	49,6	49,9	51,6	43,5	41,3	41,6	44,6	(13,2)	16,6	16,6	13,7
						Me	ı					
Total	57,6	58,0	58,3	58,2	54,0	53,6	54,1	54,7	6,2	7,5	7,3	6,1
15 – 24	38,8	39,2	38,4	40,0	33,2	31,9	31,1	34,1	((14,5))	((18,7))	((18,9))	((14,8))
25 – 49	89,5	90,8	91,5	91,6	84,0	84,2	85,1	86,2	(6,2)	(7,3)	(7,0)	(5,9)
50 - 64	60,8	62,0	64,4	65,1	58,7	59,3	61,5	62,2	((3,5))	((4,4))	((4,5))	((4,4))
65 and over	(4,9)	(5,0)	(5,6)	(6,0)	(4,9)	(4,8)	(5,3)	(6,0)				
55 - 64	54,2	55,7	57,4	58,3	52,6	53,4	55,1	55,7	((2,8))	((4,1))	((4,1))	((4,5))
15 – 64	71,5	72,6	73,6	74,1	67,0	67,2	68,2	69,5	6,3	7,5	7,3	6,3
20 - 64	76,5	78,0	78,9	79,2	72,0	72,5	73,4	74,5	5,9	7,0	6,9	6,0
25 – 29	84,7	87,3	88,0	88,6	78,9	78,0	78,1	83,2	((6,9))	((10,7))	((11,2))	((6,1))
15 – 29	54,6	55,7	55,3	56,5	48,9	47,7	47,1	50,7	((10,4))	(14,4)	(14,8)	(10,2)
						Wom	en					
Total	45,2	44,7	45,8	46,9	42,0	41,3	42,1	43,1	7,2	7,6	8,0	7,9
15 – 24	27,3	25,3	27,2	29,7	21,9	(19,0)	20,1	23,0	((19,8))	((25,0))	((26,4))	((22,7))
25 – 49	82,0	81,3	83,0	84,2	75,9	75,4	77,0	78,2	(7,5)	(7,3)	(7,2)	(7,2)
50 - 64	48,5	50,5	53,5	55,9	46,9	48,3	50,6	52,6	((3,4))	((4,4))	((5,3))	(6,0)
65 and over	((2,5))	((2,0))	((1,9))	((2,5))	((2,5))	((2,0))	((1,7))	((2,4))	-			
55 - 64	37,5	40,4	44,6	47,5	35,9	38,2	42,7	45,0	((4,2))	((5,4))	((4,3))	((5,2))
15 – 64	61,6	61,6	63,7	65,6	57,1	56,9	58,6	60,4	7,3	7,7	8,0	8,0
20 - 64	66,1	65,9	68,2	70,3	61,5	61,3	63,0	65,0	6,9	7,0	7,6	7,5
25 – 29	79,2	76,8	76,2	78,6	67,5	(64,3)	65,6	66,9	((14,8))	((16,2))	((13,9))	((15,0))
15 – 29	45,4	43,2	44,2	46,6	37,8	34,7	35,8	38,1	(16,7)	(19,6)	(19,0)	(18,2)

%

# 4 SHARE IN WORKING-AGE POPULATION, BY EDUCATIONAL ATTAINMENT AND SEX

				Labour	force					Inactive po	pulation	
	F	Persons in e	mployment			Unemploye	d persons			mactive po	pulation	
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
						Tot	al					
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Uncompleted basic school	((0,7))	((0,6))	((0,4))	((0,2))					11,8	10,3	9,0	8,5
Basic school (8 years)	7,0	6,4	6,5	6,0	((10,3))	((8,9))	((9,4))	((10,5))	29,4	29,6	28,9	28,5
Vocational schools	60,1	60,5	60,9	61,4	62,9	66,6	68,7	62,4	40,3	41,1	42,7	44,5
Grammar school	(3,2)	(2,8)	(3,0)	3,2	•	•	•	((4,4))	6,8	6,8	6,9	6,6
Higher education (professional and university study, master of science degree, doctorate)	29,1	29,7	29,1	29,1	((22,8))	((20,7))	((18,2))	(21,6)	11,7	12,1	12,5	12,0
						Wom	ien	·				
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Uncompleted basic school	((0,6))								14,9	13,0	11,5	11,1
Basic school (8 years)	7,4	6,4	6,1	5,8	(( 7,8))	((8,6))	((9,2))	((11,2))	32,4	32,4	31,4	30,9
Vocational schools	52,2	52,7	53,5	53,3	(58,1)	(60,7)	(64,9)	(59,4)	35,0	35,2	37,5	39,1
Grammar school	(3,5)	(3,7)	(3,7)	(4,0)					7,4	8,2	8,2	7,7
Higher education (professional and university study, master of science degree, doctorate)	36,2	36,8	36,5	36,8	((29,5))	((27,3))	((22,2))	((24,2))	10,3	11,2	11,5	11,2

