

IMPLICATIONS FOR EMPLOYMENT IN THE PERIOD OF TWO CRISES: COMPARATIVE STUDY OF THE BALKANS AND THE EU

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Abstract: *One of the main problems the world is currently dealing with is unemployment. The characteristics of the labor market in the Republic of Serbia are long-term high unemployment rate, unfavorable qualification structure, high youth unemployment rate, regionally unequally distributed unemployment, and insufficient measures of active state employment policy. These characteristics point to complex issues that can be characterized as a type of labor market disparity. The problem is that the existing labor supply is finding it increasingly difficult to adapt to the changing demand for labor, which is associated with growing competition in the global market and accelerated technological change. The fact that Serbia's unemployment rates are higher than those of the EU's member states is particularly significant given that the Republic of Serbia's employment policy's primary objectives are the establishment of an effective, stable, and sustainable employment growth trend and the harmonization of employment policy*

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and labor market institutions with the EU acquis. Insufficient use of human resources of a country has a direct impact on its economy and national income, which directly has negative repercussions on the living standards of the population and increasing poverty.

Key words: *unemployment / labor market / youth unemployment / measures of active employment policy.*

INTRODUCTION

The relevance of studying the unemployment issue has only increased over the past few decades, and it is now a crucial political issue. According to studies and government data, the rate of unemployment worldwide has increased more recently than at any time since the Second World War (particularly after COVID 19) (Lai et al., 2021). Unemployment rates have varied significantly over the past century. Several intervention models to lower unemployment have shown to be challenging to regulate, and definitions of ease of independence cannot be accurately approximated (Ellonen, Nätti, 2015).

The unemployment rate in the Republic of Serbia, other countries in the region, and EU member states is the focus of this study. This essay aims to highlight how economic crises affect the labor market. This paper's goal is to evaluate the employment and unemployment model in 37 European countries by means of a t-test in order to determine the trend and explanation for the movement of these two variables in the previous period. The study specifically examines whether the effects of the crisis and unemployment on the labor market in Serbia differ from those in other countries, Western Balkan countries, and EU member states. Because the implications of the study's findings point to the prevention of long-term unemployment, the paper makes a practical and scientifically valuable contribution. The paper's findings and contribution also advise future policymakers to give the labor market special consideration while formulating their plans.

In addition to the introduction and conclusion, the paper is structured in four parts. An overview of the literature will be provided in the first section, and the applied methodologies will be discussed in the second. The third section of the article will be devoted to the presentation of data

and research findings, and the fourth section will provide a summary of the main constraints and issues raised by the study that was done.

LITERATURE REVIEW

The labor market is a place where labor supply and labor demand, in the form of employers, meet. It has some characteristics that other markets do not, most notably its multiplicity, or the existence of multiple markets for various types of work and various levels of worker qualification (Piore, 2018). There are many barriers to the movement of workers in this market.

Theoretically, the basic model of supply and demand in the market is based on the assumption that real wages adjust quickly in order to equalize supply and demand for labor (Petri, 2015). Thus, in the event that the supply of labor is lower than the demand for it, companies will compete for workers with the required qualifications and abilities, through an increase in real wages. Otherwise, if many workers compete for relatively few jobs, real wages tend to fall (Acemoglu, Autor, 2011). The labor market is characterized by numerous inequalities, which can be caused by gender, race, nationality and other factors and these inequalities have become even more pronounced during the Covid-19 pandemic. (Blundell, et al., 2020). In such conditions, the classical economic principle is no longer valid, according to which the marginal labor yield and the average wage are equalized in balance, because the wage may be higher than the equilibrium wage, because preferred social groups have higher wages than discriminated groups (Albanese, et al., 2015).

Job search is a process in which workers connect with relevant jobs. If all workers and all jobs were the same, so that all workers could do all jobs, unemployment would not be a problem. However, workers differ in their knowledge and skills, and jobs in their characteristics, so looking for a job can take months, even years (Caliendo, Kritikos, 2010). In every national economy there is always a certain number of people who are out of work. The reasons for that can be different, workers can leave their jobs on their own, some of the workers have become redundant and fired, for some there are currently no jobs, but the company will hire them when more favorable conditions are met and the like (Cahuc, Postel-Vinay, 2002).

Great importance is attached to unemployment, which is an important indicator of the state in which society finds itself. Unemployment is one of the biggest problems in modern economies, which is especially pronounced in post-socialist transition countries (Helemäe, Saar, 2011).

The growth of unemployment is practically an unavoidable companion of economic crises and is usually considered their most unfavorable expression (Lai, et. al., 2021). The result is not only a reduction in economic activity, i.e., the volume of business of the economy, but also an aspiration to maximally reduce all business costs, including labor costs, in order to avoid losses and eventually make a profit (Su, et al., 2022). Exports and economic activity decreased as global economic activity and consumption fell, and a decline in per capita income resulted in a decline in consumer demand for both domestically produced and imported items (Maliszewska, Mattoo, Van Der Mensbrugge, 2020). Such real sector trends unavoidably resulted in a decline in the demand for labor force, which is a quantity that is directly related to economic activity. The specific impact of the crisis on employment depends on the employment protection policy of each country (Gebel, Giesecke, 2016). The size and structure of the unemployment workforce in a country always expresses its economic and social processes that develop in it (Ellonen, Nätti, 2015). A society with an unemployment rate above 15%, and particularly above 20%, is already severely stratified and socially divided, with a strong sense of social injustice predominating. A significant percent of the population already has virtually no chance of realizing their right to work, or to secure the conditions necessary for their own survival (European Trading Foundation, 2019). In such circumstances, it is obvious that economic activity is declining and that the wrong economic policy has been implemented.

