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European Training Foundation

YOUTH SITUATION IN SERBIA

Employment, skills and social inclusion

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EXECUTIVE SUMMARY

Despite recent improvements in labour market indicators, young people in Serbia continue to experience difficulties in accessing and participating in the labour market. One of the major challenges for youths in Serbia in establishing their independence is finding a stable job and remaining in employment. The economic transition and the recession caused by the global financial crisis in 2008 to 2010 resulted in reduced demand for young workers, diminishing their chances of successfully moving from school to work. Although the school-to-work transition in the European labour market is rarely a smooth and clear-cut process, in Serbia this is much more complex. The situation will most probably worsen given the prolonged effects of the Covid-19 crisis in Serbia and around the world.

According to the latest Labour Force Survey (LFS) data, available at the time of writing (November 2019 to June 2020), the youth unemployment rate (those aged 15–24) for 2019 was 27.5%, with a higher incidence among women. A particularly vulnerable group in the labour market are young people not in employment, education or training. Moreover, according to all available indicators, the labour market position for young people, especially women from rural areas, is considerably less favourable compared to young people, especially men, living in urban areas. Finally, young people in Serbia face bleaker labour market prospects than their peers in the European Union (EU).

Throughout the years spent in formal education, and by means of the opportunities made available through non-formal education, young people have opportunities to develop their personal and social potential, and to acquire basic skills and qualifications. Moreover, education is not only a fundamental determinant of individual life chances and social participation, but also of economic development. Obtaining a high-quality skills education gives the opportunity for young people to succeed in the labour market and find meaningful employment. Young people in Serbia on average spend about 12 years in formal education, compared to 17 years on average for youths in the EU. Upper secondary education is considered the minimum desirable educational attainment level, and it is a prerequisite for better labour market integration and avoiding poverty and social exclusion.

The economic outlook during the Covid-19 pandemic further hinders the chances of young people successfully moving from school to work. This transition is fraught with a lot of insecurity. Unemployment brings serious hardship to young people and their families, as long-term unemployment leaves lifelong negative effects. Moreover, the prolonged jobs crisis has forced young people to be less selective about the type of job they are willing to accept. In other words, young people who have been looking for a job over a long period of time are more likely to experience precarious employment, an uncertain future period of employment, and lower job satisfaction. As Marjanović's 2016 report on labour market transitions shows, it takes two years on average for a young person in Serbia to find their first stable employment after finishing education; in the EU, the average time is 6.5 months. Such a prolonged transition from school to work in Serbia has adverse effects on other transitions to adulthood. For example, according to Popadić et al. (2019), only 24% of young people (aged 18–29) do not live with their parents. This has deep social implications as it delays the creation of an environment in which young people will become independent and start their own families. Also, according to Paolini et al. (2018), a high level of long-term youth unemployment carries significant financial costs as well as increasing the risk of social unrest.

The drop in the youth unemployment rate is not only due to more people having a job but also the consequence of migration. In the International Migration Outlook (OECD, 2018) it is estimated that from 2012 to 2016, around 245 000 people, presumably mostly young, left Serbia. This means that on

an annual basis, almost 49 000 people emigrated from Serbia. A research by the Statistical Office of the Republic of Serbia (SORS) on student migration (SORS, 2018) found that a relatively large number of young people expressed a desire to move abroad. The main reason was the inability to find a job that matches qualifications followed by low pay and overall low living standard in the country.

The Survey on Income and Living Conditions (SILC) data shows that young people in Serbia are not only trapped in a troubled labour market situation but also exposed to other risks such as poverty and material deprivation. The at-risk-of-poverty or social exclusion (AROPE) rate – a composite indicator which captures all three dimensions of vulnerability of young people aged 16 to 29 years: very low work intensity, at risk of poverty and material deprivation – shows that 33.6% of young Serbian people belonged to at least one of these three states (Eurostat, 2019). Teenagers aged 16 to 19 who were not living with their parents appeared to be most vulnerable.

Against such a backdrop, this study has been undertaken with the aim of analysing the challenges faced by young people in Serbia in their transition from school to adult life, especially in their labour market integration, and with a particular focus on the most vulnerable groups. Therefore, the study looks at the main causes of youth vulnerability and skills mismatches at younger ages, forecasting of labour market demand and supply with key implications for younger generations, and policy approaches for labour market and social inclusion of young people.

The report includes six chapters regarding the above-listed topics and brings together the main conclusions and recommendations stemming from this comprehensive study.

Chapter 1, on labour market access and transition of young people, explores the main labour market indicators and analyses the position of youths and their access to the local labour market while also tackling major problems with their school-to-work transition. This chapter uses all the available survey data to analyse youth vulnerability in the labour market, including LFS, SILC and the School-to-Work Transition Survey. Also, it uses qualitative information gathered through focus groups with young people.

Chapter 2, on youths in socially vulnerable situations, presents and analyses data retrieved from SILC showing that young people are not only trapped in a difficult labour market situation but also exposed to other risks such as poverty and material deprivation. Also, it analyses innovations feasible in capturing youth vulnerability to better inform policy setting. This chapter includes identification of ‘exclusion profiles’ (i.e. young groups/subgroups exposed to social exclusion and poverty) using SILC and other relevant data and information (including qualitative), and also aims to identify possible innovations in the monitoring and evaluation of active social inclusion of young people.

Chapter 3, on measurement of skills mismatches at younger ages, focuses on the mismatch of skills or qualifications and the demand and supply of labour. It adjusts the methodology to fit specific youth groups (e.g. age subgroups relevant for policymaking and incidence of mismatch at regional/sub-regional level) and data availability and presents calculations of skills mismatch indicators and interpretation of indicators in the national context.

Chapter 4, on forecast of labour market demand and supply and key implications for the younger generations, includes trends in the overall economy and society and the expected impact (such as digitalisation or demographic risks). The chapter brings demographic projections (constant scenario) for the period 2020 to 2030 from a representative source (Penev, 2013) and adjusts them to better fit the population estimates of SORS used in the 2019 LFS. In a sequence of calculation steps, it

presents final activity, employment and unemployment projections, in absolute and relative terms for the period 2020 to 2030. In addition, the chapter provides comments on youth labour market projections, analyses the impact of the digital economy and telemigration on the youth labour market, and presents employers' views on labour market supply and demand with specific reference to the younger generation.

Chapter 5, on policy approaches for labour market and social inclusion of young people, maps policy interventions in implementation at the time of research and discusses their effectiveness in addressing multiple facets of youth vulnerability, lists illustrative examples of programmes focused on youths, and presents the main lessons and policy approaches. It includes a wider set of interventions helping socially exposed young people to integrate into society and the labour market, and identifies promising approaches and/or methods of work pointing at the importance of cooperation among different actors, including government institutions, non-governmental organisations, private sector organisations, service providers such as the National Employment Service, schools and training providers.

Chapter 6, on conclusions and recommendations, includes a summary of the key findings and recommendations for further development of the regulatory framework, strategic planning and creation of youth policies and programmes including education, employment and social inclusion of youths.

Annexes include additional tables resulting from the statistical analysis (Annex 1) and a brief methodological outlook, i.e. key methodological aspects and instruments for carrying out the qualitative research, including the list of stakeholders and local partners involved in the discussions and qualitative research (Annex 2).

INTRODUCTION

This study on the youth situation in the Republic of Serbia (hereafter Serbia) is part of a wider initiative by the European Training Foundation (ETF) focused on the problems young people face in relation to the changing labour market and social conditions in the European Union (EU) Neighbourhood area.

The research in Serbia aimed to provide an overview of the situation of young people, in particular those exposed to social vulnerabilities, and review the policy approaches with a focus on how skills are developed and used by younger generations. To meet this purpose, the Foundation for the Advancement of Economics (FREN) team, who authored this report, collected and analysed available sources, including quantitative data from surveys, administrative data sources and strategic documents, and other relevant references collected in collaboration with relevant partner institutions (local and international). In addition, focus groups with youths, employers and telemigrants were organised to collect qualitative data expected to provide more detailed information with regard to challenges faced in the transition from school to adult life, and specifically related to labour market potential and opportunities as seen by youths but also by selected employers in Serbia.

Research design and methods

Data for the study was collected from available quantitative data sets (e.g. Labour Force Survey (LFS), Survey on Income and Living Conditions (SILC) and School-to-Work Transition Survey (SWTS)), administrative sources (such as employer surveys performed by the National Employment Service (NES) and the Central Register of Compulsory Social Insurance), and strategic documents. In addition to this data, the researchers used focus groups as a recognised method in social research for collection of qualitative data related to perceptions, attitudes, motivations, experiences, expectations and other issues that might affect behaviour, living conditions and well-being of studied individuals. The research design for Chapters 1 to 5 is presented below.

RESEARCH DESIGN FOR CHAPTERS 1 TO 5

Chapter	Methods	Sources and tools	Data analysis
1	Desk research Secondary data collection Primary data collection (focus groups)	LFS, SILC, SWTS (to be obtained from the Statistical Office of the Republic of Serbia (SORS))	Quantitative and qualitative
2	Desk research Secondary data collection	SILC, other relevant resources	Quantitative and qualitative
3	Desk research Secondary data collection	LFS, SWTS, other relevant resources	Quantitative
4	Desk research Secondary data collection Primary data collection (focus groups)	LFS, population ageing trends in Serbia	Quantitative and qualitative
5	Desk research Consultations with partners	Reports and other relevant resources (secondary data), administrative sources and strategic documents (e.g. National Youth Strategy, National Employment Strategy, NEAP, NES annual reports), and focus group reports	Qualitative data analysis, descriptive analysis

At many points, the study findings have been grounded in consultations with numerous partners who were generous in sharing data and resources, as well as their views and experiences with us. These include the Social Inclusion and Poverty Reduction Unit (SIPRU), the Ministry of Labour, Employment, Veteran and Social Affairs (MoLEVSA), the Ministry of Education, Science and Technological Development (MoESTD), the Ministry of Youth and Sports (MoYS), SORS, NES, the EU Delegation in Serbia, the International Labour Organisation (ILO), UNICEF, Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ, a German development agency), NIRAS IP Consult/Employment to Education (E2E) programme, Eptisa/EU Support to Active Youth Employment project, Business Innovation Centre Kragujevac, Youth Office Novi Pazar, Start-up Centre Pirot, Centre for Youth Work Novi Sad, European Movement in Serbia in Leskovac, Belgrade Open School (BOS), Centre for Public Policy Research, the Friedrich Ebert Foundation and SECONS. The full list of institutions and organisations that took part in the consultation is provided in Annex 2.

The preliminary and final findings and conclusions, including policy takeaways, were shared with Serbian stakeholders and discussed in a series of meetings organised from June to October 2020. The statistical outcomes and novelties in terms of indicators fit for the analysis of youth vulnerability in the labour market and skills usage, resulting from this research, informed the policy advice and debates organised at regional level (South Eastern Europe and Turkey region).

1. LABOUR MARKET ACCESS AND TRANSITION OF YOUNG PEOPLE

This chapter investigates activity, employment and unemployment aspects of young people in Serbia, including labour market transition probabilities, employment experiences after graduation and an analysis of working experiences in relation to job type, wage and working conditions.

1.1 Labour market indicators

This section uses all the available survey data to analyse youth vulnerability in the labour market. Relying on survey data – in this case LFS, SILC and SWTS – allows comparability, reliability and relevance of results. Nevertheless, for improved monitoring and evaluation practices, the potential of other data sources – such as administrative ones to better capture the youth situation and policy effects – should be explored. This is reflected in Chapter 6 of the report and Annex 2.

In general, the timeline of the labour market indicators is 2015 to 2018, in line with the availability of annual data at the time of analysis (late 2019 and early 2020). For obvious reasons, the analysis does not capture the impact of the Covid-19 pandemic on the economy and employment opportunities, including for young people, in Serbia. Nevertheless, findings and policy implications remain valid as it is expected that labour market challenges will augment in the crisis and post-crisis context.

TABLE 1.1 EMPLOYMENT, UNEMPLOYMENT AND ACTIVITY RATES, 2015–18 (%)

	2015	2016	2017	2018
Age: 15–24				
Employment rate	16.7	19.8	20.9	21.1
Unemployment rate	43.2	34.9	31.9	29.7
Activity rate	29.4	30.3	30.6	30.0
Not in education, employment or training (NEET) rate	20.1	17.7	17.2	16.5
Informal employment rate	37.8	35.4	30.0	27.8
Age: 15–64				
Employment rate	52.0	55.2	57.3	58.8
Unemployment rate	18.2	15.9	14.1	13.3
Activity rate	63.6	65.6	66.7	67.8
Informal employment rate	19.5	22.0	20.7	19.5

Source: LFS.

The overall situation in the Serbian labour market improved in the 2015–18 period. Activity and employment increased, while unemployment reduced. According to LFS data, the employment rate of young people (15–24 years) increased by almost 5 percentage points (6.8 percentage point increase for the working-age population) and is currently at around 21%. This is close to average for the Western Balkans (20% in 2018), but still far from average for EU Member States (35% in 2018).

The employment rate of the working-age population is three times higher than the youth employment rate, which is above the average ratio found in the EU countries (around two times higher in 2018).

The unemployment rate for young people declined significantly, from 43.2% to 29.7% (i.e. a 13.5 percentage point decrease), much more than for the whole working-age population (which saw a 5 percentage point decrease). A similar trend was observed in other countries of the Western Balkans, with Serbia leading the way (followed by Bosnia and Herzegovina and Montenegro). Despite improvements, the youth unemployment rate was double the EU-28 rate in 2018 (15.2%) and even three times higher than in EU peer countries such as Austria and Hungary (World Bank and wiiw, 2019).

The large drop in unemployment rates could be partly explained by continued emigration. Regional research has shown that the desire to emigrate is more prevalent among youths in Serbia than in the neighbouring countries such as Romania, Bulgaria, Croatia, North Macedonia, Montenegro, Slovenia, Bosnia and Herzegovina, Kosovo[1] and Albania (Popadić et al., 2019). Almost 75% of young people (15–29) wish or intend to emigrate. For about 20% of them, short-term migration (for a year or two) is the most desirable option, while the same number think of moving permanently. The intention to emigrate is mostly motivated by a better living standard but is also driven by pessimistic views about Serbia's future. Educational opportunities are another factor that makes emigration attractive.

The labour force participation rate of young people has remained almost unchanged in recent years and it remains low compared to the EU average. This is related to the number of young people not in education, employment or training (NEET). The NEET rate of 16.5% was below average for the Western Balkans (22.5%) but still higher than the EU-28 in 2018 (10.5%). Within the pool of EU peer countries, the NEET rate went from 6.5% in Austria to 15% in Bulgaria and Croatia.

Young people who are NEET for longer periods of time have greater difficulties reintegrating into the labour market. Due to degradation of skills, their earnings might be lower once they find a job. Therefore, as Eurofound (2012) argues, long-term unemployment and detachment from the labour market increase the risk of poverty and social exclusion later in life. According to a recent World Bank and wiiw (2019) study, earnings can be 20% lower or more, depending how long it takes for a young person to find a job.

The share of young people in informal employment[2] reduced by 10 percentage points between 2015 and 2018, but young people are still overrepresented in the informal economy compared to the general working-age population. Younger cohorts exposed to higher levels of unemployment and informality face worse labour market chances as adults. These adverse effects are stronger for those with lower levels of skills.

Looking at differences across gender, the activity rate of young women fell during the 2015–18 period while it increased for men, and the gap stands at 13 percentage points (see Tables A1.1 and A1.2 in Annex 1). Activity rates for females increase with age so the gender gap is much smaller for young people in the 25 to 29 age bracket than for those aged 20 to 24 years old. This is due to the fact that women stay longer in education than men and that affects their activity rates as well as overall

[1] This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence – hereinafter 'Kosovo'.

[2] Informal employment covers: workers in an unregistered firm; workers in a registered firm but with no written contract or with no social contributions paid (health or pension insurance); and unpaid family workers.

educational structure. One earlier study for Serbia showed that women of prime age (aged 25–54) enjoy higher educational attainment than men, but the reverse is true among older cohorts. Almost 25% of women aged 25 to 54 have completed tertiary education, compared with around 18% of men. In the same age group, more women have four-year secondary school diplomas, and the share of women with three-year secondary school degrees is 9 percentage points lower than the corresponding share among men (Žarković-Rakić et al., 2016).

Employment rates increased for both genders in the 2015–18 period and the gap decreased from 12 to 10 percentage points. Looking at the sectors, young women are almost as likely to work in the informal economy as young men, as the gender employment gap is only 3 percentage points in the informal sector (Table A1.1).

Unemployment rates decreased over the 2015–18 period for all subgroups in the 15 to 29 group, but most notably for those aged 24 to 29, where the decrease in the unemployment rates for young women was double of that for young men. Still, for the overall young population, male unemployment rates were 4 percentage points lower than those for females (Table A1.2).

There is no notable difference between genders in terms of NEET rates for those in the 15–24 age bracket. Throughout the period under observation, the rate fell from 20% to 16% for young males and from 19.8% to 17% for young females (Table A1.1).

Looking across the regions (Table A1.3), we observe that Vojvodina, in the north, had the best labour market indicators in 2018, with the highest activity and employment rate and lowest unemployment and informal employment rate. A similar situation can be seen at the beginning of the period under observation, in 2015, and the gap between the regions has increased over time, especially the employment rate. For instance, the gap between the employment rate in Vojvodina and Belgrade was 2.6 percentage points in 2015 and increased to 5.7 percentage points in 2018. Activity rates increased for all the regions except Belgrade, the capital. NEET rates are highest in the region of South and East Serbia, double that for Belgrade.

Also, the highest share of employees is in Vojvodina, whereas Šumadija and West Serbia have the highest share of unpaid family members (61% of the total number in Serbia). Self-employed people are roughly equally distributed across the country's regions.

In urban areas there are lower employment, lower activity and higher unemployment rates for young people compared to rural parts of the country. But looking at the quality of that employment, in rural areas employment rates in the informal economy are higher. Also, there is a higher share of self-employment and unpaid family members (Table A1.3).

Comparison with the EU-28 countries shows that differences in gender activity rates are smaller in the EU countries (6 percentage points compared to 10 percentage points in Serbia). The same holds for employment rates, with only a 1 percentage point gender difference in the EU: 15% male and 14% female employment in 2018 (10 percentage points difference in Serbia). The NEET rate for those aged 15 to 24 is lower in the EU than in Serbia, around 10%, but like in Serbia there are no large gender-based gaps (Table A1.1).

TABLE 1.2 EMPLOYMENT, UNEMPLOYMENT AND ACTIVITY RATES BY AGE GROUPS, 2015–18 (%)

	Employment rate			Unemployment rate			Activity rate		
	15–19	20–24	25–29	15–19	20–24	25–29	15–19	20–24	25–29
2015	5.2	26.9	53.8	51.8	41.5	28.6	10.8	46.0	75.1
2016	6.9	30.8	56.2	40.9	33.6	26.2	11.7	46.4	76.2
2017	5.6	33.8	58.9	46.5	29.2	23.1	10.5	47.7	76.6
2018	5.4	34.6	62.5	44.6	27.1	21.1	9.7	47.5	79.2

Source: LFS.

Labour indicators across different age groups of young people suggest that activity and employment rates increase with age, while unemployment decreases. After completion of secondary school, at around 19 years of age, employment increases significantly, almost sevenfold. We observe that very low activity and employment rates of those in the 15–19 age bracket drags down those indicators for the entire cohort of young people (15–24).

TABLE 1.3 UNEMPLOYMENT AND EMPLOYMENT RATES BY EDUCATIONAL ATTAINMENT FOR YOUTHS AGED 15–24, 2015–18 (%)

	2015	2016	2017	2018
Unemployment rate	43.2	34.9	31.9	29.7
Low level of education	37.8	31.2	31.5	29.8
Medium level of education	42.9	32.1	31.6	29.1
• Intermediate non-VET	40.1	30.2	25.2	27.8
• Intermediate VET	45.6	35.4	32.4	29.2
High level of education	48.9	44.2	35.9	34.4
Employment rate	16.7	19.8	20.9	21.1
Low level of education	6.3	7.1	15.2	14.5
Medium level of education	25.6	28.1	25.0	26.4
• Intermediate non-VET	23.0	25.2	12.1	9.9
• Intermediate VET	27.5	29.1	29.7	32.6
High level of education	33.2	34.9	39.4	41.0

Note: VET – vocational education and training; low = International Standard Classification of Education (ISCED) 1–2; intermediate non-VET = ISCED 3–4; intermediate VET = ISCED 3; high = ISCED 5–8.
Source: Authors' calculations based on LFS data.

The employment rate increases with the level of education, but the unemployment rate also increases. Between 2015 and 2018, the employment rate increased most for those with low and high levels of education, by 8 percentage points. Young people with intermediate non-vocational education and training (VET) saw a large drop in the employment rate, by 13 percentage points. Young people with VET education experienced the largest reduction in the unemployment rate at more than 16 percentage points.

An earlier study by Rubb (2003) has shown that in general terms, higher levels of education are associated with greater labour market success, enhancing the opportunities for young people to enter the labour market and protect them from unemployment. But sometimes, highly educated individuals may choose to stay unemployed, waiting for an offer suitable to their skills level. Similarly, one of the findings emphasised in the background paper prepared for the Education for All Global Monitoring Report 2013/4 was that more education does not appear to be correlated with more success in finding a job. According to the reported data, unemployment in the selected developing countries was highest among young adults who are most educated. Less-educated young people by definition begin their transition to work at an earlier age, and therefore have had a greater length of exposure to the labour market and more time to secure employment. The correlation between education and unemployment may also be driven in part by the income effect, i.e. young people with a high level of education are more likely to be from wealthier households and therefore better able to afford longer spells of unemployment. A strong positive link between unemployment and education levels is also suggestive of mismatches between the skills produced by the education system and those needed in the labour market, and of the need for better mechanisms for bringing together skilled jobseekers and prospective employers.

