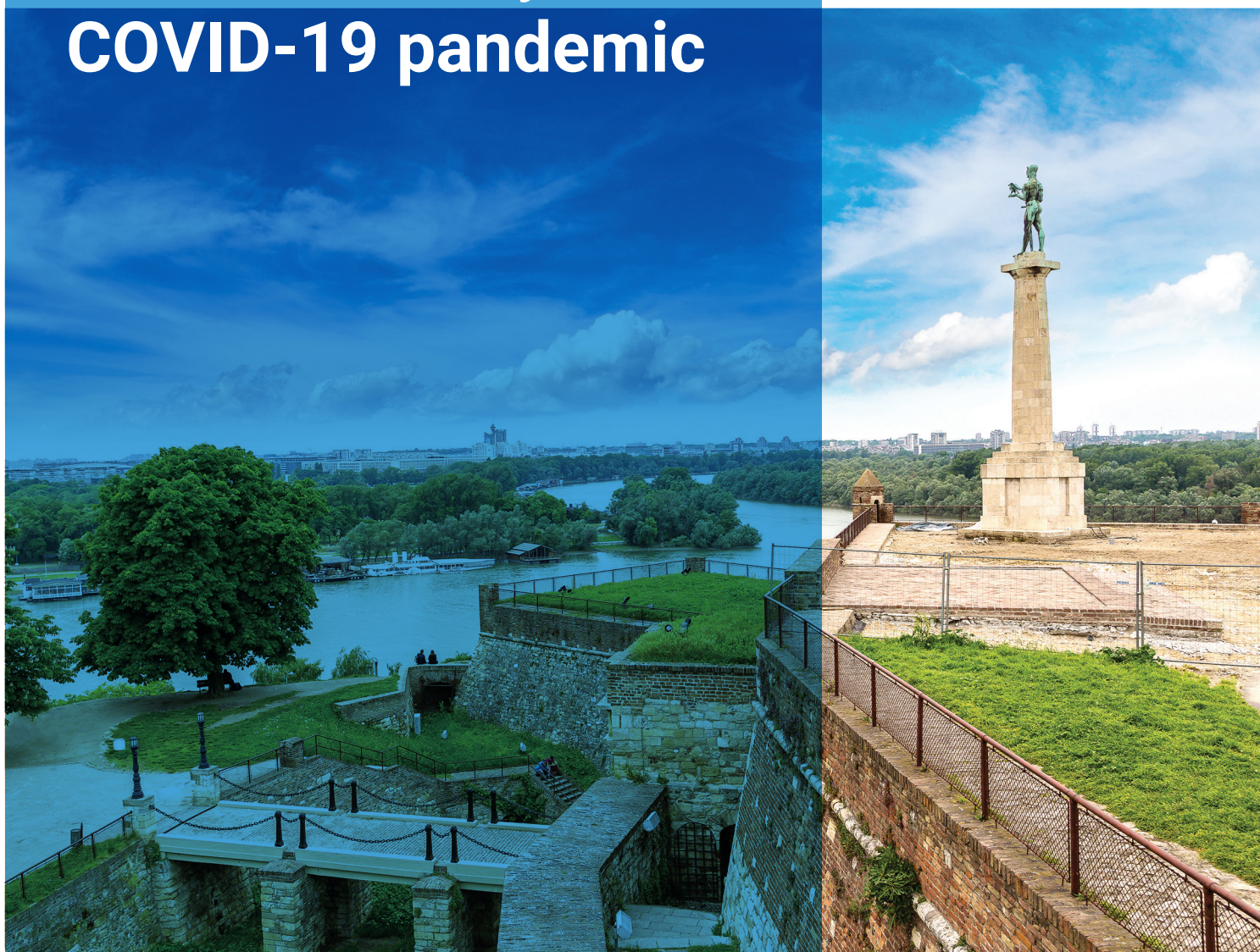


ANALYTICAL REPORT

on the situation in
the labour market
of Serbia in the context
of the economic
crisis caused by the
COVID-19 pandemic



good. better. regional.

Title: Analytical report on the situation in the labour market of Serbia in the context of the economic crisis caused by the COVID-19 pandemic

Publisher: Regional Cooperation Council
Trg Bosne i Hercegovine 1/V, 71000 Sarajevo
Bosnia and Herzegovina

Phone: +387 33 561 700; Fax: +387 33 561 701

E-mail: rcc@rcc.int

Website: www.rcc.int

Author: Mihail Arandarenko

Design: Samir Dedić
October, 2021

©RCC2021 All rights reserved.

Disclaimer: This document was prepared within the Technical Assistance (TA) instrument of the Regional Cooperation Council's (RCC) Employment and Social Affairs Platform (ESAP 2) regional project, funded by the EU. The content, analysis and opinions contained in the document are sole responsibility of the author and do not necessarily reflect the views of the RCC, RCC ESAP 2 project or the funding authority (EU).

Contents

1. Introductory remarks	4
2. Macroeconomic measures during 2020 and their effect on the labour market	9
3. Labour market trends	12
3.1. Estimates of lost working hours	12
3.2. Basic labour market indicators	13
3.3. Labour market indicators for young people	16
3.4. Labour market indicators by level of education	20
3.5. Indicators by type of contract, type of work and professional status	21
3.6. Indicators for formal and informal employees	26
3.7. Indicators of sectoral employment	28
3.8. Status dynamics on the labour market during 2020	31
3.9. Complementary labour market indicators	35
4. Active labour market policies	38
4.1. PES' services and measures	38
4.2. Active labour market measures	39
4.3. New programme 'My first salary'	46
4.4. Youth Guarantee	49
5. Labour market forecasts for 2021	52
6. Main findings, assessments and recommendations	58
Annex	64

1. Introductory remarks



The outbreak of the Covid-19 virus pandemic was a global challenge and Serbia was no exception. Complete lockdown, limitation of working hours and new business conditions related to social distancing have significantly affected the economy and the social position of the population. Due to the supply shock that occurred at the very beginning of the pandemic, employers and workers in the so-called high-contact activities (accommodation, tourism, transport, personal services, etc.) were most affected. Declining incomes due to job closures or declining production, as well as general uncertainty about the duration and depth of the crisis and consequent abstinence from consumption and investment, difficulties in maintaining international supply chains, contributed to the crisis pendulum shifting to the demand side. Consequently, the demand for products and services in low-contact sector also decreased. In that way, the crisis spread to the entire economy, leaving deep social consequences.

The strong public policy response of the Government of Serbia to the outbreak of the pandemic crisis has greatly contributed to the resilience of the Serbian labour market in 2020. The two main interventions were directed towards businesses and the general population, but job retention was their primary and common goal. Private micro, small and medium enterprises outside the financial sector were strongly supported in 2020 in various ways, but most directly through subsidies in the amount of several net minimum wages per permanent employee, which was conditioned by retaining at least 90% of the permanent workforce. All adult citizens were given unconditional financial assistance, with declared goals to maintain household incomes, bring optimism and support consumer demand, in order to preserve jobs. Both universal interventions continued in 2021, supplemented by selective measures aimed at the most endangered companies and citizens.

This approach, which can be defined as a programme of fiscal stimulus, and not just disaster relief, because it has not limited itself to partially or fully compensating for direct losses to companies and individuals, has contributed not only to significantly mitigate GDP decline and preserve employment, but also to prevent significant growth in poverty and income inequality (ILO, 2020). On the other hand, the whole aid package, including other measures, was worth almost 13% of GDP and this level of public intervention is certainly not possible to maintain over a long period of time.

Similar to the experience of other economies, active labour market measures have generally been implemented as usual, according to previously established plans, with the necessary adjustments when it comes to high-contact programmes and activities to reduce the risk of infection. Given that young people have rightly been identified as particularly vulnerable, because of slim chances of finding their first job during the pandemic, the new programme called 'My First Salary' was created in

August 2020 and became operational in December 2020. Preliminary assessment of effectiveness of the standard services and active labour market programmes that were implemented during the pandemic crisis should be useful for the future design and coverage of these programmes.

As life and business under the pandemic gradually normalize (despite the pandemic itself being far from over) and a 'new normality' is being created, while the temporarily justified expanded fiscal space inevitably narrows, it is clear that broad and costly macroeconomic stimulus measures will have to be replaced with more targeted measures aimed mainly at those most affected by the crisis or otherwise most vulnerable on the labour market. The pandemic has created winners and losers on the labour market despite all efforts to mitigate its impact, and this will become more apparent as time goes on. In this sense, providing an informative and analytical basis for the next, necessarily better targeted, phase of labour market interventions is the main task of this analysis.

The economic decline in Serbia in 2020 was only about 1%, which was much more optimistic than the initial forecasts and also much less than the decline recorded by most other countries in EU and globally. The decline was due to lower private consumption, net exports and private investment, which was partially offset by higher government spending and investment and higher stockpiles.

One reason for the relatively good results was strong and timely public intervention (e.g. European Commission 2021; World Bank 2021; IMF 2021). In several steps, the government has created the most generous package of economic assistance measures in recent history, whose total value is estimated at almost 13% of GDP (World Bank, 2021). The support packages included various measures, such as direct wage subsidies to employers for maintaining employment, deferrals in paying taxes and contributions, loan repayments, direct cash assistance to all adult citizens, increased health care expenditures, establishment of a state guarantee scheme for bank loans to small and medium enterprises and the like. These measures will be considered in terms of their impact on employment.

In addition to public policy intervention, the small decline in GDP in 2020 was influenced by several other factors. First, on the eve of the crisis outbreak, Serbia had a strong momentum of economic growth, which in the first quarter of 2020 was 5.2% compared to the same quarter of 2019. Second, the structure of the economy with modest reliance on high-contact sectors such as tourism and a relatively large share of agriculture and the food industry, which were less severely affected by the pandemic (and the year was good for agriculture). Third, although the initial lockdown that lasted some seven weeks between the second half of March and early May was very strict, later restrictions related to pandemic control were milder than in most EU countries (Randjelovic, 2021).

Above statements do not imply at all that Serbia has gone through a crisis without significant losses in economic terms. Bearing in mind that the projected GDP growth in 2020 before the pandemic was around 3.5%, the economy entered 2021 with almost 5% lower GDP than expected in 2019. In addition, some planned reforms could not be fully implemented due to the pandemic emergency. Thus, reforms of public enterprise management, employment and public sector wage systems, as well as capital market development, have been delayed or incompletely implemented. Nevertheless, progress has been made in modernizing the tax administration, strengthening the framework for public investment and monitoring and managing fiscal risks.

Also, one should keep in mind the high cost of the fiscal response to the crisis, which was exacerbated by falling revenues due to falling GDP, leading to a fiscal deficit of almost 9% of GDP in 2020. However, the stability of the economy's financial position was not seriously jeopardized.

Eurobonds worth a total of 3.2 billion euros with relatively low interest rates were successfully placed on two occasions. Foreign exchange reserves remained stable, despite declining remittance inflows and foreign direct investment.

The performance of the Serbian labour market in 2020 can also be assessed as satisfactory. The unemployment rate of the working age population was reduced to a single-digit level for the first time (9.5%) and decreased by 1.4 percentage points compared to the previous year, while the employment rate increased by about 0.6 percentage points.

However, this positive assessment should be given with two reservations. First, in addition to the increase in employment, the decrease in unemployment was to some extent achieved by the reduced activity of the population, which fell by 0.4 percentage points. Second, employment in some of the most vulnerable sectors has been preserved thanks to the Government's subsidy programme, and some jobs in those sectors are unlikely to be sustainable in the long run.

Using annual labour market data from 2020 to analyse the effects of the crisis and response measures to Covid-19 is clearly not optimal. In fact, in 2020, there were three different regimes under which the economy and the labour market operated - first, normally, until mid-March, before the outbreak of the pandemic; second, with the greatest degree of restrictions after the declaration of a state of emergency, from mid-March to early May; and finally after complete lockdown, with varying degrees of partial restrictions from month to month. In order to cover these different phases and draw conclusions, a detailed analysis of the quarterly data of the Labour Force Survey for 2020 is needed. Furthermore, for a more comprehensive picture, there is a need to use monthly trends in employment and unemployment data from other sources, such as administrative registers and employer surveys.

Despite the relatively good overall results, due to the uneven impact of the pandemic crisis on sectors and different socio-economic and demographic groups within the workforce, as well as the uneven impact of public measures on these sectors and workers, some sectors and some workers on the labour market suffered more than others. As a rule, sectors that experienced a significant drop in demand had to reduce employment to a greater extent. Similarly, conditioning companies to retain employees who imposed state support measures was highly effective in maintaining permanent formal jobs, but less so in retaining fixed-term workers, those employed on the basis of service contracts, on temporary and occasional jobs, seasonal workers and agency workers. All in all, the worst experience had those who had precarious and poorly paid jobs even before the pandemic. On the other hand, the best were highly educated and employed in the ICT sector and industry. Employment has increased in the public sector as a whole, and in healthcare in particular.

A comparison of the LFS data from the fourth quarter of 2020 with the same quarter of 2019 reveals general patterns of labour market adjustment during the first nine months of the crisis. Employment has fallen sharply among those with the lowest level of education, by as much as 31,000, among other things because they are more often than others engaged in the shadow economy. On the other hand, the number of employees with secondary and higher education increased by 13,500. In addition, although formal employment actually increased slightly during 2020, the number of informal workers fell sharply, by more than 30,000.

Having in mind all these circumstances, it is necessary to conduct a detailed analysis of changes in sectoral employment, but also the redistribution of employment within the spectrum of job permanency and by type of contract. Also, the decline in informal employment, which in this case

is not primarily due to the formalization of informal jobs, but their pronounced pro-cyclicality and the fact that informal jobs were beyond the reach of job retention subsidies, cannot be considered a positive development. What was the degree of destruction of informal jobs, what happened to informal workers during the complete closure and after that, whether those who stopped working went into inactivity or unemployment are also questions to be investigated.

In order to better understand the mechanism behind changes on the labour market and changes of persons' status on the labour market from one quarter to another, we conduct a detailed analysis of available quarterly LFS micro data from 2020. LFS panel functions will be used to monitor flows of working age population between labour market statuses. The resulting transition matrices for different segments of the workforce should reveal the adjustment patterns of these groups and will be crucial for projecting their labour market transitions in 2021 and beyond.

As already mentioned, behind the general positive picture there are great differences in the way certain sectors and segments of the population went through the previous difficult year. Certain groups in the labour market are particularly affected by the negative consequences of the pandemic and therefore special attention is paid to them. The most important among these groups are young people who, even in regular conditions, took a little over 23 months to find their first stable job (ILO, 2016). Difficulties in entering the labour market for young people in Serbia have only been exacerbated by the shock caused by the health crisis. The consequences are felt by young people who are nearing the end of their schooling, but also by those who are already tied to the labour market. The first, because the largest number of those who appear on the labour market for the first time comes from the category of young people. As companies refrain from new employment due to the fall in aggregate demand, the number of vacancies is decreasing, so a large number of young people are moving from inactivity due to schooling to unemployment. Young people suffer the consequences of the strategic behavior of companies that conduct their human resources policy according to the LIFO (last in, first out) principle during extreme shocks - they first fire those who were last employed. More unfavourable results for young people (aged 15 to 24) are clearly seen in the comparison of year-on-year employment in the fourth quarter. The year-on-year level of youth employment fell by 11,800, primarily among young women, by 11,100, while at the same time unemployment rose by 5,400, increasing the unemployment rate by 3.3 pp. Moreover, the share of young people, who neither worked nor were in educational processes (NEET), represented 17.6% of the total youth population, which means a year-on-year increase of 1.8 percentage points.

The second group certainly consists of women, who are the most numerous and at the same time the most heterogeneous vulnerable group. Reconciling work from home with family responsibilities during the state of emergency was a major challenge for women, especially when the entire education system switched to online teaching. For this reason while using data from the Labour Force Survey it is necessary to check whether there are differences in the reasons for inactivity of women in relation to the previous year, but also in relation to men in the current year. A previous assessment of the vulnerability of the sector by the International Labour Organization (ILO, 2020) showed that women are relatively more represented in the sectors most vulnerable to the effects of negative shocks caused by the Covid-19 pandemic (54% of employed women versus 47% of total employment). Women are disproportionately represented in the informal service sector, but also in labour-intensive production activities such as the textile industry, the footwear industry and the like. It should not be forgotten that women make up the majority of employees in the health sector that is directly affected by the pandemic.

Because of all the above, it is necessary to analyse how the health crisis has affected young people and women in the labour market. The application of microdata from the Labour Force Survey enables the calculation of transition matrices - both for the labour market as a whole and for individual groups such as women and youth. Transition matrices provide a dynamic dimension to labour market analysis during the crisis by providing information on trends in employment status, i.e. trends between employment, unemployment and inactivity of different categories of workers. It is also important to compare the obtained results with the results of the study FREN / European Training Foundation based on data for 2018 (ETF 2021), based on which it would be additionally checked whether there were significant changes in the dynamics of the youth labour market.

The recently adopted Employment Strategy of the Republic of Serbia for the period 2021-2026 emphasizes the following goals: (1) growth of employment quality through the implementation of cross-sectoral measures aimed at both improving labour supply and increasing labour demand, (2) improving the position of unemployed in the labour market and (3) improving the institutional framework for employment policy and defining the measures to be taken to achieve them. The Employment Action Plan for 2021-2023, which serves as an instrument for operationalizing the goals set by the Strategy, plans to gradually increase funds related to active labour market policies from 5.2 billion in 2021 to 6 billion dinars in 2023, while the planned number of participants in active measures in the labour market ranges from 18,225 in 2021 to 21,205 in 2023.

Consequently, a special segment of the analysis deals with active labour market policy measures and the existing portfolio of services and especially active labour market programmes implemented by the National Employment Service. The subject of analysis is their design, the groups they are focused on and the ultimate goals. For key measures, it is possible to conduct a simple descriptive comparative analysis of their application in relation to the initial plan and the previous year, according to the number of persons involved, as well as according to the number of those who were employed after completing the programme. A major new programme "My First Salary" is also being considered, designed as a direct response to the crisis, adopted with the aim of helping young people make their first contact with the labour market and thus productively bridging the crisis period. The first experiences of this programme are analysed and its positive and less positive sides are considered.

Although this crisis is largely characterized by uncertainty - both in terms of the duration of the pandemic and in terms of the intensity of negative shocks - it is necessary to shed light on the probable scenario on the labour market for the upcoming period. Forecasts of labour market trends for the next twelve months rely on the forecasting methodology that was first used in the "Employment Strategy of Serbia 2011-2020", and then changed in several subsequent analyses (last time in FREN, 2020). This methodology proved to be successful because it very accurately predicted labour market trends over a ten-year period. Taking into account the specific economic and labour market environment created during the last year of the pandemic crisis and the short forecast period, the projections take into account the overall population dynamics and the dynamic of the working age population, projected GDP growth rate, sectoral GDP growth, sector specific elasticities of employment in relation to GDP, sectoral structure and exposure to shocks, estimates of changes in labour demand, estimates of the recovery of the region and Serbia's main trading partners, as well as the impact of the announced state aid measures. Based on the estimated trends of these variables, the activity rate, employment rate and unemployment rate in 2021 are projected and groups that will have lower-than-average performance are identified.