Such a high unemployment rate can easily cause a wave of social unrest and protests, then emigration waves, an increase in crime, suicides, even problems in the field of physical and mental health of socially vulnerable categories of the population (Scarpetta, et al., 2010). The study conducted by SU et al. (2021) highlights that the epidemic significantly raises unemployment rates in the economies, notably in Europe. When ASEAN governments implemented lockdowns or restricted movement, the labor market of ASEAN economies was impacted as economic operations ceased (Li, et al., 2021). In Japan,

older men who had regular jobs the year before had a statistically significant increase in their unemployment rate (Hoshi et al., 2022). Research by Gangopadhyay, Garrett (2020) showed that sharp reduction in US economic activity associated resulted in millions of Americans losing their jobs, at least temporarily. Young people's mental health and unemployment are significantly threatened by the COVID-19 pandemic and the related economic crises (Achdut, Refaeli, 2020).

METHODOLOGY

The employment rate and other trends in the labor market are empirically examined in this article. To evaluate the predetermined hypotheses and determine the research findings, a paired t test will be performed. We will begin by hypothesizing that the unemployment rate was lower before than after the crisis in the observed countries, and we will use the statistical method of the paired t test to compare the unemployment rate in Serbia, countries in the region, and EU countries, before and after the crisis in 2008 and 2020. Total of 37 countries were analyzed, of which 27 are members of the European Union, and 10 are not members of the European Union. The paper covers the period from 2007 to 2021 with special reference to crisis periods, the global economic crisis in 2008, and the pandemic in 2020, as years when economic activity at the level of a group of countries weakened. The data were collected from the OECD and EUROSTAT databases. Upon completion of the gathering process, data was analysed by using the Statistical Package for the Social Sciences (SPSS, version 23). Based on the data and the software used, the authors developed hypotheses:

H1: In comparison to other EU member states, the unemployment rate in the Republic of Serbia is greater and is an ongoing problem.

H2: Periods of crisis negatively affect the movement of the unemployment rate and the economy needs time to recover from the crisis.

DATA AND RESULTS

The previous 15 years in the Republic of Serbia have been characterized by the process of restructuring and privatization, the economic crisis, and changes connected to important institutions of the labor market.

Despite the labor market's recent improvement, it is clear that the fundamental indicators during the previous years were worse than the average for the European Union. It can be said that this is a result of: the process of restructuring the economy, a poor inherited situation, as well as institutional and structural limitations. Despite the Serbian economy's growth rates, it still did not have the positive effects on the structure of employment and the reduction of unemployment in Serbia (Paunović, Kosanović, 2011). Given the overdimensioning of the public sector, the existence of parallel labor markets, the high rate of informal and precarious employment, and the decreased participation of hired workers with indefinite contracts, the employment structure is negative. The subjective sense of job security in Serbia is also lower than when looking at the average of EU countries. Serbia recorded an increase in employment rate from 41.8% (in 2007) to 48.6% in (2021). Although the trend of the employment rate indicates growth, the situation on the labor market is still far from satisfactory. Despite the increase in employment and the decrease in total unemployment, Serbia still has one of the lowest employment rates in the EU, which can be seen by looking at the employment rates of Serbia and the employment rates of selected countries given in Table 1.

Table 1. *Employment rate of the Republic of Serbia, countries in the region and countries of the European Union for the period 2007 – 2021*

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Republic of Serbia	41.80	44.40	41.20	37.90	35.80	35.5	37.70	42.90	42.70	45.50	46.30	47.40	49.70	49.90	48.00
Albania	48.40	47.90	47.00	46.60	47.90	49.70	45.30	44.90	46.80	47.70	48.30	50.40	53.39	55.90	52.00
B&H	34.50	37.20	36.70	35.10	34.70	34.30	34.30	34.00	33.80	35.10	34.70	34.30	35.50	38.50	36.00
Montenegro	40.50	41.50	40.30	39.70	39.40	39.70	39.70	40.20	40.30	40.10	40.60	44.80	47.10	44.89	45.00
North Macedonia	35.40	36.50	37.60	37.80	38.10	38.00	39.60	40.20	41.00	41.90	42.70	44.80	47.00	47.20	44.00
Belgium	62.00	62.40	61.60	62.00	61.90	61.80	61.80	61.90	61.80	62.30	63.10	64.50	65.30	64.70	51.00
Bulgaria	49.00	50.80	49.40	47.90	46.60	46.60	46.90	48.00	49.10	49.30	51.90	52.40	54.20	52.70	53.00