TABLE 1.4 EMPLOYED BY CONTRACT TYPE AND BY FULL-TIME/PART-TIME WORK FOR YOUTHS AGED 15–24, 2015–18 (%)

	2015	2016	2017	2018
Contract type				
Permanent	38.7	37.0	42.9	45.3
Temporary	54.2	54.9	48.5	48.4
Seasonal/occasional	7.1	8.1	8.6	6.4
Full-time/part-time work				
Full-time	78.7	78.7	84.4	86.8
Part-time	21.3	21.3	15.6	13.2
Total	100	100	100	100

Source: Authors' calculations based on LFS data.

According to the type of contract, in 2018, almost an equal number of young people worked on a permanent or temporary basis. This is different from the situation in 2015 and 2016, when over 50% had temporary contracts. Comparing this to the situation with adult workers (25–64), almost 80% of adults had a permanent contract, highlighting that young people were in a more precarious situation.

Part-time work in general is not prevalent in Serbia so the share of those in full-time employment regardless of whether they are under or over 25 years of age was almost the same (Table A1.6). The share of young people in seasonal work was low and stable over the period under observation (around 7%), and in 2018 it was more common among those younger than 25.

In the EU peer countries[3], the prevalence of temporary contracts for young people varies, from 30% in Austria to just 12% in Bulgaria, but is generally lower than in Serbia. The only exception is Croatia, where around 60% of all young employees were on temporary contracts in 2018.

The percentage of young people working full-time has increased, at almost 87% of the total employed in 2018 (see Table 1.4). The part-time employment rate was close to the Western Balkan average of 12.8% and higher than in most of the EU peer countries, except Austria where it was 24% in 2018.

TABLE 1.5 YOUTHS AGED 15–24 BY EMPLOYMENT STATUS, 2015–18 (%)

	2015	2016	2017	2018
Employed	71.7	72.9	79.9	82.8
Self-employed	10.4	11.2	10.3	9.0
Unpaid family members	17.9	15.9	9.8	8.2
Total	100	100	100	100

Source: Authors' calculations based on LFS data.

Regarding employment status, the highest percentage of young people were employees: 82.8% in 2018. The share of unpaid family members dropped in the 2015–18 period by almost 10 percentage points, putting them almost level with the number of young people who are self-employed (see Table 1.5). The percentage of young self-employed and unpaid family workers in Serbia was well above the EU average (3.9% and 1.6%, respectively, in 2018). Within the pool of EU peer countries in 2018, the share of self-employed young people went from 2.1% in Croatia to 12.1% in Romania, while the share of unpaid young family members went from very low 0.9% in Austria to very high 26.5% in Romania. This is a reflection of the relatively high employment share in agriculture, with Serbia having the third highest employment rate in agriculture in Europe, after Romania and Albania.

Imbalances in terms of gender are most pronounced in self-employment, where 80% are men. For employees and unpaid family members, 62% are men and 38% are women (Table A1.4).

Eurofound's survey (2017) shows that for one in five self-employed workers, self-employment was the only viable option. This is important because, as a study commissioned by the European Parliament shows (Broughton et al., 2016), the likelihood of ending up in precarious employment is higher for those who did not choose to become self-employed. The biggest concern for precarious workers is a lack of social protection.

If the status in employment is analysed by educational level, the following can be observed. In the 2015–18 period, among employees, the highest percentage had a medium level of education and their share of 60% was stable across the period under observation. About 10% of employees had a high level of education. This is linked to the length of university studies, as most highly educated people become active around the age of 24 to 25.

[3] According to World Bank and wiiw (2019), these are Austria, Hungary, Bulgaria and Croatia.

TABLE 1.6 EMPLOYMENT STATUS BY LEVEL OF COMPLETED EDUCATION FOR YOUTHS AGED 15–24, 2015–18 (%)

	2015	2016	2017	2018
Employees	100	100	100	100
Low level of education	29.1	28.3	30.5	30.4
Medium level of education	60.9	63.6	59.7	62.0
High level of education	10.0	8.1	9.9	7.7
Self-employed	100	100	100	100
Low level of education	45.4	47.6	50.5	46.4
Medium level of education	47.1	45.2	48.1	46.5
High level of education	7.5	7.2	1.4	7.1
Unpaid family members	100	100	100	100
Low level of education	61.8	63.1	59.3	57.3
Medium level of education	34.3	33.8	36.6	40.1
High level of education	3.9	3.1	4.1	2.6

Source: Authors' calculations based on LFS data.

Among self-employed people, there was almost an equal percentage of those with low and medium levels of education, around 46%. For unpaid family members, the majority had a low level of education, but there was also a large share of those with medium educational level, 40%, and that number increased by almost 6 percentage points in the 2015–18 period.

In most developing countries, even a small increase in the level of education appears to be important in terms of improving chances of engaging in waged employment. In some countries, the share of employed youths with a medium level of education is more than twice that of young adults with a low level education. Exactly the opposite pattern prevails for unpaid young family members – poorly educated young people are much more likely to be working in jobs without wages. Also, it was found that self-employment is consistently more common among those with lower levels of education. But it is worth noting that the self-employment category also captures those running their own enterprises. The small share of educated young adults in self-employment may therefore be suggestive of low levels of entrepreneurship among young people (Education for All, 2013).

TABLE 1.7 SHARE OF LOW-WAGE AND HIGH-WAGE WORKERS FOR YOUTHS AGED 15–24, 2015–18 (%)

	2015	2016	2017	2018
Low-wage workers	14.9	15.1	13.0	19.6
High-wage workers	4.1	4.3	4.5	5.8

Source: Authors' calculations based on LFS data.

Low pay is defined as less than two-thirds of the median wage, while high pay is 1.5 times the median wage. The share of young people with low wages was three times higher than the share of those earning high salaries across the period under review. Also, the share of low-paid workers increased more in the 2015–18 period than the percentage of those with high earnings (about 5 percentage points and 1.7 percentage points, respectively).

According to a European Commission report on low pay (2016), cross-country variation in the incidence of low-wage employment is to a certain degree shaped by differences in the composition of the workforce and the structure of employment. The reason for this is that some groups of workers are more likely to be low paid than others: young workers, low-skilled workers, people with disabilities and ethnic minorities. Younger employees (under 30 years) are the most likely to be low paid across the EU-28 (around 30%) and employees aged 30 to 49 are the least likely (around 14%). A potential explanation may be that young workers enter the labour market lacking work experience and skills, and upon entry, due to costs of their training, they receive wages below their productivity value. This ensures that the employer limits any loss in case a worker leaves the firm during or shortly after the training is completed.

1.2 Labour market transitions

Besides standard labour market indicators based on the cross-sectional LFS data, the study explores labour market transitions between employed, unemployed and inactive youths to disentangle inflows and outflows in each of these three labour force states using the panel LFS data in 2017 and 2018. This is best described with a transition matrix, which shows the probabilities that young people move across different labour force states, such as employment, unemployment and inactivity.

Table 1.8 shows that most of the young people aged 15–34[4] employed in 2017 – 90% – remained employed in 2018, with 5% moving into unemployment and 5% out of the labour force. At the same time, 40% of unemployed people in 2017 found a job within one year. However, outflows from unemployment to inactivity, which may reflect the 'discouraged worker' effect, were also significant. Around one-fifth of the youths unemployed in 2017 had withdrawn from the labour market one year later; most of them stopped looking for a job as they had been discouraged by poor employment prospects or by low marketability of their skills, while only 3.4% continued their education (Table 1.9). The poor quality of Serbia's education system, which fails to build both the crucial and soft skills that are required by the labour market, is considered one of the major causes of high youth unemployment and high outflows from unemployment to inactivity. Quarterly transitions are presented in Tables A1.7 to A1.10 in Annex 1.

TABLE 1.8 LABOUR MARKET TRANSITION PROBABILITIES FOR PEOPLE AGED 15–34, 2017–18

2017–18	Employed	Unemployed	Inactive	Total
Employed	90.2%	4.9%	4.9%	
	200 652	10 878	10 989	222 520
Unemployed	40.1%	40.1%	19.7%	
	26 404	26 383	12 980	65 766
Inactive	13.4%	8.5%	78.1%	
	30 003	18 991	174 248	223 242
Total	50.3%	11.0%	38.8%	
	257 059	56 252	198 217	511 528

Notes: The first row is the transition probability; the second row is the number of observations. We used the age group 15–34 in order to have sufficient number of observations. SORS did not calculate panel weights so we used cross-sectional weights.
Source: LFS, SORS. Authors' calculations.

[4] Due to a small number of observations for the transition matrix, we analysed young people aged 15 to 34.

This transition matrix is further expanded to include distinctions between formal and informal employment. Informal employment is widespread among young workers in Serbia, given that one in four young workers aged 15–24 are informal workers. We also disaggregated inactive young people into two groups: those inactive due to participation in education and other inactive young people, since for most young people, education is the reason for inactivity (87.5%).

The values for diagonal elements of the transition matrix indicate significant reallocation of labour force, particularly for the unemployed, other inactive and informal workers. Outflows from unemployment were higher than inflows into unemployment (in absolute terms), resulting in a fall in the number of unemployed people between 2017 and 2018. More specifically, in 2018, the drop in unemployment was mainly due to unemployed young people finding a job. The number of new jobs created was much higher than the number of job destructions, and also higher than net transitions between the inactive and the unemployed, causing a positive overall net effect on unemployment.

TABLE 1.9 LABOUR MARKET TRANSITION PROBABILITIES FOR PEOPLE AGED 15–34, INCLUDING INFORMAL EMPLOYMENT AND INACTIVITY DUE TO BEING IN EDUCATION, 2017–18

2017–18	Formal	Informal	Unemployed	Inactive in education	Other inactive	Total
Formal	89.2%	3.7%	4.0%	0.8%	2.4%	100%
	161 949	6 686	7 275	1 396	4 345	181 650
Informal	26.4%	52.0%	8.8%	4.9%	8.0%	100%
	10 775	21 242	3 604	1 997	3 252	40 870
Unemployed	29.8%	10.3%	40.1%	3.4%	16.4%	100%
	19 627	6 776	26 383	2 226	10 753	65 766
Inactive in education	5.6%	3.2%	5.2%	82.1%	3.8%	100%
	9 458	5 430	8 669	138 140	6 466	168 164
Other inactive	15.4%	12.0%	18.7%	3.8%	50.0%	100%
	8 491	6 624	10 321	2 088	27 554	55 078
Total	41.1%	9.1%	11.0%	28.5%	10.2%	100%
	210 301	46 757	56 252	145 847	52 371	511 528

Notes: The first row is the transition probability; the second row is the number of observations. We used the age group 15–34 in order to have sufficient number of observations. SORS did not calculate panel weights so we used cross-sectional weights.
Source: LFS, SORS. Authors' calculations.

The informal sector has played a significant role in facilitating outflows from unemployment to employment. Table 1.9 shows that about a quarter of those previously unemployed individuals who became employed in 2018 (26%) found jobs in the informal sector. In addition, substantial outflows from inactivity to informal jobs were also observed, with 40% of previously inactive young people (or more precisely, 37% of inactive not participating in education and 44% of other inactive) who became employed a year later being absorbed by the informal sector. Inactive young people participating in education were less likely to find both informal and formal jobs a year later than other inactive people, which is somewhat predictable, given the expected duration of the education process. Furthermore, half of inactive young people not participating in education remained in the same status

a year later, which shows that the key issue is not necessarily tackling unemployment but stimulating transition out of inactivity. In relevant literature, discouragement and apathy towards joining the labour market are explained as the main reasons for the inactivity of those young people who started a family (Arandarenko et al., 2012). Conversely, the inactivity of women with children is temporary, as most will be in a position to re-enter the labour market once their children are able to attend day care.

It is also the informal sector where the majority of job losses occurred. Around a third of young people who lost or left a job between the two years and became unemployed had a job in the informal sector in 2017. This confirms that the informal sector is a significant source of labour mobility in Serbia, providing additional job opportunities for unemployed and inactive people but also having more job destructions (in relative terms) than the formal sector (8.8% and 4.9%, respectively). The pattern is similar to that observed for the working-age population in Serbia using 2011 LFS data (Krstić, 2012). According to the World Bank (2020) assessment for the economic and social impact of Covid-19, the Covid-19 crisis augments the risks of job losses and adds to the worsening situation of informal workers.

The informal labour market appears more flexible, having more labour reallocation than the formal labour market. Around half of informal workers retained the same status, compared to 89% of formal workers. Considering movements between the formal and informal sectors only (in absolute terms), more informal workers became formal than formal workers became informal a year later, either by formalising (or informalising) their activity or by changing their jobs. However, if we include unemployed and inactive people, inflows into informal jobs appear higher than outflows by 30%, influencing a rise in the informal employment rate.

Young people lose jobs more easily when compared with the overall working-age population based on the LFS data for the first half of 2017 and 2018. Workers aged 15 to 24 who had formal jobs were less likely to be retained a year later and more likely to become unemployed or inactive than the rest of the working-age population. Young people who remained unemployed, inactive and not in education, or informally employed for over a year or longer were more likely to be exposed to social exclusion and poverty. Our results show that at least 15% of young people may find themselves in such a situation if the time spent in these labour market states persists. Quarterly transitions are presented in Tables A1.11 to A1.14 in Annex 1.

Panel LFS data in 2017 and 2018 could also be used to calculate the NEET persistence rate. The NEET persistence rate is defined as the percentage of young people aged 15 to 24 who remain in this status for at least one year. The definition of this indicator is limited by the existing LFS rotation model (2-(2)-2), where sampled units are interviewed for two consecutive quarters, then remain out of the sample for the next two quarters and are included for another two quarters. This suggests that the NEET persistence rate can be calculated following the same individuals over a year.

Despite a significant decline since 2015, the NEET rate was still high by international standards, as 16.5% of those aged 15–24 were NEET in 2018 (Table 1.1). Relatively high NEET rates should not be a major problem if young people do not spend a long time in this labour market status; however, the longer someone spends in the NEET status, the higher the probability of a ‘scarring effect’ in later life in terms of lower wages, higher unemployment and fewer life opportunities. Table 1.10 shows the NEET transition for young people aged 15 to 24 between 2017 and 2018. Quarterly transitions are presented in Tables A1.15 to A1.18 in Annex 1.

TABLE 1.10 NEET TRANSITION FOR YOUNG PEOPLE AGED 15–24, 2017–18

NEET status in 2017–18	No	Yes	Total
No	92.0%	8.0%	100%
	173 528	15 116	188 645
Yes	39.9%	60.1%	100%
	13 011	19 567	32 578
Total	84.3%	15.7%	100%
	186 540	34 683	221 223

Note: The first row is the transition probability; the second row is the number of observations. SORS did not calculate panel weights so we used unweighted data.
Source: LFS, SORS. Authors' calculations.

While 40% of young people NEET found a job or continued education or training in 2018, 60% remained NEET. In contrast to cross-sectional data, panel data shows a slight increase in the NEET rate, from 14.7% in 2017 to 15.7% in 2018. This is caused by higher inflows into NEET status than outflows from it (by 16%).

The NEET persistence rate of 60% is not low and should be monitored. These young people may experience troubled reintegration into the labour market or even be exposed to poverty or social exclusion if detached from jobs or education for long periods. They may also experience lower wages when they find a job due to skills obsolescence. Wages can be 20% lower than for those who find employment quicker, and the earnings deficit can persist for a long period of time (ILO, 2016).

1.3 School-to-work transition indicators

Leaving the world of education and entering the world of work is an important stage in the transition to adulthood. How smooth that transition is for young people in Serbia was analysed by Marjanović (2016). Addressing this topic is important given that recent research on young people's perceptions and attitudes showed that one of their biggest fears is that they will not be able to get a job (Popadić et al., 2019). Young people highlighted the following as the most important factors for finding a job, from most important to least: connections, luck, skills and competences, level of education, political party membership, and work experience. In general, they believe that social capital and political connections are more important for getting a job than competences and level of education.

According to SWTS data from 2015, the age at which young people leave education in Serbia is 18.6 years on average (see Table 1.11). There are no large differences across gender and settlement type. The average time at which young women leave the educational system is 0.3 months later than in the case of young men. Also, a young person from a rural area will leave education 0.3 months earlier than a young person from an urban area.

TABLE 1.11 AVERAGE AGE OF YOUNG PEOPLE (15–24) LEAVING EDUCATION BY GENDER AND SETTLEMENT TYPE, 2015

	Average age of young people leaving education
Total	18.6
Gender	
Male	18.5
Female	18.8
Settlement type	
Urban	18.6
Rural	18.3

Source: Authors' calculations based on SWTS 2015 data.

Early school leaving can be viewed as a serious economic and social phenomenon that has important consequences both for individuals and society. The benefits of education are various. For individuals, education generates benefits not only because it improves occupational prospects, wages and job satisfaction, but also because it leads to more informed decisions affecting health, marriage, parenting and retirement. Moreover, schooling affects non-cognitive skills and attitudes, such as risk aversion, patience and motivation. For society, education affects both state finances – by raising tax revenues and reducing welfare benefit payments – and social welfare, because of the effects on crime, attitudes towards minorities and immigrants, and political participation. The broad perception that early school leaving affects both society and individuals in a significant way has led policy-makers to design policies that try to address the problem. Reducing early school leaving to less than 10% of the relevant population by 2020 was a headline target in the Europe 2020 strategy and one of the five benchmarks of the strategic framework for European cooperation in education (Brunello and Paola, 2013).

The SWTS results show that it takes 24.4 months on average for a young person in Serbia to find their first job upon graduation (Table 1.12). In the EU, the average time is 6.5 months, almost four times shorter (Eurostat, 2015). Problems with finding a first job are one of the indicators of precarious conditions under which young people live, and therefore it is not surprising to find that 37% of them approve of getting a job using private connections, a much larger number than those condemning this (Popadić et al., 2019). It is also interesting to note that the same research shows that a large number of young people (almost 85%) believe that reducing unemployment is one of the government's primary roles. Young people also strongly support a governmental role in economic development and the development of private entrepreneurship. In essence, young people are burdened with issues related to living standards and value these elements more than the government's role in enabling the rule of law and protecting human rights and freedoms.

Returning to data on the school-to-work transition, it takes 1.2 months longer for young women and 0.7 months longer for a young person in rural Serbia compared to the average of 24.4 months. This indicator decreases as the attainment level of education increases: the average time to find the first job is 19.4 months longer for a person with the lowest level of education and 12.5 months longer for an individual with a medium level of education compared to a young person with the highest level of education. When employment status is observed, the shortest average time to find the first job is for unpaid family members (18.5 months) and the longest average time is for employees (28.9 months).

TABLE 1.12 AVERAGE TIME FOR YOUNG PEOPLE AGED 15–24 TO FIND THEIR FIRST JOB BY GENDER, SETTLEMENT TYPE, EDUCATIONAL ATTAINMENT AND EMPLOYMENT STATUS, 2015

	Average time to find the first job (in months)
Total	24.4
Gender	
Male	24.1
Female	25.3
Settlement type	
Urban	24.2
Rural	24.9
Educational attainment	
Low	31.2
Medium	24.3
• Intermediate non-VET	23.9
• Intermediate VET	25.7
High	11.8
Employment status	
Employed	28.9
Self-employed	19.8
Unpaid family members	18.5

Source: Authors' calculations based on SWTS 2015 data.

TABLE 1.13 PERCENTAGE OF STUDENTS (15–24) COMBINING WORK AND EDUCATION BY GENDER AND SETTLEMENT TYPE, 2015 (%)

	Percentage of students combining work and education
Total	11.1
Gender	
Male	13.2
Female	8.5
Settlement type	
Urban	11.8
Rural	12.6

Source: Authors' calculations based on SWTS 2015 data.

The overall proportion of students combining work and education was 11.1% in 2015 (see Table 1.13), which is two times lower than in the EU-28. This is important, given that some studies show that the transition from school to work is shorter in countries with a higher proportion of young people who combine work and education. Men are more likely to combine work and education than women (difference of almost 5 percentage points). The share of young people who combine work and education is roughly the same across settlement type.

Why it might be important for students to combine work and education has been discussed in the literature (Baert et al., 2017). According to standard human capital theory (Becker, 1964), employment experience during academic studies may directly provide students with both hard skills and knowledge as well as soft skills (for example good work habits, maturity and responsibility). Also, following signalling theory (Spence, 1973), employers might use student employment to sort jobseekers according to abilities. In particular, work experience during the academic year might be a strong signal, as only highly capable students can manage to combine study and work successfully. Finally, according to social network theory (Granovetter, 1973), student work experience might increase social capital, which can be used in the labour market. Indeed, student workers may collect valuable market information and establish personal relationships that will help them find a better job later.

TABLE 1.14 TYPE OF JOB HELD BY SCHOOL LEAVERS (15–24) ONE YEAR AFTER COMPLETING EDUCATION BY GENDER, SETTLEMENT TYPE AND EDUCATIONAL ATTAINMENT, 2015 (%)

	Permanent	Temporary	Full-time	Part-time
Total	39.5	60.5	74.3	25.7
Gender				
Male	41.7	58.3	75.9	24.1
Female	36.1	63.9	71.8	28.2
Settlement type				
Urban	40.8	59.2	71.9	28.1
Rural	42.7	57.3	76.6	23.4
Educational attainment				
Low	45.2	54.8	78.2	21.8
Medium	34.3	65.7	71.9	28.1
• Intermediate non-VET	35.6	64.4	74.8	25.2
• Intermediate VET	33.1	66.9	70.6	29.4
High	37.9	63.1	74.1	25.9

Source: Authors' calculations based on SWTS 2015 data.

One year after completing education, young people are more likely to get temporary rather than permanent contracts (60% of them have temporary contracts; see Table 1.14). Also, more women than men have jobs on a temporary basis. There is no large difference in type of contracts based on settlement type. Almost two-thirds of young people have full-time contracts. Temporary and part-time work is somewhat more present among women, individuals from urban areas, and those with an intermediate VET level of education.

Investigating work conditions of young people, the 2018 LFS data shows that only a third (35.5%) work 40 hours per week, while 41.2% work overtime (i.e. longer than standard working hours). This is one of the important indicators of precarious working conditions.