%

# 5 PERSONS IN EMPLOYMENT, BY STATUS IN EMPLOYMENT AND SEX

												'000
		Tot	al		Men				Women			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
						To	tal					
Persons in employment	1 679	1 657	1 678	1 707	909	901	907	918	771	757	771	789
Persons in paid employment	1 472	1 452	1 458	1 477	772	759	757	762	700	692	701	714
Self-employed persons	187	190	194	211	128	134	139	147	60	56	54	64
Unpaid family workers	(20)	((16))	(26)	(20)	((9))	((7))	((11))	((9))	((11))	((9))	((15))	((11))
						9	6					
Persons in employment	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Persons in paid employment	87,7	87,6	86,9	86,5	85,0	84,3	83,4	83,1	90,8	91,5	90,9	90,5
Self-employed persons	11,1	11,5	11,5	12,3	14,0	14,9	15,3	16,0	7,7	7,4	7,1	8,1
Unpaid family workers	(1,2)	((0,9))	(1,6)	(1,1)	((1,0))	((0,8))	((1,2))	((1,0))	((1,5))	((1,2))	((2,0))	((1,3))

# 6 PERSONS IN EMPLOYMENT, ACCORDING TO NKD 2007 AND BY SEX

									'000
		Total			Men			Women	
	2020	2021	2022	2020	2021	2022	2020	2021	2022
Total <sup>1)</sup>	1 657	1 678	1 707	901	907	918	757	771	789
Agriculture, forestry and fishing	107	114	100	73	76	69	(34)	(38)	(31)
Mining and quarrying		•		•	•		•	•	•
Manufacturing	293	297	306	195	196	198	98	102	107
Electricity, gas, steam and air conditioning supply	((18))	((19))	((17))	((13))	((15))	((14))	•	•	
Water supply; sewerage, waste management and remediation activities	(31)	(33)	(30)	(25)	(26)	(24)	((6))	((7))	((6))
Construction	119	128	126	111	118	118	((8))	((10))	((8))
Wholesale and retail trade; repair of motor vehicles and motorcycles	233	235	235	105	103	100	129	132	135
Transportation and storage	105	108	109	88	88	91	((17))	((19))	(18)
Accommodation and food service activities	95	96	107	(43)	(47)	(53)	52	50	54
Information and communication	(56)	(47)	(57)	(38)	(32)	(39)	((18))	((15))	((19))
Financial and insurance activities	(39)	(36)	(33)	((11))	((12))	((8))	((27))	(24)	(25)
Real estate activities	((6))	((6))	((7))		•				
Professional, scientific and technical activities	71	70	72	(31)	(31)	(31)	(40)	(39)	(41)
Administrative and support service activities	(45)	(45)	48	(24)	(26)	(25)	((21))	((19))	(23)
Public administration and defence; compulsory social security	122	120	111	65	65	59	57	55	52
Education	122	117	135	(29)	(24)	(27)	93	94	107
Human health and social work activities	124	128	131	((21))	((18))	(22)	103	110	109
Arts, entertainment and recreation	(29)	(29)	(28)	((14))	((13))	((16))	((15))	((16))	((12))
Other service activities	(32)	(39)	(42)	((7))	((9))	((12))	(25)	(30)	(30)
Activities of households as employers; undifferentiated goods – and services – producing activities of households for own use				-	-	-			
Activities of extra-territorial organisations and bodies				-		-			
Unknown		((6))	((8))						

1) Due to unreliable estimates marked by ((.)), data do not add up to the total.

# 7 PERSONS IN EMPLOYMENT, ACCORDING TO NKD 2007 AND BY SEX

									%
		Total			Men			Women	
	2020	2021	2022	2020	2021	2022	2020	2021	2022
Total <sup>1)</sup>	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Agriculture, forestry and fishing	6,4	6,8	5,9	8,1	8,3	7,5	(4,5)	(4,9)	(3,9)
Mining and quarrying								•	
Manufacturing	17,7	17,7	17,9	21,6	21,6	21,6	13,0	13,2	13,6
Electricity, gas, steam and air conditioning supply	((1,1))	((1,1))	((1,0))	((1,5))	((1,7))	((1,5))			
Water supply; sewerage, waste management and remediation activities	(1,9)	(2,0)	(1,7)	(2,8)	(2,8)	(2,6)	((0,8))	((1,0))	((0,7))
Construction	7,2	7,6	7,4	12,3	13,0	12,9	((1,1))	((1,3))	((1,0))
Wholesale and retail trade; repair of motor vehicles and motorcycles	14,1	14,0	13,8	11,6	11,3	10,9	17,0	17,1	17,1
Transportation and storage	6,3	6,4	6,4	9,8	9,8	9,9	((2,2))	((2,5))	(2,3)
Accommodation and food service activities	5,7	5,8	6,3	(4,8)	(5,2)	(5,7)	6,8	6,4	6,9
Information and communication	(3,4)	(2,8)	(3,4)	(4,2)	(3,5)	(4,2)	((2,4))	((1,9))	((2,4))
Financial and insurance activities	(2,3)	(2,1)	(2,0)	((1,2))	((1,4))	((0,9))	((3,6))	(3,1)	(3,2)
Real estate activities	((0,3))	((0,3))	((0,4))					•	
Professional, scientific and technical activities	4,3	4,2	4,2	(3,5)	(3,4)	(3,4)	(5,3)	(5,1)	(5,2)
Administrative and support service activities	(2,7)	(2,7)	2,8	(2,6)	(2,9)	(2,7)	((2,8))	((2,4))	(2,9)
Public administration and defence; compulsory social security	7,4	7,1	6,5	7,2	7,1	6,4	7,5	7,1	6,6
Education	7,4	7,0	7,9	(3,2)	(2,6)	(3,0)	12,3	12,1	13,6
Human health and social work activities	7,5	7,6	7,7	((2,3))	((2,0))	(2,4)	13,6	14,3	13,9
Arts, entertainment and recreation	(1,7)	(1,8)	(1,7)	((1,5))	((1,4))	((1,7))	((2,0))	((2,1))	((1,6))
Other service activities	(1,9)	(2,3)	(2,5)	((0,8))	((1,0))	((1,3))	(3,3)	(3,9)	(3,8)
Activities of households as employers; undifferentiated goods – and services – producing activities of households for own use				-	-	-			
Activities of extraterritorial organisations and bodies				-		-			
Unknown		((0,3))	((0,5))						