2. Macroeconomic measures during 2020 and their effect on the labour market



A few weeks after the declaration of the state of emergency in mid-March 2020, a package of economic measures was passed through the Decree on fiscal benefits and direct aid to economic entities in the private sector and financial assistance to citizens in order to mitigate the economic consequences of COVID-19. This programme contained three key types of measures. The direct financial injection involved direct subsidies for private companies and the general population.

The Government designed two types of subsidies to preserve jobs, one for entrepreneurs and micro, small and medium enterprises (MSMEs) and one for large enterprises. The first measure involved the payment of a net minimum wage for each full-time employee in March, April and May. About 1,050,000 employees received this assistance, which is more than 50% of the total number of employees and probably more than 90% of those who were entitled to this type of assistance (self-employed, micro, small and medium-sized private enterprises, except the financial sector). The amount of the subsidy was universal (about 30,000 dinars per employee per month), regardless of the sector, previous salaries or estimates of losses of an individual company. The basic condition was that firms do not lay off more than 10% of their workforce. This measure was repeated for another two months by the same group of beneficiaries, under the same conditions, but the amount of the subsidy was 60% of the net minimum wage. Measures to preserve jobs for large companies included the payment of 50% of the minimum wage from each employee who was issued a decision on termination of work during quarantine (state of emergency). Large companies used these subsidies to a much lesser extent.

The second group of measures, the postponement of the tax collection included the postponement of the payment of taxes and contributions on salaries and salary compensations during the state of emergency, and postponement of the advance payment of corporate income tax until the submission of final income tax returns for 2020. As a third type of assistance, the Government has also implemented guarantee schemes through commercial banks with the aim of subsidizing

loans aimed at maintaining liquidity and working capital for small business owners, SMEs and agricultural enterprises.

To further support the hardest hit sectors of tourism and hospitality, passenger transport and logistics, the government has distributed 160,000 holiday vouchers to destinations within Serbia. Later, additional assistance was provided to companies in vulnerable sectors, including hoteliers, travel agencies and bus carriers, which continued in 2021. Companies from these activities were given the opportunity to take loans from the Development Fund of the Republic of Serbia (DFRS) to maintain liquidity and working capital under more favourable conditions, which includes a longer repayment period of up to five years and a grace period of up to two years. Measures to support farmers included relaxing the criteria for loans and financial assistance.

At the credit and monetary level, the National Bank of Serbia (NBS) has taken measures to maintain price stability and support the economy. The NBS reduced the interest rate by a cumulative 125 basis points, narrowed the interest rate corridor, provided additional liquidity to the financial sector, and engaged in the purchase of government and corporate bonds on the secondary market. The NBS also significantly intervened in the foreign exchange market in order to maintain a stable exchange rate. Core inflation fluctuated around the lower limit of the tolerance range during 2020. The banking sector remained stable, with high capitalization and adequate liquidity. In order to reduce pandemic pressures and support credit growth, among other things, moratoriums on corporate and household loans and public/government guarantee schemes for new loans have been introduced.

In addition to measures to preserve jobs and help companies, the Government has introduced a one-time universal financial aid of 100 euros for all adult citizens of Serbia. According to the Ministry of Finance, this assistance was received by about 6,150,000 citizens, which amounts to a total of 615 million euros (or about 72 billion dinars). In addition, all pensioners (about 1,700,000 beneficiaries) received a total of 9,000 dinars (about 76 euros) on two occasions.

Although the package of direct assistance for preserving jobs and income of the population was indiscriminate in its nature, due to its parametric solutions, it protected relatively more those who needed more help - companies and employees with lower salaries through three minimum wages and poorer families through 100 euros. Although all employees (except in large companies, public sector and financial institutions) and all adult citizens receive the same amounts of assistance, this assistance is relatively higher for employees with lower salaries, who are on average more exposed to the risk of losing their jobs. Similarly, 100 euros for someone who lives on social assistance or without any regular income means much more than for someone with an above-average salary.

Micro-simulations of the International Labour Organization (ILO, 2020) confirmed this equalizing effect of the two main aid measures to the economy and the population. The impact of the pandemic crisis and measures against it was simulated in three simplified steps on data from the Survey on Income and Living Conditions (SILC). In the first step, in which there is no government intervention, the pandemic shock was introduced and it was allowed to destroy part of the employment in accordance with a specially created vulnerability matrix. As a result, the income of a certain number of families was taken away, and consequently poverty increased. In the second step, the population was 'assigned' three minimum wages according to the rules of the measure. Employment has partially recovered, and with it salaries. Poverty was reduced, but remained above pre-pandemic levels. In the third step, 100 euros were added to all adult citizens, and that reduced

poverty to approximately the level before the pandemic, and even reduced inequality below the pre-pandemic level. The simulations showed that these two measures only together managed to prevent the spread of poverty during 2020, and that the measure of 100 euros further managed to reduce the Gini coefficient as a measure of inequality.

The main criticism of this aid package design relates to the error of inclusion - unnecessary aid to firms that have not suffered losses, as well as to individuals who are not at risk of poverty or have not experienced job loss or declining income. According to the critics, on the one hand, those who are really endangered are insufficiently protected, and on the other hand, the package creates a public debt that will need to be repaid in solidarity. However, the costs of crisis mitigation measures are one-off in nature - they do not imply increased liabilities in the future. When it comes to one-off effects of measures on public debt and external indebtedness, in order to be able to claim that they are negative, it should be proven that the measures did not have enough positive effects on economic activity and employment. Although it cannot be said with certainty that the small drop in GDP is primarily a consequence of the government's pandemic measures, it is even harder to deny their positive impact. The counterfactual consideration - whether different measures could have similar or even stronger effects - goes beyond the scope of this analysis.

Despite the fact that most domestic economists and international agencies recommended that the aid package in 2021 should be selective, in order to help sectors, companies, families and individuals most severely affected by the pandemic, the Serbian Government remained true to its commitment to provide universal support to the economy and population. Although this package was less generous in 2021, in line with the improvement of the economy's economic performance, but also with a narrower fiscal space. On the other hand, additional, selective "emergency assistance" measures for the most severely affected sectors and individuals have been extended and sometimes expanded.

As part of economic support measures, in 2021 the government/public administration paid three halves of the net minimum wage per employee in the private sector, regardless of the size of the company. For each of the individual payments (around 16,000 dinars) registration was required, although it did not depend on the decline in the company's income. Three months after the last payment, companies cannot lay off more than 10 percent of full-time employees. The second condition is that companies that receive aid cannot pay dividends until the end of the year. 70 billion dinars are intended for this measure, but the interest was somewhat less than in the previous year. Additional assistance is intended for particularly affected sectors: catering facilities and hotels, passenger carriers, as well as travel agencies, guides and escorts. The existing guarantee scheme for credit support to the economy has been expanded by one billion euros.

The main support measures to the population in 2021 are the payment of 60 euros to all adult citizens and assistance to pensioners of an additional 50 euros. Also, all registered unemployed, who were on the records of the National Employment Service on April 15, 2021, received a one-time additional assistance of 60 euros, which partially responded to the recommendations that direct financial assistance to individuals and families focus on those who need it most.

3. Labour market trends



3.1. Estimates of lost working hours

The economic crisis of 2008 left great consequences on the labour market in Serbia. The first signs of recovery were visible only after 3 years. First, there was an increase in the activity rate, and with a delay of one year, an increase in the employment rate and a decrease in the unemployment rate. By 2019, employment had increased by about 600,000, while the number of unemployed had almost halved (from 701,000 to 336,000)¹. Positive trends in the labour market lasted for almost a decade, only to be interrupted in 2020 due to the outbreak of the Covid-19 virus pandemic. The Serbian economy, like the global economy, has been forced to adapt to new business conditions. However, this adjustment was significantly different from the adjustment during previous economic crises in modern history. Complete closure during national quarantines, restrictions on working hours and respect for social distance are just some of the factors that dictated the functioning of the economy. The combination of these factors led to a decrease in labour demand and consequently a deterioration in labour market performance.

To see the impact of the health crisis on the labour market, the International Labour Organization (ILO) has developed a nowcasting model². Modelling is based on the use of data to predict total operating hours that are available in near real time. Depending on the availability of high-frequency national data (Labour Force Surveys, administrative employee registers, national accounts, indirect activity indicators, etc.), estimates can be performed directly or indirectly. In the case of Serbia and other Western Balkan economies, direct, as well as more precise, estimates of lost working hours are given in Table 1.

¹ Due to methodological changes in the Labour Force Survey, the data before and after 2014 are not directly comparable. It is estimated that the changes in the basic contingents are lower by 50,000 to 100,000.

² <https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/lang--en/index.htm>

Table 1 - Estimation of lost hours of work and full-time jobs in 2020 for select Western Balkan economies

	Time	Jobs lost (40 hours)	Jobs lost (48 hours)	Hours lost (in %)
Western Balkans	2020 – Q1	190000	160000	2.9
Western Balkans	2020 – Q2	1170000	970000	17.3
Western Balkans	2020 – Q3	810000	680000	12
Albania	2020	51000	42600	3.9
Bosnia and Herzegovina	2020	110400	92000	9.7
Montenegro	2020	20500	17000	7.8
North Macedonia	2020	112700	93900	13.8
Serbia	2020	266100	221700	7.5

Source: ILO and Author's calculations for Western Balkans based on ILO data for economies listed above, for which [ILO Covid-19 and labour statistics data](#) was available.

The data presented in the last column represent the percentage of lost hours in relation to the reference period before the pandemic crisis, which in this case is the 4th quarter of 2019. For a better understanding of these data, the ILO has turned lost hours into full-time jobs. In this way, it is possible to estimate how many jobs with forty-hour week would be lost. Of course, these figures should by no means be interpreted as the actual number of jobs lost. Faced with a strong but potentially short-term external shock, firms would rationally opt for a combination of reduced employment and reduced effective working hours, through forced absences or through even shortening of working hours, even without job preservation measures. Of course, given the fact that measures to preserve jobs were announced and taken relatively early during the quarantine, this further directed companies to seek solutions within the framework of preserving existing employment.

According to ILO estimates, during 2020, the average number of working hours is lower by 7.5% compared to the last quarter of 2019. Translated into jobs, this represents a loss of about 220,000 and 270,000 full-time jobs, respectively. Compared to 2019, this would hypothetically imply a 7-8% reduction in employment. Viewed from an international perspective, the estimated lost working hours in Serbia are below the average of the Western Balkan economies. The only economy that recorded lower values than Serbia in the region was Albania.

3.2. Basic labour market indicators

Basic estimates of the labour market in 2020 based on LFS data show that the estimates of lost ILO working hours are not directly translated into lost jobs. Table 2 shows data on activity, employment and unemployment rates of the working age population by sex. The first four columns refer to the values of indicators by quarters, while the last one represents the change in values in 2020 compared to 2019 in percentage points.

Table 2 - Basic labour market indicators of the working age population (15-64) in Serbia, 2020

Age group 15-64		Q1	Q2	Q3	Q4	2020-2019
Activity rate	Total	67.6%	65.2%	68.8%	69.3%	-0.4
	Male	73.4%	72.0%	76.2%	77.0%	-0.3
	Female	61.9%	58.4%	61.3%	61.7%	-0.5
Employment rate	Total	60.7%	60.2%	62.2%	62.1%	0.6
	Male	66.1%	66.6%	69.2%	69.2%	0.6
	Female	55.3%	53.7%	55.2%	55.0%	0.6
Unemployment rate	Total	10.2%	7.7%	9.5%	10.5%	-1.4
	Male	9.9%	7.4%	9.2%	10.1%	-1.2
	Female	10.6%	8.0%	9.9%	10.8%	-1.7

Source: Author's calculations based on LFS, SORS.

Despite the negative consequences of the crisis, the employment of those aged 15-64 in 2020 compared to 2019 decreased by only 9,100, of which a slightly larger decrease was recorded for men (5,300). Extremely slight decline in employment with a strong depopulation trend has led to an increase in the employment rate of the working age population by 0.6 percentage points compared to the previous year. The change in the employment rate was not gender discriminatory. However, a slight difference in employment trends by gender is noticeable when looking at the quarterly data, given that the female employment rate fell in the last quarter as opposed to the stagnation observed among men.

The labour market recorded even better results in terms of unemployment, which decreased by almost 50,000 compared to the previous year. The pattern of gender dynamics was the opposite of the pattern observed in employment - the decrease in unemployment was mostly realised among women (54% of the total decrease). Previous trend also contributed to the decline in the unemployment rate, being somewhat more pronounced among women than among men. The decrease in the absolute number of unemployed resulted in a reduction of the annual unemployment rate by 1.4 percentage points, which for the first time fell to a single-digit level (9.5%). Viewed in an international context, Serbia is one of the few economies in Europe that has seen a decline in the unemployment rate. Apart from Serbia, the decrease was realized only in Italy, Greece and France, but the intensity of the decrease in these countries was much lower (Eurostat).

However, when the data on the transition from unemployment are also considered, the decline in unemployment shows its less positive side. The decrease in unemployment was mostly achieved at the expense of the reduction in activity, which decreased by 0.4 percentage points compared to 2019. Those who were unemployed, even during the economic expansion, became additionally discouraged from looking for work during the pandemic crisis, whose main feature is the limited demand for labour. The quarterly data on basic labour market indicators are the best evidence

of this. While the employment rate decreased only slightly, the activity and unemployment rates recorded a significant decline during the second quarter, which largely coincided with the strictest measures and national quarantine. The increase in the number of inactive people in the second quarter was largely due to the increased inflow from unemployment.

The hypothesis of the outflow of a large number of unemployed into inactivity is largely confirmed by the data on inactive persons according to the main sources of income. In the most unfavourable business conditions, during the second quarter of 2020, there was a very large increase in the number of inactive within the category of those whose main source of income is earnings / pensions from spouses, parents or other household members (Table 3). Already in the following quarters, the number of inactive people in this category decreased drastically by about 200,000. Based on this, we can conclude that the increase in inactivity was achieved thanks to secondary workers, or more precisely secondary unemployed. These are persons who are not the main source of household income and who had been looking for a job in order to contribute to the growth of family income. With the outbreak of the pandemic and the introduction of strict measures, they rationally decided to stop looking for work, due to lack of vacancies, and partly health risks, and move to inactivity due to security provided, to some extent, by the household head. Doing this they also eliminate costs related to job search. We will deal with the phenomenon of transition from unemployment to inactivity in more detail in the part that analyses the transition matrices between the statuses on the labour market in Serbia.

Table 3 - Inactive in Serbia by main sources of income in 2020 (in thousands)

Source of income	Q1	Q2	Q3	Q4
Total	2717.8	2830.9	2661.8	2640.9
Salary / pension of a spouse, parents or other household members	1002.2	1142.3	1005.8	964.7
Own pension	1468.6	1442.6	1438.3	1437.2
Social benefits	106.1	91.7	88.1	102.4
Other	140.9	154.3	129.6	136.6

Source: LFS, SORS.

Women represent the largest and most heterogeneous vulnerable group in the labour market. Although according to the basic indicators of the labour market, the pandemic crisis did not have a significant discriminatory character in Serbia, that does not mean that the relative position of women has not worsened. First, due to the fact that women lag behind men, every year in which there is no reduction in the gap can be characterised as lost. Second, an ex-ante assessment of the vulnerability of the sector by the International Labour Organization (ILO, 2020) showed that women are relatively more represented in the sectors most vulnerable to the impact of negative shocks caused by the Covid-19 pandemic. If there have been no quantitative changes in the labour market, this does not mean that wages have not been reduced and working conditions have deteriorated to a greater extent for women than for men. Third, reconciling work from home with family responsibilities during a state of emergency was a major challenge for women, especially

when the entire education system switched to online teaching. When inactivity due to the care of children or adults with disabilities is taken into account, women have absolute dominance with a share of about 97%. While the number of men citing this as a reason for inactivity has stagnated at around 2,000, the number of inactive women has increased from 59,000 to 73,000 in 2020 (SORS).

3.3. Labour market indicators for young people

The position of young people on the labour market in Serbia has traditionally been significantly worse compared to their peers in the European Union. Due to the level of development, it is expected that young people in Serbia will record lower activity and employment rates and a higher unemployment rate compared to their EU peers. However, worse performance of young people in Serbia in relation to young people in the EU is also noticeable when the values of youth indicators are put in relation to the indicators of the adult population. In other words, the gap in the labour market between the young and adult population in Serbia is significantly larger than in EU Member States.

The already unfavourable initial position of young people in Serbia was additionally disturbed by the pandemic crisis, considering that according to all indicators of the labour market, young people fared worse than the working age population. This was expected, due to the pro-cyclical nature of the youth labour market, which was confirmed in Serbia during the episodes of the previous crisis after 2008. In contrast to the population aged 15-64, the youth employment rate decreased, while the youth inactivity rate increased more and the unemployment rate decreased less than in the case of the working age population (Table 4). Slightly worse numbers were recorded for young women whose annual employment fell by about 5,000 versus a drop of 3,000 for young men.

Table 4 - Basic labour market indicators of the young population (15-24) in Serbia, 2020

Age group 15-24		Q1	Q2	Q3	Q4	2020-2019
Activity rate	Total	29.0%	23.6%	29.5%	31.1%	-1.3
	Male	35.7%	29.1%	36.6%	39.0%	-1.1
	Female	21.9%	17.8%	22.0%	22.8%	-1.6
Employment rate	Total	21.6%	18.7%	21.7%	21.0%	-0.7
	Male	27.0%	23.5%	27.4%	27.4%	-0.5
	Female	15.9%	13.7%	15.7%	14.3%	-1.0
Unemployment rate	Total	25.5%	20.7%	26.5%	32.4%	-0.8
	Male	24.5%	19.4%	25.1%	29.7%	-1.0
	Female	27.4%	23.0%	28.8%	37.3%	-0.4

Source: Author's calculations based on LFS, SORS.

The findings of a study by the International Labour Organisation (ILO, 2016) testify to the problems faced by young people in Serbia during the transition from school to work even in non-crisis times. The results indicate that it took young people just over 23 months to find their first stable job. Difficulties in entering the labour market for young people in Serbia have only been exacerbated by the exogenous shock caused by the health crisis. The consequences were felt by young people who are nearing the end of the schooling process, but also by those who are already on the labour market. The first, because the largest number of newcomers on the labour market comes from the category of young people. As the companies are striving to reduce the existing employment due to the fall in aggregate demand, and there are almost no vacancies, it is clear why a large number of young people are moving from education-protected inactivity to unemployment. Others suffer the consequences of the strategic behavior of companies that pursue a policy of human resources during extreme shocks - by first firing those who were last hired.