TABLE 1.15 AVERAGE AGE OF YOUNG PEOPLE LEAVING PARENTAL HOME BY GENDER, 2015–18

	2015	2016	2017	2018
Total	30.8	31.1	31.2	31.3
Male	33.4	33.7	33.9	33.9
Female	28.1	28.3	28.4	28.4

Source: Eurostat.

The average age of young people leaving their parental home in Serbia is higher compared to the average age across the EU (31 and 25 years, respectively). On average, young women in Serbia leave the parental home five years earlier than young men. These indicators remained stable over the period under observation (see Table 1.15). A key factor driving the gender imbalance among young adults living with their parent(s) is being involved in a consensual union with a partner (with or without a legal basis). Women, on average, marry or move out to live with a partner earlier than men (Choroszewicz and Wolff, 2010).

TABLE 1.16 AVERAGE AGE AT WHICH YOUNG PEOPLE START TO LIVE WITH A PARTNER BY GENDER, 2015–18

	2015	2016	2017	2018
Total	29.6	29.7	29.7	29.8
Male	31.1	31.3	31.3	31.4
Female	27.9	28.1	28.2	28.2

Source: Eurostat.

Young women in both Serbia and the EU start to live with their partner at an earlier age than young men. The gender gap is somewhat larger in Serbia than the EU (five and three years, respectively). Also, compared to their peers in the EU, young people in Serbia start living with a partner a bit later in life (three years for both genders).

In Serbia, the postponement of leaving the parental home is largely associated with the adverse structural context that transitions into adulthood take place in: high unemployment and resulting financial dependency of young people on their parents. In Serbia, the extended and delayed family transition shapes the intergenerational relationships of adolescents and young adults and their parents in a specific way. For instance, prolonged financial and housing dependence reduce the functional autonomy of young people, i.e. independence regarding decision-making and taking action (Tomanović and Stanojević, 2015).

TABLE 1.17 AVERAGE AGE OF WOMEN AT CHILDBIRTH, 2015–18

	2015	2016	2017	2018
Average age of women at childbirth	29.0	29.1	29.2	29.2

Source: Eurostat.

The average age of women at childbirth in Serbia is around 29 years, which is similar to the average age in the EU. In the 2015–18 period, the largest change was observed in Estonia, where the mean age increased by 1.2 years. A study on education and gender roles (Iyigun and Lafortune, 2016) showed that the increase in the average age at childbirth reflects two broader trends: women getting married later and more women attending higher education.

1.4 Labour market access and transition of young people from their own perspective

Apart from statistical analysis of labour market access and transition of young people, six focus group discussions (FGDs) were organised with young people from various regions in Serbia in January and February 2020. As a relevant research method allowing qualitative data collection (see Annex 2 for more details), FGDs were used to obtain a deeper insight into the issues discussed above. The qualitative findings described below are mostly in line with our statistical analysis, yet there are certain aspects that might also be taken into consideration when creating new policies for youths.

While jobs and more precisely looking for a job and finding a job are often the first associations of young people with the moment when they complete their education, our FGDs have also highlighted their need to obtain additional education, both informal and formal. Moreover, with no exception among regions, young people consider the lack of professional experience to be the main drawback in the school-to-work transition.

YOUTH FGDs: ASSOCIATIONS

Male, 24, Novi Sad: NES – you won't be able to find a job straight away, you have to register at NES first. Some young people wait a bit before they enter higher education, take a one-year break for example, find a job to obtain professional experience... And that could be the main problem – you lack professional experience and that is particularly what employers want.

Female, 22, Belgrade: Informal education, training and language courses. Lifelong learning is crucial; we have to continue developing ourselves.

Female, 22, Kragujevac: I went for a job interview and was rejected since I didn't have any professional experience.

Our findings also confirm that it is important for a young person to start getting work experience even during their studies. As suggested in their statements, our FGD participants believe that this would improve the starting position when entering the labour market and finding the first job. However, they also believe that all additional activities undertaken by students (e.g. work on various projects, voluntary work, internships and professional practice obtained from part-time jobs) should be formally acknowledged by educational institutions and listed in diploma supplements. This finding is also important for consolidating the validation system for non-formal and informal learning in Serbia.

YOUTH FGDs: PRACTICAL SKILLS AND WORK EXPERIENCE

Male, 29, Leskovac: One should try to get a job before graduation, if not a job, at least some work experience... A lot of effort and work is required; just obtaining a diploma is not a guarantee that one will find a job right after graduation, and particularly not in their main field of education.

Female, 29, Pirot: We don't have enough time to get professional practice while at school. On the other hand, once we start looking for a job, employers want us to have practical skills, work experience, at least minimal.

Male, 28, Pirot: There is no regulation as a guarantee that our voluntary work to obtain professional experience will be acknowledged.

Some spontaneously raised issues with regard to possibilities for getting a job show that young participants across all six regions are convinced that formal education, hard and soft skills and even work experience should be supported by 'luck' but also 'good connections' and 'political ties'. They also believe that many 'good jobs' are 'kept for particular candidates' and often just formally offered to open competition. This seems rather frustrating, as personal qualifications and qualities may not be valued enough, thus leaving young candidates quite disappointed after applying for jobs. It is not just that employers typically use the 'lack of experience' argument to explain rejecting a young candidate, but many of the FGD participants also complained about not even getting feedback for their CVs and applications for jobs sent to local employers.

YOUTH FGDs: POSSIBILITIES OF GETTING A JOB

Female, 29, Leskovac: Oh, the only possibility that someone sees what I know and what I can do is if I decide to turn my back on my dignity, if I find a personal tie or become a member of the ruling political party, pay for a job... I don't want it that way, at any cost... I will continue with my own job search. I have been a freelancer so far...

Female, 25, member of Roma ethnic minority, Pirot: When I completed my studies, I came back to Pirot convinced that there was already a job waiting for me. But they said you should wait two more years. In a three-minute interview... I was really devastated.

Male, 22, Kragujevac: If there is a personal tie you will get a job, but also there are other options. Youth employment agencies, they offer some jobs, but money comes too late, there are expenses, what is contracted at the beginning may not be fulfilled in the end.

Male, person with a disability, Novi Pazar: There are good jobs, but you need a personal connection…

In contrast to some previous studies, our findings shed new light on youth migrations, suggesting that undertaking concrete actions to allow better labour market possibilities might prevent young people from deciding to move abroad. While the idea of migrating both from and within Serbia prevailed among our FGD participants, using projective techniques, we also found that quite a lot of them would actually prefer to stay in their home country and/or town.

Without regional exception, the participants seemed ready to engage in finding a job that would allow them to step into adulthood, move out of their parents' home and start their own families at least when they first enter the local labour market and for a short period of time searching for a job. On the other hand, looking for jobs beyond the national labour market was also considered relevant in their descriptions of the school-to-work transition period.

YOUTH FGDs: PROJECTIVE TECHNIQUE

Female, 24, Novi Pazar: She is 23/24 years of age, feels confused but energetic to cope with the challenge. She has completed her studies in time and got a job as a sales assistant in a big local sports chain, waiting to get an opportunity to work in her own field of education, or for the moment when she will start something on her own. She wishes to have a big family, move out from her parents' house, but to stay in her native town. She is dissatisfied as she sees that the chances to get a job in her field of education are low, but still hopes that she will be able to change it. She is afraid of failure but still an optimist.

Male, 20, member of Roma ethnic minority, Novi Sad: I will describe my elder brother. He is my ideal, the good example. He is 27 and there is no happier person since he has become a father. He works in a restaurant in Novi Sad. He lives here in Serbia with his family. He has no plans to move out from our parents' house as we are all closely tied together. He always wanted to be an actor; he tried it but couldn't succeed.

Female, 20, foster family, Kragujevac: I imagine a girl who lived with her parents until the age of 20, wanted a change, moved out of her parents' house, started to work as a shop assistant and after she managed to save some money decided to leave Serbia and move to Denmark for example. She found a good job there, developed her career, became someone. After she made money she came back here, opened her own company and stayed.

YOUTH FGDs: WORK EXPERIENCE

Female, 29, Pirot: A young person expects to get a job in her field of education at once. That would be nice. I used to work as a waitress, washing dishes, and I have never had a permanent job, but was only contracted for a couple of months.

Female, 22, institution for children without parental care, Belgrade: I work and study; I believe that young people have a problem as they think they should get a managerial position the moment they finish their education. They want everything at once and are short-term oriented. But I think voluntary work, apprenticeships, personal career development should be given priority.

Male, 28, Pirot: I have friends who work in Novi Sad and all of them are engaged on six-month contracts receiving 50% of the total salary. The contract says they are expected to work part-time [i.e. four hours], but the employer expects them to work full-time – eight hours.

While many young students may typically expect to get a good position straight after their graduation, many FGD participants seemed critical of the high level of expectations young people may actually have. They are convinced that a young person should start to work as soon as possible, even while in school, in order to get the necessary work experience. On the other hand, they seem ready to

invest their time and effort for a certain period of time (even three to four years) searching for a decent job that will be well balanced with their education (i.e. field of study). Meanwhile, they may accept work on temporary contracts, low-paid positions offered directly by employers or through youth employment agencies, though being well aware of the precarious position and unfair treatment by local employers.

In line with the above, the situation faced by young people on local labour markets in Serbia may seem a bit paradoxical. Although it is relatively easy to get any job (i.e. a low-paid job typically not requiring high qualifications and skills), getting a decent job, which will guarantee secure employment over a longer period of time, be adequately paid and match one's field of education, seems to be 'very hard', particularly for university graduates. This is also reflected in the length of time young people may wait to get jobs. Many of them agree that it may depend on various factors including the level of education, parental but also social state support (for those without parental care), readiness of employers to engage young people as well as readiness of a young person to accept any job to obtain work experience and additional financial resources. However, there are many examples of young people waiting more than two years to get a decent job. While local employers typically use lack of experience as an excuse to not offer well-paid jobs to young people, they may also have prejudices, such as with regard to Roma, people with disabilities and children without parental care living in institutions.

YOUTH FGDs: SEARCHING FOR A JOB

Female, 18, Novi Pazar: One can find a job in a couple of months if he/she is ready to accept anything. In local boutiques, even in less than a month, there are a lot of jobs there, but the salary is up to EUR 150.

Male, 27, Novi Sad: In big cities such as Belgrade and Novi Sad there are many opportunities to find part-time jobs through youth employment agencies. But I have been looking for a job in my field of education for four years now and I can't find one. I applied for a job only one week after graduation and was accepted, but the salary was only EUR 100 and I had to refuse it.

Female, 25, Leskovac: My sister who is an architect found her first job almost immediately after graduation while two of her colleagues had to wait for 1.5 to 2 years. But that was because they were looking for a specific job, while my sister accepted a job not exactly suited to her qualifications, but she continued to develop her skills.

Male, 22, institution for children without parental care, Belgrade: It is personal. I have a female friend from the same [foster care] institution who went for a job interview and they were asking her about our institution, if we have thieves and criminals here; there are certain prejudices about children without parental care.

Male, 22, person with a disability, Belgrade: The same refers to Roma and people with disabilities. But it also depends on schools and occupations; it is easier to find a job in IT and programming as well as for medical workers.

As already noted, young people in Serbia do consider combining education with work. However, many believe that it may be extremely difficult or even impossible while being a secondary school or undergraduate student. A few young participants had already found jobs while still being in education and/or know about their classmates who have student jobs. Their motives include the need to get necessary work experience while still in education and develop their practical skills; the

belief that they will have easier access to the labour market due to work experience ('better CV for potential employers'); the possibility to keep the job with the same employer after they finish education; and a lack of financial resources, followed by the need to contribute to the costs of their own education and overall family expenses. In particular, young people attending secondary schools combine work and education when they are from poor families yet are generally reluctant to speak about it among their peers.

Young university students believe that many would like to combine work and education even at undergraduate level should universities start to value it as part of their practical skills development and an upgrade to the knowledge and competences obtained from their professors in classrooms.

Finally, young people believe that combining education and work would be more likely if it was supported by local employers offering more flexible working hours.

YOUTH FGDs: EDUCATION AND WORK

Female, 29, Kragujevac: It is a bit hard, yet not impossible; the employer should provide support to a young person. Or she [the young person] should find a more flexible job, with shorter working hours.

Male, 22, Kragujevac: Some universities provide support as they allow absence from classes and workshops for their working students.

Male, 18, Novi Pazar: At the moment, four of my classmates have jobs, but what jobs... My friend gets up at 5, finishes work at 12 and then she comes to school… She can't say anything, she is forced to work and she is not proud about that.

The FGD participants were outspoken in criticising the formal education system for not adjusting to employers' needs, as the education either does not relate to available occupations or does not adequately prepare students to develop their hard and soft skills. Young people mainly complained about not having enough opportunities to obtain practical experience, which along with developing soft skills were considered extremely important for improving their job prospects. They wish to have more practical hours in formal education, but also to use them more productively. Yet, they are also aware that this mostly refers to jobs requiring higher qualifications, while manual workers are typically not expected to have practical skills and/or work experience. In addition, while they complain about the employers who offer apprenticeship programmes but do not allow them to really contribute, they are also self-critical, pointing out that many young people would rather stay out of the work environment and/or would not accept working without payment.

YOUTH FGDs: HARD AND SOFT SKILLS

Male, 22, person with a disability, Belgrade: Public speaking skills are now crucial for getting a job. Formal education doesn't offer it; it is quite rare for secondary school students to have a chance to develop presentation skills. The educational system doesn't allow creative work. It is highly important to develop critical thinking and formal education restricts it.

Male, 27, member of Roma ethnic minority, Kragujevac: For manual workers, work experience is not needed. They don't ask for anything special – just come and start working.

Female, 21, Roma, Pirot: State schools lack material resources and other necessary conditions to obtain practical knowledge and skills, and therefore this professional part of our education was not complete. For my occupation, obtaining practical skills and work experience is a must. But I managed to find employment in a local medical care provider and I am quite fine. I work and learn simultaneously. It is necessary to be a volunteer and attend some additional educational programmes.

Male, person with a disability, Novi Pazar: I had a chance to do an apprenticeship while still in education and I liked it very much...

While searching for desirable jobs where young people can use and further develop their professional knowledge and skills, guaranteeing a secure and fair income as well as overall working conditions, many young people still accept lower salaries and posts that do not exactly match their qualifications. However, they expect their employers to encourage their personal development and offer them opportunities to get promoted and earn higher salaries. While they mainly refer to 'public service' jobs as the most desirable ones, many of them would also build their careers within big private companies while a few considered the idea of starting their own businesses. Prompted to state the amount they would regard as an acceptable monthly salary for a young person entering the local labour market, at first they seemed hesitant but finally agreed that between RSD 40 000 and RSD 60 000 (EUR 350 and EUR 500, approximately) would be enough to cover their expenses. Yet, they stressed that the offered amount may be affordable or not depending on a young person's decision to live with their parents or move out.

YOUTH FGDs: JOB QUALITY

Female, 30, Leskovac: A salary that allows you to pay all your bills, to eat properly, including fruits and vegetables, and to have something left, for example RSD 1 200 [EUR 10] that I would need to buy new jeans, and not to save for four months, restrain from buying some food in order to get those jeans...

Female, 22, minority, Novi Sad: When you start to work while being trained it is RSD 40 000 [EUR 342]. But when you begin to add value for your employer you can earn even EUR 600. Living expenses are at least EUR 500, probably even more. I understand that you are a pure expense for employers for the whole month when they need to train you, but you also have to pay for living.

Male, 17, Belgrade: It is very hard. My brother doesn't have a TV set, his bathroom is messy, appliances in his kitchen don't work... It would have been better if he had decided to stay with our mother...

Many young people in Serbia still opt to stay with their parents, thus accepting work for even less than RSD 30 000 per month (EUR 256). This monthly salary may be enough to help their parents to cover monthly costs for the family as a whole, and since they do not have any additional costs (for separate rent and maintenance), they will be left with some 'pocket money'. They wish to move out from their parents a couple of years after completing school, but it is subject to various personal and cultural factors. For example, young people who left their hometowns to study seem better prepared to live on their own after graduation, yet they are still aware of the need to earn their own money in order to pay rent. Young people with lower qualifications, and particularly those belonging to the Roma community, may decide to stay in their primary families, thus combining multiple family members' income and sharing expenses. Finally, there are also cultural differences across regions; in Novi Pazar, for example, it is still quite common for young men to stay in their parents' houses, while young women may move out only once they are married.

For all these reasons, our FGD participants had different ideas about what is the right time for a young person to move out, where some of them opted for 'as soon as possible' (meaning even at the age of 18) while others seemed not to be in a hurry, saying that there is enough time by the age of 30 for a young person to 'develop his/her skills, finish graduate studies, travel the world and find a good job, or even start one'.

YOUTH FGDs: MOVING OUT FROM PARENTS' HOME

Female, 24, Novi Pazar: Here it differs between boys and girls... Girls will more often accept a low-paid job as they are helping their parents that way. I would consider EUR 350 to EUR 400 as a well-paid job, but even that would cover only personal expenses. For a man supporting his family, that would not be enough.

Male, 24, minority, Kragujevac: I used to dig canals, and my parents never asked me about how much I spent, but I felt a need to show my respect so if I earn RSD 10 000 [less than EUR 100], I give them half of what I get; it is because I eat and I bathe there.

Female, 19, Novi Sad: If we want to move out from our parents' home, we need to find a job to pay our rent, to find a room-mate; of course, it should be as soon as possible, but it can't be if you don't have money and enough time to earn it.

Though the belief that 'only a state job is a good job' is generally shared among young FGD participants across regions, some would also opt to start their own business instead. Some have already tried and failed, but there are a few successful cases as well. Those who had been able to attend entrepreneurship classes (typically offered in secondary schools of economic orientation, where some participants had experienced work in virtual enterprises) were quite enthusiastic about such programmes, ready to share their experiences and promote the need to upgrade educational programmes at different levels and across various professions with similar courses. Yet the general opinion is that a young person should have stronger support to find the necessary financial resources for new start-ups, also with regard to lowering the risk of failure, through adequate guidance and mentorships provided by those who already have some experience in successful running of small businesses. The opportunity to find initial financial funds for starting up a new business offered by NES is not quite unknown but does not seem very appealing even among those who got to know about it. An additional option for young people is to work on various online platforms (i.e. as

telemigrants); however, it is mainly seen as acceptable in the ‘short term’ and as an ‘additional job’ used to top up personal finances.

YOUTH FGDs: ENTREPRENEURSHIP

Male, 22, Kragujevac: As an entrepreneur I would have more time for myself, I would know how to make use of it, to work when I want, to study if I wish, to travel… My father made a mistake that he didn’t start his own business.

Female, 26, Leskovac: After graduation, my professor offered me the chance to apply for an apprenticeship and that is how I started to work, book-keeping, administration. I was familiar with it as we had classes in accounting at university, and thus I decided to start my own business, opened a small shop for accounting services. [The government] offers some funds for entrepreneurs. I decided to give it a try; it is OK for now, there are problems, but it is important to take the chance by 31 December 2020. It is important to offer subsidies not only for foreign investors, but also to support local entrepreneurs, especially young people.

Male, 28, Pirot: I know a few people, they have two main goals – one is to give language classes via a platform until I get a job, and the other is to improve their [foreign] language skills and leave Serbia.

Finally, in our FGDs with young people, we referred to the NEET category and particularly the subgroup comprising those who stay inactive for a couple of years. While certain empathy exists with regard to ‘apathy felt by young people’, most of our participants believed that it is up to personal desire to become independent as well as being overprotected either by parents or the state. There was a general attitude across all regions that young people believe that sooner or later a young person should decide to get ‘any work’ rather than staying at home and living on their parents’ or social benefits. FGD participants who come from institutions for children without parental care pointed out that some of their peers have been given social housing and transfers allowing them to stay NEET and not actively searching for jobs. The same is true of young people considered overprotected by their parents, which may be typically but not exclusively seen in well-off families.

YOUTH FGDs: YOUTH NEETS

Male, 22, Pirot: My best friend, he stays at home, gambles, believing that it will come from nothing, but you can’t become a fashion designer before you learn how to sew.

Female, 21, Leskovac: Their parents support it, they give them money.

Female, 22, foster family, Kragujevac: There are seasonal jobs, it is not hard to get, and you may still earn money.

2. YOUTHS IN SOCIALLY VULNERABLE SITUATIONS

This chapter delves into aspects of social vulnerability at younger ages, using internationally comparable data sources, such as SILC and the statements collected through the qualitative research (FGDs with young people, employers and other stakeholders). Risks of poverty or social exclusion, by various dimensions (e.g. education level, work intensity of households or place of residence), are analysed as well as the perceived causes of poverty and social exclusion risks affecting young people.

2.1 Indicators of youth vulnerability

SILC data for Serbia shows that young people are not only trapped in the troubled labour market situation but also exposed to other risks such as poverty and material deprivation. The so-called at-risk-of-poverty or social exclusion (AROPE) rate is a composite indicator that captures all three dimensions of vulnerability of young people: very low work intensity (VLWI), relative poverty and material deprivation; it shows that 38.8% of young people aged 15 to 24 belonged to at least one of these three states in 2018 (Eurostat, n.d.). This is above the AROPE rate for the population above 15 years of age (34.3%) and among the highest rates compared to EU-28 countries (Greece being the only country with a higher AROPE for young people, 45.9%) (based on SILC data). AROPE for individuals aged 15–19 is the highest compared to other young people, 40.7%.

The AROPE indicator reduced in the 2015–18 period for all young people aged 15 to 29, with the biggest reduction for those in the 25–29 age interval (10 percentage points) (see Table 2.1).