1) Due to unreliable estimates marked by ((.)), data do not add up to the total.

# 8 PERSONS IN EMPLOYMENT, ACCORDING TO NKZ 10 MAJOR GROUPS OF OCCUPATIONS AND BY SEX

									'000'
		Total			Men			Women	
	2020	2021	2022	2020	2021	2022	2020	2021	2022
Total <sup>1)</sup>	1 657	1 678	1 707	901	907	918	757	771	789
Managers	84	78	73	60	55	57	((24))	(22)	((16)
Professionals	307	291	301	115	108	114	192	183	187
Technicians and associate professionals	239	241	228	135	129	115	104	112	113
Clerical support workers	160	163	166	(57)	57	54	103	106	112
Service and sales workers	275	300	329	91	104	121	184	196	208
Skilled agricultural, forestry and fishery workers	71	75	62	47	54	46	(24)	(22)	(16
Craft and related trades workers	203	209	216	187	191	200	((16))	((18))	((16)
Plant and machine operators and assemblers	171	173	175	130	133	132	(41)	41	43
Elementary occupations	128	131	137	63	65	64	65	66	73
Armed forces occupations	((14))	((11))	((12))	((13))	((9))	((10))			
Unknown	•		((8))				•	•	
					%				
Total <sup>1)</sup>	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Managers	5,1	4,6	4,3	6,7	6,1	6,2	((3,1))	(2,9)	((2,0)
Professionals	18,5	17,4	17,6	12,7	11,9	12,4	25,4	23,8	23,7
Technicians and associate professionals	14,4	14,4	13,4	15,0	14,2	12,5	13,7	14,6	14,3
Clerical support workers	9,7	9,7	9,7	(6,3)	6,3	5,9	13,7	13,8	14,3
Service and sales workers	16,6	17,9	19,3	10,1	11,4	13,2	24,3	25,5	26,4
Skilled agricultural, forestry and fishery workers	4,3	4,5	3,6	5,3	5,9	5,0	(3,2)	(2,8)	(2,1
Craft and related trades workers	12,3	12,5	12,7	20,8	21,0	21,8	((2,2))	((2,4))	((2,0)
Plant and machine operators and assemblers	10,3	10,3	10,2	14,5	14,6	14,4	(5,4)	5,3	5,4
Elementary occupations	7,7	7,8	8,0	7,0	7,2	7,0	8,6	8,6	9,2
Armed forces occupations	((0,9))	((0,6))	((0,7))	((1,5))	((1,0))	((1,1))			
Unknown			((0,5))						

1) Due to unreliable estimates marked by ((.)), data do not add up to the total.

# 9 AVERAGE HOURS ACTUALLY WORKED ON MAIN JOB DURING REFERENCE WEEK, ACCORDING TO NKD 2007 ACTIVITY SECTIONS AND BY SEX

2019	2020	2021 <sup>1)</sup>	2022
	Tot	al	
38,4	38,0	37,9	37,7
37,7	38,3	37,1	36,7
38,6	38,0	38,3	38,0
38,3	38,0	37,8	37,7
	Me	en	
39,0	38,5	38,5	38,3
39,4	39,7	38,6	37,4
38,9	38,3	38,6	38,4
39,1	38,5	38,4	38,4
	Won	nen	
37,6	37,4	37,3	37,0
34,4	35,2	33,9	35,1
37,7	37,4	37,6	37,1
37,7	37,5	37,4	37,1
	38,4 37,7 38,6 38,3 39,0 39,4 39,4 38,9 39,1 37,6 34,4 37,7	Tot    38,4  38,0    37,7  38,3    38,6  38,0    38,6  38,0    38,6  38,0    38,6  38,0    38,6  38,0    38,6  38,0    38,6  38,0    38,7  38,5    39,4  39,7    38,9  38,3    39,1  38,5    Won  37,6    37,6  37,4    34,4  35,2    37,7  37,4	Total    38,4  38,0  37,9    37,7  38,3  37,1    38,6  38,0  38,3    38,6  38,0  38,3    38,3  38,0  37,8    38,4  38,0  38,3    38,5  38,5  38,5    39,0  38,5  38,6    39,1  38,5  38,6    39,1  38,5  38,6    39,1  38,5  38,6    39,1  38,5  38,6    39,1  38,5  38,6    39,1  38,5  38,6    39,1  38,5  38,6    39,1  38,5  38,6    39,1  38,5  38,6    39,1  38,5  38,6    39,1  38,7  38,6    39,1  38,7  38,6    39,1  38,7  38,6    39,1  37,7  37,3    39,2  37,4  37,3    39,3  37,4