A relatively large number of young people in Serbia do not have a job, but they are also not in the formal or informal education process. Young people who have not been employed for a long time, are not in education or training, have greater difficulties in reintegrating into the labour market. During this state, knowledge and skills become obsolete, which can have consequences on their future income. The findings of an influential study show that depending on how long it took a young person to find employment, they may have up to 20% lower earnings than their peers who were employed immediately after school (Gregg and Tominey, 2005). In line with this are the findings of Eurofund, according to which long-term unemployment and detachment from the labour market increase the risk of poverty and social exclusion in later stages of life (Eurofund, 2012).

The NEET (neither in employment, education or training) rate shows the participation of persons aged 15-24 who are not employed, not in school, nor in training in the total population of that age. The trend of constant reduction of the NEET rate in Serbia began in 2014 and lasted until the outbreak of the pandemic crisis. In that period, this rate decreased by more than 5 percentage points (from 20.4% to 15.3%). The break in the trend happened in 2020, when it increased by 0.6 percentage points. Although this rate has decreased significantly in the last 6 years, it still has high values according to international standards. The value of 15.9% in 2020 is lower than the average for the Western Balkans (22%), but still higher than the EU average of 11.1%. However, unlike the European Union average, the NEET rate among young people in Serbia differs significantly by gender. Young men are those who to a greater extent than young women do not have a job and at the same time are not involved in formal or non-formal education. It is very interesting that things changed during the crisis, considering that in 2019, the NEET rate for men was 14.8%, and for women 15.8% (Table 5). So, it is a completely opposite reaction to the current crisis. While due to the lack of available jobs, young women returned to some form of education to a greater extent (the number of NEETs decreased from 55,000 to 51,000), the number of young NEET men increased by 3,000 (from 109,000 to 112,000).

Table 5 - Percentage of young people who are neither in employment, education or training in 2020.

Education		Total	Male	Female
Total	EU 27	11.1	11.0	11.1
	Serbia	15.9	17.0	14.8
Low	EU 27	10.4	10.4	10.5
	Serbia	9.3	8.3	10.4
Medium	EU 27	11.9	11.7	12.1
	Serbia	20.0	22.8	16.8
High	EU 27	10.0	9.8	10.2
	Serbia	26.1	20.9	29.7

Source: LFS, Eurostat.

The participation of young people who are not employed and are not in the process of education and training in Serbia is positively correlated with the level of education. It implies that young people with the lowest level of education in Serbia have the easiest transition to the labour market, while highly educated young people encounter significant obstacles when entering the labour market. This is in stark contrast to the results obtained for EU Member States, where NEET rates are relatively similar for all levels of education, although this rate is still slightly lower for young people with the highest level of education. A potential explanation for the poorer transition of highly educated people in Serbia could be based on the fact that recently a large number of young people are obtaining diplomas in areas for which there is no adequate demand for work. This was at least the cause in some ETF partner economies (European Training Foundation, 2012). Highly educated young women are in a particularly disadvantaged position, of which almost every third has no employment or education or training.

Not only is the NEET rate the lowest for young people with the lowest level of education, but these young people were the only ones who managed to further lower this rate during the pandemic crisis. Compared to 2019, the NEET rate for young people with the lowest education decreased by 1.2 percentage points, while young people with secondary and higher education recorded an increase in the value of indicators of 1.8 and 0.9 percentage points, respectively. However, it should be emphasized that there is a big difference within young people with secondary education. The NEET rate for young people with general secondary education in 2020 was only 4.2% and did not change compared to the previous year, while for those with vocational education the value of this rate was 24.8%, which is an annual growth of 2,2 percentage points (Eurostat).

High NEET rates are not necessarily an issue if young people do not spend a long time in this status. In contrast, the high persistence of the NEET rate indicates that some young people face certain barriers when entering the labour market. In order to check the time dimension of NEET status, it is necessary to observe young people through time. The longitudinal component of the Labour Force Survey data provides us with this possibility. Namely, the Labour Force Survey is based on a rotating panel plan of the sample, according to which each household is in the sample four times. The 2-2-2 rotation scheme is applied, which means that the persons in the sample are

two consecutive quarters, then two quarters are out of the sample and then again there are two consecutive quarters in the sample.

Thanks to the rotation scheme, it is possible to create two types of transition matrices - interannual and intraannual. The former involve matching the responses of the same respondents from the same quarters in two consecutive years, while the latter are based on matching the responses of the same individuals from different quarters, but within the same year. Both types have advantages and disadvantages. The advantage of year-on-year transitions is also the disadvantage of intra-year transition matrices - robustness. Information on the change of status is much more relevant if we look at a period of one year instead of just one quarter. On the other hand, interannual transitions lead to data shedding, because the probability of matching the responses of the same persons in two different years is lower than within the same year. Also, the Statistical Office of the Republic of Serbia does not calculate longitudinal weights, but only weights for cross-sectional data, and in that case the year-on-year analysis would be very inaccurate. Therefore, we decided to analyse the transitions on a quarterly basis within the same year. Additional motive is the fact that we are much more interested in what the change of status looked like within the crisis year.

Table 6 shows the transition matrices for NEETs aged 15-24 in 2020. The percentages in the first row of the table show the probability that a person who was not a NEET in the previous quarter will not be a NEET in the next quarter (first column), i.e. will become a NEET in the next quarter (second column). Much more important are the probabilities in the second row of the table, and they refer to the change in the status of NEET persons, i.e. the probability that a NEET person will lose this status in the next quarter (first column), i.e. keep its status in the next quarter (second column). The latter is an indicator of the persistence of NEET and provides information on whether and to what extent NEET is a long-term problem for certain categories of young people.

Table 6 - Transition matrices of NEET status for young people in 2020

NEET (15-24)	Total		Male		Female	
	No	Yes	No	Yes	No	Yes
No	95.6%	4.4%	94.6%	5.4%	96.7%	3.3%
Yes	25.1%	74.9%	25.4%	74.6%	24.7%	75.3%

Source: Author's calculations based on LFS micro data, SORS.

A transition probability of 75% implies that three out of four people who were NEETs in one of the 2020 quarters retained this status in the following quarter as well. Persistence is slightly more pronounced among young women and is 0.7 percentage points higher than for young men. The obtained results are expected to be higher than the results of the study that looked at the year-on-year transitions of NEET status between 2017 and 2018. The probability of retaining NEET status after one year in this study was about 60% (ETF, 2021). In accordance with that, we can say that the obtained values are high and that during 2020, the persistence of NEET status among young people in Serbia was very pronounced. Young people going through long-term episodes of NEET face a higher risk of developing a "scar effect" in terms of lower incomes, a higher probability of unemployment and lower chances on the labour market at a later stage in life.

In contrast to persistence, women were in a relatively better position when it came to the influx into NEET status. While 5.4% of young men who were not NEETs in the previous quarter entered NEET status in the following quarter, in the case of women this value was 3.3%. It is also interesting that if young people disaggregate into people aged 15-19 and 20-24, the lower persistence of NEET (68%) is recorded by the younger cohort, while for the older one it is about 9 percentage points higher. However, the insufficient number of observations does not allow us to draw any conclusions on a disaggregated level.

3.4. Labour market indicators by level of education

When analysing the NEET rate, we discussed the problems faced by people who do not have a job and are not in the process of formal or non-formal education. The importance of education as the most important protection against risks on the labour market is best seen from the basic indicators of the labour market according to educational levels. Activity and employment rates are markedly positively correlated with the level of education, while the relationship between the level of education and the unemployment rate is inverse.

These findings were also confirmed during the pandemic crisis, as those with the lowest level of education were most affected. The synergy of two factors contributed to that. First, most of the low-educated are employed in high-contact activities whose businesses were directly affected by the Covid-19. Second, low-skilled workers are the dominant group when it comes to contractless employment, informal work, work based on atypical contracts or contracts with lower legislative employment protection. As a result, contracts with insufficient legal protection have further contributed to these people losing their jobs above average during the crisis. This is supported by the findings of an international OECD study according to which the crisis had almost 3 times more impact on the reduction of working hours among people with low education (24%) compared to people with higher education (8.5%). Also, low-wage workers, which tend to be low-skilled, were more than twice as likely as the highly educated to work in sectors characterized by significant net destruction. In other words, more than half of the low-skilled worked in these sectors compared to only 20% of the highly educated workers (OECD, 2021).

Table 7 - Basic labour market indicators by educational levels for the adult population

Indicator	Education	2019	2020
Activity rate	Low	32.4%	31.0%
	Medium	60.3%	59.8%
	High	71.8%	70.4%
Employment rate	Low	29.0%	28.3%
	Medium	53.6%	54.1%
	High	65.8%	64.8%
Unemployment rate	Low	10.7%	8.6%
	Medium	11.2%	9.6%
	High	8.3%	7.9%

Source: Author's calculations based on LFS, SORS.

A similar pattern was observed in Serbia, as can be seen from Table 7. The largest decrease in employment and activity occurred among low-educated people. Employment decreased by some 28,000 (6%), while the decline in activity compared to the previous year was even more drastic and amounted to 42,000 (8%). The only improvement among people with lower education occurred in terms of unemployment, but the decrease of about 15,000 was primarily due to the transition from the unemployment to inactivity. The unemployment rate of all educational levels in 2020 decreased compared to 2019. However, the decline in the unemployment rate only among those with secondary education was accompanied by an increase in the number of employees by about 25,000 and consequently an increase in the employment rate. Contrary to global assessments, it turned out that in Serbia, those with a secondary level of education were the most resistant to the crisis. This is a positive result considering that more than half of the employees in Serbia have this level of education. However, it should be mentioned that the decline in employment among the highly educated was marginal (4,000 or only 0.5%), so that there can be no significant deterioration in their position.

3.5. Indicators by type of contract, type of work and professional status

In addition to a large number of specifics, there are certain similarities between the current crisis and previous crises - companies are behaving strategically, trying to save their resources to the maximum. In order to reduce monetary costs, but also costs in terms of declining productivity, companies first lay off workers hired through atypical contracts. Due to the low legislative protection of these contracts, the obligations of the company if they dismiss such workers are negligible. Also, typically the company views such workers as relatively easy to replace and does not try to keep them. Workers in which the company invests money and time for training them, it usually binds with permanent contracts, because in the event of their departure, productivity would be greatly reduced. Therefore, when due to an external shock the company makes adjustments by laying off workers with a less secure contract, it thereby minimizes both costs and a drop in productivity, which in the end again comes down to savings in money.

However, what is characteristic of the current crisis are the state aid packages, which are much more generous than in previous crises. Although the main feature of the measures to prevent the consequences caused by Covid-19 adopted by the Government of Serbia is universality, employers could not obtain subsidies and other benefits for certain groups of workers. Among these workers are those who work without an employment contract, i.e. those who work outside the employment relationship. Thus, in addition to the above two reasons, companies in Serbia were additionally motivated to first lay off workers who were hired outside the employment relationship. Work outside the employment relationship in the shortest sense includes four types of engagement:

1. Contract on temporary and occasional jobs;
2. Service contract;
3. Contract on professional training and advanced training; and
4. Additional employment contract

Therefore, these are not informally employed workers, but persons who are hired on one of the stated grounds in accordance with the law or persons who perform some kind of part-time work. Table 8, based on CROSO and SBR data, shows the movement of registered employment by quarters depending on the type of employment.

Table 8 - Registered employment by modalities of registered employment

Modalities of registered employment	Q1 '20	Q2 '20	Q3 '20	Q4 '20	2019	2020
Total employees	2117949	2130072	2159303	2189072	2101267	2149099
Employees in "long-term employment"	2048851	2064776	2092398	2127492	2029441	2083379
Employees at legal entities	1678923	1691378	1705406	1734675	1656391	1702596
Entrepreneurs and their employees and persons individually running business	369927	373398	386992	392817	373050	380783
Employees in "temporary and occasional employment"	69098	65296	66906	61580	71826	65720
Employees at legal entities	64720	61158	62621	57626	67437	61531
Entrepreneurs and their employees and persons individually running business	4378	4137	4285	3954	4389	4189

Source: CROSO and SBR, SORS.

Registered employment grew steadily throughout all four quarters of 2020, contributing to an annual growth of nearly 50,000. The number of employees in "long-term employment" increased by more than 50,000 while the number of employees in "temporary and occasional employment" decreased by just over 6,000, corresponding to an annual decline of about 9%. Most of the decline in out-of-employment workers occurred during the second and fourth quarters. This period corresponds to the appearance of the first wave of national quarantine and the third wave and the introduction of more rigorous measures of social distancing due to the record number of infected people. At that time, the companies had the greatest need for rationing, and they acted in accordance with the model we described above.

Quarterly micro data of the Labour Force Survey provide an opportunity to assess the position of workers working through intermediaries, i.e. temporary employment agencies. Their protection is also somewhat worse than that of directly engaged workers. There are currently about 90 agencies registered in Serbia that deal with this activity, whose operations have recently been more closely

regulated by the long-awaited Law on Agency Employment (2019). The change in the structure of the economy and the adoption of a new law that partially limited abuses contributed to the number of workers employed through leasing agencies more than halving compared to 2014, from about 100,000 to about 40,000 in 2019. Observed on an annual basis, the number of workers hired through the agency fell by about 4,000 in 2020. However, a drastic decline was recorded during the second quarter when, according to LFS data, in relation to 47,308 such employees in the first quarter, the number of persons decreased by over 10,000, which corresponds to a decline of 22%. In other quarters, the number was around the annual average.

Like the modality of registered employment, a similar picture of the different impact of the crisis on employees is provided by the analysis of wage employment by type of work from the Labour Force Survey. However, there is one important difference. The modalities of registered employment more adequately separate work within the employment relationship from work outside the employment relationship, while employment according to the type of work enables gradation within the wage employment as well. It turned out to be extremely important considering the design of the measures of the assistance package of the Government of Serbia. The Decree defines that the employer loses the right to benefits if he reduces the number of employees by more than 10% in relation to the situation on March 15, 2020, except for employees whose employment contract with limited duration expires. Termination of employment of an employee on all other grounds is included in the stated limit of 10%, including termination of the employment contract given by the employee himself (Government of RS, 2021). In this regard, the relatively low level of protection of non-permanent employees compared to permanent employees, which has been systematically reduced in previous years during the adoption of flexible labour legislation, has been further exacerbated by this Regulation.

Table 9 - Employees for wages by type of work, adult population (in thousands)

Type of work	Q1 '20	Q2 '20	Q3 '20	Q4 '20	2019	2020
Total	2102.7	2082.1	2131.3	2139.1	2097.7	2113.8
Permanent	1658.5	1662.6	1691.7	1706.1	1620.1	1679.7
Limited duration	392.8	363.7	375.3	379.6	408.8	377.8
Seasonal and occasional work	51.4	55.8	64.3	53.4	68.9	56.2

Source: Author's calculations based on LFS, SORS.

The data of the Labour Force Survey shown in Table 9 illustrate these points. The annual growth of permanent employees by about 60,000 is a continuation of the previous trend, but also shows the degree of protection provided to these persons by the Labour Law and the Government assistance package. This is supported by the quarterly data according to which employment in this category did not decrease even in the most unfavourable second quarter. On the other hand, total wage employment increased slightly compared to the previous year, but still recorded a slight decline during the second quarter of 2020. This decline is primarily due to the reduction in the number of employees with limited duration of about 30,000. Most of them belong to the group of workers who found themselves in limbo, i.e. those whose contracts expired between April 1 and June 30, 2020. With the abolition of quarantine, this type of work was stabilized, but the decline from the second quarter was translated into an almost identical year-on-year decline of about 30,000.

It was mentioned earlier that seasonal and occasional jobs do not involve an employment contract, as they are exempt from the government assistance. Therefore, there was a decrease of these engaged persons by about 18% compared to the previous year. The absence of a reduction in this type of work in the second quarter should not come as a surprise, given that seasonal and occasional jobs have a very strong seasonal component, so comparing neighbouring quarters is not the most adequate measure.

The intensity of vulnerability within employees also differs based on their professional status. In the general case, paid employment is usually singled out as the most favourable employment status, while other employment statuses are the so-called vulnerable employment. There is a gradation even within vulnerable employment. Self-employment is preferred over unpaid family workers (supporting household members), and again within the self-employed, less vulnerability characterizes those who employ other workers in addition to themselves. It is considered that the self-employed with employees have a greater possibility of diversification compared to the self-employed without employees (own-account workers), which consequently makes their business more resistant. On the other hand, unpaid family workers are not paid for their work (at least not in regular fixed amounts) and depend to a large extent on the functioning of the "family business" and are therefore in the most unfavourable position. They often feel and self-declare themselves as unemployed, because they are looking for a "real" job for a salary.

Table 10 - Wage employment by professional status, adult population (in thousands)

Professional status	Sex	Q1 '20	Q2 '20	Q3 '20	Q4 '20	2019	2020
Total	Total	2877.4	2844.2	2936.6	2920.9	2901	2894.8
	Male	1582.3	1583.8	1634.6	1637	1616.6	1609.4
	Female	1295.1	1260.4	1302	1283.9	1284.4	1285.3
Wage employment	Total	2102.7	2082.1	2131.3	2139.1	2097.7	2113.8
	Male	1099.2	1114.8	1144.5	1141.2	1114.8	1124.9
	Female	1003.5	967.3	986.8	997.9	982.9	988.9
Self-employment	Total	629.4	643.9	664.1	654.8	666.2	648.1
	Male	437.4	434	451.8	456	463.9	444.8
	Female	192	209.9	212.3	198.8	202.3	203.2
Self-employed with employees	Total	88.1	94.7	95.9	82	98.3	90.2
	Male	60.8	66	66.8	59.5	69.4	63.3
	Female	27.3	28.7	29.1	22.5	28.9	26.9
Self-employed without employees (own-account workers)	Total	541.3	549.2	568.2	572.9	567.9	557.9
	Male	376.6	368	385	396.6	394.5	381.5
	Female	164.7	181.2	183.2	176.3	173.4	176.3
Unpaid family workers	Total	145.3	118.2	141.2	126.9	137.1	132.9
	Male	45.7	35	38.3	39.7	37.9	39.7
	Female	99.6	83.2	102.9	87.2	99.2	93.2

Source: Author's calculations based on LFS, SORS.

It turned out that the general pattern of vulnerability corresponds relatively well to the vulnerability during the pandemic crisis, which can be seen from Table 10. The most protected, wage employment, increased by 16,000 compared to the previous year. Relatively speaking, the growth of wage employment was not discriminatory, given that a 1% increase was recorded for both men and women. Despite the slight decline during the second quarter, it can be said that the implemented measures have preserved this type of employment quite satisfactorily.