TABLE 2.1 AROPE RATE AND ITS COMPONENTS, 2015–18 (%)

	2015	2016	2017	2018
At-risk-of-poverty or social exclusion rate				
Total population	41.7	38.5	36.7	34.3
Aged 15–24	46.2	45.0	40.1	38.8
Aged 15–19	47.6	45.9	44.0	40.7
Aged 20–24	44.9	44.3	37.1	37.2
Aged 25–29	41.7	38.9	35.2	31.5
At-risk-of-poverty rate				
Total population	26.7	25.9	25.7	24.3
Aged 15–24	32.1	33.9	30.2	30.2
Aged 15–19	33.8	36.8	33.4	33.7
Aged 20–24	30.7	31.3	27.7	27.3
Aged 25–29	25.8	23.3	23.0	20.6

	2015	2016	2017	2018
Severe material deprivation rate				
Total population	24.0	19.5	17.4	15.9
Aged 15–24	24.9	20.6	17.1	15.5
Aged 15–19	27.0	20.6	17.4	17.0
Aged 20–24	23.1	20.5	16.9	14.3
Aged 25–29	19.9	18.7	17.0	12.8
Very low work intensity				
Total population	15.6	15.7	14.5	13.0
Aged 15–24	20.2	20.4	18.8	18.0
Aged 15–19	21.0	22.4	19.3	17.8
Aged 20–24	19.4	18.7	18.4	18.1
Aged 25–29	19.5	19.2	18.8	17.0

Source: SILC.

Looking at sub-indicators, the at-risk-of-poverty rate shows that young people are more exposed to poverty than the general population, and especially those in the 15–19 age bracket. Looking at the trend, the reduction of the poverty rate was evident both for young people and the total population in the 2015–18 period. The AROPE value in Serbia for all observed age groups of young people is much higher than for EU Member States, on average 10 percentage points higher.

Severe material deprivation is the inability to afford at least four out of nine items considered by most people to be desirable or even necessary to lead an adequate life[5]. Most age groups from the young population have below average shares in the households exposed to severe material deprivation, except individuals in the 15–19 age category. On the other hand, the percentage of young people living in households exposed to severe material deprivation has reduced most for this age group (10 percentage points), compared to other young people and the general population.

Activity and employment relate only to the number of active or employed persons, while work intensity of household members indicates the amount of work, i.e. how many household members worked in relation to the potential number of months. An advantage of this indicator is that work intensity is not observed at the level of the individual, but rather at the household level, as a person's welfare is not solely dependent on the intensity of one's work but also on the work intensity of the other members of one's household (Krstić, 2017). Households with VLWI include all those aged 0–59 who live in households in which the working-age members worked 20% or less of the total number of months in which they could have worked during the reference period. Table 2.1 shows that 13% of the total population were in VLWI households. The share of young people in each age category being in VLWI households is higher than the general population; the highest share is for the 20–24 age group,

[5] Those nine items relate to being unable to afford: unexpected expenses; one week's annual holiday away from home; to pay for arrears (mortgage or rent, utility bills or hire purchase instalments); a meal with meat, chicken or fish every second day; to keep the home adequately warm; a washing machine; a colour TV; a telephone; and a personal car.

5.1 percentage points above the rate for the total population. VLWI reduced over the 2015–18 period (2.6 percentage points for the total population) but much less than the rate of severe material deprivation (8.1 percentage points). Within the young population, those in the 15–19 age bracket experienced the largest drop in their share in households with VLWI (3.2 percentage points).

Looking at the AROPE indicators across regions (north versus south), the south is more exposed to social exclusion, but the gap has decreased during the period under observation, from 12 to 7 percentage points. The same holds for the gap in the at-risk-of-poverty rate, which reduced from 14 to 8 percentage points between the regions (Table A1.19).

Less populated areas have higher AROPE rates. Thinly and intermediately populated areas saw a larger drop in the AROPE indicator in the 2015–18 period (10 percentage points) than the more densely populated (5 percentage points) areas. Regarding the at-risk-of-poverty rate, there was almost no change for the densely populated areas, while the thinly and intermediately populated areas saw a drop in the poverty rate of 4.9 to 6.8 percentage points, respectively.

Severe material deprivation has decreased since 2015 and almost equally for all the regions. Deprivation is somewhat more present in the north, 16%, than in the south, 13%. There is no difference in this indicator looking across areas with different degrees of urbanisation.

There are more people with VLWI living in the south and in thinly populated areas. While densely and intermediately populated areas saw a decline in the number of people with VLWI, in thinly populated areas, there was a small increase in the 2015–18 period.

TABLE 2.2 YOUTH (15–24) VULNERABILITY INDICATORS ACCORDING TO EDUCATIONAL ATTAINMENT LEVEL OF THEIR PARENTS, 2015–18 (%)

	2015	2016	2017	2018
At-risk-of-poverty or social exclusion according to educational attainment level of parents				
Low education level of parents	64.0	66.2	72.0	78.3
Medium education level of parents	48.3	47.1	39.9	36.4
High education level of parents	26.8	22.7	19.0	19.0
Share of people who live in households with very low work intensity by educational attainment level of parents				
Low education level of parents	29.1	38.6	40.7	54.1
Medium education level of parents	20.3	18.3	15.7	13.4
High education level of parents	11.1	11.2	7.2	6.7

Source: Authors' calculations based on SILC data.

Table 2.2 shows that for young people aged 15–24, the AROPE rate decreases significantly with the educational attainment level of their parents.

Over the 2015–18 period, the AROPE rate increased 14 percentage points for young people living with parents with low educational attainment but reduced for almost the same proportion of those having highly educated parents. A somewhat lower reduction in the AROPE indicator is observed among young people with parents having a medium level of education.

Table 2.2 also shows that 54.1% of young people whose parents have a low level of educational attainment lived in households with VLWI in 2018. This is a considerable increase from 29.1% in 2015. On the other hand, this decreased for those young people whose parents have a middle or high level of education.

TABLE 2.3 RELATIVE MEDIAN POVERTY RISK GAP, 2015–18 (%)

	2015	2016	2017	2018
Total population	37.5	39.4	38.8	37.4
Aged 15–24	39.5	41.2	44.6	41.5
Aged 15–19	37.6	42.5	41.0	42.4
Aged 20–24	39.9	40.1	48.7	41.0
Aged 25–29	38.0	35.1	42.9	38.3

Source: Authors' calculations based on SILC data.

The relative median poverty risk gap measures the difference between the poverty line (at-risk-of-poverty threshold) and median equalised income of a person below the poverty line, expressed as a percentage of the poverty line. The at-risk-of-poverty rate shows who is exposed to poverty, while the relative at-risk-of-poverty gap shows how much funds a person lacks (in % of at-risk-of-poverty threshold) to escape poverty. Simply, it shows how far from the poverty line a poor person is in terms of income. This indicator is higher for young people, meaning that their income is further from the poverty line compared to the general population. While the gap in 2018 returned to its 2015 value for the general population, it increased for young people, on average by 3 percentage points, and mostly for those aged 15–19, by almost 5 percentage points.

Focus now turns to young people who live in households with VLWI and are at the same time exposed to the risk of poverty. This group of young people, due to exposure to two of the components of the AROPE rate, are more vulnerable than those who belong to just one.

In Serbia, 14.3% of young people aged 15–24 live in households with VLWI and are exposed to the risk of poverty. These are people in households in which members do not work or they work very little and who also have a relatively low income. The proportion of this group of young people in Serbia is significantly higher than in the EU-28 (4.5%), which is in line with the lower average rate of VLWI of households and the average at-risk-of-poverty rate for the EU-28. The share of this group of young people slightly decreased in Serbia, from 14.9% in 2015 to 14.3% in 2018.

Out of the total number of young persons who live in households with VLWI, almost four out of five (79%) are exposed to the risk of poverty (Figure 2.1). Such overlapping of two sets is understandable, since VLWI of a household is a significant determinant of low household income. However, every second young person facing the risk of poverty (47.4%) lives in a household with VLWI. This indicates that VLWI of households is not the only reason for the risk of poverty that young people face; it is also the low earnings of young people (whose work intensity is not very low) in combination with social benefits/transfers that were not enough to increase the household income above the risk-of-poverty threshold. As stated earlier in this chapter, the share of young people with low wages is three times higher than the share of those with high wages.

TABLE 2.4 POPULATION AT RISK OF POVERTY AND LIVING IN HOUSEHOLDS WITH VLWI, 2015–18 (%)

	2015	2016	2017	2018
Population at risk of poverty and living in a household with VLWI				
Total population	10.9	10.9	10.4	9.6
Aged 15–24	14.9	15.3	14.6	14.3
Aged 15–19	15.7	17.6	14.7	15.7
Aged 20–24	14.2	13.2	14.4	13.1
Aged 25–29	12.5	12.8	14.1	12.3
Population at risk of poverty, living in a household with VLWI and severely materially deprived				
Total population	6.1	5.6	4.7	4.1
Aged 15–24	8.1	7.7	6.6	6.4
Aged 15–19	9.0	8.8	6.6	8.2
Aged 20–24	7.4	6.7	6.6	4.8
Aged 25–29	6.3	5.6	6.9	4.4

Note: Total population is for all age groups.
Source: SILC, SORS. Authors' calculations.

Youths are more exposed to the combination of these risks than the total population (14.3% and 9.6%, respectively), given their lower employment rates, since a significant proportion of young people are still in education. The percentage of youths who live in households with VLWI and are exposed to the risk of poverty is highest for the youngest cohort (15–19) and declines further with age, which is in line with increased educational level and employment rates.

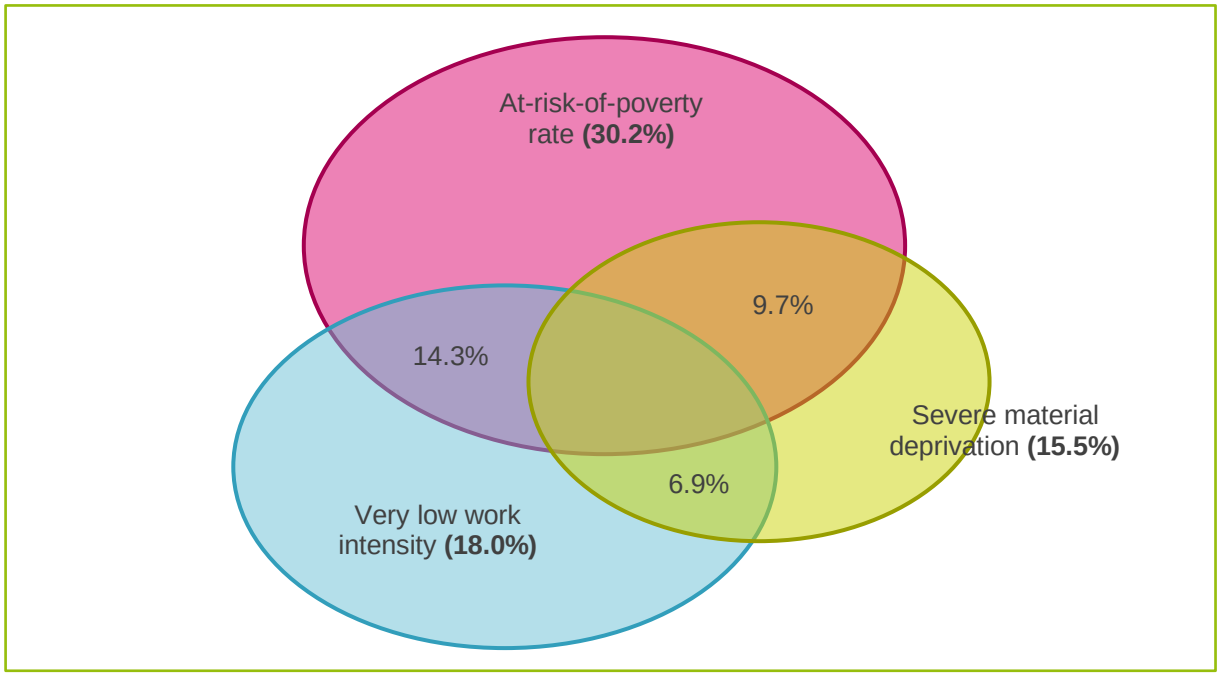
Young people aged 15 to 29 from the southern region were more likely to live in households with VLWI and to be exposed to the risk of poverty than those in the northern region, at 14.8% and 12.4% respectively, which is in line with better labour market opportunities observed in Belgrade and Vojvodina (northern region) than in the southern region (Table A1.20). Between 2015 and 2018, youths in the southern region experienced greater improvement, as the proportion of those exposed to the risk of poverty and the VLWI of their households decreased more than in the northern region, which narrows initial regional disparities. As regards degree of urbanisation, young people living in thinly populated areas were in the worst position, as 17.7% experienced both risks, compared to 11.4% and 10.8% of young people from intermediate and densely populated areas, respectively, which is in line with the observed regional differences.

Among young people who are exposed to both the risk of poverty and VLWI, about 45% are also severely materially deprived (Figure 2.1)[6]. This suggests that 6.4% of young people cannot afford at least four out of nine items necessary to lead an adequate life. Low income is a consequence of VLWI. Young people are more likely to face all three risks than the total population (6.4% and 4.1%,

[6] However, when interpreting the results, it is necessary to bear in mind that the reference period for these two components is not the same. While VLWI of household members refers to the 12 months in the year preceding the year of the survey (2012), severe material deprivation refers to the moment of the survey (May–June 2013).

respectively) and this multiple risk decreases with age. In addition, there are no significant differences by regions and by degree of urbanisation, as these differences significantly contracted from 2015 to 2018 (Table A1.20).

FIGURE 2.1 AT-RISK-OF-POVERTY RATE, VLWI AND SEVERE MATERIAL DEPRIVATION, AGED 15–24, 2018 (%)



Source: SILC, SORS. Authors' calculations.

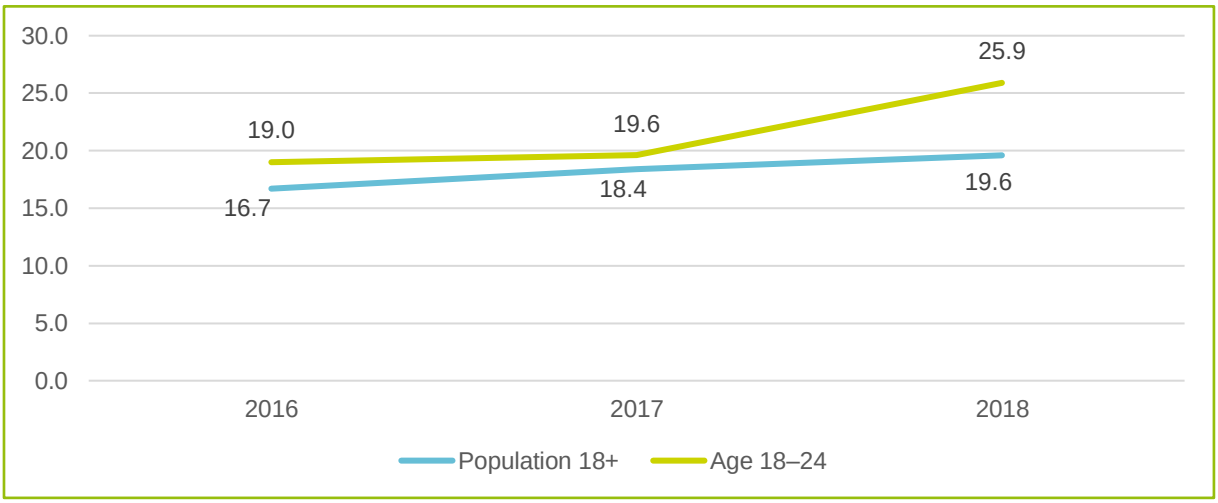
In 2018, one in four young people aged 18 to 24 (25.9%) were in persistent poverty (Figure 2.2). Persistent poverty is defined as the percentage of persons (in the total population) whose equalised disposable income is below 60% of the national median equalised disposable income after social benefits/transfers for the current year and at least two out of the preceding three years (Eurostat, 2014). This subgroup of young people is extremely vulnerable since their income is below the relative poverty line not only in the current year but also in at least two out of the preceding three years. Serbia has a higher youth persistent at-risk-of-poverty rate than the EU-28 countries; the EU-28 average rate is 14.2%. This indicator has been regularly calculated for young persons aged 18–24 by the EU countries and included in the Eurostat database. It could be easily used to monitor changes in vulnerability of young people, as the likelihood for a person to exit poverty falls the longer they remain at risk of poverty (Eurostat, 2018).

The persistent poverty rate for young people aged 18 to 24 significantly increased in Serbia, from 19% in 2015 to 25.9% in 2018. Young people were more likely to be in persistent poverty than the total population, and this gap increased over the 2015–18 period. The persistent at-risk-of-poverty rate decreases with age, from 40.9% for the youngest (15–19) to 33.2% for those aged 20–24 and further to 25.9% for those aged 25–29.

Youth poverty in Serbia is a long-term phenomenon, as 90% of young people aged 15–24 who were in poverty were also in persistent poverty. This means that almost all young people facing the risk of poverty in 2018 were also poor in at least two out of the previous three years. Being trapped in poverty at a younger age can limit the opportunities of youths to achieve their full potential by affecting their

educational outcomes, health and well-being, which in turn may further reduce their ability to lead productive and successful lives and increases the risk of persistent poverty. In such a situation, poverty is likely to be transmitted from one generation to the next, which can create a loss of productivity and stifle inclusive and sustainable economic growth.

FIGURE 2.2 PERSISTENT AT-RISK-OF-POVERTY RATE, 2016–18 (%)



Notes: Data for 2015 does not exist as the first SILC was conducted in 2013.
Source: Eurostat.

We propose calculating two indicators that could allow innovations in monitoring and evaluating progress in active social inclusion of young people. The first indicator is 'youths who persistently live in households with VLWI' based on a panel component of the SILC data, since this group of youths are more likely to be permanently exposed to multiple facets of vulnerability. The share of young people who persistently live in households with VLWI is defined as the percentage of persons aged 15–24 (in the total population) who live in households in which the members of working age have worked less than 20% of the total number of months in which they could have worked in the current year and at least two out of the preceding three years. The current year in our analysis is 2018[7]. This is not a standard Eurostat indicator. 'The percentage of people living in households with VLWI' has only been regularly calculated by the EU countries and included in the Eurostat database (Eurostat, 2014).

In Serbia in 2018, 15.8% of young people (15–24) persistently lived in households with VLWI. Young people were much more likely to live in such households than the total population (10.8%). It seems that these young people were trapped in households in which members worked very little, as 88% of young people who lived in households with VLWI in 2018 lived in such households in at least two out of the previous three years.

[7] The reference period for work intensity refers to 12 months in the year preceding the year of the survey.

TABLE 2.5 PERSISTENT AT-RISK-OF-POVERTY RATE AND SHARE OF PEOPLE WHO PERSISTENTLY LIVE IN HOUSEHOLDS WITH VLWI, 2018 (%)

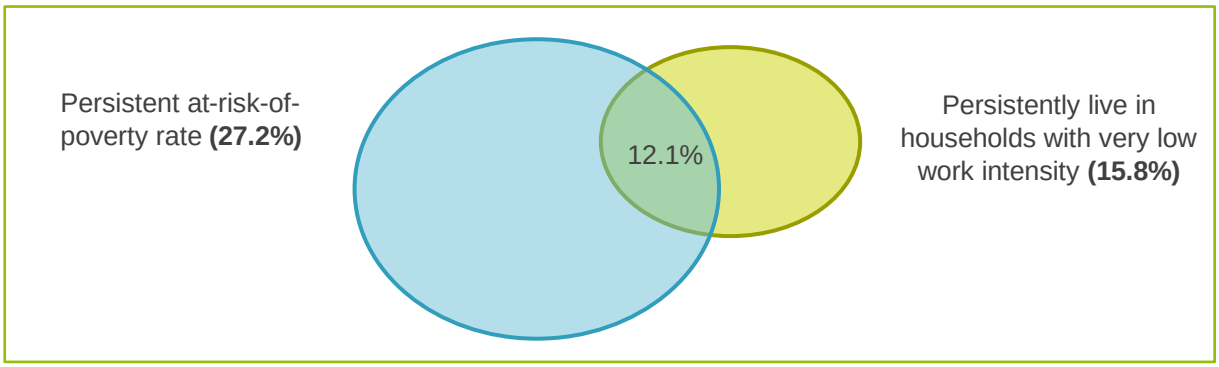
Persistent at-risk-of-poverty rate	
Total population	19.6
Aged 15–24	27.2
Aged 15–19	40.9
Aged 20–24	33.2
Aged 25–29	25.9
Persistently live in households with VLWI	
Total population	10.8
Aged 15–24	15.8
Persistently at risk of poverty and persistently live in households with VLWI	
Total population	7.8
Aged 15–24	12.1

Note: The last two indicators could not be disaggregated by age groups due to low number of observations. Total population is for all age groups.
Source: SILC, SORS. Authors' calculations.

The second indicator that can be regularly measured to monitor the progress in active social inclusion of young people is 'youths who are persistently at risk of poverty and persistently live in households with VLWI'. This group of young people are more vulnerable than those who belong to one or the other set (rather than both). This includes people in households in which members do not work or they work very little and who also have a relatively low income in the current year and at least two out of the preceding three years.

Figure 2.3 shows that 12.1% of Serbian youths experienced both risks in 2018. Such overlapping of the two sets shows that VLWI of a household both in the current and at least two out of the three preceding years is a significant determinant of persistent low household income. However, only 44% of young people facing persistent risk of poverty persistently live in households with VLWI. For the other 56% of young people facing persistent poverty, low earnings and insufficient social benefits/transfers are the key reasons for persistent poverty.

FIGURE 2.3 PERSISTENT AT-RISK-OF-POVERTY RATE OF YOUNG PEOPLE AND YOUNG PEOPLE WHO PERSISTENTLY LIVE IN HOUSEHOLDS WITH VLWI (15–24), 2018 (%)



Source: SILC, SORS. Authors' calculations.

Our results show that youths faced not only multiple risks but persistent risks. Most of those living in poverty experienced persistent poverty, while most of those who lived in households with VLWI were chronically trapped in such households. In addition, most of those persistently living in such households appear to also be exposed to persistent poverty. A significant share of young people remain idle (in NEET status) for a year or longer. These few indicators of persistent youth vulnerability should be regularly calculated and used, in conjunction with the standard indicators of poverty and social exclusion, to enable better capture of 'exclusion profiles' in monitoring and evaluation used to measure progress in the active social inclusion of young people.