1) Since 2021, the new binding Regulation (EU) 2019/1700 and the related Commission Implementing Regulation (EU) 2019/2240, concerning the labour force domain, have entered into force. Their implementation caused changes in the methodology and breaks in time series of indicators of working hours, which makes the data from 2021 incomparable with data in previous periods.

## 10 UNEMPLOYED PERSONS, BY DURATION OF JOB SEARCH

		Total,	'000		Total, %					
	2019	2020	2021	2022	2019	2020	2021	2022		
Total <sup>1)</sup>	119	135	138	128	100,0	100,0	100,0	100,0		
Less than 1 month	((8))	((7))	((7))	((7))	((6,4))	((4,9))	((5,1))	((5,8))		
1 – 5 months	(45)	56	49	47	(37,6)	41,5	35,8	36,5		
6 – 11 months	((19))	(32)	(25)	(24)	((15,9))	(23,7)	(18,1)	(19,2)		
12 – 23 months	((19))	((16))	(27)	(18)	((15,9))	((12,2))	(19,5)	(14,0)		
24 months and longer	((17))	((17))	((22))	(19)	((13,9))	((12,6))	((15,7))	(14,9)		

1) Due to non-response of respondents, a sum of low-level data does not add up to the total.

### 11 REGISTERED UNEMPLOYED PERSONS, NOT ILO UNEMPLOYED

		Total,	'000		Total, %					
	2019	2020	2021	2022	2019	2020	2021	2022		
				Tot	al					
ILO unemployed persons <sup>1)</sup>	119	135	138	128	100,0	100,0	100,0	100,0		
Registered with CES	85	103	92	90	71,8	76,5	66,4	70,5		
Not registered with CES	(34)	(31)	(46)	(38)	(28,2)	(23,3)	(33,5)	(29,5)		
Registered unemployed persons	129	151	137	116	100,0	100,0	100,0	100,0		
Of which not ILO unemployed	43	48	45	26	33,6	31,7	32,9	22,5		
				Me	en					
ILO unemployed persons <sup>1)</sup>	60	72	71	60	100,0	100,0	100,0	100,0		
Registered with CES	(38)	(51)	(44)	(39)	(64,0)	(70,5)	(62,5)	(65,5)		
Not registered with CES	((21))	((21))	(26)	((21))	((36,0))	((29,1))	(37,2)	((34,5))		
Registered unemployed persons	57	67	61	49	100,0	100,0	100,0	100,0		
Of which not ILO unemployed	19	16	17	10	33,2	24,0	27,2	20,5		
				Won	nen					
ILO unemployed persons <sup>1)</sup>	59	62	67	68	100,0	100,0	100,0	100,0		
Registered with CES	(47)	(52)	(47)	51	(79,6)	(83,5)	(70,5)	74,9		
Not registered with CES	((12))	((10))	((20))	((17))	((20,4))	((16,5))	((29,5))	((25,1))		
Registered unemployed persons	72	84	76	67	100,0	100,0	100,0	100,0		
Of which not ILO unemployed	24	32	28	16	33,8	38,0	37,5	24,0		

1) Due to non-response of respondents, a sum of low-level data does not add up to the total.

### 12 COMPARISON BETWEEN REGISTERED AND ILO UNEMPLOYMENT, BY SEX

	Total				Men				Women			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
Unemployed persons registered with CES, '000	129	151	137	116	57	67	61	49	72	84	76	67
ILO unemployed persons, '000	119	135	138	128	60	72	71	60	59	62	67	68
ILO unemployment rate, %	6,6	7,5	7,6	7,0	6,2	7,5	7,3	6,1	7,2	7,6	8,0	7,9
Registered unemployment rate <sup>1)</sup> , %	7,6	8,9	8,0	6,7	6,5	7,6	6,8	5,4	8,9	10,4	9,3	8,1

1) Rates were calculated from final revised administrative data.

### **NOTES ON METHODOLOGY**

#### Data sources

The data presented here have been calculated from the data collected in the Labour Force Survey (LFS).

The Labour Force Survey is the most comprehensive official survey on the labour market characteristics in the Republic of Croatia that is conducted on the sample of randomly selected private households.

Data collected by the Labour Force Survey are related to socioeconomic and demographic characteristics of households, with the special emphasis on the status in activity according to the methodological standards of the International Labour Organisation (employed persons, unemployed persons and persons outside the labour force), activity

and occupation characteristics on the current, second and previous job, hours of work and working time, unemployment characteristics and educational attainment characteristics.