The same cannot be said for those who are self-employed, as their employment has fallen by about 18,000. Interestingly, the decline was solely due to a decrease in self-employed men of over 19,000 while self-employed women managed to increase their number compared to the previous year. The quarterly pattern of crisis adjustment was also different. While self-employed men experienced a decline in the most unfavourable second quarter and then continued to grow in other quarters, self-employed women fared relatively well through the second quarter, but their numbers declined significantly in the last quarter. A potential explanation for the divergent trends could be in the different sectoral structure of entrepreneurs by gender. It is probable that men were more intensively influenced by supply-side factors, i.e. it is likely that their representation is higher in high-contact sectors where the ban on movement significantly affected business conditions.

Although the self-employed with employees are considered to be less vulnerable, during 2020 their employment decreased to a greater extent (8%) than the self-employed without employees (2%). The largest decline in the self-employed with employees occurred in the fourth quarter, while the number of self-employed without employees continued to grow. A potential reason could be the design of measures under the Government's second aid package. Under the first package, all eligible entrepreneurs received 3 minimum wages. The second package included 2 times 60% of the minimum wage, while the condition for retaining employees for another three months after the expiration of subsidies has not changed. While this assistance under the first package was very well received by both types of self-employed, under the second package it did not seem entirely cost-effective for one part of the self-employed.

By simply comparing the costs and benefits, the self-employed with employees face a higher risk than the self-employed without employees, and at the same time they have more room for maneuver. If in the first wave they accepted subsidies for themselves and their employees in the hope that the crisis would pass quickly, in the third wave that was not the case. Some of them encountered a serious drop in demand for products and services and concluded that less aid than in the previous case (60% instead of 100% and 2 instead of 3 months) was not enough to continue the business. With a strong incentive to stay in business, and without the burden of payroll with other employees, the self-employed without employees managed to record relatively better performance in the labour market than the self-employed with employees.

The decrease in employment was also registered in the most vulnerable category, which is quite an expected outcome. The employment of unpaid family workers on an annual basis decreased by about 3%, primarily due to a decrease within the female population, while a slight increase was noticeable among men. Quarterly changes in employment are extremely noticeable when it comes to this category of employees. However, this should come as no surprise as more than 90% of the unpaid family workers work in the agricultural sector which is characterized by a strong seasonal component. The rest of the unpaid family workers are primarily employed in family businesses within small catering, retail and bakery industries. In this regard, the decline in employment within this category can be explained in two ways. First, when small shops faced a drop in demand, the

need for the work of helping members ceased. Second, some of these workers are secondary workers, who have been forced to look for (become unemployed) and find (become employed) job for which they receive a salary due to a drop in family income.

Taking into account all categories, we come to the fact that the employment of adult women even slightly increased compared to the previous year (by about 1,000), while the decline in total employment was due to a decrease in employment of adult men by just over 7,000. However, the quarterly dynamics of employment of women and men were different. The total employment of adult men grew slightly during all quarters, but not enough to be at a higher level compared to the previous year. On the other hand, the total employment of adult women had quarterly oscillations, but it is still at a higher level compared to 2019.

3.6. Indicators for formal and informal employees

So far, we have observed various aspects of vulnerability and analysed the impact of the crisis on employment status flows among the particularly vulnerable workers. We have not yet touched on the type of employees who were hardest hit by the crisis. These are informally engaged workers. The reduction in informal employment, which under normal conditions can be considered a positive shift because it usually goes hand in hand with the formalization of the labour market, has the opposite sign in times of crises. Then, a pronounced pro-cyclical nature of informal employment comes to the fore, with informal employment declining much faster than formal employment, as was the case in the Serbian labour market during the previous economic crisis of 2009-2012.

Lack of regular income, modest savings and limited access to the social protection network put informal workers who lose their jobs during the crisis in a position to fight for their existence and increase their risk of poverty and social exclusion. The International Labour Organisation estimates globally that the average monthly income of informal workers could fall by 28% in upper middle-income economies, 76% in high-income economies and 82% in lower-middle-income and low-income economies. Assuming there are no alternative sources of income, lost labour income could increase the relative poverty of informal workers and their families by more than 21 percentage points in upper middle-income economies and by 56 percentage points in lower-middle-income economies (ILO, 2020).

Table 11 - Formal and informal employment of the adult population (in thousands), quarterly data for 2020 and annual data for 2019 and 2020

Indicator	Q1 '20	Q2 '20	Q3 '20	Q4 '20	2019	2020
Employment	2877.4	2844.2	2936.6	2920.9	2901	2894.8
Formal	2410.2	2412.4	2427.3	2434.3	2371.8	2421.1
Informal	467.2	431.8	509.3	486.6	529.2	473.7

Source: Author's calculations based on LFS, SORS.

Table 11 shows that the annual decrease in adult employment of about 6,000 is the product of very divergent trends in the two types of employment. While formal employment grew by about 50,000, almost 56,000 informal jobs were lost. This has led to a reduction in the informal employment rate from 18.2% in 2019 to 16.3% in 2020. Informal employment experienced the largest quarterly

decline in the second quarter during quarantine, and then in the fourth quarter due to a drop in demand during the third wave. Oscillations in informal employment affected the volatility of the quarterly rate of informal employment, which ranged between 15.2% and 17.3% during 2020.

The reduction in informal employment of about 10% compared to the previous year is a major blow to this category of workers. The question arises in which sectors the destruction of informal jobs was greatest during the second, most unfavourable, quarter. Access to Labor Force Survey micro-data allows us to classify informal workers into 21 sectors and compare employment levels over time, as shown in Table 12. Given that over 40% of all informal workers are engaged in agriculture, the largest absolute decline was recorded precisely in this sector. However, the relative changes are much more interesting, where the sector of Professional, scientific and technical activities stands out by the destruction of jobs, in which informal employment fell by almost 90% compared to the first quarter. Informal workers also lost their jobs to a large extent in the following sectors: Transportation and storage (52%), Other service activities (41%), Manufacturing (35%), Accommodation and food service activities (26%) and Wholesale and retail trade; repair of motor vehicles and motorcycles (18%). On the other side is Construction, which was largely exempted from business restrictions during the lockdown and which recorded high growth rates during the year. This left room for this sector with a traditionally high share of informal employment to further engage informal workers. The number of informal employees in the sector increased by about 8,500 or 27% in just 3 months.

Table 12 - Informally employed by sectors in the first two quarters of 2020

Sector	Q1	Q2
Agriculture, forestry and fishing	191829	176104
Mining and quarrying	340	406
Manufacturing	21105	13695
Electricity, gas, steam and air conditioning supply	0	112
Water supply; sewerage, waste management and remediation activities	1226	1130
Construction	31250	39667
Wholesale and retail trade; repair of motor vehicles and motorcycles	24246	19890
Transportation and storage	7930	3773
Accommodation and food service activities	12119	9010
Information and communication	3681	3903
Financial and insurance activities	522	642
Real estate activities	644	261
Professional, scientific and technical activities	8018	843
Administrative and support service activities	5719	4386
Public administration and defence; compulsory social security	1081	0
Education	3509	2049
Human health and social work activities	1214	1877
Arts, entertainment and recreation	8023	8477
Other service activities	9527	5619
Activities of households as employers	134637	139946
Act of extraterritorial organisations and bodies	578	0

Source: Author's calculations based on LFS micro data, SORS.

3.7. Indicators of sectoral employment

The sectoral analysis of informal employment shows an important pattern of strategic behavior of enterprises in relation to reducing the number of informal workers depending on the impact of the sector. It is also very important to look at how companies treated formal workers depending on the sector in which they operate. Unlike the previous analysis when we used the data of the Labour Force Survey, on this occasion we will rely on the SORS data on registered employment. These data are obtained by combining data from the Central Register of Compulsory Social Insurance (CROSO) and the Statistical Business Register (SBR), which makes them much more accurate than the data from the Labour Force Survey. Table 13 presents data on the movement of registered employment by quarters in the previous two years, which allows monitoring of year-on-year changes - changes in the same quarters of different years.

Table 13 - Registered employment by sectors during 2019 and 2020, quarterly data

Sector	2019				2020			
	q1	q2	q3	q4	q1	q2	q3	q4
Agriculture, forestry and fishing	30612	30904	30984	31000	29996	30373	30553	30458
Mining and quarrying	25590	25880	26076	26409	28732	28963	28981	29198
Manufacturing	452474	455799	462585	467728	468560	471446	477098	487055
Electricity, gas, steam and air conditioning supply	26122	25910	25887	26140	24525	24668	24681	24699
Water supply; sewerage, waste management and remediation activities	35558	35889	35749	35215	35474	35291	35691	35614
Construction	100370	103842	108012	110461	110619	114341	117739	118467
Wholesale and retail trade; repair of motor vehicles and motorcycles	340631	342648	342329	344670	340711	343147	351354	356896
Transportation and storage	117967	118389	119087	120579	121214	122281	123506	124471
Accommodation and food service activities	81135	81532	83150	84018	83178	83784	87322	89077
Information and communication	65441	66154	68063	70265	70386	73059	74706	77378

The table continues on the following page

Financial and insurance activities	43978	43929	43561	43928	43785	43696	43626	43836
Real estate activities	6431	6618	6921	7019	7052	7144	7346	7454
Professional, scientific and technical activities	106454	107964	109880	111441	107044	107123	109424	112016
Administrative and support service activities	105171	104759	107360	109234	103017	100282	101740	101538
Public administration and defence; compulsory social security	155548	157724	158609	157732	157444	158261	158425	156800
Education	146746	146154	143608	148479	152579	150628	147999	153661
Human health and social work activities	155955	156339	157225	158163	153229	154605	156021	157104
Arts, entertainment and recreation	35820	36249	36950	37359	37624	37549	38111	38283
Other service activities	41533	42199	43463	43309	42779	43429	44981	45065

Source: CROSO and SBR, SORS.

Some sectors and sub-sectors within them have not experienced significant deterioration due to the pandemic crisis. Moreover, some of them recorded a significant increase in registered employment. In percentage terms, most new jobs were created in the Mining and quarrying sector (an increase of 12%). The largest number of jobs in this sector was created within the exploitation of coal, crude oil and natural gas. Most jobs in absolute terms were created in the Manufacturing industry (around 16,500), of which more than 60% were opened in the subsector Manufacture of motor vehicles, trailers and semi-trailers. The high resistance of the Manufacturing industry, and primarily the motor industry within it, is a consequence of the systemic incentives of the government that contributed to the large increase in investment in this sector after 2016 (Arandarenko et al, 2021). Many of the companies that received subsidies from the government have previously committed themselves to pre-determined dynamics of employment growth in the future, which has contributed to the growth of registered employment in this sector.

A significant increase in employment of around 10,000 is also noticeable in Construction. The divergent trend of formal and informal employment in the two best-performing sectors can now be clearly seen. While in Construction the growth of formal employment was accompanied by almost identical growth of informal employment (around 8,500), the situation was quite different in

the Manufacturing industry. The increase in registered employment in the Manufacturing industry of 16,500 was almost offset by a decrease in informal employment of about 16,000 that occurred only in the second compared to the first quarter. In the case of this sector, it can be said that the measures were very effective. Not only were they effective in maintaining employment, but they probably also contributed to the formalization of the labour market within the manufacturing industry.

The sector with the third largest growth in registered employment was Information and Communication, which increased by 6,500 employees. The increase was mostly contributed by the subsectors Computer programming, consulting and related activities, Information service activities and Telecommunications. The way of organising business in this sector prevents us from giving an unambiguous assessment of the effectiveness of the measures of the Government of Serbia. As these are low-contact sectors where the possibility of working from home is widespread, the above-average results they recorded are partly due to their low exposure to Covid-19, and partly the result of state aid which in this sector acted as a stimulus rather than a job retention measure. This sector has been recording significant growth in employment and even greater growth in value added and exports for years, and it is certainly one of the strategic priorities of Serbia's industrial policy.

On the other hand, the measures did not prove to be sufficient in maintaining the registered employment, primarily in the sector of Administrative and support service activities, in which it was reduced by 5,000. The largest destruction of jobs occurred in the subsectors of Employment, Travel agencies, tour operators, reservation services and related activities, and Office-administrative and other ancillary business activities. There was a significant decrease in registered employment within the Human health and social work activities, almost entirely due to labour restrictions and a decrease in employment in the social protection sub-sector without accommodation. Interestingly, despite the decline in registered employment, this sector has seen an increase in informal employment. However, in summary, observed in the largest number of sectors in which the decline in informal employment was registered, the growth of registered employment was also registered. In addition to the mentioned exceptions in the form of Construction, Human health and social work activities, there is also the sector of Administrative and support service activities, where the decline in informal employment was accompanied by a decline in registered employment.

The above findings are confirmed by the analysis of the impact of the pandemic crisis on employment (Udovicki and Medic, 2021), conducted on the basis of a survey of companies and entrepreneurs. This analysis confirmed that the initial impact of the crisis was very strong, as 30% of entities could hardly operate at all, while 45% worked with reduced capacity, which in the period March-May led to a decline in revenues of 35-40% in average. The most affected sectors were those based on high-risk personal contacts at the time of the pandemic - leading to external restrictions and prohibitions, or in their absence, to the voluntary renunciation of services by consumers. Such sectors are passenger transport and work in travel agencies, HORECA, personal services and education, which lost from 50 to 80% of their income during the state of emergency.

Although formal employment remained largely stable during the critical period of closure, firms generally resorted to (short-term) wage cuts and layoffs of informal workers. During April and May 2020, there was a downward adjustment in the affected sectors. With the exception of air transport, where wages were reduced by about 25%, other reductions ranged from 5% to 15%, in HORECA, travel agencies, gambling and betting, as well as in the affected parts of the manufacturing industry (textiles and car industry). However, already in June, average wages returned to pre-crisis levels, indicating a temporary reduction (Udovicki and Medic, 2021).

3.8. Status dynamics on the labour market during 2020

In addition to comparing data at different time points, it is necessary to look at the labour market dynamics in order to determine how the crisis affected employees as a whole, and then both formally and informally employed within them. For this purpose, it is most convenient to create transition matrices. The methodology is similar to that in the case of transitional probabilities of NEET status among young people, but in this case the subject of observation is the transformation of status on the labour market. In addition to the three standard statuses - employed, unemployed and inactive, we decided to disaggregate employees into those who work formally and informally to determine whether there are differences in crisis adjustment patterns between them. The tables with intra-annual transition probabilities for the adult population, adult men and women, and the young population are presented below. The outcomes of the transition matrices for all the above categories between the first and second quarters of 2020 are presented in the annex.

For this purpose, we classified persons aged 15-34 as young people for two reasons. The first is statistical and the second is comparative. A relatively small number of observations in the case of persons aged 15-24 would call into question the statistical significance of the probabilities. Also, a previously conducted research (ETF, 2021) dealt with the transition matrices of young people aged 15-34 in 2017 and 2018, so we will be able to see the time dimension of this indicator using the same age interval. Similar to the transition matrices for NEET youth status, Table 14 shows the labour market statuses in the initial quarter, while the columns represent the status of persons in the next wave of surveys. In this regard, the bold numbers in each row show the probability of retaining the same status, while all other fields show the probability of switching to other statuses.

Table 14 - Intra-annual transition matrices in 2020 for:

(a) Adult population

Status (in %)	Formal	Informal	Unemployed	Inactive
Formal	95.6	1.5	0.8	2.1
Informal	10.9	78.0	1.6	9.6
Unemployed	11.9	8.2	42.6	37.4
Inactive	1.5	2.7	1.7	94.1

(b) Adult males

Status (in %)	Formal	Informal	Unemployed	Inactive
Formal	95.5	1.5	0.8	2.2
Informal	12.7	76.6	2.3	8.5
Unemployed	12.2	10.4	43.8	33.6
Inactive	2.1	3.1	2.1	92.6

The table continues on the following page

Continuation of the table from previous page

(c) Adult females

Status (in %)	Formal	Informal	Unemployed	Inactive
Formal	95.7	1.5	0.8	2.0
Informal	9.0	79.4	0.9	10.7
Unemployed	11.4	5.5	41.1	42.1
Inactive	1.1	2.5	1.4	95.0

(d) Young people (15-34)

Status (in %)	Formal	Informal	Unemployed	Inactive
Formal	93.5	1.7	1.9	2.9
Informal	17.6	67.8	2.7	12.0
Unemployed	13.9	6.3	48.2	31.6
Inactive	3.4	2.3	5.0	89.3

Source: Author's calculations based on LFS micro data, SORS.

Despite the strong negative effects of the pandemic crisis, employees in Serbia mostly kept their jobs. Over 95% of formally employed remained in the same status in the next wave of surveys within 2020. By adding informal employees, the preservation of employment climbs to 97% and its intensity does not differ between the sexes, but it is significantly lower among people aged between 15 and 34. The transition probabilities between the first and second quarters also show that the aid measures contributed to the preservation of employment. In the most turbulent times, the probability of losing a job has not increased, but corresponds to the annual average. Moreover, the probability of keeping a formal job with women in the second quarter is slightly higher than the annual average.

Another important fact about the probability of a change in employment status is what the outflow pattern was. Formally employed people who lost their jobs were three times more likely to become inactive than to become unemployed. The preference for inactivity over unemployment among formal workers who lost their jobs was even more pronounced between the first and second quarters when the ratio of the two probabilities rose to 4. In both cases (annual and between the first two quarters), men were the ones who slightly more often moved into inactivity than women. The increased outflow to inactivity relative to unemployment was particularly pronounced among young people in the second quarter. A potential explanation for this phenomenon may be the choice of young people to continue with formal or non-formal education until the labour market situation improves. It is a strategy that, for natural reasons, is more affordable to young people than to the adult population.

The values shown in the other rows of the tables above clearly show why it is very important to look at informal workers separately from formally employed workers. Only 78% of informal versus 96% of formal workers on average retained their status during the year. In the case of young people

(15-34) this difference is even more pronounced and amounts to 68% versus 94%. According to earlier allegations, the second quarter was particularly unfavourable for informal workers, with the probability falling to 72% for adults and 62% for young people. Informally employed women performed better on both an annual and quarterly basis, given that in both cases they were more likely to keep their jobs than men.

Informally employed women did not fare better than informally employed men when it comes to formalizing work. While on average 9% of informally employed women switched to formal employment (by formalizing an existing or transitioning to a new job), this was the case for 13% of informally employed men. However, the best transition to formal jobs was had by informally employed young people with a probability of about 18%.

It turns out that the assistance measures of the Government of Serbia most likely contributed to the formalization of employment. It can be concluded based on a comparison of annual transitions and transitions in the first two quarters. Uniformly, for all four observed categories of the population, the transition to formal jobs is significantly higher in the second quarter than on an annual basis. The probability is higher by an average of 3 percentage points, while for informally employed women this difference increases to 4 percentage points. The fact is that the assistance measures presented at the beginning of the second quarter are designed to apply exclusively to formal employees. The part of the companies that did not face the drop in demand and which therefore wanted to keep their employees (among which some are also informally employed), had an incentive to formalize them.