2.2 Perceived causes of poverty affecting youth vulnerability

Our qualitative research also focused on perceived causes of poverty affecting youth vulnerability. Poverty, defined as being hard for a person to satisfy his/her basic needs, is linked with one's prospects of finding employment. Thus, in our FGDs[8] we asked both young people and local employers about poverty among youths as well as potential causes of staying in poverty, most of which are linked with labour market prospects of a young person.

YOUTH FGDs: POVERTY

Male, 26, person with a disability, Belgrade: Doesn't have a job, doesn't go to work, doesn't have money and doesn't have enough for living.

Female, 18, Novi Pazar: There are many poor young people. Even worse, we don't know about them. Here – it is a big shame to live in poverty.

Female, 22, minority, Novi Sad: There are many cases where both parents or at least one of them goes to Germany to earn money and that is how they survive. Here if we can't get minimal salary it makes no sense to work, we will still be poor. Here the necessary amount of money is subject to whether you live on your own, and if there is one or more salaries in a household.

Most of our young participants stated that finding employment is essential if a young person wants to escape poverty. They also did not show empathy towards those who may decide not to try to find 'any job' while trying to escape poverty. However, they are also very much aware of the huge economic discrepancies in the country, pointing out 'the extremely rich' in contrast to those living in poverty, with many of the latter not being very visible. Yet, their discussion also indicated that having employment is not always a guarantee for not facing material deprivation, as local salaries may not be enough to cover the basic needs of a family.

Both in an open discussion and in an exercise where they were asked to rank listed statements representing potential causes of poverty that young people in Serbia may be facing[9], youth FGD participants found (1) living in households with non-working members and low income (i.e. houses

[8] Six FGDs with youths in Belgrade, Novi Sad, Kragujevac, Leskovac, Pirot and Novi Pazar and three FGDs with employers in Novi Sad, Kragujevac and Leskovac were organised in January to March 2020. For the detailed methodology, please see Annex 2.

[9] FGD participants were asked to rank seven statements describing potential causes of poverty. The most important causes of poverty were calculated based on the lowest rank, which theoretically could range from one to seven. Three lowest ranks have been taken into consideration. For youth FGD participants, the first two ranks were calculated at below 3.5 and the third rank was below 4.

with VLWI) as well as (2) low educational attainment to be the most important causes (see Figure 2.4). Generally high unemployment in Serbia and restricted opportunities for jobs were ranked as the third most important cause of poverty based on participants' overall answers, yet it should be noted that this issue was not mentioned in their discussions. Moreover, as previously noted, there was a strong belief that to not stay poor, a young person must find a job.

YOUTH FGDs: PERSISTENT POVERTY

Female, 22, foster family, Kragujevac: There are poor young people, very often they are unemployed. They can't afford to get an education.

Female, 25, Roma, Pirot: I look at it from a Roma family perspective; when parents don't work, he [the child] sees it, he doesn't have a model. That environment is crucial.

Male, 22, institution for children without parental care, Belgrade: We should blame it on education. You have to be well educated not to be poor.

Male, 25, Novi Pazar: We often try to find guilt in other people. When we focus on ourselves the environment will start to change.

Local employers seem to have a better understanding of living conditions of young people living in poverty and limited opportunities to change the situation. Employers in our FGDs explained their experiences while recruiting young people, including those who come from poor families. The employers pointed out that living in poverty may also limit that person's possibility to accept work under a formal contract even to the point that the poor person cannot afford to cover work-related expenses (e.g. pay for transportation). This typically refers to young people living in smaller communities, with no or low level of education. While employers often show respect for the work done by these young people and would be ready to keep them on permanent contracts, the family interests as well as the young person's personal interest seem to be low and may be subject to seasonality. Young people living in poverty often have seasonal jobs which are short term but bring higher temporary income. Higher short-term wages can keep them away from formal employment in private companies, and social benefits/transfers when they are not working also hinder their interest in accepting a formal contract.

EMPLOYER FGDs: POVERTY AND EMPLOYMENT

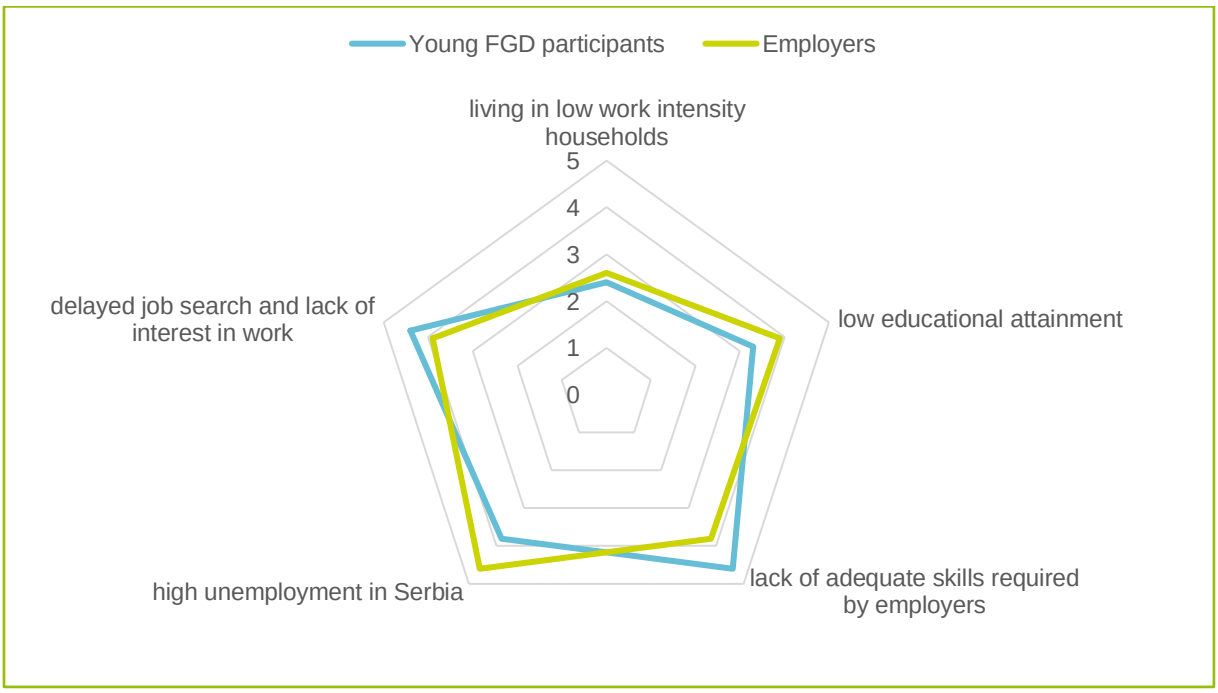
Employer from IT company, Novi Sad: Their father doesn't allow them to work with us, because they are manual workers. He can't let them because he knows that while they bring some money, he is afraid to let them go and find a job in a company. Moreover, they will also skip school classes for a period if they get an opportunity to earn money.

Employer from private company, Kragujevac: He can't come to work because he has no money. Poverty causes many problems. They can't stay for even three months because they have to accept seasonal jobs.

Entrepreneur, Leskovac: Some can't find formal employment as they receive social benefits/transfers.

As regards the main causes of poverty[10], the local employers gave living in VLWI households the highest ranking, almost equally as our young FGD participants (see Figure 2.4). On the other hand, they also considered lack of adequate skills required by local employers as yet another important cause of poverty of young people. This was in line with perceived lack of practical knowledge and skills, coupled with insufficient work experience of young people, their overall weak motivation and low interest to keep the offered post for a longer period of time. Consistent with that, local employers also pointed at low educational attainment as yet another important cause of poverty, in line with the opinions of the young participants. Yet in the local employers' view, observed hesitation to start a job search right after completion of school and lack of desire to start working should also be considered relevant causes of youth poverty.

FIGURE 2.4 PERCEIVED CAUSES OF POVERTY AFFECTING YOUTHS BY YOUNG FGD PARTICIPANTS AND EMPLOYERS



Note: Lower rank values represent higher relevance of listed factors.

Figure 2.4 shows that the highest discrepancy in perceived causes of youth poverty between the two FGD participant groups relates to the lack of adequate skills required by local employers. However, while the young FGD participants did not rank it as a relevant cause of poverty affecting youth vulnerability, they still referred to it in further discussions on what should be done to improve the youth position in Serbia. They highlighted the need to develop skills and qualifications through informal education, training and retraining for occupations in demand on local labour markets. They expect the state to provide support through institutions and programmes (e.g. NES) to help young people acquire hard and soft skills as well as adequate work experience required by local employers. Young participants also believe the state should issue regulations to restrict employers' use of lack of

[10] In the same manner as in the youth FGDs, employers were asked to rank seven statements describing potential causes of poverty. The most important causes of poverty were calculated based on the lowest rank, which theoretically could range from one to seven. Four lowest ranks were taken into consideration. For employers, the first rank was calculated at below 3.5 and the other three were below 4.

experience as a valid excuse for not offering jobs to young candidates under similar conditions to their older counterparts. Though not exactly verbalised in their statements, it was obvious that young people expect the state to create new policies and programmes to implement the Youth Guarantee as a commitment that young people will get good-quality offers of employment, continual education, apprenticeships and traineeships.

YOUTH FGDs: EXPECTATIONS

Male, 28, Pirot: A system that would allow young people to find employment after graduation doesn't really exist, there should be a concrete plan, someone who would say we need that many people for these occupations. You must know how many current employees will retire. Why would you pay to educate 250 new Serbian language professors if you only need five in the upcoming period?

Male 27, Novi Sad: It should be legally regulated that employers can't insist on five years' work experience of a young candidate if the post doesn't really require that many years of experience, like competences.

Female, 18, Novi Sad: The state should create possibilities for us to acquire work experience.

3. SKILLS MISMATCHES AT YOUNGER AGES

This chapter refers to measurement of skills mismatches at younger ages in accordance with the advice on the methodology for mismatch measurement provided by the ETF. This part of the report looks at adjustment of the methodology to specificities of youth groups (i.e. age subgroups relevant for policy-making, and incidence of mismatch at regional/sub-regional level and specific subgroups of young people) and data availability; data collection using various sources, in particular from SORS; and calculation of skills mismatch indicators and interpretation of indicators in the national context.

3.1 Methodology and data

The analysis is focused on mismatch of skills or qualifications between demand and supply of labour. Since skills are difficult to measure, due to the lack of reliable data, qualification is often used as an imperfect approximation of skills (ETF, 2012). Qualification is measured by the highest attained level of education awarded in the formal education system (Eurostat, 2016). Various types of skills mismatch and imbalance occur, such as overeducation, undereducation, overqualification, underqualification, overskilling, skills shortages and surpluses, and skills obsolescence (ILO, 2018). 'Hence, skills mismatch can be both qualitative and quantitative, thus referring both to situations where a person does not meet the job requirements and where there is a shortage or surplus of persons with a specific skill' (Andersen and Van de Werfhorst, 2010). Whether a person meets the job requirements can be expressed in terms of the level of education as well as the field of education. Vertical mismatch occurs when the level of education of a person is not matched to the job's requirement (i.e. overeducation or undereducation). Horizontal mismatch occurs when the field of education is not matched to the job's requirements, even though the level of education is matched. Identification of both vertical and horizontal mismatches is mainly influenced by the extent to which the detailed job requirements are provided by the survey data[11].

As a basis for measurement of skills mismatches, we extensively use various studies on skills mismatch carried out by the ETF (2012), European Commission's Joint Research Centre (JRC, 2014), Cedefop (2015), the European Commission (2015), Eurostat (2016), Handley et al. (2017) and McGuinness et al. (2017). In addition, recent studies for the ETF (ETF/Kriechel and Vetter, 2019; ETF/Vasić, 2019) on skills mismatch measurement in Serbia and in ETF partner countries (including Serbia) represent the methodological baseline for this study; the latter study reviews the suitability of the indicators and methods for measuring the incidence of mismatch, ensuring comparability across ETF partner countries and with similar research carried out by international organisations (e.g. Cedefop, OECD and ILO).

Experimental indicators for skills mismatches developed by Eurostat are also examined[12]. Eurostat proposes the following two new indicators as a first attempt to measure vertical and horizontal skills mismatches using LFS data:

- overqualification rate defined as the ratio of employed persons aged 20 to 64 with tertiary education (ISCED 2011 5–8) working in occupations for which a tertiary education is not required (International Standard Classification of Occupations (ISCO) 4–9) to all employed persons with tertiary education;

[11] For more details regarding skills mismatch methodology, see ETF (2012) or ETF/Vasić (2019).
[12] https://ec.europa.eu/eurostat/web/experimental-statistics/skills

- skills mismatch rate by field of education defined as the ratio of employed persons working in an occupation outside of their field of education (ISCED-F) to all employed persons.

The first indicator is recalculated for young people aged 20 to 29 and 20 to 34, while the second comes from the Eurostat database[13] and is provided for employed persons aged 15–34 or 25–34 depending on the level of educational attainment.

Thus, this part of the study will build on previous conceptual and empirical analyses conducted by the ETF on skills mismatches in Serbia and ETF partner countries and Eurostat experimental indicators. The following potential skills mismatch indicators will be examined and adjusted to youth group specificities:

- unemployment rate and unemployment to employment ratio;
- young people NEET;
- coefficient of variation by level of educational attainment;
- variance of relative unemployment rates by level of educational attainment;
- relative wages by educational attainment level;
- occupational mismatch: overqualification rate;
- overeducation and undereducation by occupation level;
- skills mismatch by field of education.

Indicators are calculated for total young population, by age groups, and, if possible, by degree of residential urbanisation (urban and rural areas) or specific subgroups of young people depending on the sample size. The reliability of indicators is carefully examined due to the potentially low number of observations of some youth categories. Table 3.1 presents a definition of the proposed indicators, their purpose, interpretation and dimension (disaggregation by specific group of young people).

TABLE 3.1 MISMATCH INDICATORS FOR YOUNG PEOPLE (15–24): DEFINITIONS AND INTERPRETATION

Indicator	Definition	Purpose	Dimension	Interpretation
Unemployment rate	U/(E+U) Official indicator, a strict definition of unemployed (person searching for work within the past four weeks)	Examines overall mismatch between demand and supply by specific dimension	Educational attainment, age groups, gender, settlement type	Higher unemployment rates show an increasing mismatch between demand and supply
Unemployed/ employed ratio	U/E	More direct measure of mismatch between demand and supply by specific dimension	Educational attainment, age groups, gender, settlement type	See above. Youth unemployment shows problems in the school-to-work transition; old-age unemployment shows a lack of relevant skills or institutional barriers to employment

[13] https://ec.europa.eu/eurostat/web/experimental-statistics/skills

Indicator	Definition	Purpose	Dimension	Interpretation
Rate of young people NEET	(IA+U)/POP	Examines non-employment (due to non-education inactivity and unemployment) among young people in school-to-work transition	Educational attainment, age groups, gender, settlement type	High NEET rate shows large barriers encountered when entering the labour market, including the lack of relevant skills
Coefficient of variation by level of educational attainment	Ratio of standard deviation to the mean, e.g. compares the distribution of skills within different groups correcting for the overall size of the underlying statistics	Examines the difference in educational composition of employed to unemployed (or working-age population)	Age groups	Increasing levels indicate higher mismatch
Variance of relative unemployment rates by level of educational attainment	The average of the squared differences from the mean	Examines how unemployment rates by education level deviates from the country's average unemployment rate		Higher value indicates higher mismatch
Relative wages by educational attainment level	Index of wages relative to base year (and relative to specific base level)	Examines the overall level at a specific time, also the development over time		Increasing (relative) wages usually indicates a higher (relative) demand for the specific group
Vertical mismatch				
Occupational mismatch: overqualification rate	Ratio of people with given level of education working at an inappropriate skill level to all workers with that level of education	Degree of mismatch by qualification level	Educational attainment, region, settlement type	Higher ratios reflect higher mismatch
Overeducation and undereducation by occupation level (empirical method)	Percentage with education level above (below) required or identified level of education in occupation (group)	Degree of mismatch by qualification level		Higher percentages of overeducation/ undereducation (or an increase) reflect higher mismatch
Horizontal mismatch				
Skills mismatch by field of education	Ratio of employed persons working in occupation outside their field of education to all employed persons	Degree of mismatch by field of education	Field of education	Higher ratios reflect higher mismatch

Notes: E – employed; IA – inactive people (for NEET calculation, only non-education inactivity is taken into account); POP – population; U – unemployed. By definition the population is the sum of employed, unemployed and inactive people (POP=U+E+IA), while the labour force is defined as unemployed plus employed people (LF=U+E).

Source: ETF/Kriechel and Vetter (2019).

Measurement of skills mismatches is primarily based on the LFS microdata for 2015 and 2018[14]. The Serbian LFS is the most comprehensive data source concerning the main characteristics of the labour market and its participants, and presents the best data source for skills mismatch measurement and analysis. It is fully harmonised with the ILO recommendations and the Eurostat regulation and guidelines, and it is one of the best LFS among the six Western Balkan economies in regard to its content (Krstić, 2018). Additional surveys are used to provide background information to complement mismatch analysis. They are the ILO SWTS from 2015, the employer survey conducted by NES and STEP (Skills Toward Employment and Productivity), and the Skills Measurement Employer Survey conducted by the World Bank in 2015 and 2016. Employer surveys are mainly used to inform the demand side of the skills mismatch. Some supporting indicators relating to the national context and useful for the interpretation of the mismatch indicators are presented in Chapter 1 of this report.

3.2 Analysis of skills mismatch indicators

We present different approaches for estimating skills mismatch that enable us to provide insight into this multidimensional phenomenon which has a negative impact on workers and their labour market outcomes, employers and the overall economy. The overall cost resulting from mismatch in terms of lower wages, lost productivity and wasted human resources and education costs depend on the quantity and quality of the mismatch, i.e. the type and severity of mismatch (ILO, 2018). Hence, estimating skills mismatch is the first step to enable evidence-based policy making to reduce mismatch.

Unemployment rate and unemployment to employment ratio

The unemployment rate, defined as the share of persons in the labour force who are unemployed, provides a valuable insight into the mismatches between the labour supply and demand, reflecting an unutilised labour supply.

As we saw in Chapter 2, despite significant downward trends since 2015, the unemployment rate of young people aged 15–24 was still high in 2018 at 29.7% (Table 1.1). This indicates that young people who are ready to enter the labour market can experience difficulties during the school-to-work transition. The poor quality of Serbia's education system, which fails to build the skills required by the labour market, is considered one of the major causes of the high youth unemployment rate (Oruč and Bartlett, 2018; World Bank, 2019). Similarly, results from the youth survey conducted for the project funded by the Friedrich Ebert Foundation, Youth Study Serbia 2018/19, show that the majority of young people (53%) believe that the education system is not well adapted to the labour market requirements (Popadić et al., 2019).

In 2018, among young people in the labour force, more young women were unemployed than men, at 32% and 28.3%, respectively, notwithstanding their higher educational attainment (4.8% of women had completed higher education, compared to 2.7% of men). Between 2015 and 2018, young women experienced a larger reduction in the unemployment rate compared to men, by 16 and 12 percentage points respectively, narrowing the initial degree of gender discrimination in access to employment and occupations(see Table 3.2).

[14] We were advised by SORS to use LFS for 2015 as a base year for the analysis (instead of 2014), given that the LFS data has been fully comparable since 2015 due to organisational change in conducting the survey (in 2014 it was a quarterly survey; since 2015, it has been carried out continuously throughout the year).

TABLE 3.2 UNEMPLOYMENT RATE (UR), UNEMPLOYED TO EMPLOYED RATIO (UN/EMP) AND NEET RATE BY GENDER, EDUCATIONAL ATTAINMENT, AGE GROUP, REGION AND SETTLEMENT TYPE, 15–24, 2015 AND 2018 (%)

	2015			2018		
	UR	UN/EMP	NEET	UR	UN/EMP	NEET
Total	43.2	76.2	20.1	29.7	42.3	16.5
Gender						
Male	40.1	67.0	20.3	28.3	39.5	16.0
Female	48.4	93.9	19.8	32.0	47.0	17.0
Educational attainment						
Low	37.8	75.9	18.6	29.8	42.4	15.7
Medium	42.9	74.5	24.8	29.1	41.0	16.5
• Intermediate non-VET	40.1	69.2	5.7	27.8	38.5	6.2
• Intermediate VET	45.6	75.2	24.9	29.2	41.2	20.4
High	48.9	84.9	30.4	34.4	52.5	26.4
Age group						
15–19	51.8	107.4	12.1	44.5	80.6	9.9
20–24	41.5	70.8	27.2	27.1	37.3	22.1
25–29	28.6	40.0	32.2	21.1	26.8	26.2
Region						
Belgrade	35.6	43.2	12.9	23.9	31.4	10.4
Vojvodina	34.7	39.8	21.1	23.0	29.9	17.7
Šumadija and West Serbia	46.6	77.4	20.1	33.4	50.1	16.6
South and East Serbia	49.1	88.7	22.6	38.9	63.8	20.7
Settlement type						
Urban	45.1	85.1	18.2	33.4	50.0	14.4
Rural	40.2	66.2	23.8	26.0	35.2	19.5

Source: Authors' calculations based on LFS data.

The lowest unemployment rates were found among young people with an intermediate non-VET level of education, at 27.8%[15], and the highest among young tertiary/university graduates, at 34.4% in 2018. The aggregation of educational levels used in this report is provided in Table A1.21. Between 2015 and 2018, unemployment rates decreased for all educational levels; however, the fastest decrease was for young people with an intermediate VET level of education, by 16 percentage points. Despite the significant reduction of the unemployment rates, one in three young university graduates were unable to find employment in 2018, a result which points to a mismatch in terms of educational qualifications and labour market requirements.

[15] These results should be treated with caution due to the low number of observations of youths with an intermediate non-VET level of education.

According to age groups, the unemployment rate of teenagers aged 15–19 was around 17 percentage points higher than that of young adults aged 20–24 in 2018 (44.5% and 27.1%, respectively), due to the lower educational attainment and work experience of teens. If we expand youths up to the age of 29, those aged 25–29 had the lowest unemployment rate, at 21.1%. Over the 2015–18 period, unemployment decreased the most for young adults aged 15–24, by 14 percentage points.