The Labour Force Survey is harmonised with the EU regulations and Eurostat's methodology prescribed for the EU-Labour Force Survey (EU-LFS). The Labour Force Survey is binding at the EU level and it is a reference data source that provides observing and comparability of labour market statistics at the international level.

#### Background

The Labour Force Survey was introduced in the statistical system of the Republic of Croatia in November 1996 as an annual survey. It was carried out in the same manner in June 1997. From 1998 to 2006 it was carried out by interviewing sampled households every month and data were published for each half-year period.

Starting from 2007, the Labour Force Survey has been carried out continuously on a weekly basis, that is, households are interviewed throughout the year. This means that every week is both a reference and an interviewing, i.e. implementation week. The Croatian Bureau of Statistics processes and publishes results in quarterly dynamics.

Since the beginning of 2016, the earlier method of data collection on printed questionnaires was replaced by interviewing methods using laptops and telephones.

Since the beginning of 2021, the new Regulation (EU) 2019/1700 has entered into force, which repealed the Council Regulation (EC) No. 577/98, which was, until then, the fundamental legal basis for conducting the Labour Force Survey.

The implementation of the new legal basis has brought some changes in the survey, starting with changes in the questionnaire design, the application of strictly prescribed and harmonised sequence of questions modification and elimination of the existing questions as well as adding new ones, to changes in the coverage and definitions of employment and unemployment.

In view of the mentioned changes, it was expected that the data released before and after the implementation of the new legal basis would not be consistent and that the changes would cause breaks in time series. The analyses that had been carried out showed that there were no breaks in time series and that the data for 2021 are comparable with data for previous periods. A brief review of the approach and methodology used in these analyses is available at: Methodological summary on the breaks in time series exercise\_HR. The exception are indicators on hours of work, where breaks in time series occurred, making those indicators incomparable to data for previous periods.

#### Data collection

The Labour Force Survey is a panel survey conducted on a weekly basis. Every sampled household is interviewed four times over a year-and-a-half period following the 2- (2) -2 rotation scheme. In other words, households are interviewed in two subsequent quarters, omitted from the sample for the next two quarters and then in the next two subsequent quarters they are interviewed again. This allows for timely monitoring of flows of persons at the labour market, in quarterly and annual dynamics. Every household selected into the sample receives an announcement letter from the Croatian Bureau of Statistics.

Interviews are carried out by applying the CAPI and CATI data collection methods.

The CAPI method (Computer-Assisted Personal Interviewing) includes interviewing on laptops "face to face". All households selected into the sample for the first time and households that either do not have a telephone/cell phone or do not want, for whatever reason, to be interviewed by telephone are interviewed in this way.

The CATI method (Computer-Assisted Telephone Interviewing) includes interviewing by telephone from the CATI Centre. All households that accepted in the first interviewing to be interviewed by telephone are interviewed in this way.

Accordingly, interviewers visit private households every week and conduct interviews at selected addresses. The interview lasts approximately 20 minutes. On the basis of the Act on Official Statistics (NN, No. 25/20), all information given by interviewed persons are confidential. The data collected are used for statistical purposes only.

Due to the COVID-19 pandemic, since 2020, the Labour Force Survey has been facing difficulties in the collection and processing of data.

Since the second quarter of 2020, the data collection has been adjusted to the new circumstances and "face-to-face" interviewing using laptops was partly replaced by telephone interviewing.

In announcement letters sent to the selected addresses, when a telephone number was not available in the telephone book, households were asked to provide their telephone number for the purpose of establishing contact and conducting the Labour Force Survey.

### **Basic concepts and definitions**

The Labour Force Survey measures the economic activity of the population in a short survey period of one week.

Reference period is every week in the whole year.

Target population includes all persons residing in private households who make the usual population of the Republic of Croatia.

A household is a small economic group of persons that is usually, although not always, a group of relatives. There are one-person and multi-person households, providing that the multi-person households consist of two or more persons who jointly reside in a housing unit or a part of it and share costs for food and basic household needs, or jointly contribute to the household income and/or mutually share all or a major part of household costs.

Working-age population is comprised of all persons aged 15 years and over.

Employed persons comprise persons aged 15 to 89 who, during the reference week, were in one of the following categories:

a) persons who during the reference week worked for at least one hour for pay in cash or in kind, including unpaid family workers

b) persons having a job or their own business who were **temporarily not at work** due to annual leave, working time arrangements, sick leave, maternity or paternity leave, or persons in job-related training.

Accordingly, a pensioner, a housewife, a student or a person not in formal employment can also be classified as employed persons.

### Employed persons are also:

- persons on parental leave, either receiving and/or being entitled to job-related income or benefits, or whose parental leave is expected to be three months or less

- seasonal workers **during the off-season**, where they continue to regularly perform tasks and duties for the job or business, excluding fulfilment of legal or administrative obligations

- persons temporarily not at work for other reasons where the expected duration of the absence is three months or less

- persons that produce agricultural goods whose main part is intended for sale or barter.