Other informal people who were not lucky enough to keep their status or to formalize themselves most often went into inactivity, much more often than formally employed people. The gap in the transition to inactivity between formal and informal employees is especially noticeable in two vulnerable groups - women and youth. In both cases, informally employed are about 9 percentage points more likely to move into inactivity than their formally engaged colleagues. As in the case of formally employed, a significantly higher outflow of inactivity compared to the annual average was recorded during the second quarter for informal employees as well. The deterioration of labour market conditions in that period had the greatest impact on informally employed young people, who recorded an increase in outflow to inactivity by about 4 percentage points compared to the annual level.

Natural flows in the labour market during the pandemic crisis have been disrupted when it comes to the transition of the unemployed. It is expected that, after maintaining the status of the unemployed as the most common "transition", the second largest number of unemployed will move to the category of employed. However, due to the reduced volume of work and reduced demand for work, after retaining their own status, unemployed most often went into inactivity. Among unemployed women, the outflow into inactivity took precedence even over maintaining unemployment status. The annual probability of transition to inactivity of unemployed women is 8 percentage points higher than the probability of unemployed men and 11 percentage points than the probability of unemployed youth.

Discouragement of the unemployed is best reflected in the transitions in the second quarter. In that case, the outflow from unemployment to inactivity is not the most frequent change of status only for women, but also for all other observed categories of the population. More than half of the unemployed who changed their status left the labour market in the second quarter, with women again leading with 62% and young people with 59%.

Of those unemployed who remained in the labour market during the year, formal jobs were relatively easiest to find by young people. We can also connect this with the effects of the newly introduced programme “My first salary”, which, despite its hybrid character, is “seen” in LFS as a formal job. Observed by gender, unemployed men found it relatively easier, on average, to find both formal and informal jobs than unemployed women. The same pattern was valid during the second quarter, but of course the intensity of the quarterly transition for all observed categories was significantly lower than on an annual basis.

From all of the above, it is clear that 2020 was not a year in which those who had been inactive before would be activated. Labour market flows have slowed significantly, on the one hand as a result of reduced job creation opportunities due to the pandemic crisis, and on the other hand as a result of government intervention to retain employees who would otherwise be at risk of losing their jobs. On average, more than 94% of the inactive maintained their status during the year, with persistence highest among women (95%) and lowest among young people (89%). The few who did activate mostly went directly to employment, except among young people where the average probabilities of outflows into employment and unemployment do not differ much. The change in the status of the inactive in the second quarter is characterized by a higher probability of remaining inactive, with this increase being greatest among young people. The dynamics of employment and unemployment of inactive persons does not deviate significantly from the annual average.

The study that dealt with the transitions of young people between 2017 and 2018 allows us to see whether and to what extent there has been a change in the dynamics of young people between the ages of 15 and 34 (ETF, 2021). It should be emphasized that the transitions in this study refer to year-on-year changes - the same quarters in different years were observed. In our case, quarters within the same year were observed. The most important consequence of methodological differences are slightly higher values of status retention given the shorter observation period in our case, but a comparison of other statuses according to the transition rank (not according to the level of probabilities) is quite acceptable.

About 89% of formally employed youth retained their status between 2017 and 2018 while 4% became informally employed, the same number unemployed, and 3% became inactive. Considering the results from 2020, we conclude that there has been an inversion between unemployment and inactivity, with employed young people moving to inactivity more often in times of crisis. That informally employed young people, in addition to retaining their status, usually switch to formal jobs, and only then to inactivity and unemployment. This is a pattern that has not changed even during the crisis. What has drastically changed in relation to the pre-crisis period is the destination of the outflow from unemployment. While previously a larger number of unemployed young people switched to formal and informal employment, and only then to inactivity, during the crisis, the outflow into inactivity became by far the most frequent transition among unemployed persons aged between 15 and 34. This finding suggests that active labour market policies aimed at young people should indeed be a priority not only in the immediate future, but also in the medium term. Additional strong arguments for prioritizing youth employment are related to the constant deterioration of the demographic situation and to preventing the growth of emigration, which was only temporarily stopped due to restrictions on international movements and a temporary decline in labour demand in destination economies.

3.9. Complementary labour market indicators

Standard labour market indicators have limited value in circumstances of an atypical economic crisis, such as the crisis caused by the Covid-19 pandemic. Therefore, the International Labour Organisation has proposed additional indicators that can more effectively look at labour market developments. One of the most used such indicators is certainly the labour market slack. Labour market slack is defined as the sum of:

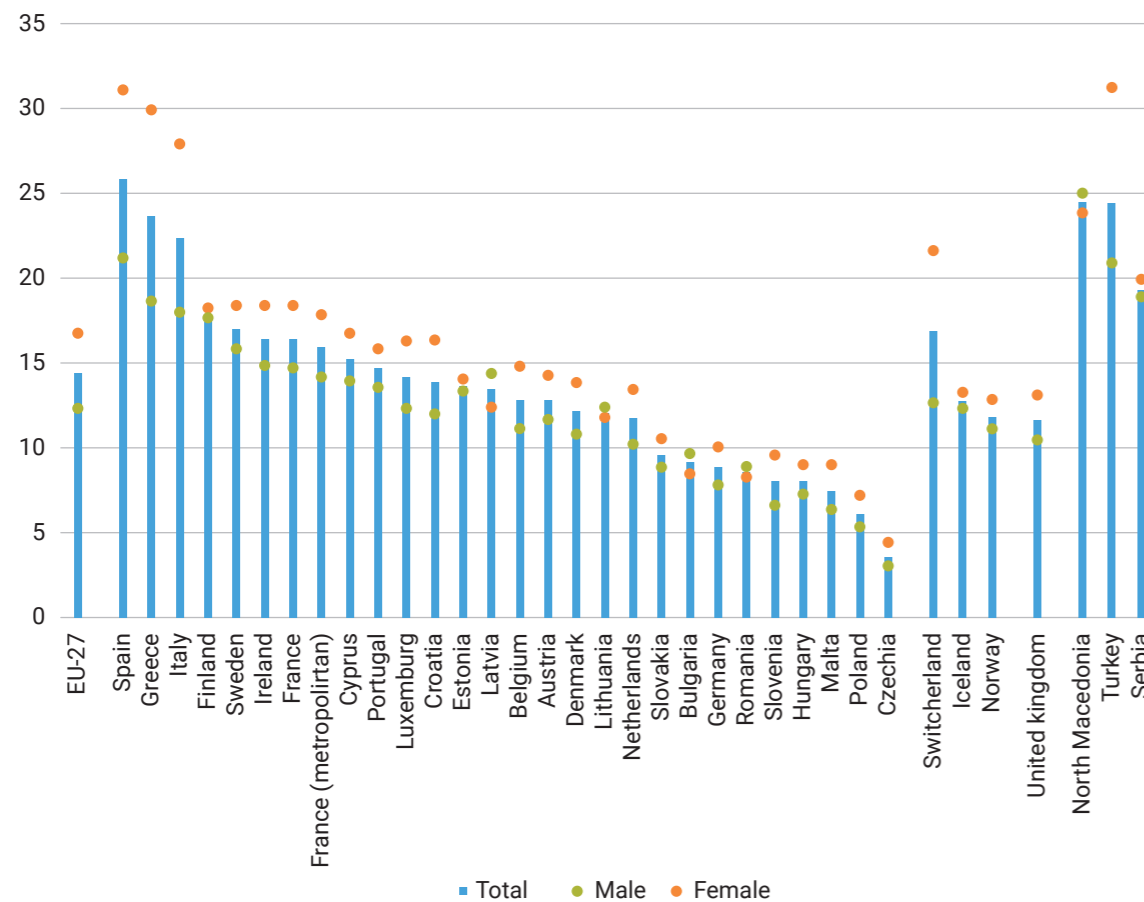
1. Unemployed;
2. Employees who work less than full time and would like to work more;
3. Those who are looking for a job but cannot work; and
4. Those who can work but do not look for a job.

As usual, in order for this statistical concept to be comparable between economies and time, the sum of the mentioned contingents of the population is put in relation to the expanded labour force. The extended workforce includes all employed, unemployed and potential labour force (some of the inactive who can work but do not look for a job and those who are looking for a job but cannot start working immediately) between the ages of 15 and 74.

The unmet need for employment in Serbia is higher than the EU average, but it is also lower than the economies in the Western Balkans for which data are available (North Macedonia and Montenegro). The percentage of labour market slack in 2020 in Serbia is 19.8%, in the European Union 14.3%, while in North Macedonia and Montenegro it is 23.9% and 30.1%, respectively (Eurostat). The intensity of the labour market slack decreased in all European countries until 2020, when it increased sharply due to the pandemic crisis. The only “outlay” among the economies was Serbia, where in 2020, compared to 2019, there was a decrease of 0.5 percentage points. The above means that the unmet need for employment is even lower than in the previous year. Divergent trends between economies once again confirm the different pattern of adjustment of the Serbian economy to the new crisis - while in other economies the unemployed workers mostly went into unemployment, in Serbia they went into inactivity to a somewhat greater extent, even beyond the expanded (potential) labour force.

The following graphs show the labour market slack for the observed economies in the 3rd quarter of 2020 (Chart 1) and the change in its value compared to the 4th quarter of 2019 (Chart 2). Unlike the year-on-year values, Greece also recorded a slight quarterly decline, in addition to Serbia. It is worth mentioning that the labour market slack is equally present among men and women in Serbia, while at the level of the European Union, women generally record significantly higher values compared to men. Also, while there were no changes in the stagnation rate for men in Serbia, a decline was recorded for women. This is again contrary to the trend in the EU, where the increase in the labour market slack is more registered among women. When we take into account age groups, the labour market slack among young people in Serbia is among the largest in the whole of Europe. The rate of 44% recorded among young people in Serbia is lower only than in North Macedonia (45.7%), and is significantly higher than the European Union average of 31.7%.

Figure 1 - Labour market slack in Q3 2020 as% of expanded workforce (15-74)

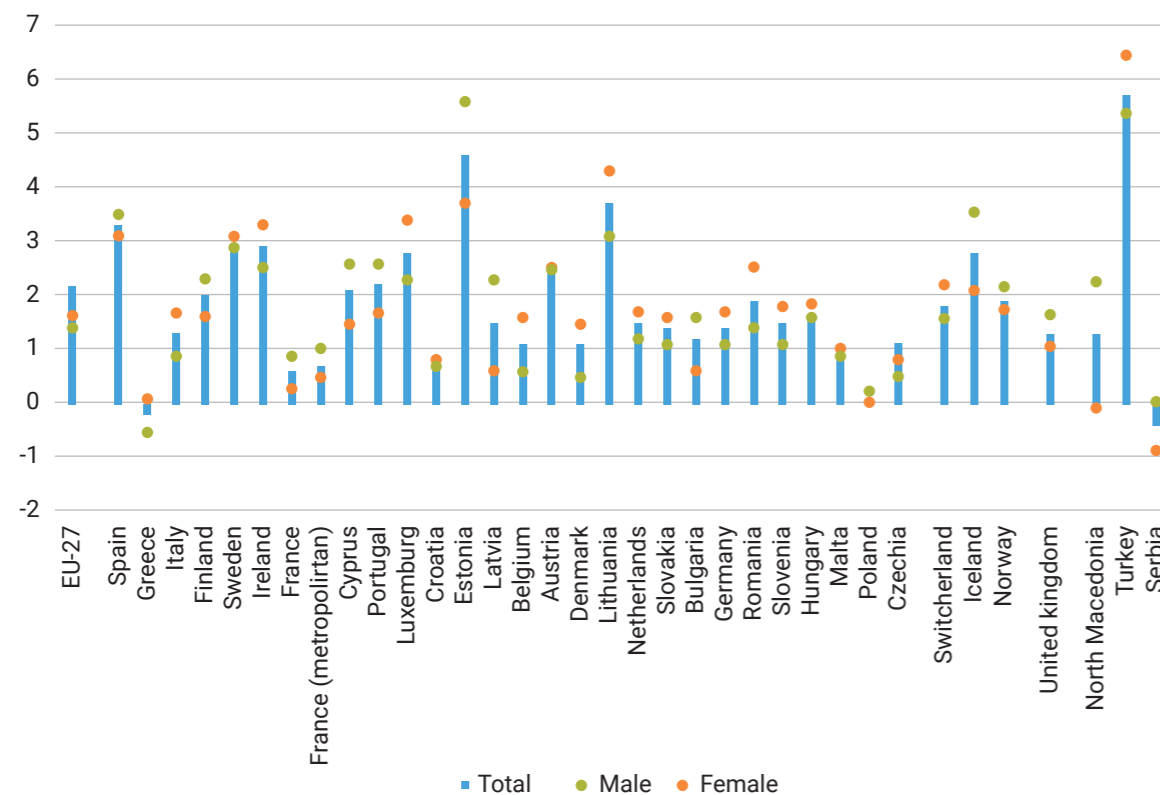


Among the complementary indicators, the degree of absence from work also stands out, which puts the number of absentees in relation to the total number of salaried employees. Compared to 2019, there was an increase in the participation of those who were absent from work by 1.4 percentage points (from 6% to 7.4%). The change in the structure of the reasons for absence from work is especially indicative. While in 2019, only 5% of those who were absent cited reduced workload due to technical or economic reasons, the same reason was the answer in the case of 37% of respondents in 2020.

On the other hand, the number of employees who were absent from work due to annual leave was significantly reduced from 40% in 2019 to only 18% in 2020. Two factors may explain this decline. First, the Government solved the problem of using annual leave from the previous year at the level of a recommendation. It recommended to all employers that employees who work from home during the state of emergency use the remaining part of the annual leave for 2019 until June 30, 2020. Those who used vacation in this way are most likely not fully registered with the Labour Force Survey. Working from home and using vacation have somehow merged into one. In addition, the international restriction of movement after the end of the state of emergency has led many to use the corresponding annual leave from the calendar year 2020 in 2021.

In line with expectations, there was an increase in the participation of employees who did work from home. However, given the extremely unfavourable business conditions, the stated share has not increased drastically. Compared to 2019, when 8% of employees worked from home for a salary (which is a comparatively high share for a European country in normal conditions, probably reflecting the high percentage of vulnerable employment, but also the prevalence of freelance work), this share increased by 1,9 percentage points in 2020.

Figure 2 - Change in the labour market slack in percentage points, Q3 2020 compared to Q4 2019



Source: Eurostat.

4. Active labour market policies



4.1. PES' services and measures

The primary role of active market policies consists of providing assistance to the unemployed in finding a job and secondarily to support employees in finding a better job. Defining the goals and more specific priorities of active labour market policies in Serbia takes place within the employment strategy as an umbrella document on the basis of which the general and specific goals of active employment policies for a longer period of time are defined. The operationalization of these goals is done through one-year (as was the case during the implementation of the previous National Employment Strategy for the period 2011-2020) or multi-annual employment action plans (which is the case with the current Employment Strategy in the Republic of Serbia for the period 2021-2026) which serve as an instrument for implementing an active employment policies. Based on the action plan, programmes and measures of active employment policies are determined, which the PES implements independently or in cooperation with other institutions, in accordance with the law and rules on state aid control.

The services and measures implemented by the PES during 2020 did not deviate significantly from the pre-crisis period. In the general case, four major groups of services and measures can be singled out that form the backbone of the PES arsenal:

1. Measures for active job search;
2. Additional education and training programmes;
3. Employment subsidies; and
4. Public works.

According to international categorizations, the listed instruments of active employment policies can be classified into services and measures of active employment policy. The first group (group of services) includes measures for active job search, while the second group consists of the remaining three instruments. In the context of services, the PES also has an advisory role. Unemployed people have the opportunity to receive advice on career development opportunities, job search tips, as well as to create their own individual employment plan together with a counselor. Other measures for

active job search are brokerage services that are based on connecting job seekers with employers (individually or, for example, through employment fairs). Within the measures for active job search, services are also provided that encourage employability and strengthen the motivations of unemployed persons. It is realized through various trainings that affect the development of skills of active job search and skills needed for self-employment. Services of this type are generally relatively cheap, but also very massive. The main services available to the unemployed within this category are: Training for active job search, Self-efficiency training, Job club, Training for entrepreneurship development, etc.

The services provided by the NES are characterized by a relatively stable number of users over time and difficult to measure but most likely small direct effects on employment, in line with very modest costs per user. On the other hand, additional education and training programmes, employment subsidies and public works are relatively expensive measures of active employment policies, but they also have a significantly greater effect on employment. That's why we will analyse their effects in more detail below.

4.2. Active labour market measures

The first group of "real" active labour market measures consists of additional education and training programmes. Measures implemented within this group are based on increasing competencies, retraining / additional training and adapting the specific knowledge and skills of the unemployed to the needs of the labour market. The most important measures within this group during 2020 were Professional practice programme, Programme for acquiring practical knowledge, Internship, as well as Training for the labor market. The first two measures aim to provide the first contact of unemployed persons with the labour market and enable them to work independently in the profession. The first of them has a slightly longer duration and refers to persons with qualifications, while the participants of the second measure are primarily persons without qualifications. However, this programme can also include persons who have higher levels of education if they meet certain conditions - for example, in 2020 redundant workers and unemployed who were on the NES records for more than 18 months were eligible. The internship programme includes professional training of unemployed persons in order to perform an internship and to satisfy the conditions for taking the professional exam, if necessary. It also takes place at two levels - for those with secondary and those with higher education, on which the duration of the programme depends.

Three groups of trainings were realized - for the labour market, training at the employer's request - for the unemployed and training for the employer's need for an employee. Within the first, unemployed persons are enabled to acquire additional knowledge and skills in order to increase their competence and employability and to be able to perform jobs within the same or new occupation in accordance with the needs of the local labour market. One of the key target groups of these trainings are people with disabilities. The other two training groups aim to provide participants with additional knowledge and skills needed to perform jobs in a specific workplace. In the first case, it implies the employment of unemployed persons from the PES records, and in the second, the preservation of employment of already employed persons. The training should be accompanied by the Functional basic adult education programme, which provides persons without primary education the opportunity to acquire it, as well as to be able to perform simple tasks.

Within the framework of subsidized employment, measures are implemented that lead to the direct creation of jobs. Subsidized employment takes place through two channels - a subsidy for self-employment and a subsidy for job creation. The first type of subsidy involves a one-time financial assistance to the unemployed to start their own business, to which all those who have successfully completed the training for entrepreneurs are entitled. Subsidies for job creation are intended to encourage the employment of the unemployed from the category of hard-to-employ persons, such as the young, the elderly, Roma, redundant workers, the long-term unemployed and the like. Although different types of measures, Public Works, similar to subsidies, implies the engagement of primarily hard-to-employ unemployed persons in order to preserve and improve their working abilities. In addition to the essential differences, it should be noted that the period of engagement in Public Works is significantly shorter, as well as that the participants are fully engaged through contracts on temporary and occasional jobs.