Young people living in rural areas have lower unemployment rates than those in urban areas, at 26% and 33.4%, respectively, which may indicate that farming activities provide additional employment opportunities in rural areas. Similarly, the results of the 2015 SWTS indicate that youths in rural areas are more likely to transit to stable employment than youths in urban areas, despite their lower educational attainment (Marjanović, 2016). Between 2015 and 2018, youths in rural areas experienced greater improvement, as their unemployment rate decreased slightly more than in urban areas (by 14 vs. 12 percentage points, respectively).

The unemployment to employment ratio is a more direct measure of skills mismatch, as it compares the unemployed with the employed only, not with the labour force (employed plus unemployed), as is the case with the unemployment rate. As such, this indicator relates significantly to the unemployment rate.

The highest unemployment to employment ratio is found among young women, young people living in urban areas, young university graduates and teenagers, which confirms results based on the unemployment rate. Between 2015 and 2018, a significant reduction in the unemployment to employment ratio is observed for all categories of young people. Based on both indicators, labour market improvements have most benefited women, young adults (20–24) and people with an intermediate VET level of education. Young people living in rural areas experienced significant improvements based on the unemployment rate, while those living in urban areas experienced improvements based on the unemployment to employment ratio.

The unemployment to employment ratio confirms earlier findings that young people with intermediate non-VET appear to be in the most favourable position in the labour market as regards skills mismatch. The unemployment to employment ratio for this group was lowest, at 0.38 in 2018. The highest value of the unemployment to employment ratio observed for young university graduates, at 0.53, indicates significant labour market mismatches: there are too many university graduates with skills acquired in higher education that do not match the needs of the labour market and/or a mismatch exists in the type of skills taught. The other reason for the high unemployment to employment ratio may be that young people who graduate on time are probably better students and may have reservation wages[16]. According to ILO SWTS data from 2015, almost half (49%) of unemployed young people who refused a job offer did so because the wage offered was low, while the corresponding share was about 23% according to 2018 LFS data[17].

Finally, there are substantial regional labour market disparities, with Vojvodina and Belgrade having the lowest unemployment rate and unemployment to employment ratio. Despite significant improvement between 2015 and 2018, Southern and Eastern Serbia had the highest unemployment

[16] The reservation wage is the lowest wage a worker would be willing to accept for a particular job.

[17] Other reasons were: the type of job was not adequate (33%); distance from the place of residence (25%); inadequate working hours (10%); the job did not match the applicant's qualifications (4%); 'other' reasons (4%); and absence/illness at the time of the offer (2%). These results should be treated with caution as only a few unemployed young people refused a job offer (only 52). The majority of young people did not refuse any offers (95%).

rate and unemployment to employment ratio, while the region of Šumadija and Western Serbia are positioned between these extremes. Significant regional disparities in unemployment indicate low internal labour mobility and a poor investment climate in many parts of the country, which may increase risks of widening skills shortages or oversupply in certain regions (ETF/Vasić, 2019). The poorly developed housing market across regions and weak communication systems, which make commuting between some regions extremely difficult and time consuming, may have also contributed to low internal labour mobility. Positive internal migration was recorded for the regions of Belgrade and Vojvodina, while negative scores were recorded for the regions of Šumadija and West Serbia, and Southern and Eastern Serbia (SORS, 2018).

Young people not in employment, education or training

The share of NEETs is already presented in Chapter 1, both using cross-sectional and panel data. The NEET rate shows the level of non-employment among young people related to unemployment or inactivity for those not participating in education or training. It provides insight into the barriers that young people may face when entering the labour market, including the lack of relevant skills. Higher levels of the indicator reflect an underutilisation of youth potential in the labour market. This is a very useful indicator as it isolates inactive youths participating in education or training or unemployed youths participating in education or training from other inactive or unemployed youths. Since NEETs represent a heterogeneous group, there is a need to calculate the incidence of different subgroups and causes of their exclusion (ETF/Bardak et al., 2015).

The NEET rate decreased by 4 percentage points between 2015 and 2018, amounting to 16.5% in 2018 (Table 1.1). This reduction of the NEET rate indicates that Serbian youths either found employment more easily and/or may have remained in education for longer during the observed period.

In 2018, the NEET rate for women was slightly higher than that for men, at 17% and 16%, respectively. Between 2015 and 2018, the male NEET rate dropped more than the female rate. Although there is no large difference between genders, the composition of NEET by gender varies. Around 60% of men in NEET are unemployed, while 62% of women are inactive, which points to potential limited opportunities for women to reconcile work with childcare and other family responsibilities.

The NEET rate increases with the level of education, from 15.7% for young people with a low level of education to 16.5% for those with a medium level, and further to 26.4% for young university graduates. Among young people with a medium level of education, there is a huge discrepancy between those with non-VET and with VET education levels. The NEET rate for young people with non-VET education is only 6.2%, while this rate is 20.4% for those with a VET education. Young people with intermediate non-VET are the only group that experienced an increase in the NEET rate between 2015 and 2018. These results confirm earlier findings based on the unemployment rate and unemployment to employment ratio that young people with an intermediate non-VET education experienced the easiest transition into the labour market, while highly educated young people encountered barriers when entering the labour market. This might be a sign of oversupply of university graduates, or that many of them attained degrees in fields that are not sufficiently demanded by the labour market, like in some ETF partner countries (ETF/Bardak et al., 2015).

The NEET rate increases with age, as observed in all ETF partner countries (Ibid.). As expected, the lowest NEET rate is for young people aged 15–19, at 12.1%, as most are still in education and very few have entered the workforce. The employment rate for this age group shows that only 5% of youths

are employed, while the unemployment to employment ratio of 0.8 suggests a smaller number of unemployed compared to employed people. Other young people are inactive, mostly due to participation in education. The higher NEET rate for older youth groups (at 22.1% for young people aged 20–24 and 26.2% for those aged 25–29) can be explained by the higher number of both unemployed and inactive not in education; the number of unemployed increased much more than the number of inactive. Between 2015 and 2018, young people aged 25–29 experienced the fastest drop in the NEET rate, by 6 percentage points.

The rural NEET rate is higher than in urban areas, at 19.5 and 14.4%, respectively. This suggests that when inactivity not related to participation in education is taken into account, young people in urban areas experience an easier and quicker school-to-work transition. The NEET rate is lowest in the Belgrade region, at 10.4%, where most economic opportunities are concentrated, and highest in Southern and Eastern Serbia, at 20.7%.

Coefficient of variation by skills

This indicator compares the distribution of skills within different groups while correcting for the overall size of the underlying statistic. The difference in skills composition/level between employed and unemployed people is expressed in just one number that measures the overall extent of the mismatch. The higher the number, the greater the difference between the skills of people employed in the labour market and the skills of people wishing to enter it. The extent to which the distributions are different can therefore be interpreted as a measure of the ineffectiveness of the process of matching supply and demand of skills in the labour market (ETF, 2012).

Table 3.3 shows the dispersion of qualifications (measured by education level) among unemployed youths compared to those among the overall youth population. The coefficient of variation by skills significantly increased between 2015 and 2018, which suggests greater differences between the skills of unemployed youths and the skills of youths overall and, thus, a greater mismatch. It increased the most for the youngest age group (15–19), which drags the indicator for the entire cohort of young people (15–24).

TABLE 3.3 COEFFICIENT OF VARIATION BY LEVEL OF EDUCATIONAL ATTAINMENT FOR YOUTH AGED 15–29 AND POPULATION 15–64 (UNEMPLOYED VS. POPULATION), 2015 AND 2018

	2015	2018
All levels of education by age group		
15–24	0.432	0.601
15–19	1.356	2.182
20–24	0.236	0.389
25–29	0.114	0.136
15–64	0.071	0.099
VET vs. non-VET by age group		
15–24	0.203	0.305
15–64	0.068	0.091

Source: Authors' calculations based on LFS data.

As regards age groups, mismatch decreases with age, with the highest value observed for the youngest group. This indicates that unemployment is highly correlated with the level of education. This is expectable as different age cohorts were exposed to various levels of education and it confirms earlier results based on the unemployment rates and unemployment to employment ratio. The coefficient of variation by skills for young people (15–24) appears much higher than for the working-age population.

We also calculated the coefficient of variation for young people with an intermediate non-VET level of education and those with a VET level education, instead of for youths with all levels of education. The idea behind this exercise is to examine whether there are differences in unemployment experiences for youths with VET compared with those that have other types of intermediate education. We can see that the coefficient of variation differentiating between youths with VET and non-VET levels of education is twice as low compared to the indicator for youths with all education levels, while this difference for the working-age population is rather small.

Variance of relative unemployment rates by level of educational attainment

Another summary measure of mismatch on the labour market is the variance of relative unemployment rates by education level (Lipsey, 1960). Higher values of the variance indicate a greater scattering of the unemployment rates of various educational groups relative to the average unemployment rate. Therefore, the variance examines the extent to which some educational groups are in greater supply/demand imbalance compared to others. The variance is zero if the unemployment rate of all educational groups is the same. The higher the variance, the higher the mismatch. This methodology may also be used to measure the extent of diversity in the labour market across different subgroups, such as age, gender, region or occupation.

The variance of the relative unemployment rate for youths ranged from 0.01 in 2015 to 0.007 in 2018 and appears lower than for the working-age population. We see that the overall mismatch significantly decreased over the observed period, along with a decrease in the overall unemployment rate. This trend appears somewhat different compared to the coefficient of variation by level of education, which shows an upward trend. This is not surprising given that the variance of relative unemployment rates relies on the distribution of unemployed people only, while the coefficient of variation refers to the distribution of both the unemployed and total youth groups. This suggests that although the youth unemployment rate across educational groups became less scattered, the difference between educational attainment of youths wishing to enter the labour market and of total youths increased.

TABLE 3.4 VARIANCE OF RELATIVE UNEMPLOYMENT RATES BY LEVEL OF EDUCATIONAL ATTAINMENT, 2015 AND 2018

	2015	2018
Youths 15–24	0.0103	0.0069
Working-age population 15–64	0.0158	0.0114

Source: Authors' calculations based on LFS data.

The change in the unemployment rate for youths with a low level of education contributed most to the reduction of the variance of the relative unemployment rate between 2015 and 2018. While being significantly lower than the average unemployment rate in 2015 (37.8%), it approaches the average unemployment rate in 2018 (29.8%) (see Table 1.3).

Relative wages by education levels

Another aspect of the supply/demand imbalance by various educational groups can be examined based on the development of relative wages over time. Comparing the wages across educational levels over time, relative to their base year levels or to a benchmark wage, we can examine the extent to which various educational levels are differently remunerated over time. The higher wage increase for a certain level of education signals a higher demand for this level of education.

Relative wages by educational level reported in Table 3.5 are compared with wages of the corresponding level of education in 2015. The higher the level of education, the higher the wage growth between 2015 and 2018. Wages for youths with a low level of education increased by 4%, for those with both intermediate non-VET and VET education by 6%, which is the average wage growth, while wages for tertiary graduates increased the most, by 10%.

TABLE 3.5 RELATIVE WAGES BY EDUCATIONAL ATTAINMENT FOR YOUTHS AGED 15–24, 2018 (EACH LEVEL OF EDUCATION IN 2015=100)

Educational attainment	2018 (2015=100)
Low	1.04
Medium	1.07
• **Intermediate non-VET**	1.06
• **Intermediate VET**	1.06
High	1.10
Total	1.06

Source: Authors' calculations based on LFS data.

The estimated returns to education of young people aged 15–29 based on a human capital regression approach and 2015 SWTS data shows that every additional year of education, on average, increases the earnings of the young person by 5%, controlling for other personal and job characteristics (Vuksanović et al., 2018). Based on 2015 SILC data, wages were higher by 7.9% for each year spent in higher education (World Bank, 2019). Regression analysis over time is needed to reveal changes in returns to education and demand for different skill levels.

However, these results should be treated with caution as many other factors may have masked changes in relative wages across educational levels, which are not included in regressions, such as labour market institutions, catch-up wage development of some occupational groups, or the slow adjustment of wages to demand/supply imbalances (ETF/Bardak et al., 2015). For example, the wage increase of youths with a low level of education was directly affected by the increase in the minimum wage between 2015 and 2018[18], which could also have indirectly influenced wages across other educational levels. Moreover, tertiary graduates were more affected by the reduction of public sector wages within the Programme of Fiscal Consolidation (wages over RSD 25 000 were cut by 10%) than young people with a lower level of education, as workers with a tertiary education are more likely to work in the public than in the private sector (35% vs 17%).

[18] Minimum wages increased by 18% between 2015 and 2018.

Occupational mismatch: overqualification rate

Occupational mismatch is defined as the ratio of employed people with a given level of education working at an inappropriate skill level, measured by the ISCO, to all employed within that education level. This indicator provides insight into vertical occupational mismatch as it measures how well educational competences of employed people are utilised in their job. It can be calculated for different levels of education, but also across different dimensions, such as age, gender and region. Eurostat calculates the overqualification rate as the ratio of employed persons aged 20–64 with tertiary education (ISCED 2011 5–8) working in occupations for which a tertiary education is not required (ISCO 4–9) to all employed persons with a tertiary education.

Table 3.6 presents the overqualification rate for young people aged 20–29 and 20–34 with medium and tertiary education working in occupations which require a qualification/skill level below their educational attainment (ISCO 9 was used for medium education level and ISCO 4–9 for high). Occupational mismatch was much higher for young people with a tertiary education than those with a medium level of education. In 2018, 13.4% of youths aged 20–29 with medium education worked in elementary occupations, while 38.7% of young people aged 20–29 with a tertiary education worked in occupations for which a tertiary education was not required. Young people with a non-VET education were the least likely to be overqualified, at 7.7%, twice as low compared to those with VET education.

If we expand the youth category up to the age of 34 for 2018, the overqualification rate slightly decreased to 12.9% for medium level education and to 35.6% for tertiary graduates, which suggests that younger people (20–29) are more likely to be overqualified than those aged 29–34.

These results may be a sign of low job creation for tertiary graduates who accepted positions below their level of formal education, as no other job opportunities were available, or a sign of mismatch by the type of skills taught. The SWTS data shows that 23.4% of employed youths who would like to change their employment would do so in order to make better use of their qualifications and skills (Marjanović, 2016). Moreover, according to the 2015–16 STEP report, over half of young people with a tertiary education say their jobs do not require the level of education they have obtained (World Bank, 2019). It seems that the skills acquired in formal education are not what employers need, which points to the quality and relevance of education and training systems.

It may also be the case that some of these mismatches are voluntary in nature, as some young people accept jobs below their level of qualification and/or skills because these jobs offer some other benefits such as a permanent contract, better social protection, better working conditions, greater flexibility in working hours, enriched work/life balance and shorter commuting time (ILO, 2018). Nevertheless, for some young people it may also represent a short-term strategy to acquire work experience and basic work-related and other relevant skills required by labour markets to secure decent, stable employment in future. However, more detailed skills surveys are needed to identify all types of mismatch. Recent studies found that overeducated workers experienced wage penalties (OECD, 2016; McGuinness et al., 2017; ILO, 2018).

The overqualification rate for a high level of education is disaggregated by region and settlement type. In 2018, overqualification appeared to be less common among young people aged 20–29 residing in the Belgrade region, at 27.8%, and most widespread among those in Southern and Eastern Serbia, at 47.4%, which is the least developed region in the country.

TABLE 3.6 OVERQUALIFICATION RATE BY LEVEL OF EDUCATION, REGION AND SETTLEMENT TYPE, AGE GROUPS 20–29 AND 20–34, 2015 AND 2018 (%)

	2015		2018	
	20–29	20–34	20–29	20–34
Educational attainment				
Medium education level	14.1	13.2	13.4	12.9
• VET	16.2	14.1	14.0	13.7
• non-VET	7.2	7.3	7.7	7.7
High education level	40.2	37.4	38.7	35.6
Region – high education level				
Belgrade	29.9	27.3	27.8	27.0
Vojvodina	38.8	37.0	43.6	35.0
Šumadija and Western Serbia	40.9	41.2	43.5	42.8
Southern and Eastern Serbia	47.6	46.1	47.4	47.4
Settlement type – high education level				
Urban	36.7	33.1	34.5	32.8
Other	48.8	44.9	49.9	45.4
Region – medium education level				
Belgrade	5.1	5.6	4.2	5.0
Vojvodina	19.1	17.9	18.7	17.4
Šumadija and Western Serbia	13.4	14.1	12.0	12.6
Southern and Eastern Serbia	19.9	18.2	18.2	17.5
Settlement type – medium education level				
Urban	13.1	14.8	10.6	11.1
Other	18.7	16.5	16.7	15.6

Source: Authors' calculations based on LFS data.

Regarding settlement type, youths aged 20–29 living in urban areas were less likely to be overqualified than those living in rural areas, which is in line with results for the regions. While one in three young people in urban areas were overqualified, this is every other young person living in rural areas (34.5% and 49.9%, respectively). Low labour mobility, especially in less developed regions, contributed to high overqualification rates in these regions: 47.4% in South and East Serbia and 43.5% in Šumadija and West Serbia.

The profile of young people with a medium level of education who were overqualified appears the same as for those with a tertiary level of education. The only difference is that the Vojvodina region appeared to be the region with the most overqualified workers (18.7%) along with the traditionally underdeveloped region of Southern and Eastern Serbia (18.2%).

Between 2015 and 2018, the overqualification rate for young people aged 20–29 with medium and high levels of education declined by around 1 percentage point. For those with a high level of education, the overqualification rate declined in urban areas and in the Belgrade region (by 2 percentage points), and increased in rural areas (by 1 percentage point), in the Vojvodina region (4.8 percentage points) and in the region of Šumadija and Western Serbia (2.6 percentage points), while it remained unchanged in Southern and Eastern Serbia.

Overeducation and undereducation

The method used for this study is suitable in cases where datasets do not include specific questions on overeducation or overskilling. However, it is quite a simplistic measurement and must be interpreted as a proxy. The empirical method is a purely statistical measure in which the distribution of education is calculated for each occupation. Overeducation is defined as existing when the level of education is more than one standard deviation above the mean (Bauer, 2002) or above the mode (Mendes de Oliveira et al., 2000) for the education level of a given occupation. The educational mean and/or mode for each occupation is therefore assumed to be a match for that occupation, but this may very well be a false assumption. In theory, everybody employed in a given occupation could be mismatched (ETF, 2012).

Since this basic assumption of the model is not fulfilled, our results for overeducation and undereducation according to occupational level are treated as a proxy only, regardless of educational categories used (Table A1.22). For occupations where overeducation is more prevalent, there will be a small share of those additionally overeducated, given that the mean level of education is artificially high, as many overeducated people have already been included in the data and, hence, a high share of those are 'false' undereducated. This means that, for these occupations, overeducation appears to be underrepresented and undereducation overrepresented.

The opposite holds true for occupations where undereducation is dominant: their mean level of education will be artificially low, resulting in a small share of those additionally undereducated and a large share of 'false' overeducated. Hence, for these occupations, undereducation is likely to be underrepresented and overeducation overrepresented.

Using the same data and based on objective educational requirements across occupations, we found that the overqualification rate is quite high, at 13.4% for medium level of education and 38.7% for high level of education. This suggests that overeducation to a large extent provides a 'false' mean value for making comparisons and consequently yields unconvincing results based on this empirical method.

The survey of youths aged 14 to 29, conducted by the Centre for Free Elections and Democracy (CeSID), provides insight into self-assessed skills mismatches (Popadić et al., 2019). The results show that around 40% of respondents are overeducated or overqualified, as they are working in positions that require a lower level of qualifications than they have, 6% are undereducated/underqualified, while 55% are well matched to jobs according to their qualifications. The main drawback of this subjective approach is that workers tend to overestimate overqualification compared to other measures (McGuinness, 2006).

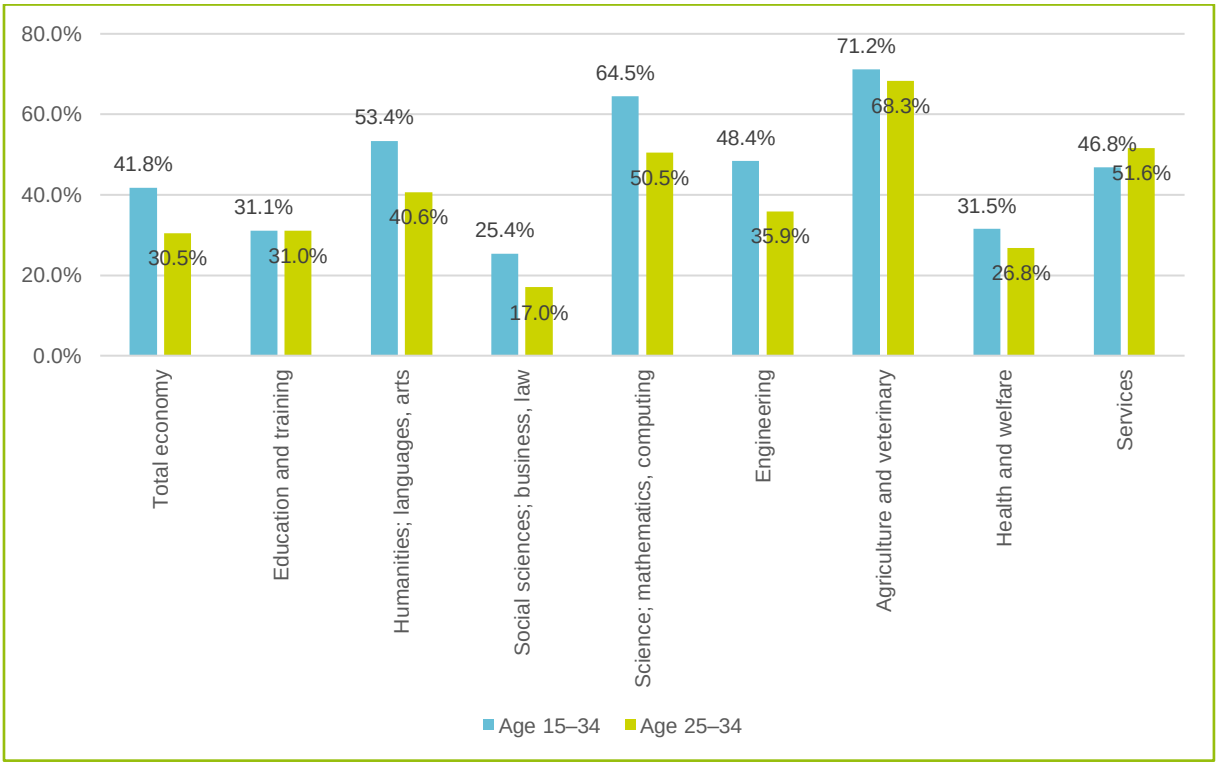
Occupational mismatch: overqualification rate by field of education

Employed persons are not just matched to jobs based on their level of education, but also on the field of education. Thus, another type of skills mismatch, referred to as horizontal mismatch, is between employees' field of education and the job requirements. The rate of skills mismatch by field of

education is defined as the ratio of employed persons working in an occupation outside their field of education (ISCED-F) related to the highest level of education attained, to all employed persons. This experimental Eurostat indicator[19] is provided for employed persons aged 15–34 having at least completed secondary education (level 3 to 8 in ISCED 2011) and employed persons aged 25–34 having completed tertiary education (level 5 to 8 in ISCED 2011).