Regarding the status in employment, employed persons are classified either as persons in paid employment (employees), as self-employed persons or as unpaid family workers.

Persons in paid employment are those who work for an employer in the state or private sector and are paid for their work in cash or in kind.

Self-employed persons are employers who run an enterprise and employ one or more employees, as well as own-account workers who have no employees.

**Unpaid family workers** are those who are not in paid employment or self-employment, but work in an enterprise owned by a family member and do not receive a payment for their work. They can also be relatives who do not reside in the same household where the owner of the family business resides.

Unemployed persons are those between 15 and 74 years old, who meet the following three criteria:

a) not employed during the reference week

b) currently available for work, i.e. were available for paid employment or self-employment before the end of the two weeks following the reference week

c) actively seeking work, i.e. had either carried out activities in the four-week period ending with the reference week to seek paid employment or self-employment or found a job to start within a period of at most three months from the end of the reference week.

Active population (labour force) comprises employed and unemployed persons.

Inactive population (persons outside the labour force) comprise persons who are in one of the following categories:

a) aged below 15

b) aged 15 to 89 and neither employed nor unemployed during the reference week

c) aged above 89.

Activity rate represents the labour force as a percentage of the working-age population.

Employment rate represents employed persons as a percentage of working-age population.

Unemployment rate represents unemployed persons as a percentage of the labour force.

In certain tables, the sum total may not equal the sum of individual figures due to the rounding to thousands.

#### Changes in the Labour Force Survey since 2021

#### **Definition of employment**

Until 2020, employed persons included persons who turned 15 years of age and over, while since 2021 and onwards, they have included persons aged from 15 to 89 years.

**Persons temporarily not at work** but have a job to return to after the reason for their absence ceases to exist have been classified since 2021 as employed only if the total expected duration of their absence is three months or less, i.e. if during their absence they continue to receive income or benefit for their work. Until 2020, all persons temporarily absent from work who had a job to return to after the reason for their absence ceased to exist (irrespective of the reason for absence) were classified as employed persons.

Persons on parental leave have been classified since 2021 as employed only if they either receive and/or are entitled to job-related income or benefits, or if their parental leave is expected to last three months or less. Until 2020, all persons on parental leave were classified as employed persons.

Seasonal workers who did not work in the reference week (off-season period) have been classified since 2021 as employed persons if they continue to regularly perform tasks and duties for the job or business, excluding fulfilment of legal or administrative obligations. Until 2020, seasonal workers were classified as employed persons if they signed a contract/agreement with an employer to return to the same job at the beginning of the new season and/or if they continued to receive at least 50% or more of income or benefits during the off-season.

Persons that produce agricultural goods whose main part is intended for consumption in own household were until 2020 classified as employed persons, while they have been excluded from employment since 2021. Only if the main part of their agricultural production is intended for sale or barter are such persons classified as employed.

**Unpaid family workers** who perform work for members of their families have been classified since 2021 as employed persons, even if they do not reside in the same household with their relatives who own the trade/enterprise/agricultural holding, while until 2020 they were classified as employed only if they resided in a joint household with them.

#### **Definition of unemployment**

Until 2020, unemployed persons included persons who turned 15 years and over, while since 2021 and onwards, they have included persons aged from **15 to 74** years. Changes in the definition of unemployment and inactivity derive from the described changes in definitions of employment.

#### Questionnaire design

In order to improve the comparability of data across countries, a unique, strictly prescribed and harmonised sequence of questions has been applied for defining of major survey categories (employed persons, unemployed persons, persons outside of the labour force).

Further on, new questions have been introduced (e.g. questions related to migrations, economic and organisational dependence of self-employed persons, etc.). Some questions have been removed, e.g. questions related to the situation of the respondent a year prior to the interview and certain questions concerning informal education characteristics. Particular questions and answers offered to respondents have been changed in order to achieve standardisation of questions in the Labour Force Survey with those in other surveys in the social statistics domain.

In addition, certain blocks of questions have been modified more substantially, e.g. the block of questions related to working hours (contracted working hours have been monitored since 2021 along with usual and actually worked ones, etc.). Moreover, the location of certain blocks of questions in the questionnaire has also been changed.

#### Survey and administrative sources

Besides survey data on employment and unemployment, the Croatian Bureau of Statistics also publishes data on employment and unemployment according to administrative sources in the Republic of Croatia (including registered unemployment rate).

#### The following text provides methodological characteristics that cause mutual differences between data on employed persons.

**Source and coverage**: until 2016, data from administrative sources were based on monthly and annual statistical surveys (RAD-1 and RAD-1G forms) covering employed persons in legal entities of all types of ownership, government bodies and bodies of local and regional self-government units on the territory of the Republic of Croatia. The monthly survey covered 70% of all employed persons in each NKD 2007 division. Since 2016, data on employed persons in legal entities have been gathered by processing data from the "Report on Income Tax and Surtax as well as Contributions for Mandatory Insurances" (JOPPD form), in effect since 1 January 2014, and are not comparable to previously published monthly data. Data on employed persons in crafts and trades and free-lances as well as on employed insured persons – private farmers are taken over from the records on active pension insurance beneficiaries kept by the Croatian Institute for Pension Insurance. The Labour Force Survey results are estimated on the basis of a representative statistical sample of private households in the Republic of Croatia.