The assessment of the effectiveness of measures implemented during 2020 is most reliably based on the results of net impact evaluations. In these circumstances, the counterfactual data allow an assessment of the net effects that the measure has produced on the employment of the participants. However, conducting a net evaluation requires the existence of a certain time distance from the moment of completion of the measure, as well as the engagement of external expertise due to the complexity of the methodology, which is relatively expensive to implement on a regular basis for each measure. Various net evaluations of active employment policy measures in Serbia have been made (Bonin and Rinne, 2006; Arandarenko et al, 2010; Vasić, 2014; FREN, 2016), but all of them relate to a period that is significantly further from the health crisis, and mostly to internationally funded programmes outside the standard PES programme portfolio. As there are no recent net evaluations of measures from the standard PES portfolio that could serve as a basis for comparing the effects of measures during a pandemic crisis, in order to assess the effectiveness of the measures we are forced to monitor the gross effects of each measure. Gross effects show the percentage of participants in the measure who have employment 6 or 12 months after its completion.

As an instrument for assessing the success of the programme, gross effects have their great limitations. In addition to overestimating the effectiveness of the measures (because some participants would be employed without participating in the measure), a certain time to elapse is required for their evaluation, too. Depending on the specific measure, its duration can be up to a year. Assuming that due to national quarantine, the largest number of persons are included in the measures during the second half of 2020, it is clear that for many participants the measures are still not completed, or at least 6 months have not elapsed after their labour market status is checked. The data from the following table also support this.

Table 15 - Participants in active labour market measures and their status on the labour market on the 180th day after leaving the measure

Active labour market measures				Total number of participants		Labour market status on the 180th day after leaving the measure			
						The evaluation period has not yet expired		Person is employed	
				Total	Female	Total	Female	Total	Female
Additional education and training programmes	TRAINING	Functional basic adult education programme		1,052	663	0	0	31	13
		Retraining / additional training	Training for the labour market	136	58	6	0	21	8
			Training at the employer's request - for the unemployed	527	343	491	322	13	10
			Training for the employer's need for an employee	17	0	17	0	0	0
	PROFESSIONAL TRAINING AND DEVELOPMENT	Internships		798	513	628	416	103	54
		Professional practice		3,009	2,022	1,999	1,352	355	227
		Acquiring practical knowledge		770	380	732	360	23	13
	SUBSIDIES	Subsidies for self-employment	Subsidies for self-employment	3,597	1,773	3,596	1,773	1	0
		Subsidies to employers	Subsidies for new jobs	3,312	1,681	3,311	1,681	1	0
	Job creation programmes	PUBLIC WORKS	Public works	4,530	2,119	367	199	916	431

Source: Author's calculations based on IT sector of NES.

As can be seen from Table 15, in most measures the number of participants for whom the evaluation period has not yet expired exceeds 80%. Therefore, we will not deal with their effectiveness, because in that case, the evaluation would be based on an extremely small sample. A recent evaluation of the National Employment Strategy for the period 2011-2020 dealt with estimates of the gross effects of each of the measures in the past decade (Aleksić et al, 2020). We will use the results of this evaluation as a proxy for the effectiveness of those measures that cannot be evaluated, but also as a basis for comparison with those measures where the assessment of effectiveness is possible. Measures whose effectiveness in 2020 can be assessed with some reservations are Functional basic adult education programme, Training for the labour market, Professional practice and Public works. As the main finding, it can be pointed out that the effectiveness of all the mentioned measures has decreased in relation to 2019, but also in relation to the multi-year average. This is to be expected, bearing in mind that the gross effects in 2020 have not been 'cleansed' of the influence of external factors, and above all the deterioration of the situation on the labour market due to the pandemic.

The lowest gross effects of only 3% were recorded for the Functional basic adult education programme. The obtained effects are in accordance with the design of the measure whose main goal is to educate participants and provide opportunities for acquiring primary education. The value of gross effects is slightly lower than the average value over the past decade, which was 6%. The efficiency of Training for the labour market in 2020 was 16%, which is significantly below the average for the past decade (27%). The lower gross effects are understandable given that the implementation of this measure implies direct contact. It is the nature of the organisation of trainings for the labour market that has contributed to the inclusion of 136 instead of the planned 1,200 people due to the pandemic.

Gross effects of Professional practice of 37% are also slightly below the multi-year average. From the aspect of vulnerable groups, it should be noted that the gross effects under this measure were significantly higher for men during 2020. Gender differences were not observed when it comes to the efficiency of Public works, which in both cases amounted to about 22%. However, the gross effects obtained for this measure during 2020 are significantly lower than the average values, which were around 35%, and especially than the values from 2019, which amounted to 60%. Of course, we emphasize once again that the results from 2020 should be taken with a certain reserve, because the evaluation period is not completely over for all participants.

Of the measures for which it was not possible to estimate the gross effects in 2020, it is worth focusing on those that traditionally have high efficiency. We are doing this in order to, based on the structure of participants by measures in 2019 and 2020, give a rough assessment of whether active labour market policies have adequately responded to the consequences of the health crisis. In other words, was there, during 2020 compared to 2019, a larger or smaller number of persons directed to measures characterized by high gross efficiency. While in standard conditions the medium-term and ideally long-term effects of measures are more important, in crisis conditions it is equally important that the short-term effects be high, considering that employment options on the free labour market are reduced. Subsidies for self-employment, whose gross effects at one point were at the level of 96%, stand out as extremely effective (average of 85%). They are followed by Subsidies for employment of hard-to-employ persons (for new job creation) with an average gross effect of about 80%. Among those initiated by the PES³, we should also mention the Acquisition of practical knowledge, whose average efficiency during the past decade was 65%.

³ Training at the request of employers depends on the needs of employers and the NES alone cannot influence the number of participants.

Based on the data from Table 16⁴, there is a noticeable decrease in the number of participants in 2020 compared to 2019 for all measures whose gross effects we discussed. In addition to the health crisis, the reduction in the number of participants in standard measures was influenced by another factor. That is the implementation of the My first salary programme, in which more than 8,000 people participated. This has largely occupied the already limited capacity of the PES. Also, from the point of view of users' interest in participating in the programmes, there could have been a spillover from standard programmes to My First Salary. We will deal with the My First Salary programme in more detail in the next part.

When it comes to the structure of participants by measures, it has not changed significantly. However, it can be said that during the previous year, participants were slightly more focused on measures characterized by relatively higher gross effects. Thus, in 2020, the percentage of participants in Professional practice and Training for the labour market that have below-average efficiency decreased compared to 2019. On the other hand, there has been an increase in the participation of persons in subsidy programmes with higher gross effects - both within the Subsidies for self-employment and within the Subsidies for employment of hard-to-employ persons.

Table 16 - Number of participants in selected active labour market measures in 2019 and 2020

	2019	2020
Professional practice	4581	3013
Acquisition of practical knowledge	910	775
Training for the labour market	1257	136
Functional basic adult education	1305	1049
Subsidies for self-employment	4190	3601
Subsidies for employment of hard-to-employ persons	4000	3314
Public works	5293	4531

Source: NES Work report, NES.

We further check whether and how the pandemic affected the implementation of active labour market measures in 2020, as well as whether certain deviations are planned for 2021 in relation to the established practice. It can be seen from Table 17 that the planned quota within the programme group of Additional education and training has not been met for any measure. As mentioned earlier, the biggest failure was recorded in Training for the labour market, which had a realization of only 11%. The low level of realization is a consequence of the suspension of the public procurement procedure for the selection of training providers in 2020, so that the number of participants in the trainings represents the unemployed who are included in the trainings under the 2019 tender. In addition to them, two other measures were significantly affected by the pandemic - Professional practice and Functional basic adult education, in which about 2/3 of the initially planned persons

⁴ Slight differences in the number of participants by measures in 2020 are possible, depending on whether the source is the NES Work report or the NES Information system. The latter source provides more reliable data, because they are more recent and exclude those persons who have given up / left the measure in the meantime. The overall differences are at the level of statistical error.

participated. However, the number of people included in this programme group is 1.5 times higher than planned due to the ad hoc implementation of the My first salary programme. Therefore it can be concluded that the introduction of My first salary has crowded out other additional education and training programmes.

The opposite trend can be seen in the programme of Direct job creation, where each measure recorded a degree of realization greater than 100%. Reallocation between programme groups contributed greatly to this. The impossibility of realization of trainings left space to redirect part of the funds to programmes of direct job creation for which there was great interest, both for the unemployed and employers. Involvement of persons higher than planned was especially characteristic of subsidy programmes, which are already characterized by high gross effects by design. In the case of Subsidies for self-employment, the plan was exceeded by 23%, while in the case of Subsidies for employment of the unemployed from the category of hard-to-employ persons, the transfer is 16%.

The year marked by the health crisis was also the last of ten years of implementation of the National Employment Strategy for the period 2011-2020. In contrast, the new Strategy is characterized by an almost half shorter period (2021-2026), but also three-year (instead of one-year) action plans. The first such action plan covers the period 2021 to 2023. With a slightly greater insistence on increasing the quality of employment, its goals basically do not deviate too much from the goals of the action plans from the previous period.

One of the biggest shortcomings of the previous Strategy was the insufficient amount of funds for the implementation of active labour market policies (Aleksić et al, 2020). Measured as a percentage of GDP, these expenditures hovered around, and sometimes below, levels of 0.1%, well below the planned 0.5% and far from the EU average. The current action plan envisages a gradual, but rather modest, growth of funds intended for the implementation of an active labour market policies. Expenditures for these purposes are planned to amount to 5.2 billion dinars in 2021, and then 5.5 and 6 billion dinars in the next two years. Taking into account the GDP projections, the stated nominal dynamics will still not contribute to a significant growth of expenditures as a percentage of GDP.

Limitations in terms of financial resources are one of the important factors that should be taken into account when considering the planned measures of ALMP in 2021. Based on the data from the previous table, it is noticed that the planned number of persons by measures is in line with the plan from 2020, with minor deviations. Action Plan for the period 2021-2023 envisages many innovations, but no drastic turn in relation to the basic corpus of measures is expected. New, expanded or activities for which a review of the approach is planned include, inter alia: piloting new solutions for the development of local employment policy; redesigning support measures for active job search according to the needs of persons and labour market requirements; digitization of ALMP services and measures; preparation of an analysis of the preconditions for the introduction of training vouchers; inclusion of multiple vulnerable Roma in the package of measures. Also, it is planned to improve and redesign other ALMP measures in accordance with the needs of the labour market and the findings of the evaluation of the effects of ALMP measures.

However, the main innovation and the biggest challenge in the coming period is certainly the announcement of the adoption and gradual implementation of an extremely extensive and demanding programme of the Youth Guarantee. The realization of the Youth Guarantee implies the engagement of a large part of the NES capacity, and the greatest attention will have to be paid to that in the coming period. A more detailed discussion of the Youth Guarantee will be presented in a separate section. In the meantime, based on the positive experience of the first cycle of implementation of the My first salary programme, the Government has decided to re-implement it in the second cycle in 2021/2022.

A somewhat smaller number of participants in relation to the number of planned persons in the programme group of Additional education and training is a consequence of the reduced volume of Professional practice, which is only partially compensated by the growth of the planned number of persons in the Training for the labour market. The extremely low level of realization of these trainings, due to the suspension of the public procurement procedure for the selection of training providers during 2020, and the relatively favourable epidemiological situation have influenced the planned coverage in 2021 to be almost twice as high as in 2020.

Greater realization than planned during 2020 within the programme group of hiring subsidies influenced the growth of the number of planned persons in 2021. The planned number of

Table 17 - Planned and realized number of participants in active labour market measures in 2020 and 2021

Measures	2020		2021
	Plan	Realisation	Plan
ADDITIONAL EDUCATION AND TRAINING	9220	14561	8970
Professional practice	4030	3013	3000
Internship for unemployed with high qualifications	530	479	550
Internship for unemployed with medium qualifications	590	322	500
Acquisition of practical knowledge	820	775	820
Training for the labour market	1200	136	2100
Training at the employer's request - for the unemployed	530	527	500
Functional basic adult education	1500	1049	1500
Training for the employer's need for an employee	*	36	*
Recognition of prior learning	20	0	/
My first salary	/	8224	/
HIRING SUBSIDIES	6230	7396	7400
Subsidies for self-employment	3100	3601	3500
Subsidies for employment of the unemployed from the category of hard-to-employ persons	2730	3314	3500
Subsidies for people with disabilities without prior work experience	360	432	400
PUBLIC WORKS	4000	4531	2800
Public works	4000	4531	2800

* According to the requirements of employers

Source: Author's calculations based NES Work report and NES Work programme, NES.

participants in Subsidies for self-employment and Subsidies for employment of the unemployed from the category of hard-to-employ persons is equal in 2021 and amounts to 3,500. In contrast, the planned number of participants in Public works in 2021 does not reflect previous dynamics. Although the realization of Public works was significantly above 100% in 2020, a reduction of participants is planned. Thus, in contrast to the planned 4,000 and realized around 4,500 people in 2020, only 2,800 participants in this measure are expected for 2021. This reduction is in line with the recommendations of the Ex-post analysis of the National Employment Strategy and the European Commission's Progress Report on Serbia. The latter report especially emphasizes the reallocation of the unemployed from Public works to Additional education and training due to the educational structure of the unemployed and the high participation of the long-term unemployed who need to refresh their knowledge and skills and adapt them to labour market requirements. Public works remain reserved primarily for underdeveloped and devastated areas with very limited employment opportunities.

4.3. New programme 'My first salary'

The basic range of measures and services that the NES provides to the unemployed has not changed significantly in the past decade. However, within the existing set of measures, there were modifications and improvements in the design of measures or reorientation to other target groups. One of the most significant innovations occurred in August 2020, when due to the mitigation of the consequences of the pandemic, and based on the Decree of the Government of RS, the programme of encouraging youth employment "My first salary" was adopted (Government of RS, 2020b). The Government of Serbia, the National Employment Service and the Serbian Chamber of Commerce participated in the planning and implementation of the programme with the technical support of the Office for IT and Electronic Administration.

The goal of the programme is empowering of young people up to 30 years of age with completed secondary and higher education for independent work. The programme is exclusively intended for young people without any or with limited work experience (not longer than 9 months) who are on the unemployment register of the National Employment Service. Conditions for employers were less restrictive given that registration was available to both public and private sector employers, with preference given to the latter. As with most NES measures, the priority was given to employers coming from devastated areas (municipalities).

It is envisaged that the programme will be significantly more extensive than the standard measures implemented by the NES. This is evidenced by the planned number of 10,000 people, but also the planned funds of 2 billion dinars, which were allocated from the RS budget for the implementation of the programme. According to the design of the programme, a monthly fee in the amount of 20,000 dinars was paid from the allocated funds to the participants in the programme with secondary education, i.e. 24,000 to those with higher education. During the programme (9 months), participants are insured in case of injuries at work and occupational diseases, where contributions are calculated and paid by the NES.

Negligible financial costs and the lack of conditions for retaining participants at the end of the programme made My first salary very attractive to employers. In the first round of calls, more than 10,000 employers showed interest in participating in the programme and hiring about 28,000 unemployed people. The conditions for the invitation to participate in the programme were fulfilled

by slightly more than 8,500 employers with the need to hire 22,740 unemployed. The largest number of required profiles came from employers from the Manufacturing industry (occupations such as agronomist, technologist, chemist, biotechnologist, microbiologist, mechanical engineer, locksmith, welder), Wholesale and retail trade; repair of motor vehicles and motorcycles (occupations such as salesman, car mechanic, electrician) and Administrative and support service activities (occupations such as administrative worker, accountant, economist). Interest among young people was also very high and exceeded the planned number of people. The account on the portal My first salary was opened by more than 23,000 young people, of which about 17,000 candidates successfully applied for one of 12,559 positions with 7,524 employers.

Due to the large number of applicants on both sides, the process of matching programme participants and companies, and then the process of selection and selection of candidates took place in several rounds, and there were obviously many withdrawals from both employers and potential participants. In the final pairing round, 8,453 unemployed young people were referred to 5,177 employers, which represents a plan implementation rate of about 85%. In line with the intentions, the largest number of persons was hired by employers from the private sector (7,165), while the representation of young people involved is significantly lower within the public sector (1,288). The programme is predominantly engaged persons with secondary education whose share in the total number of engaged persons is almost 2/3. When it comes to the educational structure of students, there is a clear difference between those engaged in the private and public sectors. While in the public sector almost 42% of unemployed young people had higher education (751 with secondary education versus 537 with higher education), this was the case in only 33% of employers coming from the private sector (4,790 with secondary education versus 2,375 with higher education). This well reflects the general differences in the educational level of those already employed in the public and private sectors.

Since the programme is still ongoing, the last cross-section of the situation was done in mid-June 2021. On that occasion, it was established that there are still 7,767 people in the programme, that 576 people were employed during the programme and that in the case of 110 people, the programme was interrupted (at the request of participants or companies). The total expenditures for the My first salary programme reached almost 970 million dinars, which represents 48% of the allocated funds from the RS budget. The lower level of financial realization (48%) compared to the realization of participants (85%) is a result of the structure of participants (higher number of those who are paid a lower fee) and especially that the programme is not yet fully completed.

The NES took advantage of the fact that the implementation of the programme is at a late stage, and with the help of the Office for Information technology and electronic administration conducted a rough evaluation. An online questionnaire was used for this purpose, which aimed to check the experiences and attitudes of the participants and employers who participated in the programme. All actors expressed a relatively high level of satisfaction with the programme. Companies gave a slightly more positive assessment (4.7 out of 5), but youth satisfaction is also at a completely acceptable level (4.4 out of 5). The digitization of the entire process was highlighted as particularly positive. The support of the Office for Information technology and e-Government enabled the opening of the portal My first salary, through which young people applied and which also contained all relevant information about the programme and available jobs.

The digital approach is the most characteristic specificity that sets this one apart from other programmes implemented by the NES. This approach is completely justified, considering that it

is the easiest and most efficient way to reach young people in this way. This is supported by the data according to which the largest number of surveyed participants heard about the programme via the Internet, the media, and above all through social networks. During the programme, young people had the opportunity to improve their knowledge and skills that can be used in future jobs. Of the offered skills, the largest number of young participants pointed out that by participating in the programme, they improved teamwork, work ethic and business correspondence.

Based on the evaluation results, it can be said that the My first salary programme, despite the modest financial incentive, was relatively attractive to both young people and employers. Thanks to it, a number of young people got the opportunity to gain their first contact with the labour market. Unlike other similar type programmes for young people, My first salary was initiated and realized in specific conditions of the health crisis. Therefore, it can be said that the programme has to some extent achieved its main purpose - it provided work engagement to a number of young people during the pandemic crisis that caused a sharp decline in demand for labour. In the previous part, we pointed out why these circumstances particularly affected the young population, so that the significance of the My first salary programme is all the greater.