In 2018, 41.8% of employed persons aged 15–34 with at least a secondary education worked in occupations that did not require their field of education (Figure 3.1). This is far above the average EU-28 rate of 27.8%. The rate of horizontal skills mismatch for those aged 25–34 with completed tertiary education was 30.5%, which is comparable to the EU-28 average rate of 29% in 2017. Between 2015 and 2018, the skills mismatch by field of education for those employed with at least a secondary education decreased by 3 percentage points, while for those with a tertiary education it increased by 3 percentage points. The largest horizontal skills mismatch is observed in the following fields of study: agriculture and veterinary; science, mathematics and computing; humanities, language and arts; and services.

FIGURE 3.1 SKILLS MISMATCH BY FIELD OF EDUCATION, 2018



Source: Eurostat.

Similarly to the vertical mismatch, reasons for such a high level of horizontal mismatch may be demand related when a matching job is not available, but also supply related when these jobs offer better opportunities in terms of pay and promotion, type of contract or hours worked, i.e. permanent contract or greater flexibility in working hours (Robst, 2007).

[19] https://ec.europa.eu/eurostat/web/experimental-statistics/skills

Given the fact that this indicator is solely computed by Eurostat, we could not provide further analysis of horizontal skills mismatch according to other dimensions, i.e. region or type of settlement. If countries want to disentangle other aspects of this mismatch, it would be beneficial for those with large horizontal skills mismatches to apply the Eurostat methodology. Thus, more details regarding matching the occupation (ISCO 2008) of an employed person with the field of education is needed.

Self-assessed hiring difficulties

Employer surveys are used to complement previous mismatch analysis and inform the demand side of skills mismatch. According to the NES employer survey data, 29.3% of companies surveyed in 2017 indicated problems in filling vacancies compared to only 13.7% in 2014 (NES, 2017). The most common difficulties encountered by employers (Table 3.7) are shortage of suitable workers (28%), lack of required knowledge and skills (24.8%) and lack of work experience (23.5%). Companies most often experiencing these difficulties were in manufacturing (38.6%), construction (37.7%), mining (33.3%), accommodation and food production (32.2%), information and communication (32.1%), and transport and storage (29.4%).

TABLE 3.7 EMPLOYERS' ATTITUDES REGARDING HIRING PROBLEMS, 2018

Occupation groups	Difficulties encountered in the labour market (%)							Total number of companies by occupations
	Labour market deficiencies	Education system deficiencies	Inadequate level of education	Lack of knowledge and skills	Lack of work experience	Unsatisfactory working conditions	Other reasons	
Managers/ directors	0.0	0.0	0.0	50.0	50.0	0.0	0.0	6
Professionals, artists	34.9	1.0	4.0	22.9	27.5	1.7	8.1	582
Technicians	18.2	1.6	2.1	31.6	25.7	2.1	18.7	187
Clerical workers, admin. workers, similar	6.9	2.0	1.0	35.6	35.6	2.0	16.8	101
Service workers, assemblers	28.7	6.1	4.8	25.7	22.2	1.5	10.9	1 818
Plant and machine operators, installers	25.5	14.2	5.0	26.2	21.3	0.0	7.8	141
Drivers, mobile plant operators	31.7	3.1	2.0	19.8	25.6	3.4	14.3	293
Agricultural workers	0.0	0.0	0.0	60.0	20.0	20.0	0.0	5
Supervisors	35.3	11.8	0.0	5.9	47.1	0.0	0.0	17
Ships' deck officers	22.2	55.6	0.0	22.2	0.0	0.0	0.0	9
Elementary occupations	14.8	1.6	2.3	14.1	7.0	4.7	55.5	128
Other	18.2	9.1	0.0	18.2	18.2	9.1	27.3	11
Average	28.0	4.9	4.0	24.8	23.5	1.9	12.9	3 298*

* Total number of companies.

Source: NES, Employers' survey, year 2017. The results of the employers' survey and employment needs' forecast for 2018.

Similar problems in filling vacancies were found in the 2015–16 STEP survey data. Lack of required skills and work experience caused difficulty in filling vacancies for more employers than, for example, candidates rejecting a wage offer or objecting to working conditions (World Bank, 2019). This data also shows that employers are not satisfied with education outcomes, as around half of firms reported that general education and training systems do not meet the skills needs of businesses. This rate is much higher than the Western Balkan average (37%) and higher than in any other Western Balkan country. Bosnia and Herzegovina is the only country with a higher share of firms unsatisfied with the overall education system than Serbia.

4. LABOUR DEMAND AND SUPPLY FORECAST: KEY IMPLICATIONS FOR YOUTHS

This chapter presents results for labour demand and supply forecasting, starting from general demographic, economic and labour force projections, with a focus on younger generations. The forecast takes partially into account the foreseeable impact of the Covid-19 pandemic, available at the time of calculation process (April 2020). The chapter also looks at the digital economy and its influence on work patterns including the emerging model of 'telemigration' (working online for an employer abroad) and employers' expectations with regard to possibilities for further growth of youth employment.

4.1 Results of labour force projections

With the population over 15 projected to shrink by 500 000, or 9%, between 2020 and 2030, and for those aged between 15 and 64 to shrink by 450 000, or 10%, the two key forces shaping the size and structure of labour market demand and supply in Serbia will be demographic decline and economic growth. The size of the labour force will thus be under decisive influence of the two countervailing forces: the former placing downward pressure on it, and the latter pointing at its expansion.

General projections start with quantitative labour force indicators (activity, employment and unemployment) that have been improving at a relatively rapid pace since 2012. However, their relative expressions (activity, employment and unemployment rates) are still well below EU averages. Thus, assuming the expected stable and relatively high rates of economic growth occur, there is still some scope for further improvement. That improvement, given the shrinkage of the working-age population by almost 1% on an annual basis, will have to be based on rising productivity rather than on extensive increases in employment.

When it comes to the youth labour market, the demographic projections for 2030 are even more reliable than general ones, given the negligible youth mortality rate, except in the part related to labour migration, since young people tend to be the most mobile. However, modelling labour force participation of young people, especially those below 25, could still be difficult for a variety of reasons. One needs to anticipate the changing balance between the key two forces shaping youth activity: extension of education, on the one hand, and growing demand for young workers, fuelled both by general economic growth and by increased replacement demand, on the other hand. Furthermore, the fast-growing phenomenon of online work for typically international customers/employers, most often via digital platforms, also known as telemigration, represents a particular challenge. Not only do we currently know little about its actual size and significance in Serbia, but also telemigration as a specific form of employment cannot be directly correlated with gross domestic product (GDP) growth, since telemigrant jobs are created abroad. This is why there is a need to augment the standard trend-based projections of youth labour market with forecasts based on various other primary and secondary sources of information.

Still, the most unexpected and biggest challenge that emerged after we had already prepared our preliminary projections was the outbreak of the Covid-19 pandemic. It officially arrived in Serbia in March 2020 and, like with the rest of the world, at the time of writing (end of May 2020), it is uncertain how long it will take until the end of the pandemic is declared and, once it is over, what will be its overall impact on the Serbian economy and labour market.

Practically all major international economic organisations and agencies have projected a comparatively mild (but still absolutely significant) impact of Covid-19 on Serbian economic growth. Instead of stable growth rates of 4.1% in 2020 and 4.0% in 2021, we have replaced them with new projections based on estimates of international organisations: -4.1% in 2020 followed by strong recovery of 6.1% in 2021. Other adjustments introduced to account for the impact of Covid-19 are presented in a step-by-step presentation of our methodology.

In the rest of this section our methodology, key assumptions and results will be presented in a step-by-step approach to ensure clarity and transparency.

In Step 1, we take demographic projections (constant scenario) for the period 2020–30 from a representative source (Penev, 2013) and smooth them to better fit the population estimates of SORS used in the 2019 LFS. In Step 2, we project activity rates of the adult population broken down by five-year age groups. These two steps track the dynamics of potential and actual labour supply. In Step 3, we project employment by sectors and total employment, based on growth projections and on adjusted and downwardly revised sectoral elasticities of employment with respect to growth. In Step 4, total employment is distributed across age groups. These two steps represent the demand projections. In Step 5, we upwardly adjust employment for the population over 65. This adjustment consists entirely of self-employment, reflecting idiosyncrasies of this group. In Step 6, we present final activity, employment and unemployment projections, in absolute and relative terms for the period 2020–30.

Step 1

As the base for our projections, we used population projections from Penev (2013) for the years 2020, 2025 and 2030. We chose a 'constant' scenario, which assumes that fertility, mortality and migration rates will remain constant during the period under consideration. Since the population projections are made for five-year periods (2015–20, 2020–25 etc.), the difference in population between the last and the first year of the projections should be divided by five in order to obtain the annual change in population.

Since we have the LFS population data for 2019 (which most likely overestimates the true resident population in 2019), to avoid a sharp decline in population in 2020 implied by Penev's 2020 population estimate, we subtracted LFS 2019 data from Penev's 2025 projection and divided it by six. In that way, we smoothed the population decline since 2019. In the same way we got a constant decrease in population over the period 2025–30, only dividing the projected population by five, because of the shorter period. While it somewhat alters Penev's original projections, it does not significantly alter the trend of sharply declining population, which foresees a reduction of half a million adults over the 11-year period.

TABLE 4.1 POPULATION PROJECTIONS FOR 15+, CONSTANT FERTILITY, MORTALITY AND MIGRATION SCENARIO, 2016–30

Total	LFS (actual)				Projected (assumption: constant fertility, mortality and migration)										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
15+	6 017 600	5 984 700	5 955 100	5 923 762	5 881 114	5 838 465	5 795 817	5 753 168	5 710 520	5 667 871	5 611 729	5 555 588	5 499 446	5 443 305	5 387 163
15–19	349 400	339 600	336 300	331 366	327 721	324 076	320 431	316 786	313 141	309 496	305 656	301 816	297 976	294 137	290 297
20–24	407 400	400 500	390 800	385 066	383 614	382 162	380 709	379 257	377 805	376 352	371 991	367 630	363 269	358 907	354 546
25–29	440 300	432 300	424 400	417 255	407 696	398 136	388 576	379 017	369 457	359 897	358 161	356 426	354 690	352 954	351 218
30–34	485 900	480 700	475 500	467 495	459 919	452 343	444 766	437 190	429 614	422 038	410 615	399 193	387 770	376 348	364 925
35–39	499 200	495 300	490 700	490 682	483 084	475 486	467 888	460 290	452 692	445 093	436 059	427 024	417 989	408 954	399 919

Total	LFS (actual)				Projected (assumption: constant fertility, mortality and migration)										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
40–44	483 500	490 200	495 300	495 282	491 841	488 400	484 958	481 517	478 076	474 634	465 602	456 571	447 539	438 507	429 475
45–49	466 100	463 400	463 800	461 720	463 123	464 526	465 930	467 333	468 736	470 140	466 079	462 019	457 958	453 898	449 838
50–54	478 200	467 200	458 500	456 443	457 328	458 213	459 098	459 983	460 867	461 752	463 374	464 995	466 617	468 239	469 860
55–59	499 900	487 000	477 000	463 596	458 271	452 946	447 622	442 297	436 972	431 648	432 668	433 688	434 708	435 728	436 748
60–64	567 000	562 300	552 800	537 266	528 959	520 652	512 345	504 038	495 731	487 424	481 484	475 544	469 605	463 665	457 726
65–69	464 200	497 800	513 600	523 813	511 918	500 023	488 128	476 233	464 338	452 443	443 534	434 625	425 716	416 806	407 897
70–74	293 300	281 600	290 600	296 379	304 775	313 171	321 567	329 963	338 360	346 756	334 739	322 723	310 707	298 690	286 674
75+	583 300	586 700	585 800	597 449	602 916	608 382	613 849	619 315	624 782	630 248	641 816	653 385	664 953	676 522	688 090

Step 2

We projected activity rates based on an inverse exponential (logarithmic) trend. This was meant to reflect both our supply and demand assumptions. On the supply side, the activity function is expected to grow at a decreasing rate because of the increasing difficulty of bringing more people from inactivity to activity as the latter expands. From the demand perspective, the activity function reflects the more intensive nature of economic growth. Due to severely decreasing demographic trends in the prime age group 30–49, we had to restrict the growth of its active members by assuming that the activity function asymptotically approaches 93% instead of 100%. Comparatively, the activity rates for the 30–49 age group very rarely surpass 93% even in countries with the highest activity and employment rates.

TABLE 4.2 PROJECTED ACTIVITY RATES BY RELEVANT AGE COHORTS, 2020–30 (%)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
15–19	9.4	9.3	9.3	9.2	9.2	9.1	9.1	9.1	9.0	9.0	9.0
20–24	48.4	48.6	48.8	49.0	49.1	49.3	49.4	49.5	49.6	49.7	49.8
25–29	79.3	80.0	80.6	81.2	81.7	82.2	82.6	83.0	83.4	83.7	83.9
30–49	86.5	87.4	88.2	88.9	90.6	91.1	91.6	92.0	92.4	92.8	93.0
50–64	61.5	62.8	64.0	65.0	65.6	66.0	66.4	66.8	67.2	67.6	67.9
65+	12.2	12.6	13.0	13.3	13.6	13.9	14.2	14.4	14.6	14.8	15.0

Step 3

In this step, we projected employment by sectors and total employment, based on projections of economic growth and on adjusted – first upwardly and then downwardly revised – trends for sectoral elasticities of employment with respect to economic growth. These coefficients show the intensity of employment growth in relation to GDP growth. As already explained, instead of stable pre-Covid-19 projected growth rates of 4.1% in 2020 and 4.0% in 2021, we replaced them with new projections of -4.1% in 2020, followed by a strong recovery of 6.1% in 2021.

We forecast sectoral employment by obtaining annual increments by multiplying sectoral growth rates with their corresponding employment elasticities. Based on historical data (2014–18) on gross value added by sectors, we obtained sectoral GDP growth rates and then divided the sectoral rate by the total growth rate to get the trend elasticity of sectoral employment to changes in total GDP. The elasticity thus obtained, downwardly adjusted for the expected productivity growth in a sector, it was applied to projected GDP growth rates by 2030 (from SORS, 2019). Furthermore, we downwardly adjusted the SORS-projected GDP growth rates from 5% to 4% annually. We considered our

estimates more realistic, taking into account that Serbia has not had sustained economic growth over 4% since the 1970s, when the starting point was lower and the country was reaping the demographic dividends, while during the next decade it will clearly face demographic difficulties.

TABLE 4.3 PROJECTION OF REAL GDP GROWTH RATES, 2019–30 (%)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
GDP	4.0	-4.1	6.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Agriculture	4.5	-4.6	6.8	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Manufacturing	5.1	-5.2	7.8	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Services	3.3	-3.4	5.1	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3

We then used employment elasticities with respect to sectoral GDP to obtain a change in employment by sector. In the preliminary (pre-Covid) projections, based on stable 4% GDP projections, we applied reduced elasticities for the sectors of agriculture, manufacturing and services of 0.1, 0.18 and 0.28, respectively. These elasticities were lower (due to productivity growth) than those applied in our earlier projections (Arandarenko, 2017). Also, as is standard in labour market projections, we assumed that employment would not respond immediately to GDP changes, so we introduced a one-year lag, e.g. changes in employment in 2020 were based on the 2019 GDP growth.

More generally, it is customary in labour market projections and forecasting that annual increments of employment in year t+1 are obtained through the multiplication of sectoral growth rates in period t with estimated employment elasticities. The total employment is the sum of all sectoral employment numbers obtained in that way.

However, the outbreak of Covid-19 forced us to revise our assumptions in several crucial ways, in addition to using completely new GDP growth projections for 2020 and 2021. First, the assumption of a one-year time lag in adjustment of employment had to be abandoned. The once-in-a-lifetime Covid-19 event caused immediate lockdown and widespread disruption of economic and labour market activities. According to the ILO nowcasting model for the Western Balkans, the lockdown resulted in an 11.6% reduction in the region's employment expressed in full-time equivalents (ILO Monitor, 2020). Second, because of the intensity and immediacy of the labour market response, we had to apply much higher elasticities approaching 1, to approximate the intensity of relationship between the reduction of GDP and drop in employment. As an orienting benchmark, we used the unemployment rate projections for 2020 and 2021 produced by the International Monetary Fund and European Bank for Reconstruction and Development (EBRD). Eventually, based on the application to Serbia of the ILO (2020) framework for analysis of the vulnerability of economic sectors to the economic crisis, we revised upwards the elasticity of employment with respect to GDP to 0.95 for manufacturing and to 0.9 for services. The estimates of elasticity were based on the assessment of the share of employees found in medium- to high-risk activities within sectors – 45% employed in services and 72% in manufacturing. For 2021, we assumed a partial return of the time lag in employment response to GDP changes, which meant very mild recovery of employment despite GDP strongly bouncing back. The corresponding elasticities of employment with respect to growth were thus set at 0.09 for manufacturing and 0.14 for services. As of 2022, the time lag is fully restored to one year and employment elasticities remain constant at their initially projected values (0.1 for agriculture, 0.18 for manufacturing and 0.28 for services) until 2030.

Applying the above-described procedure, we obtained the dynamics of employment by broad sectors, as presented in Table 4.4.

TABLE 4.4 DYNAMICS OF EMPLOYMENT (15+) BY BROAD ECONOMIC SECTOR, 2019–30

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Agriculture	447 182	445 140	446 652	448 642	450 640	452 648	454 665	456 690	458 725	460 769	462 821	464 883
Manufacturing	795 251	755 866	761 143	768 111	775 143	782 239	789 400	796 627	803 920	811 280	818 707	826 202
Services	1 631 997	1 581 857	1 604 353	1 619 313	1 634 414	1 649 655	1 665 038	1 680 565	1 696 236	1 712 054	1 728 019	1 744 133
Total	2 874 430	2 782 863	2 812 147	2 836 066	2 860 197	2 884 542	2 909 103	2 933 882	2 958 881	2 984 102	3 009 547	3 035 218

Step 4

Because of large changes in the size and structure of the working-age population, we could not keep the assumption applied in our previous projection by Arandarenko (2017) that over the forthcoming decade each age group will preserve the same starting share of total employment. This assumption is reasonable when employment is dominantly determined by the labour demand, and it would imply the stable age structure of employment – that is, that employers need roughly the same proportion of employees belonging to the broad age groups within the working-age population. But in our case, keeping the age structure of total employment unchanged would imply, as already mentioned, the implausibly high employment rate of prime-age workers. Thus, because of severe and uneven (by age groups) demographic decline, we could not keep the employment structure fixed until 2030. Instead, we adjusted it in line with the changing age structure of the total population. In this way, we arrived at the number of employed people by age group as shown in Table 4.5.

TABLE 4.5 PROJECTION OF EMPLOYMENT BY AGE GROUP, 2019–30

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
15+	2 874 430	2 782 863	2 812 147	2 836 066	2 860 197	2 884 542	2 909 103	2 933 882	2 958 881	2 984 102	3 009 547	3 035 218
15–19	21 058	20 355	20 536	20 676	20 815	20 955	21 095	21 258	21 423	21 587	21 753	21 919
20–24	136 295	132 708	134 879	136 820	138 799	140 817	142 874	144 100	145 336	146 582	147 838	149 104
25–29	264 084	262 699	261 875	260 410	258 827	257 121	255 287	259 162	263 125	267 179	271 326	275 570
30–34	356 564	342 849	344 018	344 433	344 779	345 051	345 246	342 755	340 065	337 166	334 049	330 704
35–39	383 588	369 103	370 642	371 380	372 053	372 658	373 191	373 075	372 850	372 509	372 048	371 459
40–44	387 625	376 222	381 142	385 368	389 654	394 002	398 414	398 806	399 103	399 299	399 388	399 367
45–49	356 400	349 395	357 538	365 167	372 988	381 005	389 227	393 737	398 324	402 989	407 735	412 562
30–49	**1 484 177**	**1 427 056**	**1 442 705**	**1 455 612**	**1 468 634**	**1 481 773**	**1 495 030**	**1 497 208**	**1 499 056**	**1 500 555**	**1 501 687**	**1 502 433**
50–54	333 245	326 337	333 578	340 325	347 238	354 321	361 578	370 251	379 178	388 370	397 836	407 587
55–59	288 559	278 791	281 122	282 890	284 654	286 413	288 165	294 739	301 502	308 461	315 624	322 998
60–64	197 506	190 053	190 850	191 235	191 586	191 903	192 183	193 714	195 254	196 804	198 361	199 927
50–64	**819 310**	**793 769**	**802 669**	**810 051**	**817 504**	**825 031**	**832 631**	**847 589**	**862 928**	**878 661**	**894 802**	**911 367**
65–69	81 019	77 387	77 117	76 658	76 162	75 629	75 057	75 080	75 083	75 065	75 025	74 961
70–74	35 059	35 237	36 939	38 622	40 358	42 148	43 994	43 336	42 638	41 900	41 118	40 292
75+	33 363	32 906	33 876	34 804	35 759	36 740	37 748	39 225	40 752	42 331	43 965	45 654
65+	**149 441**	**146 262**	**149 426**	**152 365**	**155 375**	**158 458**	**161 617**	**163 835**	**166 098**	**168 409**	**170 768**	**173 178**

The minimal difference between the total employment (15+), shown in the first row of Table 4.5, and the sum of employment of all age cohorts is a consequence of rounding up numbers when calculating the structure of employment. We will use the latter data when referring to 15+ employment.