Reference period: administrative data on employed persons refer to the last day of the previous month, while the Labour Force Survey data are related to a reference week.

Observation period: administrative data are processed and published in monthly dynamics, while the Labour Force Survey results are related to a quarterly period.

**Definitions of employed persons**: administrative sources apply the formal definition of employment (persons who have signed the work contract with the employer for a fixed or unspecified period of time, irrespective of type of ownership and of whether they work full time or less than full time), while the Labour Force Survey shows employed persons as all persons who were, in the reference week for at least one hour, engaged in any work for payment in cash or in kind, as well as those who were absent from work during the reference week, but had a job to return to with the same employer after the reason for absence no longer existed.

Released data: administrative data on employed persons are published monthly in the First Release "Persons in Paid Employment, by Activities" and in the Statistics in Line on the web site of the Croatian Bureau of Statistics.

The First Release "Active Population in the Republic of Croatia" is the publications in which survey results on employed persons are published in quarterly dynamics. The RAD-1G annual survey data are also published at lower territorial levels, while the Labour Force Survey results are available at classification levels HR\_NUTS 2021 – HR\_NUTS 2.

# The Croatian Bureau of Statistics of the Republic of Croatia publishes data on unemployed persons taken over from administrative sources as well as those obtained through the Labour Force Survey. These data differ due to the following methodological characteristics.

**Source and coverage**: data on registered unemployment are obtained from the Register of Unemployed Persons kept by the Croatian Employment Service, while the Labour Force Survey results are collected by interviewing private households. Register contains data on all unemployed persons in the Republic of Croatia, while the Labour Force Survey results are estimated on the basis of the representative statistical sample.

Reference period: the Register data refer to the last day of each month, while the Labour Force Survey data are collected for each reference week.

Observation period: the Register data are taken over in monthly dynamics, while the Labour Force Survey results are processed and published for a quarterly period.

**Definitions of unemployed persons**: a registered unemployed person is a person aged from 15 to 65 years who is fully or partly capable to work, who is not employed, who is actively seeking job and who is available for work, and a person who meets the criteria as defined in provisions of the Labour Market Act and is registered with the Croatian Employment Service. According to the Labour Force Survey, an unemployed person is, in line with the international definition, either a person who did not perform any work for payment in cash or in kind in the reference week, and was actively seeking job in the course of four weeks before the interview and is prepared to start performing an offered job in the following two weeks, or a person who has found a job and will start working in the next three months.

**Released data**: data on registered unemployment and registered unemployment rate are published monthly in the First Release "Persons in Employment, by Activities" and in the Statistics in Line on the web site of the Croatian Bureau of Statistics. The First Release "Active Population in the Republic of Croatia" is a publication in which the comparison of unemployment rate obtained from the Labour Force Survey results and the one from administrative sources are published. At the same time, the Croatian Employment Service publishes administrative data on unemployment at lower territorial levels, while the Labour Force Survey data are available at classification levels HR\_NUTS 2021 – HR\_NUTS 2.

The data show that the unemployment rate based on the administrative data sources is higher than the Labour Force Survey rate. This is, on one hand, due to the fact that some categories of population formally classified as unemployed or inactive are nevertheless active, and on the other, administrative sources, besides actually unemployed persons, include a significant share of persons who are not classified as unemployed according to the definition of the Labour Force Survey, but are through this status entitled to some social or economic rights and benefits.

### **Classifications used**

a) The National Classification of Activities, 2007 version, comparable to the international Statistical Classification of Economic Activities in the European Community, NACE Rev. 2, was used in the coding of economic activities.

b) The National Classification of Occupations 2010, NKZ 10, comparable to the International Standard Classification of Occupations, ISCO-08, was used in the coding of occupations.

### Coverage and comparability

Data from the 1991 Census on Population, Households and Dwellings were used as a sample frame in the period from 1996 to 1999. In this period, the parts of Croatian territory with still ongoing war operations could not be included in the sample frame.

The database of the Croatian Electrical Utility (HEP) containing data on households spread on the whole Croatian territory was used as a sample frame for 2000 and 2001. Hence, since 2000 the sample and the Labour Force Survey results have related to the whole Republic of Croatia.

Starting from 2002, the sample frame based on the data from the Census of Population, Households and Dwellings in the Republic of Croatia in 2001 had been used for the Labour Force Survey, while since the beginning of 2014, the new sample frame based on the data from the Census of Population, Households and Dwellings in 2011 has been in use.

The Labour Force Survey methodology determines that the population residing in institutions (such as homes, convents, hospitals for long-term treatments, etc.) is not included in the sample frame.