However, one should be careful when giving positive assessments for several reasons. First, young people who are engaged in this way are insured only in the event of an injury at work and an occupational disease. They do not have the right to sick leave, they do not have the right to annual leave and, perhaps most importantly, the time spent with the employer is not included in their length of service. If mentors do not pay enough attention to the participants and transfer the necessary knowledge and skills, the compensation, which is only 62% or 75% of the minimum wage (depending on the educational level), will not in itself be sufficiently stimulating for young people. It is confirmed by the attitudes of young respondents who attended the programme. Almost two thirds of them stated that the amount of compensation is the main thing that should be improved in the programme itself. On the other hand, employers are left with the option of paying participants additional funds in addition to the amount reimbursed by the NES⁵. However, these benefits were used by relatively few employers, so that about 700 young people received additional compensation, or less than 10% of the total number of participants in the programme. According to the answers of the respondents, the additional amount of compensation in most cases was up to 5,000 dinars per month.

Another problem arises in connection with the previous one. Employers who did not intend to retain young people at the end of the programme did not have an incentive to include them in essential aspects of the business. In these circumstances, the tasks of the participants were reduced to auxiliary-administrative, which means that they are not significantly trained to work independently on specific jobs with a future employer. The largest number of respondents suggested that there was no development of skills such as leadership, critical thinking, conducting meetings, etc. Third, apart from staffing, companies have almost no financial costs of hiring young people. In that case, the effect of substitution can be manifested by replacing a part of "expensive" workers hired through standard employment contracts with "cheap" programme participants. Therefore, in the coming period, in this or similar programmes that will be implemented, consideration should be given to imposing conditions on the impossibility of reducing the number of employees in companies participating in the programme.

⁵ Additional funds are categorized as other income, because it is not an employment relationship, so that all additional income of students is taxed at 20%. Also, the participants do not acquire the status of the insured with the compensation above the prescribed one, and therefore the companies are not obliged to calculate and pay their contributions for the stated amount.

Similarly, there is a danger that some companies will become permanent beneficiaries of the programme in the event of its longer duration. The data according to which 97% of the surveyed companies expressed interest in participating in the My first salary programme again are not unequivocally positive as one might think at first glance. However, if they have needs for workers, it would be expected that a higher percentage of companies would employ programme participants who have already spent 9 months with them instead of going through the same training process with new participants. In the choice between higher levels of productivity and lower costs of earnings, companies are easily tempted to give preference to the latter if the design of the programme allows it. This is confirmed by the data on the attitudes of the surveyed companies about what should be improved in the programme itself. The most frequent response was the extension of the programme. The desire of the company for the programme to last longer than nine months, which is considered close to the upper limit for typical internship programmes that are realized through contracts on professional training and development, was most likely driven by extremely low or even zero salary costs.

Finally, it should be noted that the name of the programme itself is in a way misleading, bearing in mind that the Regulation on the Youth Employment Promotion Programme "My first salary" defines that participants in the programme do not receive a real salary, but only a compensation.

In conclusion, the "My first salary" programme can be considered an intervention form that, due to the simplicity of its rules and the benefits it provides to employers, proved to be a strong and timely response to the extreme deterioration of youth employment opportunities during the pandemic crisis. At the same time, it would be wrong to treat it as a permanent and main solution for encouraging youth employment.

4.4. Youth Guarantee

The Youth Guarantee is a complex, comprehensive programmatic approach to the problem of entry of young people in the labour market. It is a programme by which the European Union has been trying to respond to youth unemployment for almost a decade. It requires that all young people under the age of 30 receive a quality job, continuing education, internship or training from the public employment service in a relatively short period of time from entering unemployment or leaving or completing formal education.

In 2020, in response to the rapid deterioration of the situation of young people due to the outbreak of the pandemic crisis, the European Commission and the European Council recommended that members introduce a strengthened Youth Guarantee, which extends the target group to 25-29 years, while the deadline for quality job offer, continuing education, internship or training remained unchanged at 4 months. In this way, there is a direct effect on reducing and, in the case of full coverage, eradicating the long-term status of NEET in young people, which is considered one of the main culprits for the 'scar effect', i.e. permanent reduction of earning capacity and job retention among young people exposed to long-term unemployment or inactivity.

Since the wider introduction of the Youth Guarantee in the EU, sometime around 2012, most public employment services (PES) have improved and expanded their youth services. It has created new opportunities for young people and has acted as a strong driver of structural reforms and innovation. Just before the COVID-19 pandemic, there were approximately 1.7 million fewer young people out

of employment, education and training (NEET) in the EU than in 2012. Youth unemployment fell to a record low of 14.9% by February 2020. Although the improvement of the macroeconomic context certainly played a role, the facts indicate that the Youth Guarantee had a great transformative effect.

Although Serbia has followed the introduction of the Youth Guarantee from the beginning, bearing in mind that its problem of youth unemployment and inactivity was much more pronounced than in the EU, the lack of financial resources and advisory capacities prevented it from introducing this concept into everyday NES practice. Instead, the Youth services package was established in 2012, as a measure by which young people primarily received more intensive counseling support, through the rapid and mandatory development of an individual employment plan and the realization of priorities in inclusion in active programmes. Although the initial ambition may have been to create a 'Youth guarantee light', as no significant financial resources were allocated or additional administrative and advisory support was sufficiently provided, the effects of the Youth service package were necessarily limited.

The new impetus for the establishment of the Youth Guarantee in Serbia came with the pandemic, which sharply worsened the position of young people on the labour market, as well as with the economy's exposure to influences and recommendations coming from the European Union. In particular, the Economic and investment plan for the Western Balkans from October 2020 foresaw that the Youth Guarantee in the Western Balkans would be implemented according to the model applied at the EU level, with gradual introduction in order to provide the necessary funds and build capacities. The readiness of the economies of the Western Balkans for the gradual introduction of the Youth Guarantee was confirmed by a joint declaration at a ministerial conference held in July 2021.

It is proposed to implement it in four phases: (i) implementation plan (identification of planned measures and their time frame, resources, necessary changes in the normative framework, determination of the coordination mechanism and the role of relevant bodies and stakeholders), (ii) preparatory actions will and commitment, capacity of competent authorities, provision of necessary manpower and infrastructure, changes in the normative framework, preparation of the framework for monitoring and evaluation, (iii) piloting, through the implementation of the Guarantee in a number of NES branches, (iv) progressive expansion and general introduction through the implementation of the Guarantee in several regions / throughout the economy. There are four main pillars under the Guarantee Scheme: i) early intervention; ii) reaching out to inactive young people; iii) activation - assessment of employability, assistance in job search and improvement of youth competence for active job search, information and counseling on career development opportunities, iv) support for integration into the labour market through active employment policy measures (RCC, 2021).

The successful introduction of a fully developed Youth Guarantee requires good preparation, which means creating not only direct preconditions (providing financial resources and expanding human and other capacities of the employment service, as well as the ministry responsible for employment), but also broader structural and institutional reforms, such as reform of the education system, changes in the regulatory framework, improvement of the training system, qualifications framework, etc. Serbia is continuously implementing structural reforms, so the biggest bottleneck is related to direct preconditions.

Through the IPA 20 programme cycle, it is planned to provide technical support to the Ministry of Labour, Employment, Veteran and Social Affairs and the National Employment Service, as well as to award a direct grant to the National Employment Service for the implementation of active labour market measures which will be prepared and defined within the stated technical support. One of the planned results, within the technical support, refers to the establishment of a pilot framework for the Youth Guarantee. The proposal is to support the following activities:

- Development of a plan for piloting the Youth guarantee programme - identification of relevant actors and institutional framework, procedures and modalities for implementation, assessment of the necessary financial resources;
- Development of models for reaching, registering and activating young people from the NEET category who are outside the institutions of the system;
- Development of a system for coordination of policies within the Youth Guarantee;
- Development of a management mechanism that directs activities at the national and local level within the Youth Guarantee.

After the implementation of preparatory activities, the plan is to pilot the Guarantee in the area of three branches of the National Employment Service, in accordance with the recommendation within the Feasibility study for the introduction of the Youth Guarantee in the Republic of Serbia, prepared by the ILO in December 2020.

5. Labour market forecasts for 2021



One of the important characteristics of the labour market in Serbia over the past decade has been the trend of constant improvement of all basic indicators. The outbreak of the Covid-19 virus pandemic has led to a structural breakdown and a moderate deterioration in labour market performance. Although the initial and sharpest external shock has passed, the health crisis is still strongly affecting business conditions and labour market outcomes. There are a large number of international and domestic institutions that have come out with an estimate of the recovery of the GDP in 2021. However, this cannot be said for the labour market outcomes in Serbia. Therefore, in this section, we will deal with the forecasts of basic labour market indicators for 2021.

The forecasting of labour supply and demand for labour is based on the methodology previously developed in Serbia for the needs of the National Employment Strategy for the period 2011-2020 (Arandarenko and Vujic, 2010), with certain modifications. Adjustments are necessary due to the fact that it is a much shorter period, but also due to the specifics that 2020 brings with it. For the sake of clarity, we will present the methodology of forecasting labour market trends in steps.

The first step involves forecasting the labour supply, which is based on demographic projections in order to estimate the total population, which is the theoretical maximum of available workers in the economy. The total number of adult residents can be projected on the basis of the previous five - year trend from the Labour Force Survey, whose data are shown in Table 18.

Table 18 - Population in Serbia by age groups, 2015-2020

Age	Annual values				
	2016	2017	2018	2019	2020
15+	6017600	5984700	5955100	5923900	5894200
15-24	756900	740000	727100	716000	705300
15-64	4677000	4618500	4565000	4504100	4445100
65+	1340700	1366200	1390100	1419800	1449000

Source: Labour Force Survey, SORS.

The long-term depopulation trend that is characteristic of Serbia has not changed significantly in the last 5 years. As a particularly unfavourable circumstance in the long run, it may be that the entry cohorts (cohorts of young people - between 15 and 19 years old) are many times smaller than the exit cohorts (cohorts of older people - between 60 and 64 years old). The decline of all cohorts within the working age population with the rapid growth of the population over the age of 65 are a clear sign of an ageing population. It is the annual increase in the population over the age of 65 of about 27,000 on average that has contributed to the average decline in the working age population of about 60,000 not reducing the adult population by more than 35,000 per year. Based on the stable trend in previous years, we attribute this reduction to the next year, on the basis of which we get the adult population in 2021, which thus numbers about 5,863,000.

In the second step, it is necessary to project the activity rate of the adult population. On this occasion, we rely on the Cohort Simulation Model (CSM), which was developed in 2003 (Burniaux, Duval and Jaumotte, 2003) and which was used for the needs of Eurostat, but also in earlier projections in Serbia. Of course, due to the relatively short period, it has been slightly modified. In this regard, we based the forecast of the activity rate on the previous five-year trend with the exception of 2020, which is a kind of outlay.

Table 19 - Activity rate of the adult population in Serbia, 2015-2019

Time	2015	2016	2017	2018	2019
Activity rate (in %)	51.6	53.3	54	54.5	54.6

Source: Labour Force Survey, SORS.

The ageing of the population is the cause of the slowdown in the growth of the activity of the adult population. This is obvious on the basis of the data presented in the previous table, according to which the activity rate grew on average by slightly more than 0.7 percentage points per year. However, the activity rate forecast should not be based solely on the previous trend. It should reflect our assumptions both in terms of supply and in terms of labour demand. From the supply aspect, the relatively larger transition from employment to inactivity during 2020 will affect the growth of population activity in 2021 to be somewhat more intense than before. The pandemic also had a slight impact on the change in the age structure of the population in the direction of increasing activity through two channels. First, during 2020, excess deaths were recorded, from Covid-19 and other diseases. Second, a number of foreign workers who returned to Serbia at the beginning of the pandemic generally do not plan or will not be able to leave in 2021. As the majority of "surplus" deaths are older than 65, and almost all returnees are younger than 65, a slightly higher activity rate can be expected. In terms of demand, higher-than-usual growth in activity reflects the intense nature of economic growth, which according to international forecasts is around 6% of GDP. Accordingly, it is possible to expect that the increase in the activity rate in 2021 will be at the level of about 1.2 percentage points compared to 2020.

The third step relates to the forecast of labour demand, which is basically reduced to the forecasting of employment, starting from the well-known theoretical law of the relationship between employment and GDP. The relationship between employment and GDP is much more stable in the long run, but it can serve as a basis for forecasting labour demand with certain modifications. For the sake of increasing accuracy, instead of looking at the ratio of total employment to total GDP, we will lower

the analysis to the sectoral level. Thus, based on the previous trend and the expected technological progress, we will be able to anticipate the extent to which sectoral employment reacts to changes in GDP. When assessing sector elasticities, we will also exclude 2020 for already known reasons. We then multiply the average value of the obtained elasticities by the sectoral employment from 2020 in order to obtain the change in employment in 2021.

Due to the greater robustness of elasticity, we observed the reaction of both registered and employed according to the LFS concept. However, as the forecasts are based on the LFS data, the elasticities we will use were obtained as a weighted average of elasticities from two different sources, with the LFS being given greater importance with a weighting factor of 0.75. Table 19 shows the elasticities thus obtained for the different sectors.

Table 20 - Estimated sectoral elasticity of employment in relation to GDP

Sector	Elasticity
Agriculture, forestry and fishing	-1.09%
Mining and quarrying	1.03%
Manufacturing	1.94%
Electricity, gas, steam and air conditioning supply	1.72%
Water supply; sewerage, waste management and remediation activities	2.35%
Construction	1.46%
Wholesale and retail trade; repair of motor vehicles and motorcycles	0.22%
Transportation and storage	1.75%
Accommodation and food service activities	2.07%
Information and communication	2.46%
Financial and insurance activities	0.26%
Real estate activities	-0.34%
Professional, scientific and technical activities	1.43%
Administrative and support service activities	0.28%
Public administration and defence; compulsory social security	0.50%
Education	1.09%
Human health and social work activities	-0.20%
Arts, entertainment and recreation	1.27%
Other service activities	1.10%
Activities of households as employers; Act of extraterritorial organisations and bodies	0.68%

Source: Author's calculations based on LFS and CROSO, SORS.

In the fourth step, we continue to forecast employment. Previously obtained elasticities represent the starting point, but their values should be adjusted to economic circumstances, which in 2021 will be significantly different than before 2020. There are several factors that will influence the reaction of employment to economic growth in 2021 to be significantly more moderate than before. First, during 2020, despite the economic downturn, registered employment increased, and LFS employment declined only slightly. Government measures have greatly contributed to maintaining or even increasing employment during the economic recession. Therefore, we expect that the projected intensive economic growth in 2021 will be accompanied by significantly lower employment growth than would otherwise be the case. This phenomenon is known in statistics as regression to the mean.

Second, in the section on the impact of Covid-19 on the labour market, we pointed to the phenomenon of estimated loss of working hours. According to the International Labour Organisation, working hours in Serbia in 2020 were about 7% lower than in 2019. Many workers are forced to work less because their employers have faced declining demand for products and services. Many employers could not use the full productive potential of employees due to health restrictions in business and reduced workload, but they were not fired due to state aid. The projected economic growth in 2021, which should bring with it the growth of demand for products and services, will force these employers to increase the working hours and productivity of their workers. This type of increase in working hours and output per worker will not be registered as an increase in employment.

Third, the methodological changes that took place during the 2021 Labour Force Survey could potentially reduce the corridor for informal employment growth. Although informal employment is highly pro-cyclical, almost a third of all informal workers are engaged in the Household sector, which produces goods and services for their own needs. The change in the statistical concept of employment has led to a drop in the number of employees in this sector by about 114,000. Therefore, the expected increase in informal employment in Construction, Wholesale and Retail; repairs of motor vehicles and motorcycles and Accommodation and food services only marginally affect the increase in total employment.

Due to all the above, it is necessary to mitigate the elasticities, because we expect that due to a certain way of artificially preserved employment in 2020, the reaction of employment in relation to GDP growth will be significantly milder than in the period before the crisis. It is assumed that these factors will halve sector sensitivity. Consequently, when calculating employment in 2021, we will multiply the sectoral employment from 2020 by halved of the values of the originally estimated elasticities.

The fifth step involves calculating unemployment. As in the previous steps, first the projected activity rate from which it is possible to get the number of active in the labour market, and then the number of employees, the fifth step is residual. We will get unemployment by simply taking employees away from the active population. However, the mentioned methodological changes within the LFS to some extent complicate this quite simple process. According to the pilot research, the new methodology results in lower employment and higher unemployment. The estimates made by the SORS refer only to the fourth quarter of 2020. For the purposes of forecasting, the data for the whole of 2020 are crucial, because they represent the basis on which we project the basic indicators of the labour market in 2021. The accuracy of the forecast will also depend on the accuracy of the base.

Based on the methodological notes and the announcement of the SORS from June 2021, we can derive the basic values of the labour market in 2020 according to the new methodology. Compared to the old methodology, the number of employees decreased by about 118,000, and the number of unemployed increased by about 14,000. It led to a decrease in the activity rate by 1.8 percentage points, the employment rate by 2 percentage points and an increase in the unemployment rate by 0.8 pp. More detailed indicators according to the old and new methodology are shown in Table 20.

Table 21 - Basic labour market indicators for the adult population in 2020 according to the old and new methodology

	Old	New
Absolute numbers		
Total population (15+)	5894200	5894200
Active	3181400	3077500
Employed	2894800	2776600
Unemployed	286600	300900
Rates (in %)		
Activity	54.0%	52.2%
Employment	49.1%	47.1%
Unemployment	9.0%	9.8%

Source: Author's calculations based on LFS, SORS.

Applying the projected adult activity rate of 53.4% (step 2) to the adult population reduced by the projected demographic decline (step 1) results in 3,131,000 active people in 2021. The aggregation of projected sectoral employment (steps 3 and 4) yields a total employment of around 2,843,000 in 2021. The difference between the active and the employed is the number of unemployed, which according to forecasts should be around 288,000.

In the last step, based on the projected absolute indicators, we calculate the basic relative indicators of the labour market - activity rate, employment rate and unemployment rate (Table 21). With the fulfillment of the previous assumptions, the employment rate of the adult population will reach the value of 48.5% (growth of 1.4 percentage points), while the value of the unemployment rate will be 9.2% (decrease of 0.6 percentage points). The increase in the number of active people of about 54,000 will be achieved thanks to the increase in the number of employees by 66,000, while unemployment will be lower by about 12,000 compared to 2020.

Table 22 - Basic labour market indicators for 2020 (new methodology) and projections for 2021

	2020	2021 (p)
Absolute numbers		
Total population (15+)	5894200	5863350
Active	3077500	3131029
Employed	2776600	2842532
Unemployed	300900	288497
Rates (in %)		
Activity	52.2%	53.4%
Employment	47.1%	48.5%
Unemployment	9.8%	9.2%

Source: Author's calculations based on LFS, SORS.

Rough estimates show that employment should increase the most in the following sectors:

1. Construction;
2. Information and communication;
3. Manufacturing industry; and
4. Professional, scientific and technical activities.