Croatia	France	Spain	Greece	Ireland	Estonia	Germany	Denmark	Czechia
56.00	64.35	65.80	60.88	71.72	69.72	68.97	77.00	66.8
60.80	64.92	64.47	61.42	69.65	70.08	70.10	76.33	66.55
58.20	64.08	59.95	60.85	63.65	63.77	70.33	73.53	65.38
58.00	64.00	58.85	59.10	61.00	61.25	71.25	71.80	64.97
57.20	63.90	58.02	55.10	60.02	65.30	72.70	71.63	65.72
55.00	64.03	55.75	50.80	59.90	67.15	73.00	71.03	66.55
50.70	64.05	54.83	48.80	61.73	68.47	73.50	70.78	67.72
52.70	63.65	56.00	49.42	63.15	69.58	73.78	71.10	68.97
54.00	63.83	57.80	50.80	64.78	71.88	73.97	71.97	70.22
55.50	64.17	59.55	52.02	66.42	72.10	74.65	72.67	71.95
56.20	64.72	61.10	53.50	67.65	74.13	75.25	73.22	73.63
62.90	65.30	62.40	54.90	68.65	74.78	75.90	74.13	74.83
62.20	65.58	63.30	56.50	69.55	75.30	76.70	75.00	75.13
63.00	65.30	60.95	56.27	67.75	73.70	76.05	74.42	74.40
48.00	51.00	49.00	43.00		59.00	59.00	59.00	58.00

Austria	Netherla- nds	Malta	Hungary	Luxem- bourg	Lithuania	Latvia	Cyprus	Italy
69.88	73.45	45.00	57.02	64.15	65.00	68.13	61.90	58.58
70.83	74.92	45.60	56.40	63.42	64.40	68.22	62.10	58.65
70.33	74.63	46.00	55.05	65.20	59.88	60.35	60.30	57.35
70.78	73.92	46.60	54.95	65.20	57.55	58.50	60.50	56.75
71.10	74.17	47.60	55.42	64.63	60.20	60.83	60.30	56.80
71.42	74.35	48.80	56.67	65.85	62.02	62.98	59.50	56.63
71.40	73.58	50.20	58.08	65.72	63.73	65.05	56.20	55.52
71.08	73.13	51.30	61.77	66.63	65.65	66.30	53.10	55.70
71.10	74.15	51.60	63.95	66.15	67.25	68.10	53.60	56.27
71.55	74.83	52.60	66.53	65.58	69.38	68.72	54.40	57.25
72.20	75.85	53.50	68.17	66.28	70.38	70.10	54.90	57.98
73.03	77.20	54.90	69.25	67.10	72.40	71.80	57.40	58.52
73.53	78.15	55.90	70.13	67.95	72.97	72.30	58.70	59.05
72.40	77.80	55.90	69.70	67.25	71.63	71.63	58.00	58.08
57.00	64.00	60.00	57.00	59.00	57.00	56.00	59.00	44.00

Norway	Iceland	Sweden	Finland	Slovakia	Slovenia	Romania	Portugal	Poland
76.83	85.15	74.17	70.30	60.70	67.75	53.50	67.60	57.02
77.95	83.58	74.33	71.05	62.25	68.58	53.70	68.03	59.23
76.42	78.33	72.20	68.72	60.17	67.53	52.10	66.08	59.38
75.30	78.17	72.15	68.15	58.77	66.20	51.10	65.28	58.95
75.30	78.47	73.58	69.03	59.33	64.40	50.20	63.83	59.30
75.75	79.67	73.78	69.38	59.73	64.08	50.90	61.42	59.67
75.42	81.10	74.40	68.88	59.85	63.27	50.70	60.63	60.00
75.22	82.95	74.85	68.72	60.98	63.90	51.10	62.63	61.67
74.80	84.72	75.53	68.55	62.73	65.22	50.80	63.92	62.92
74.30	86.53	76.20	69.08	64.85	65.85	61.60	65.25	64.50
74.00	86.10	76.85	69.97	66.17	69.28	63.90	67.83	66.13
74.80	85.08	77.38	72.08	67.58	71.13	64.80	69.70	67.40
75.30	84.10	77.13	72.95	68.42	71.88	65.80	70.47	68.20
74.65	80.30	75.50	72.05	67.53	70.85	66.00	69.00	68.67
63.00	62.00	59.00	56.00	56.00	55.00	50.00	54.00	55.00

	Turkey	UK	Switzerland
	44.65	72.69	78.60
	44.85	72.62	79.50
	44.23	70.92	79.00
	46.27	70.42	77.33
	48.40	70.32	78.35
	48.90	70.97	78.47
	49.52	71.53	78.40
	49.52	72.88	78.75
	50.15	73.68	79.20
	50.65	74.39	79.60
	51.55	75.02	79.80
	51.98	75.63	80.10
	50.30	76.16	80.47
	47.50	75.59	79.92
	43.00	60.00	64.00

Source: OECD, <https://data.oecd.org/emp/employment-rate.htm>

Serbia recorded a reduction in its unemployment rate from 18.1% in 2007 to 11.0% in 2021. It should be noted that from 2008 to 2015, both the number of unemployed persons and the unemployment rate scaled significantly. In Serbia, the highest reported unemployment rate was 23.9% in 2012. Although there has been a good trend from 2015 to 2021, the unemployment rate is still quite high. Serbia is struggling with the issue of labor force unemployment, and in particular, the social and economic repercussions of unemployment, which are more pronounced during the current crisis. In addition to deindustrialization, which seriously disrupted the labor market and increased structural unemployment, crises are a contributing factor to unemployment. Only partially has unemployment been reduced by various employment-related initiatives and strategies. The persistently high unemployment rate indicates complicated issues that can be characterized as a form of disproportion both in terms of the regional distribution of qualifications and the qualification structure.