#### Data revision

In order to achieve consistency and comparability of data for 2014 and onwards with already published data for previous years, the weighting revision has been done on the data for the period from 2007 to 2013, i.e. the data have been weighted according to the results of the Census of Population, Households and Dwellings in the Republic of Croatia in 2011 by using the calibration method. The data were published in the First Release "Active Population in the Republic of Croatia, 2007 – 2013" of 23 December 2014.

Due to the availability of new and more updated estimates of the total population of the Republic of Croatia, the Labour Force Survey data from the fourth quarter of 2015 to the fourth quarter of 2016 have been revised in order to make them in line with the demographic data of the Republic of Croatia. These data were published in the First Release of 11 April 2017, while the data for the remaining three quarters of 2015 are available in the Statistics in Line.

### Sample design

The Labour Force Survey is based on a random sample of private households. In the period from 1996 to 2006, the sample was separately defined for each period, that is, the interviews were not repeated, which means that the sample did not have a panel component. As from 2007, the panel component was introduced in the sample design and households were repeatedly interviewed four times. However, since the beginning of 2014, the repeated interviewing of previously selected households has been abandoned due to changes in the methodology of processing and implementation of the Labour Force Survey. Having in mind that the Census of Population, Households and Dwellings in 2011 has been used as a new sample frame, all households in the first quarter of 2014 were selected for the first time, but the interviewing dynamics remained the same.

Since 2014, the new sample design has been determined. The sample consists of four separately selected subsamples, rotation groups (panels). The sample design is twostage and stratified. The sample frame is stratified in seven strata at classification levels HR\_NUTS 2021 – HR\_NUTS 2 and further separated into urban and rural parts. The random sample of inhabited dwellings is selected in two stages and the sample design used is a two-stage cluster sampling. Before selecting the sample, the so-called segments are formed. Segments are territorial units formed by grouping of one or several neighbouring enumeration districts, which were established for the purpose of carrying out the Census of Population, Households and Dwellings in 2011.

In the first stage, the random sample of segments is chosen from each stratum and in the second one, the random sample of inhabited dwellings within the selected segments.

During the first two quarters of 2022, the sample size has been gradually enlarged by adding of 325 new households in each panel, i.e. a part of the sample interviewed for the first time, thereby completing the planned enlargement that started in 2021.

In an average quarter, the sample consists of 8 499 dwellings selected in the sample. All members of private households permanently living in these dwellings and accepting to participate in the Labour Force Survey were interviewed. In 2022, there were 37 590 persons aged 15 years and over interviewed in 17 908 households.

#### Weighting

The weighting procedure is carried out in order to calculate the estimate for the whole household population. This procedure provides for the compensation of the design and sample size impact as well as the impact of the non-response of households to the Labour Force Survey.

Since the beginning of 2014, the new process of weighting the collected data has been determined. In the first phase of the process, the calculation included the weights of the selection of units into the sample taken over from both sampling stages (segments and dwellings) and, in the second one, the weights due to the adjustment to the non-response of units included in the sample. In the last phase of weighting, the final weights calculated in the first two phases were calibrated at the population distribution estimates by age groups, sex and statistical spatial units at the NKPJS 2<sup>nd</sup> level according to the Census of Population, Households and Dwellings in 2011, which was updated with data on live births and deaths as well as on population migrations in the Republic of Croatia.

The calibration can be described as a process of reweighting aimed at balancing the population estimates by age groups, sex and at classification levels HR\_NUTS 2021 – HR\_NUTS 2 from the Labour Force Survey, so that these estimates of the survey data correspond to the totals of the entire population, that is, to the distribution of the population of the Republic of Croatia by age groups, sex and statistical spatial units at NKPJS 2<sup>nd</sup> level from the Census of Population, Households and Dwellings in 2011.

The overall non-response rate for 2022 was 41.5% and the refusal rate was 22.9%.

### Abbreviations

EC EU CES COVID-19 HR_NUTS 2021 HR_NUTS 2 ILO NKD 2007 NKPJS	European Community European Union Croatian Employment Service COrona VIrus Disease-19 National Classification of Statistical Regions 2021 2nd level statistical regions International Labour Organisation National Classification of Activities, 2007 version Nomenclature of Territorial Units for Statistics
HR_NUTS 2021	National Classification of Statistical Regions 2021
HR_NUTS 2	2nd level statistical regions
ILO	International Labour Organisation
NKD 2007	National Classification of Activities, 2007 version
NKPJS	Nomenclature of Territorial Units for Statistics
NKZ 10	National Classification of Occupations, 2010 version
NN	Narodne novine, official gazette of the Republic of Croatia
NUTS	common classification of territorial units for statistics
'000	thousand

### Symbols

-	no occurrence
	not zero, but extremely inaccurate estimation
(( ))	inaccurate estimation
()	less accurate estimation

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Persons responsible: Dubravka Rogić-Hadžalić, Director of Demographic and Social Statistics Directorate Lidija Brković, Director General

Prepared by:

Branka Špoljarić, Marina Munitić, Anita Pavlović, Marija Mišir, Ivana Maričić, Ivana Levačić and Sandra Truntić

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Information and user requests Phone: (+385 1) 48 06 138, 48 06 154 E-mail: stat.info@dzs.hr

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