On the other hand, sectors where a slight decline in employment can be expected are Agriculture, Mining and quarrying and Public Administration and defence; compulsory social insurance.

We emphasize again that it should be borne in mind that these are forecasts whose accuracy depends on many factors such as the validity of baseline assumptions, the realization of GDP growth rate, vaccination rate and extreme uncertainty regarding the future epidemiological situation. Also, the accuracy of the forecast can be additionally affected by a very short period of time, but also by methodological changes within the LFS that will create a discontinuity in relation to the data from 2020 and earlier.

6. Main findings, assessments and recommendations



The strong public policy response of the Government of Serbia to the outbreak of the pandemic crisis has greatly contributed to the resilience of the Serbian labour market in 2020. The two main direct interventions in response to the pandemic crisis were targeted at businesses and the general population, but job retention was their primary and common goal. Private micro, small and medium enterprises outside the financial sector during 2020 are strongly supported in various ways, but most directly through subsidies in the amount of several net minimum wages (a total of 4.2 - 3 in the first and 1.2 in the second package) per permanently employed worker, which was conditioned by retaining at least 90% of the permanent workforce. All adult citizens were given unconditional financial assistance in the equivalent of 100 euros, with declared goals to maintain household income, bring optimism and support consumer demand, and thus preserve jobs. Both universal interventions continued in 2021, supplemented by selective measures aimed at companies in the most vulnerable sectors and citizens affected by unemployment.

This approach can be defined as a fiscal stimulus programme, not just a disaster relief, because it has not limited itself to partially or fully compensating for direct losses to firms and individuals. The generous support programme has contributed not only to significantly mitigate the fall in GDP and preserve employment, but also to prevent significant growth in poverty and income inequality (ILO, 2020). Compared to other Western Balkan economies, microsimulations show that Serbia was the only economy in which there was no increase in poverty (World Bank, 2021). On the other hand, the entire aid package, including other measures, was worth almost 13% of GDP and this level of public intervention is certainly not possible to maintain over a long period of time. However, in the short run, public finances remained stable and the share of public debt in GDP did not exceed 60%.

Despite the negative consequences of the crisis, the total number of employees aged 15-64 in 2020 compared to 2019 decreased minimally, by about 10,000, while due to a strong depopulation trend, the employment rate of the working age population even increased by 0.6 percentage points compared to the previous year. The labour market recorded even better results in terms of unemployment, which decreased by almost 50,000 persons compared to the previous year, which

led to a decrease in the unemployment rate by 1.4 percentage points to a single-digit level (9.5%). However, it is less positive that the decrease in unemployment was mostly achieved at the expense of the decrease in activity, which decreased by 0.4 percentage points compared to 2019.

As was the case in previous crises, the pandemic crisis caused shocks and changed the previous equilibrium in the economy and especially on the labour market. Government intervention, primarily minimum wage subsidies for job retention, has greatly mitigated the intensity of the overall blow to the labour market, but by protecting primarily formal employees that work on indefinite contracts, it has left other categories of employees less protected, especially those on atypical contracts (without contracts), informally employed, as well as temporary employees. Firms facing business difficulties have therefore adapted by reducing atypical and informal employment. These categories could count only on indirect protection through general stimulative measures of economic policy which stimulated aggregate demand, and through it employment. Additional measures targeting the most affected sectors and activities (tourism and hospitality, carriers, personal services, etc.) somewhat mitigated the most negative effects in these sectors, but were not strong enough to better protect employees with or without atypical contracts.

According to administrative data, registered employment grew continuously during all four quarters of 2020, which contributed to the annual employment growth of almost 50,000. However, the number of employees in "long-term employment" increased by more than 50,000, while the number of employees in "temporary and occasional employment" decreased by slightly more than 6,000, corresponding to an annual decline of about 9%. The largest part of the decline in employment outside employment was realized during the second and fourth quarters.

In percentage terms, most new jobs were created in the Mining and quarrying sector (an increase of 12%). The largest number of jobs in this sector was created within the exploitation of coal, crude oil and natural gas. Most jobs in absolute terms were created in the Manufacturing industry (around 16,500), of which more than 60% were opened in the subsector Manufacture of motor vehicles, trailers and semi-trailers. The high resistance of the Manufacturing industry, and primarily the motor industry within it, is a consequence of the systemic incentives of the government that contributed to the large increase in investment in this sector after 2016 (Arandarenko et al, 2021). Many of the companies that received subsidies from the government have previously committed themselves to pre-determined dynamics of employment growth in the future, which has contributed to the growth of registered employment in this sector.

The sector with the third largest growth in registered employment was Information and Communication, which increased by 6,500 employees. The increase was mostly contributed by the subsectors Computer programming, consulting and related activities, Information service activities and Telecommunications. As these are low-contact sectors where the possibility of working at home is widespread, the above-average results they recorded are partly due to their low exposure to Covid-19, and partly the result of state aid which in this sector acted as a stimulus rather than a job protection measure. This sector has been recording significant growth in employment and even greater growth in value added and exports for years, and it is certainly one of the strategic priorities of Serbia's industrial policy.

On the other hand, the measures were not sufficient to preserve the registered employment in the most severely affected activities, primarily in the sector of Administrative and support service activities, in which it was reduced by 5,000. The largest destruction of jobs occurred in the

subsectors Employment activities (predominantly due to reductions in temporary employment agencies), Travel agency activities, tour operators, reservation services and related activities and Office-administrative and other ancillary business activities, as well as in Health and social care.

The Labour Force Survey provides an excellent insight into the very different dynamics of formal and informal employment. While formal employment grew by about 50,000, almost 56,000 informal jobs were lost. This has led to a reduction in the informal employment rate from 18.2% in 2019 to 16.3% in 2020. Informal employment experienced the largest quarterly decline in the second quarter during quarantine, and then in the fourth quarter due to a drop in demand during the third wave. As expected, the largest decline in the number of informal employees was in agriculture, because the most informal workers are engaged in agriculture, but in relative terms informal employees lost the most jobs in the following sectors: Transport and storage (52%), Other service activities (41%), Manufacturing industry (35%), Accommodation and food services (26%) and Wholesale and retail trade, repair of motor vehicles (18%).

The divergent trend of formal and informal employment can be seen in the two sectors that record the best results when it comes to the transition from formal employment. While in Construction the growth of formal employment was accompanied by almost identical growth of informal employment (around 8,500), the increase in registered employment in Manufacturing of 16,500 was almost offset by a decrease in informal employment of around 16,000 which occurred exclusively in the second quarter. It is obvious that the pandemic did not harm the strong expansion of Construction and that subsidies in that sector had a rather stimulating character. On the other hand, they were obviously necessary to remedy the negative trends in the Manufacturing industry, and it is possible that they even contributed to the formalization of informal employment in that sector.

Only 78% of informal versus 96% of formal workers on average retained their status during the year. In the case of young people (15-34) this difference is even more pronounced and amounts to 68% versus 94%. The second quarter was particularly unfavourable for informal workers, in which the stated probability dropped to 72% for adults and to 62% for young people.

The change in the structure of the economy and the adoption of the new law have contributed to the number of employees employed through leasing agencies more than halved in relation to 2014, from about 100,000 to about 40,000 in 2019. Observed on an annual basis, according to the data on registered employment, the number of workers hired through the agency decreased by about 4,000 in 2020. However, a drastic decline was recorded during the second quarter when, according to the LFS data, in relation to 47,308 such employees in the first quarter, the number of persons decreased by over 10,000, which corresponds to a decline of 22%.

The already unfavourable initial position of young people (15-24) in Serbia was additionally disturbed by the pandemic crisis, considering that according to all labour market indicators, young people fared worse than the working age population. This was expected, due to the pro-cyclical nature of the youth labour market, which was established in Serbia in the episodes of the previous crisis after 2008. In contrast to the population aged 15-64, the youth employment rate decreased, while the youth inactivity rate increased more and the unemployment rate decreased less than in the case of the working age population. Slightly worse results were recorded for young women, whose annual employment decreased by about 5,000 compared to a decrease of 3,000 for young men.

The NEET (neither in employment, education or training) rate shows the participation of persons aged 15-24 who are not employed, not in school, nor in training in the total population of that age.

The trend of constant decrease of the NEET rate in Serbia started in 2014 and by 2019 this rate was reduced by more than 5 percentage points (from 20.4% to 15.3%). The structural break happened in 2020, when it increased by 0.6 percentage points. The value of 15.9% in 2020 is lower than the average for the Western Balkans region (22%), but much higher than the EU average of 11.1%. The NEET rate rose sharply among young men, while it fell among young women in 2020. While due to the lack of available jobs, young women returned to some form of education to a greater extent (the number of NEETs decreased from 55,000 to 51,000), the number of young NEET men increased by 3,000 (from 109,000 to 112,000).

However, the persistence of retaining NEET status increased significantly during 2020. Looking at 15-34 youth, the inter-quarter transition probability of persistence increased from 60% in 2017-18 to 75% in 2020. Persistence is somewhat more pronounced among young women. The values are very high and during 2020, the persistence of NEET status among young people in Serbia was very pronounced. Young people going through long-term episodes of NEET face a higher risk of developing a "scar effect" in terms of lower incomes, a higher probability of unemployment and lower chances on the labour market at a later stage in life.

The cycle and the procedure of planning ALMP are such that it is difficult to implement ad hoc interventions in case of sudden shocks, such as the pandemic shock. Therefore, it is not surprising that within the standard portfolio of active programmes implemented by the NES, there were no major changes compared to 2019. However, during 2020, unemployed persons were somewhat more focused on measures characterized by relatively higher gross effects. Thus, in 2020, the percentage of participants in Professional practice and Training for the labour market, which had below-average efficiency due to the suspension of the public procurement procedure for the selection of training providers due to the pandemic, decreased compared to 2019. On the other hand, there has been an increase in the participation of persons in subsidy programmes with higher gross effects - both within the Subsidies for self-employment and within the Subsidies for employment of hard-to-employ persons.

However, the biggest change was the completely new programme 'My first salary', developed as a rapid response to the deteriorating position of young people in the labour market, which was established by Government decree in August 2020. The goal of the programme is training for young people with completed secondary and higher education. The programme is exclusively intended for young people without any or with limited work experience (not longer than 9 months) who are on the unemployment register of the National Employment Service. A large number of participants (10,000) is planned, and the planned funds were 2 billion dinars, for the needs of the realization of the programme allocated from the RS budget. According to the design of the programme, a monthly fee in the amount of 20,000 dinars was paid from the allocated funds to the participants in the programme with secondary education, i.e. 24,000 to those with higher education. During the programme (9 months), participants are insured in case of injuries at work and occupational diseases, where contributions are calculated and paid by the NES. The programme is dominated by persons with secondary education, whose share in the total number of employees is almost two thirds.

Based on the conducted evaluation, it can be said that the My first salary programme, despite the modest financial incentive, was relatively attractive to both young people and employers. Thanks to this programme, a number of young people got the opportunity to gain their first contact with the labour market. Unlike similar type programmes for young people, My first salary was initiated

and realized in specific conditions of the health crisis. Therefore, it can be said that the programme has to some extent achieved its main purpose - it provided work engagement to a number of young people during the pandemic crisis, which caused a sharp decline in demand for youth work. After a positive evaluation and expressed interest of young people and employers, the programme was continued and the second cycle is being prepared, so that the programme will be active in 2022 as well.

Although the “My first salary” programme was undoubtedly justified and timely, it should not lose sight of its weaknesses, which over time can outweigh the positive ones, especially when the situation on the labour market improves. The programme is massive and uniformly designed, which means that it is not the best option for all young people who are finishing school and have difficulty finding a job. It is basically free and non-binding for employers, which opens the possibility for a “moving door” strategy, where employers from year to year can take new participants whose free work they can exploit without a real desire to train them and then hire them. Participants gain experience, but not work experience, and it is uncertain how that experience will be valorized in the labour market. Some participants may thus join the programme with less resistance and slow down instead of accelerating their transition to the first significant job on the labour market. All these weaknesses remain in the background while the situation on the labour market is very unfavourable for young people, but they can come to the fore when things improve on it.

Thus, “My first salary” can be seen as an appropriate programme for overcoming the difficult situation of young people during the pandemic and possibly post-pandemic crisis, while at the same time preparing a more sophisticated and complex solution in the form of the Youth Guarantee. The first steps towards the gradual introduction of the Youth Guarantee as a comprehensive approach to ALMP to include young people in the labour market have already been taken.

The successful introduction of a fully developed Youth Guarantee requires good preparation, which implies not only the creation of direct preconditions (provision of financial resources and expansion of personnel and other capacities of the NES, as well as the Ministry of Labour, Veteran Employment and Social Affairs), but also broader structural and institutional reforms, such as reform of the education system, changes in the regulatory framework, improvement of the training system, qualifications framework, etc. Serbia is continuously implementing structural reforms, so that the biggest bottleneck is related to direct preconditions.

Through the IPA 20 programme cycle, it is planned to provide technical support to the Ministry of Labour, Employment, Veteran and Social Affairs and the National Employment Service, as well as to award a direct grant to the National Employment Service for the implementation of active labour market measures which will be prepared and defined, within the stated technical support. One of the planned results, within the technical support, refers to the establishment of a pilot framework for the Youth Guarantee.

Taking back to the macroeconomic and institutional assumptions of labour market recovery, the main challenge is to maintain a solid economic recovery during 2021 and beyond, when most crisis measures expire. Also, uncertainty about the course of the pandemic and the delayed effects it may have on the financial health of businesses and households remains high, so targeted measures to support the economy and vulnerable groups should be maintained until a full recovery occurs, taking into account now on fiscal sustainability.

In the meantime, structural reforms need to be accelerated to turn Serbia into a dynamic market

economy driven by the private sector. This will also help Serbia’s preparation for successful accession to the EU single market, a long-standing ambition of the authorities. Improving the quality of institutions and governance is also a priority, which includes good governance and management of state-owned enterprises. Further addressing infrastructure gaps in Serbia would help support competitiveness, foreign investment and integration into regional and global value chains. Fighting informality would make business easier, while generating higher fiscal revenues. Finally, an increased commitment to the fight against corruption, strengthening the rule of law and the efficiency of the judiciary would improve the business climate and encourage long-term economic growth.

Annex

Table A1 - Transition matrices for the adult population between the first and second quarters of 2020

Status (in %)	Formal	Informal	Unemployed	Inactive
Formal	95.6	1.2	0.6	2.6
Informal	13.9	72.5	1.5	12.2
Unemployed	6.8	7.8	30.3	55.1
Inactive	1.4	3.2	1.1	94.4

Source: Author's calculations based on the LFS micro data, SORS.

Table A2 - Transition matrices for the adult men between the first and second quarters of 2020

Status (in %)	Formal	Informal	Unemployed	Inactive
Formal	95.2	1.6	0.5	2.6
Informal	14.9	71.4	1.9	11.9
Unemployed	7.1	10.2	32.7	50.0
Inactive	2.0	3.3	1.5	93.2

Source: Author's calculations based on the LFS micro data, SORS.

Table A3 - Transition matrices for the adult women between the first and second quarters of 2020

Status (in %)	Formal	Informal	Unemployed	Inactive
Formal	96.2	0.7	0.6	2.5
Informal	12.8	73.8	1.0	12.5
Unemployed	6.3	4.9	27.3	61.5
Inactive	1.0	3.1	0.7	95.2

Source: Author's calculations based on the LFS micro data, SORS.

Table A4 - Transition matrices for young people (15-34) between the first and second quarters of 2020

Status (in %)	Formal	Informal	Unemployed	Inactive
Formal	93.0	0.8	1.5	4.7
Informal	20.8	61.7	1.7	15.8
Unemployed	6.3	5.1	30.1	58.5
Inactive	1.8	1.8	3.0	93.5

Source: Author's calculations based on the LFS micro data, SORS.

References

Arandarenko, M., Aleksić, D. & Lončar, D. (2021), „Expansion of Direct Investment and Resilience of Serbian Labour Market: A Regional and Sectoral Perspective“, *Ekonomika preduzeća*, No. 3-4 (May-June), p.p. 203-216, ISSN 0353-443X.

Eurofound, (2012), „Social Europe-Many ways, one objective. Annual Report of the Social Protection Committee on the social situation in the European Union“, Publications Office of the European Union.

European Commission (2021), 2021 Economic Reform Programmes of Albania, Montenegro, North Macedonia, Serbia, Turkey, Bosnia and Herzegovina and Kosovo: The Commission's Overview and Country Assessments, Institutional Paper 158. July 2021. Brussels.

European Training Foundation, (2012), „Measuring mismatch in ETF partner countries: A methodological note“, ETF.

European Training Foundation, (2021), „Youth situation In Serbia: Employment, skills and social inclusion“, ETF.

Gregg, P. and Tominey, E., (2005), „The wage scar from male youth unemployment“, *Labour Economics*, 12(4), pp.487-509.

ILO, (2020), „ILO Monitor: Covid-19 and the world of work“, third edition, ILO, Geneva.

IMF (2021), Republic of Serbia 2021 Article IV Consultation and request for a 30-month policy coordination instrument – staff report, IMF Country Report No. 21/132, Washington DC: June.

OECD (2021), OECD Employment Outlook 2021: Navigating the COVID-19 Crisis and Recovery, OECD Publishing, Paris.

Randelović, S., (2021), Determinants of volatility of economic activity in Europe during the COVID-19 pandemic: Stylized facts. *Ekonomika preduzeća*, 69(3-4), pp.231-241.

RCC (2021), „Study on Youth Employment in the Western Balkans“, Regional Cooperation Council.

Republički zavod za statistiku, „Anketa o radnoj snazi“, različite godine, RZS.

Udovički K., P. Medić (2021), Uticaj COVID-19 krize na zaposlenost: Fokus na ranjive kategorije, Tim za socijalno uključivanje i smanjenje siromaštva Vlade Republike Srbije, Beograd.

Vlada RS, (2019), „Zakon o agencijskom zapošljavanju“ Sl. glasnik RS, br. 86/2019.

Vlada RS, (2020), „Uredba o fiskalnim pogodnostima i direktnim davanjima privrednim subjektima u privatnom sektoru i novčanoj pomoći građanima u cilju ublažavanja ekonomskih posledica nastalih usled bolesti Covid-19“, Sl. glasnik RS, br. 54/2020 i 60/2020.

Vlada RS, (2020b), „Uredba o Programu podsticanja zapošljavanja mladih „Moja prva plata“, Sl. glasnik RS, br 107/20.

World Bank (2021), Western Balkans Regular Economic Report Spring 2021, World Bank, Washington DC.



RegionalCooperationCouncil

**Employment and Social Affairs
Platform 2 Project (#ESAP2)
www.esap.online**



@rccint



RegionalCooperationCouncil



RCCSec



regionalcooperationcouncil_rcc



Regional Cooperation Council

good.better.regional.