The existing supply of labor is increasingly difficult to adapt to the changing demand for labor, which is associated with growing competition in the global market and accelerated technological changes. Regardless of the fact that unemployment is not particularly high, the average length of job search is above the EU average (Veselinović, 2008). Serbia has a high rate of informal employment, thanks to which the unemployment rate has partially decreased. This category includes employees in an unregistered

company, employees in a registered company, but without a formal employment contract and without social and pension insurance, as well as unpaid helping household members (Jandrić, Molnar, 2016).

The unqualified, insufficiently educated and uncompetitive labor supply is partially the reason for unfavorable trends on the Serbian labor market. In established market economies, there is a positive relationship between education level and employment rate, meaning that those with higher levels of education are less likely to be unemployed. The probability of unemployment declining as education levels rise is thought to be the education's greatest advantage. Education not only contributes to the quality of the workforce, but also ensures better working conditions and higher earnings.

Table 2. *The unemployment rate of the Republic of Serbia, countries in the region and in the countries of the European Union for the period 2007 – 2020*

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Republic of Serbia	18.1	13.6	16.1	19.2	23.0	23.9	22.1	19.2	17.7	15.3	13.5	12.7	10.4	9.0	11.0
Albania	13.5	13.1	13.8	14.2	13.9	13.4	15.6	17.5	17.1	15.2	13.9	12.0	12.0	11.5	11.8
BiH	28.9	23.3	24	27.2	27.6	28.1	27.5	27.5	27.7	25.1	25.6	18.4	15.7	16.6	15.2
Montenegro	19.4	17.2	19.1	19.7	19.7	19.7	19.5	18.0	17.5	17.7	16.1	15.2	15.2	18.5	18.5
North Macedonia	29.3	33.8	32.2	32	31.4	31	29	28	26.1	23.7	22.4	20.8	17.3	16.4	16.2

France	Spain	Greece	Ireland	Estonia	Germany	Denmark	Czechia	Bulgaria	Belgium
3.0	1.1	2.2	1.7	2.9	4.8	0.5	2.1	3.7	3.3
7.1	11.3	7.8	6.8	5.5	7.5	3.7	4.4	5.6	7.0
8.7	17.9	9.6	12.6	13.5	7.8	6.4	6.7	6.8	7.9
8.9	19.9	12.7	14.6	16.7	7.0	7.7	7.3	10.3	8.3
8.8	21.4	17.9	15.4	12.3	5.8	7.8	6.7	11.3	7.2
9.4	24.8	24.5	15.5	10.0	5.4	7.8	7.0	12.3	7.6
9.9	26.1	27.5	13.8	8.6	5.2	7.4	7.0	13.0	8.4
9.9	24.5	26.5	11.9	7.4	5.0	6.9	6.1	11.4	8.5
10.1	22.1	24.9	10.0	6.2	4.6	6.3	5.1	9.2	8.5
9.8	19.6	23.6	8.4	6.8	4.1	6.0	4.0	7.6	7.8
9.1	17.2	21.5	6.7	5.8	3.8	5.8	2.9	6.2	7.1
8.7	15.3	19.3	5.8	5.4	3.4	5.1	2.2	5.2	6.0
8.2	14.1	17.3	5.0	4.4	3.1	5.0	2.0	4.2	5.4
7.8	15.5	16.3	5.7	6.8	3.8	5.6	2.6	5.1	5.6
8.1	14.7	14.8	6.6	6.3	3.5	4.8	2.9	5.4	6.4

Poland	Austria	Netherlands	Malta	Hungary	Luxembourg	Lithuania	Latvia	Cyprus	Italy	Croatia
4.6	1.2	1.3	2.8	3.3	1.3	1.5	1.9	0.8	2.2	5.0
7.1	4.1	3.7	6.0	7.8	5.1	5.8	7.7	3.7	6.7	8.6
8.2	5.3	4.4	6.9	10.0	5.1	13.8	17.5	5.4	7.8	9.2
9.7	4.8	5.0	6.9	11.2	4.4	17.8	19.5	6.3	8.4	11.7
9.7	4.6	5.0	6.4	11.0	4.9	15.4	16.2	7.9	8.4	13.7
10.1	4.9	5.8	6.2	11.0	5.1	13.4	15.0	11.9	10.7	16.0
10.3	5.4	7.3	6.1	10.2	5.9	11.8	11.9	15.9	12.2	17.3
9.0	5.6	7.4	5.7	7.7	5.9	10.7	10.8	16.1	12.7	17.3
7.5	5.7	6.9	5.4	6.8	6.7	9.1	9.9	15.0	11.9	16.2
6.2	6.0	6.0	4.7	5.1	6.3	7.9	9.6	13.0	11.7	13.1
4.9	5.5	4.9	4.0	4.2	5.5	7.1	8.7	11.1	11.2	11.2
3.9	4.9	3.8	3.7	3.7	5.6	6.2	7.4	8.4	10.6	8.5
3.3	4.5	3.4	3.6	3.4	5.6	6.3	6.3	7.1	10.0	6.6
3.2	5.4	3.8	4.3	4.3	6.8	8.5	8.1	7.6	9.2	7.5
3.4	6.3	4.0	3.5	4.1	5.2	7.9	7.6	6.1	9.8	8.7

Turkey	UK	Switzerland	Norway	Iceland	Sweden	Finland	Slovakia	Slovenia	Romania	Portugal
2.1	1.6	-	0.5	-	0.9	1.7	7.4	1.8	3.6	3.2
9.8	5.6	-	2.5	2.9	6.2	6.4	9.5	4.4	5.8	7.7
12.6	7.6	:	3.1	7.2	8.4	8.2	12.0	5.9	6.9	9.6
10.7	7.8	4.8	3.5	7.6	8.6	8.4	14.4	7.3	7.0	11.0
8.8	8.1	4.4	3.2	7.0	7.8	7.8	13.6	8.2	7.2	12.9
8.2	7.9	4.5	3.1	6.0	8.0	7.7	14.0	8.9	6.8	15.8
8.8	7.5	4.8	3.4	5.4	8.1	8.2	14.2	10.1	7.1	16.4
9.9	6.1	4.9	3.5	4.9	8.0	8.7	13.2	9.7	6.8	14.1
10.3	5.3	4.8	4.3	4.0	7.4	9.4	11.5	9.0	6.8	12.6
10.9	4.8	5.0	4.7	3.0	7.0	8.8	9.7	8.0	5.9	11.2
10.9	4.3	4.8	4.2	2.7	6.7	8.6	8.1	6.6	4.9	9.0
10.9	4.0	4.7	3.8	2.7	6.4	7.4	6.5	5.1	4.2	7.1
13.7	3.8	4.4	3.7	3.5	6.8	6.7	5.8	4.5	3.9	6.5
13.2	4.0	4.8	4.4	5.5	8.3	7.8	6.7	5.0	5.0	6.9
13.4	4.5	5.3	5.0	5.4	8.7	7.5	6.7	4.4	5.2	6.6

Source: Eurostat, <https://ec.europa.eu/eurostat/databrowser/view/tps00203/default/table?lang=en>

When comparing the unemployment rates of Serbia and the neighboring countries, it is clear that Serbia's rate is higher for the observed period than those of Albania, Croatia, Slovenia, and Turkey, though this trend changed in relation to Albania and Turkey during the years 2019 and 2020. Comparing Serbia to Montenegro, Macedonia, and Bosnia and Herzegovina, the unemployment rate in Serbia is consistently lower. When comparing the jobless rates of EU members to Serbia, it is clear that all nations, with the exception of Greece and Spain, consistently record lower unemployment rates than Serbia. Unemployment in the observed countries, and especially in Serbia, has a long-term character, because unemployed persons remain in that status for a long time. Problems in the field of unemployment in Serbia are long-standing, they last as long as the process of transition and change itself, but they are more pronounced in periods of crisis when they are deeper and more dangerous. This was also shown in this pandemic when Serbia had to come up with strong measures to support the economy in order to preserve employment (The World Bank, 2020).

By examining the statistics provided above, it is clear that the consequences of the global economic and financial crisis have contributed to an increase in the jobless rate in the majority of the examined nations since 2008. After 2015, the first wave of the Covid-19 pandemic threatens to seriously disrupt the job market once more after years of projected recovery from the global financial crisis. The epidemic has exposed all of the economy's flaws in transition nations as well as in the EU, causing major issues not just with health systems but also with the latter (The World Bank, 2020). Business opportunity and the average decline in income differed significantly for different sectors. Those sectors that depend on personal contact, such as passenger transport, work in travel agencies, personal services and education, are most affected by the pandemic (Labor Force Survey, 2021).

Although the pandemic was expected to cause serious disruptions in the labor market of Serbia, employment has shown strong resilience, supported both by the longer-term trend of positive economic growth, but also primarily by the Government's financial measures during 2020 and 2021. The pandemic has had the greatest impact on changes in informal employment. In the absence of layoffs of formal employees, in order not to be deprived of subsidies, companies mostly resorted to (short-term) wage

reductions and layoffs of informal workers. Consequently, formal employment has largely been preserved, even in sectors that have been significantly affected. Although the average wage at the economy level did not decline, in the previous period there was a downward adjustment in the affected sectors.

According to the findings in tables 3 and 5, the average unemployment rate in 2007—prior to the financial crisis—was 5.0973 percent, and in 2008, it was 8.035 percent. We infer indirectly that the unemployment rate increased in the year of the great financial crisis based on the average value of the rate. Analysis of the average value for 2019 and 2020 also show a rise in unemployment rates in the observed nations as a result of the covid-19 virus epidemic, however this growth is somewhat slower.

Table 3. *The average value of the unemployment rate in Serbia, countries in the region and EU countries before and after the 2008 crisis*

	Arithmetic mean	Number of countries
2007	5.0973	37
2008	8.0351	37

Source: Authors

Table 4. *The impact of the 2008 crisis on the unemployment rate in Serbia, countries in the region and EU countries*

	T	Df	Sig (2-tailed)
2007 - 2008	-6.115	36	0.000

Source: Authors

Table 5. *The average value of the unemployment rate in Serbia, countries in the region and EU countries before and after the 2008 crisis*

	Arithmetic mean	No.countries
2019	7.1000	37
2020	7.7459	37

Source: Authors

Table 6. *The impact of the 2020 crisis on the unemployment rate in Serbia, countries in the region and EU countries*

	T	Df	Sig (2-tailed)
2019 - 2020	-3.933	36	0.000

Source: Authors

Based on the conducted t test, bearing in mind the obtained significance, and based on the analysis of the observed sample, we conclude that there is a difference between the values of unemployment rates before and after the crisis years. The t test proved the initial hypothesis that the unemployment rate was lower in the years before the crisis in 2008 and 2020, which is confirmed by the results given in tables 4 and 6. No sooner had countries' economies recovered from the great financial crisis of 2008, and began to achieve higher economic growth rates and lower unemployment rates, than the world was hit by a pandemic. The real effects of the pandemic on unemployment rates and the economies of the observed countries are expected only in the following years. The current analysis can give the false impression that there was a decrease in unemployment at the end of 2020, when in fact there was an increase in the inactive, because individuals who, due to the application of anti-epidemic measures, could not look for work or were not able to start working, they are not considered unemployed, although inactive, according to the International Labor Organization's theory (Aleksić, Arandarenko, Ognjanov, 2020).

DISCUSSIONS

The findings of the study conducted support efforts to lower the unemployment rate in the Republic of Serbia. It is noticeable that comparing the real economic situation in Serbia, the official data on the percentage of unemployed do not correspond to the real situation or subjective feeling. The Republic Institute of Statistics in Serbia counts several categories as formally employed. This figure does not include only those citizens who are employed for a fixed or indefinite period of time, but also includes employers, and people engaged in agriculture, as well as those who, during a certain period, performed some work or engaged in

some business activity. The statistics also include people who performed occasional or temporary jobs, but outside of that period they are objectively unemployed. In addition, people who leave the country are also removed from the records of the National Employment Service, which reduces unemployment. Because of this, Serbia had a unique situation in 2020 where the proportion of employed and jobless individuals is decreasing. Many economists think that the number of unemployed people in Serbia is significantly larger than what is indicated if true indicators are observed. In addition, based on the Labor Force Survey itself, it is clear that the drop in unemployment is more a consequence of the drop in the activity rate. The number of people working and the number of those looking for work has decreased. The distinction between unemployment and inactivity is that the previous term involves seeking job but failing to do so, whilst the second refers to a lack of employment search effort. And yet, during the examined period, Serbia's unemployment rate was greater than that of the EU's member nations. The actual number of unemployed people in Serbia is much larger than what is depicted. Additionally, it is evident from the Labor Force Survey that the decline in unemployment is mostly a result of the decline in the activity rate. Both the number of individuals employed and the number of job seekers have fallen.

According to the study's findings, Serbia has a higher unemployment rate than other EU member states. This can be dangerous when a country is preparing to join the EU because it may result in a significant exodus of people who are working age, with young people being particularly vulnerable to this phenomenon (Vutsova & Arabadzhieva, 2022). Another finding of the study indicated that the unemployment rate in the countries under study was greater following the 2008 global financial crisis and is currently higher following the epidemic. This will have a substantial impact on the future labor market because, in accordance with reports from the World Bank, the pandemic has already undone Serbia's labor market gains in the Western Balkan countries (The World Bank, 2020). The government launched initiatives to encourage businesses to keep or add jobs in the months following of the epidemic. Further lowering the high unemployment rate in Serbia's labor market would necessitate the planning and implementation of active employment policy programs in the future with a view to resolving the issue in the long term; programs that would respect individual differences and customs, thinking and

behavior patterns, and interpersonal connections and cooperation while taking into account the specificities of each individual. People's knowledge and skills, their individual values, culture, education, creativity and innovation should represent key factors for strengthening the economy and economic development of Serbia, but also the quality of life, increasing the subjective well-being of individuals.

CONCLUSION

Despite a recent rebound, Serbia's basic labor market indicators—activity rate, employment rate, and unemployment rate—were worse from 2007 to 2021 than the average for European countries. The Serbian labor market has the following general characteristics: a high unemployment rate, especially among young people, a mismatch between supply and demand for labor, a high participation of the long-term unemployed, the needs of companies and the educational backgrounds and capabilities of the jobless are not aligned, a large difference between the unemployed by region, very scarce and underdeveloped mechanisms of systemic support for employment and additional training, unregulated labor market, high share of the informal economy, corruption, nepotism and clientelism during employment, low labor force mobility.

The quality of employment in Serbia is poorer than in Europe, and the unemployment rate is high, in addition to the fact that the employment rate is still low when compared to conditions in Europe. The rate of informal employment is high, which is negative given that informal workers are excluded from a number of crucial characteristics of job security in the labor market: chances of finding adequate employment, protection against dismissal, protection related to safety and health at work, chances for advancement and knowledge development and skill, appropriate level of earnings and participation in social dialogue.

High unemployment is a multidimensional problem, indicates a deep disorder in society and remains a threat to society (Nassif Pires et al., 2021). Planning, design and redesign of active employment policy measures should take place in accordance with the structure of members of the vulnerable groups they target and in accordance with assessments of the net effectiveness of those measures, in order to ensure that the right

people are included in the right measures. Encouragement of entrepreneurship is one strategy to address the issue of unemployment in Serbia because launching small, family-run enterprises has become popular across Europe. But in order to do so, a suitable economic environment must first be established through a combination of different social and economic policies, and the legal framework must be brought into compliance with international norms to encourage foreign investment.

The design of the model and the t-test represent the biggest limitation of the research in this paper. Although a large data set is present, it is necessary to include in the future more detailed estimation models, possible cluster analysis or approximation analysis. Nevertheless, the test revealed high discrepancies in the level of (un)employment rates in Serbia and other European countries. As suggested by the author Dimitrijević et al., (2022) in the future, great attention can be paid to industries that can increase employment and influence economic development individually by country.

REFERENCES

1. Albanese, M., Navarra, C., & Tortia, E. C. (2015). Employer moral hazard and wage rigidity. The case of worker owned and investor-owned firms. *International review of Law and Economics*, 43, 227-237.
2. Aleksić, D., Arandarenko, M., Ognjanov, G., (2020), Analiza Nacionalne strategije zapošljavanja za period 2011-2020. Godine, Beograd: Vlada Republike Srbije, Tim za socijalno uključivanje i smanjenje siromaštva, Znanjem do posla, Fondacija za razvoj ekonomske nauke, str. 109-129., dostupno na: http://socijalnoukljucivanje.gov.rs/wpcontent/uploads/2021/02/Ex_post_analiza_Nacionalne_strategije_zaposljavanja_za_period_2011-2020.pdf (17. 04. 2021.)
3. Acemoglu, D., & Autor, D. (2011). Skills, tasks and technologies: Implications for employment and earnings. In *Handbook of labor economics*. Elsevier
4. Achdut, N., & Refaeli, T. (2020). Unemployment and psychological distress among young people during the COVID-19 pandemic: Psychological resources and risk factors. *International journal of*

- environmental research and public health*, 17(19), 7163. DOI: 10.3390/ijerph17197163
5. Blundell, R., Costa Dias, M., Joyce, R., & Xu, X. (2020). COVID-19 and Inequalities. *Fiscal studies*, 41(2), 291-319. DOI: 10.1111/1475-5890.12232
 6. Dimitrijević, M., Ristić, L., & Bošković, N. (2022). Rural tourism as a driver of the economic and rural development in the Republic of Serbia. *Hotel and Tourism Management*, 10(1), 79-90. <https://doi.org/10.5937/menhottur2201079D>
 7. Gangopadhyaya, Anuj and Garrett, A. Bowen, Unemployment, Health Insurance, and the COVID-19 Recession (April 1, 2020). Available at SSR DOI: 10.2139/ssrn.3568489
 8. Gebel, M., & Giesecke, J. (2016). Does deregulation help? The impact of employment protection reforms on youths' unemployment and temporary employment risks in Europe. *European Sociological Review*, 32(4), 486-500. DOI: 10.1093/esr/jcw022
 9. Ellonen, N., & Nätti, J. (2015). Job insecurity and the unemployment rate: Micro-and macro-level predictors of perceived job insecurity among Finnish employees 1984-2008. *Economic and Industrial Democracy*, 36(1), 51-71. DOI: 10.1177/0143831X13495720
 10. European Trading Foundation, (2019), Skills mismatch measurement in ETF partner countries, Turin: Kriechel, B., Vetter, T., for European Trading Foundation
 11. Eurostat, available at the following web address: <https://ec.europa.eu/eurostat/databrowser/view/tps00203/default/table?lang=en>
 12. Su, C., Ke Dai, Sana U., Zubaria A. (2022). COVID-19 pandemic and unemployment dynamics in European economies, *Economic Research-Ekonomska Istraživanja*, 35:1, 1752-1764, DOI: 10.1080/1331677X.2021.1912627
 13. Jandrić, M., Molnar D., (2016), *Kvalitet zaposlenosti i tržišta rada u Srbiji*, Belgrade: Friedrich-Ebert-Stifung, p. 13.
 14. Lai, H., Khan, Y. A., Thaljaoui, A., Chammam, W., & Abbas, S. Z. (2021). COVID-19 pandemic and unemployment rate: A hybrid unemployment rate prediction approach for developed and developing countries of Asia. *Soft Computing*, 1-16.

15. Li, J., Lim, B., Pazim, K. H., & Furuoka, F. (2021). COVID-19 pandemic's impact on the labour market in ASEAN countries. *AEI INSIGHTS*, 7(1), 59-76
16. Maliszewska, M., Mattoo, A., & Van Der Mensbrugge, D. (2020). The potential impact of COVID-19 on GDP and trade: A preliminary assessment. *World Bank policy research working paper*, (9211).
17. Marjanović, G., Mihajlović, V., (2017), Komparativna analiza osnovnih indikatora na tržištu rada u Republici Srbiji – regionalni aspekt. U: Veselinović, P., Makojević, N., Slavković, M., Uticaj globalizacije na poslovno upravljanje i ekonomski razvoj Šumadije i Pomoravlja, Kragujevac: Ekonomski fakultet, pp. 147-157.
18. Morel, N., Palier, B., & Palme, J. (2011). Social investment: a paradigm in search of a new economic model and political mobilisation. In *Towards a social investment welfare state?* (pp. 353-376). Policy Press. DOI: 10.51952/9781847429261.ch014
19. Nassif Pires, L., Carvalho, L. B. D., & Lederman Rawet, E. (2021). Multi-dimensional inequality and COVID-19 in Brazil. *Investigación económica*, 80(315), 33-58.
20. OECD, dostupno na: <https://data.oecd.org/emp/employment-rate.htm>
21. Paunović, S., Kosanović, R., (2011), The problem of unemployment in the Republic of Serbia with specific regard to informal employment, *Journal for Labour and Social Affairs in Eastern Europe*, 14 (4) South-east Europe: between crises and EU accession, dostupno na: <https://www.jstor.org/stable/43293439?seq=1>
22. Petri, F. (2015). Neglected implications of neoclassical capital-labour substitution for investment theory: another criticism of Say's Law. *Review of Political Economy*, 27(3), 308-340. DOI: doi.org/10.1080/09538259.2015.1067367
23. Piore, M. J. (2018). The dual labor market: theory and implications. In *Social stratification* Routledge.
24. Republički zavod za statistiku, (2020, 2021), Anketa o radnoj snazi
25. Scarpetta, S., Sonnet, A., & Manfredi, T. (2010). Rising youth unemployment during the crisis: how to prevent negative long-term consequences on a generation? DOI: 10.1787/1815199X
26. The World bank, Western Balkans Regular Economic Report, za više godina, dostupni na: www.worldbank.org/eca/wbrer

27. Helemäe, J., & Saar, E. (2011). An introduction to post-socialist transition in Estonia. *Towards a Normal Stratification Order. Actual and Perceived Social Stratification in Post-Socialist Estonia*, Frankfurt: Peter Lang, 13-32.
28. Hoshi, K., Kasahara, H., Makioka, R., Suzuki, M., & Tanaka, S. (2022). The heterogeneous effects of Covid-19 on labor markets: People's movement and non-pharmaceutical interventions. *Journal of the Japanese and International Economies*, 63, 101170. DOI: 10.1016/j.jjie.2021.101170
29. Caliendo, M., & Kritikos, A. S. (2010). Start-ups by the unemployed: characteristics, survival and direct employment effects. *Small Business Economics*, 35(1), 71-92.
30. Cahuc, P., & Postel-Vinay, F. (2002). Temporary jobs, employment protection and labor market performance. *Labour economics*, 9(1), 63-91. DOI: 10.1016/S0927-5371(01)00051-3
31. Veselinovic, P., (2008), Stanje reformi i prioriteti ekonomske politike u Srbiji, *Ekonomski horizonti*, br. 10, Kragujevac: p. 61. DOI: 10.5937/ekonhor1402141V
32. Vutsova, A., & Arabadzhieva, M. (2022). Three Eastern cases of youth unemployment trends--Bulgaria, Romania, Serbia. *Economic Studies*, 31(3).

IMPLIKACIJE ZA ZAPOŠLJAVANJE U PERIODU DVE KRIZE: KOMPATIVNA PROUČAVANJA BALKANA I EU

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Sažetak: *Nezaposlenost je jedan od najvećih izazova sa kojima se svet suočava. Dugoročna visoka stopa nezaposlenosti, nepovoljna kvalifikaciona struktura, visoka stopa nezaposlenosti mladih,*

regionalno neravnomerno raspoređena nezaposlenost, nedovoljne mere aktivne državne politike zapošljavanja, karakteristike su tržišta rada u Republici Srbiji koje ukazuju na složene probleme koji se mogu okarakterisati kao svojevrsni disparitet tržišta rada. Problem je što se postojeća ponuda radne snage sve teže prilagođava promenljivoj tražnji za radnom snagom, koja je povezana sa rastućom konkurencijom na globalnom tržištu i ubrzanim tehnološkim promenama. Stopa nezaposlenosti u Srbiji veća nego u zemljama članicama Evropske unije, što je posebno važno kada se zna da su primarni ciljevi politike zapošljavanja Republike Srbije stvaranje efikasnog, stabilnog i održivog trenda rasta zaposlenosti i usklađivanje institucija tržišta rada sa pravnim prešedanom EU. Nedovoljno korišćenje ljudskih resursa jedne zemlje direktno utiče na njenu privredu i nacionalni dohodak, što direktno ima negativne reperkusije na životni standard stanovništva i povećanje siromaštva.

Ključne reči: nezaposlenost / tržište rada / nezaposlenost mladih / mere aktivne politike zapošljavanja.