Step 5

Following the practice from preceding projections by Arandarenko (2017), we capped projected unemployment of workers aged 65+ to the level below 2 000. The justification is that this is the maximum number of unemployed people reported by LFS for this age group, and besides, beyond the age of 65, unemployment is not legally recognised. Furthermore, an increase in employment for those aged 65+ might be expected on the basis of relatively slow but steady increase in life expectancy in Serbia, which is also followed by an increase in the number of healthy years of life. Since the original projection is derived from the projection of activity, following our earlier practice, we reassigned this 'surplus' of unemployed to employment, thus keeping the activity projections for this age group unchanged.

After this technical correction is applied, the total employment increases by more than 30 000 people by 2030.

TABLE 4.6 ADJUSTED ESTIMATES OF TOTAL 15+ EMPLOYMENT AFTER REASSIGNING 'EXCESS' UNEMPLOYMENT OF 65+ TO EMPLOYMENT, 2020–30

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Employment 15+ before correction	2 782 849	2 812 089	2 835 933	2 859 955	2 884 156	2 908 534	2 933 152	2 957 965	2 982 973	3 008 175	3 033 572
Employment 15+ after correction	2 808 579	2 840 482	2 867 229	2 892 673	2 918 335	2 944 010	2 969 271	2 993 213	3 017 265	3 041 426	3 065 793

Step 6

The absolute numbers of the total population, active and employed, were projected based on demographic projections and a set of elaborated assumptions on the labour supply and demand. Unemployment was obtained as a residual and on this basis we calculated the basic indicators of the labour market.

The projected transformation of the labour market between 2020 and 2030 is stunning, especially in terms of unemployment rates. Under the current assumption of only a comparatively moderate GDP drop in 2020 and dynamic economic recovery from the negative impact of Covid-19 in 2021, taken from the forecasts of leading international economic organisations, the Covid-19 pandemic shock becomes only a temporary blemish in the long-term upward trend in GDP and employment. Clearly, one can foresee a less optimistic trajectory, but at the time of writing we have no authoritative external basis to do so.

As is visible from Table 4.7, the unemployment rate for the adult population is projected to drop from 13.4% in 2020 to as low as 3.0% during that period. The already relatively high employment rate of prime-age workers (30–49) of 75.2% in 2019 will go up to 91.4% by 2030. All other age cohorts will also experience significant improvements in all quantitative dimensions. However, the employment rate for the population aged 20–64 will only reach the current EU average in around 2028. This reassures us that our projections are conservative enough. At the same time, it should be stressed

that progress in convergence with the EU in terms of key labour market indicators will be achieved both by better-than-average economic performance and worse-than-average demographic performance.

TABLE 4.7 PROJECTIONS OF ACTIVITY, EMPLOYMENT AND UNEMPLOYMENT RATES, 2020–30 (%)

		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total (15+)	Activity	55.1	55.8	56.3	56.8	57.5	57.7	58.0	58.2	58.4	58.6	58.7
	Employment	47.8	48.7	49.5	50.3	51.1	51.9	52.9	53.9	54.9	55.9	56.9
	Unemployment	13.4	12.8	12.2	11.5	11.1	10.0	8.7	7.4	6.0	4.6	3.0
Total (15–64)	Activity	68.8	69.7	70.5	71.1	72.1	72.5	72.8	73.1	73.3	73.6	73.7
	Employment	59.1	60.3	61.4	62.5	63.6	64.8	66.1	67.4	68.7	70.0	71.4
	Unemployment	14.1	13.5	12.9	12.1	11.7	10.6	9.2	7.8	6.3	4.8	3.1
Total (20–64)	Activity	73.5	74.5	75.3	76.0	77.1	77.5	77.8	78.1	78.4	78.7	78.8
	Employment	63.3	64.6	65.7	66.9	68.1	69.4	70.7	72.1	73.5	74.9	76.4
	Unemployment	13.9	13.3	12.7	12.0	11.6	10.4	9.1	7.7	6.2	4.7	3.0
Employment	15–19	6.2	6.3	6.5	6.6	6.7	6.8	7.0	7.1	7.2	7.4	7.6
	20–24	34.6	35.3	35.9	36.6	37.3	38.0	38.7	39.5	40.4	41.2	42.1
	25–29	64.4	65.8	67.0	68.3	69.6	70.9	72.4	73.8	75.3	76.9	78.5
	30–49	75.2	76.7	78.1	79.5	81.0	82.5	84.2	85.9	87.7	89.5	91.4
	50–64	54.9	56.1	57.1	58.1	59.2	60.3	61.5	62.8	64.1	65.4	66.8
	65+	12.1	12.5	12.9	13.2	13.5	13.8	14.1	14.3	14.5	14.7	14.9
Unemployment	15–19	33.9	31.9	30.6	28.6	27.3	25.1	23.6	22.0	19.5	17.8	16.1
	20–24	28.6	27.4	26.4	25.3	24.2	22.9	21.6	20.1	18.6	17.1	15.5
	25–29	18.7	17.8	16.9	15.9	14.8	13.7	12.4	11.1	9.7	8.2	6.5
	30–49	13.1	12.2	11.4	10.5	10.6	9.4	8.1	6.6	5.1	3.5	1.7
	50–64	10.7	10.7	10.8	10.6	9.8	8.6	7.3	6.0	4.6	3.2	1.6
	65+	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0

TABLE 4.8 PROJECTIONS OF ACTIVITY, EMPLOYMENT AND UNEMPLOYMENT, ABSOLUTE NUMBERS, 2020–30

Year/age		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total (15+)	15+	5 881 114	5 838 465	5 795 817	5 753 168	5 710 520	5 667 871	5 611 729	5 555 588	5 499 446	5 443 305	5 387 163
	15–64	4 461 555	4 416 939	4 372 322	4 327 706	4 283 090	4 238 474	4 191 690	4 144 905	4 098 121	4 051 336	4 004 552
	20–64	4 133 834	4 092 863	4 051 892	4 010 921	3 969 949	3 928 978	3 886 034	3 843 089	3 800 144	3 757 200	3 714 255
	15–19	327 721	324 076	320 431	316 786	313 141	309 496	305 656	301 816	297 976	294 137	290 297
	20–24	383 614	382 162	380 709	379 257	377 805	376 352	371 991	367 630	363 269	358 907	354 546
	25–29	407 696	398 136	388 576	379 017	369 457	359 897	358 161	356 426	354 690	352 954	351 218
	30–49	1 897 967	1 880 754	1 863 542	1 846 330	1 829 117	1 811 905	1 778 356	1 744 806	1 711 256	1 677 707	1 644 157
	50–64	1 444 558	1 431 811	1 419 064	1 406 317	1 393 570	1 380 824	1 377 526	1 374 228	1 370 930	1 367 632	1 364 334
	65+	1 419 609	1 421 576	1 423 544	1 425 512	1 427 479	1 429 447	1 420 090	1 410 733	1 401 375	1 392 018	1 382 661

Year/age		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Activity	15+	3 243 204	3 256 629	3 265 814	3 267 816	3 281 811	3 270 107	3 252 669	3 231 595	3 209 838	3 187 648	3 160 082
	15–64	3 070 012	3 077 511	3 080 753	3 078 223	3 087 673	3 071 414	3 051 016	3 028 450	3 005 237	2 981 630	2 952 683
	20–64	3 039 206	3 047 371	3 050 953	3 049 079	3 058 864	3 043 250	3 023 201	3 000 985	2 978 419	2 955 157	2 926 556
	15–19	30 806	30 139	29 800	29 144	28 809	28 164	27 815	27 465	26 818	26 472	26 127
	20–24	185 759	185 906	185 916	185 824	185 655	185 426	183 709	181 946	180 142	178 304	176 436
	25–29	323 303	318 509	313 192	307 761	301 846	295 836	295 841	295 833	295 811	295 423	294 672
	30–49	1 641 741	1 643 779	1 643 644	1 641 387	1 657 180	1 650 646	1 628 974	1 605 221	1 581 201	1 556 912	1 529 066
	50–64	888 403	899 177	908 201	914 106	914 182	911 344	914 677	917 984	921 265	924 519	926 383
	65+	173 192	179 119	185 061	189 593	194 137	198 693	201 653	203 146	204 601	206 019	207 399
Employment	15+	2 808 579	2 840 482	2 867 229	2 892 673	2 918 335	2 944 010	2 969 271	2 993 213	3 017 265	3 041 426	3 065 793
	15–64	2 636 587	2 662 664	2 683 568	2 704 580	2 725 697	2 746 917	2 769 318	2 791 867	2 814 564	2 837 407	2 860 394
	20–64	2 616 232	2 642 128	2 662 892	2 683 765	2 704 742	2 725 822	2 748 059	2 770 445	2 792 977	2 815 654	2 838 475
	15–19	20 355	20 536	20 676	20 815	20 955	21 095	21 258	21 423	21 587	21 753	21 919
	20–24	132 708	134 879	136 820	138 799	140 817	142 874	144 100	145 336	146 582	147 838	149 104
	25–29	262 699	261 875	260 410	258 827	257 121	255 287	259 162	263 125	267 179	271 326	275 570
	30–49	1 427 056	1 442 705	1 455 612	1 468 634	1 481 773	1 495 030	1 497 208	1 499 056	1 500 555	1 501 687	1 502 433
	50–64	793 769	802 669	810 051	817 504	825 031	832 631	847 589	862 928	878 661	894 802	911 367
	65+	171 992	177 819	183 661	188 093	192 637	197 093	199 953	201 346	202 701	204 019	205 399
Unemployment	15+	434 625	416 147	398 585	375 143	363 476	326 097	283 398	238 383	192 573	146 223	94 289
	15–64	433 425	414 847	397 185	373 643	361 976	324 497	281 698	236 583	190 673	144 223	92 289
	20–64	422 974	405 244	388 061	365 314	354 122	317 428	275 142	230 540	185 442	139 503	88 082
	15–19	10 451	9 603	9 125	8 329	7 854	7 069	6 556	6 043	5 230	4 719	4 207
	20–24	53 051	51 027	49 096	47 025	44 839	42 551	39 610	36 610	33 561	30 466	27 331
	25–29	60 604	56 634	52 782	48 934	44 725	40 549	36 679	32 708	28 632	24 096	19 102
	30–49	214 686	201 074	188 033	172 753	175 407	155 615	131 766	106 166	80 646	55 225	26 633
	50–64	94 634	96 508	98 150	96 602	89 151	78 713	67 088	55 056	42 604	29 717	15 016
	65+	1 200	1 300	1 400	1 500	1 500	1 600	1 700	1 800	1 900	2 000	2 000

Looking more closely at the projected trends in youth activity, employment and unemployment, it comes as no surprise that the youth labour market will, as a whole (population 15–29), largely follow the labour market trends for the entire working-age population. This is partly what is expected to happen over the longer term, but is also the result of the projected stable GDP growth, with the exception of years 2020 and 2021. However, when looking separately at five-year age groups, it becomes clear that the activity rates of the two younger 'true' youth age groups of 15–19 and 20–24 will, unlike for the age group 25–29 and indeed for the rest of the adult population, remain stagnant over the next 10-year period. This is part of the long-term trend in which increased and then plateaued participation in education limits the share of active young persons. Thus, the activity rate is projected to remain in single digits for the age group 15–19 (9.4% in 2020 and 9.0% in 2030), to remain rather stable at slightly below 50% for the age group 20–24 (48.4% in 2020 and 49.8% in 2030), and to increase, but at below the average speed, from 79.3% in 2020 to 83.9% in 2030 for the age group 25–29. With this limited supply potential, the speed of increase in employment rates by five-year age groups will largely reflect the relative decline in their underlying populations. Between 2020 and 2030, this decline will be highest for the age group 25–29, and lowest for the age group 15–19.

According to our projections, at the end of the period in 2030, the unemployment rate for the 15–19 age group will stand at 16.1%, for the 20–24 age group at 15.5% and for the 25–29 age group at 6.5%. This seems a great improvement over the current situation and an enviable achievement overall, but would still mean unemployment rates are five times the average rate for the two younger five-year age groups, and twice the average for the 25–29 age group.

The nature of projections is such that they are mostly based on past trends and predictable changes. We have noted that there might be another somewhat elusive and not so easily quantifiable source of actually or potentially increased activity, especially of young people, namely digital work on online platforms for largely foreign customers or employers, so-called telemigration (Baldwin, 2019). In the next section, we explore what we know about telemigration in Serbia and what we can reasonably assume about its development in the following decade.

4.2 Digital economy and telemigration and the potentially unobserved impact on the youth labour market

Of the many new concepts related to a certain form of remote digitally mediated relationship between the employer (or more broadly, the user of labour services) and the digital worker (such as the gig economy, platform economy, sharing economy, crowdwork, online labour market or digital freelancing), we opted for the concept of telemigration. The point is simple and directly related to our labour market projecting methodology based on the relationship between the changes in GDP and employment. Since telemigration means working for an employer abroad, the income of telemigrants remains unaccounted for (at least directly) in the estimates of GDP and enters national accounts mostly within a rarely used concept of gross national disposable income, where it becomes a part of remittances and other transfers. But since telemigrants by definition reside in the country, they are a part of labour market statistics. Thus, clearly there is a tension that needs to be addressed between the unaccounted-for domestic income earned by accounted-for domestic workers, if this tension should be considered of any significance.

To make things more complicated, telemigrants, although mostly young and educated, are an extremely heterogeneous category among themselves. According to the only available Serbian survey of ‘gig workers’ (Andjelkovic et al., 2019), one-third of the surveyed digital workers were registered as entrepreneurs, and for most of them, digital work represents the main source of income. Their average income from digital work is slightly below USD 2 000 per month, or some two and a half times above the Serbian average wage. The spectrum of telemigrants’ variable fee levels as well as levels of attachment to the online labour market is best captured by the fact that the income quintile ratio for Serbian online workers is 20:1. But the majority of telemigrants either have another main offline job or work part-time while studying, or work only sporadically. Counting all those registered on online freelancing platforms would clearly lead to overestimation, since many of them do not necessarily have any work and there are multiple registrations.

Nevertheless, the results of global online surveys invariably put Serbia close to the top regarding the frequency of digital work. Specifically, according to the Online Labour Index developed by researchers from Oxford Internet Institute, in 2018, Serbia ranked 11th in the world for the number of freelance workers (the total for Serbia is estimated at 24 605, out of which 5 534 are active), and 1st in per capita terms with 3.24 freelancers per 1 000 inhabitants (Victor, 2018).

Andjelkovic et al. (2019) find that the main motivations for joining the digital workforce include access to better-paid jobs, the source of extra money, and the inability to find a job in the offline world. Most

digital workers work on general platforms (such as Upwork and Freelancer), followed by specialised platforms such as those specialised in teaching foreign languages (DMM Eikawa, ABC Tutor) or design (99 Designs). The modal digital worker is female, urban, has higher education, works in the field of writing and translation, does this work for three years, and has another offline job. She is not the main breadwinner in the family.

The significance of digital work for the youth labour market comes from the fact that according to most opinions and estimates, it has been growing rapidly in size and income volume in the past five or so years. It was probably one independent reason for faster-than-average improvement in labour market indicators of youths in the past five years – although it is quite likely that the LFS did not fully capture growth in platform employment. Two important questions are as follows: what is its potential for further growth and how can that growth be accelerated.

At pre-Covid-19 general FGDs, the prevailing opinion was that the potential for telemigration remains very significant. A special survey on the digital economy in Serbia during the Covid-19 pandemic lockdown in April 2020 found a general resilience of this sector. True, many interviewed freelancers reported problems maintaining the same intensity of online work, but overall, the optimistic attitude regarding expectations for fast recovery prevailed, especially in comparison with other sectors (Digital Serbia Initiative, 2020). More generally, there is a dominant opinion that the Covid-19-generated labour supply shock will speed up digital transformation of work and expand the work-from-home and remote work sector.

As a very heterogeneous category, telemigrant jobs cover a wide range of job types, from highly paid formalised self-employment to sporadic freelancer tasks. Especially if telemigration is reduced to platform-based gig jobs, it has its limitations in terms of quality and security of employment relationships (Jašarević, 2020). Perhaps the best equivalent to online gig work in offline employment relations would be service contracts, student jobs and mini jobs.

Probably the best way to keep Serbia at the top of the global telemigrant workforce lists would be to support early exposure of full-time students aged 18–24 to the global online platforms and labour marketplaces. This would also have a visible impact on the labour market statistics of members of a given age group, increasing their activity and employment and building up their digital skills and work experience, while not interfering with their participation in education. The larger the initial group of early freelancers, the more probable that a significant number of them would climb the telemigrant ladder to create for themselves good, well-paid and secure digital jobs. As the local labour market gradually absorbs more and more young people, especially after 2025, there should be less and less 'last resort' digital workers. In an ideal scenario, telemigrant jobs would still be relatively abundant, because early exposure would visibly improve the above-presented activity and employment rates of the 15–19 and 20–24 age groups, and jobs for those over 25 years of age would be more uniformly good and well paid.

4.3 Employers' views on youths and the labour market supply and demand

To analyse problems and potential to better match labour market supply and demand as well as to obtain an insight into employers' expectations with regard to possibilities for further growth of employment of young workers, we collected qualitative information in three FGDs organised in January to March 2020 with local employers in Novi Sad, Kragujevac and Leskovac[20].

[20] For more details about the methodology, see Annex 2.

Our findings draw attention to the problems that local employers face while recruiting young workers for available jobs. According to their experiences shared in FGDs, it seems that many problems with regard to the labour market position of youths are rooted in existing skills gap, but also in the younger generation's specific attitudes towards learning and work. With no exception by different regions, employers point to the lack of skilled workers and the fact that there are more jobs than qualified workforce. This particularly refers to young people with secondary school attainment, as well as those coming from dual education. On the other hand, employers mostly see young people with higher education as lacking work experience, practical and soft skills, though employers were not able to verbalise what particular types of soft skills they actually expect young workers to have. A lack of qualified workers is evident in many different sectors represented in our FGDs, including manufacturing, pharmacy, insurance, information and communication technologies (ICT and IT), and the creative industry. Additionally, local employers in IT companies seemed very dissatisfied with retraining programmes for IT that had been organised as a public policy programme. In their opinion, the trainees' qualifications remained weak while the pressure on this business sector increased both in the number of applicants and expected wages. Employers believe that possibilities for young people to find employment are not restricted, yet young people should get to know how to present themselves to employers, lower their expectations, and be prepared to develop their skills and acquire work experience.

EMPLOYER FGDs: JOB MARKET AND LABOUR SUPPLY CONCERNS

Employer, big company, manufacturing, Kragujevac: It is difficult to find workers on the local labour market, those who have qualifications, knowledge and skills. Over 200 workers had no previous work experience. It was extremely difficult to find human resources for what we needed.

Employer, small company, pharmaceuticals, Kragujevac: It is not true that there are not enough jobs. There are even too many jobs, but they [young people] are not interested in working, and after only a few months they will go to another company. Too many students graduate from university and as regards their field of education (medicine and pharmacy), it is true that there are not enough posts for all of them.

Employer, small company, IT, Novi Sad: They lack soft skills – communication, I don't know what I would put under soft skills. They apply for a job and don't even know how to write a CV, how to present what they know...

Employer, small company, creative industry, Novi Sad: There is a lack of labour supply, demand is much bigger. I faced a problem finding a designer for three months. For some other posts I received 50 to 60 applications, but all from retraining. And their knowledge is not good. We are losing time to train them.

In addition to recruitment problems related to skills gaps, local employers developed rather a negative attitude towards the younger generation. Namely, in all three FGDs, employers were outspoken in criticising young candidates for showing low interest and low motivation to learn and develop their skills, as well as for their unrealistic expectations with regard to offered possibilities to obtain work experience and acquire practical skills. Employers stated that the younger generation were not ready to put in the effort to acquire knowledge from their older colleagues, to volunteer, to accept a lower salary in the beginning (as it must include the costs of training until the young worker finally starts producing value), and to be committed to keeping the post for a longer period of time.

EMPLOYER FGDs: OPINIONS ON YOUNG PEOPLE'S EXPECTATIONS

Employer, small company, manufacturing, Kragujevac: They seem quite uninterested in work, have no particular expectations, come to see what is going on.

Employer, small company, IT, Novi Sad: Lately, I haven't received interns. Universities call and ask me to take students for practical experience. I haven't received any this year and I feel great. Young people don't understand that when they are offered an opportunity, it doesn't mean that someone will watch them all the time. You should be happy to get half an hour of your mentor's time. They receive knowledge and skills. In some cases, you should pay to be an intern in a company, and our young people don't attend practice if it is not paid!

Employer, entrepreneur, Leskovac: The low wage is a problem. They want more than the minimum salary and we can't offer it due to decreasing turnover. Thus they stay for a month, two, three and leave.

Employer, social enterprise, Leskovac: Young people would like to find a job in the public sector. Especially when they graduate from university, they believe that they deserve a job even without concrete results for their employers.

Local employers expect that the labour demand will continue to grow, while the decreasing trend of labour supply will remain due to negative demographic trends and migration. Therefore, they expect that the problems they have recently been facing with recruitment of workers will intensify. As regards their plans for employment, big and medium-size companies make such decisions on an annual basis; however, they do not have formalised employment plans in the long run. On the other hand, small companies and entrepreneurs do not have such plans, neither for the short or long term. Small companies and entrepreneurs generally seem less enthusiastic about possibilities to create jobs, which they find very much dependent on their business partners' future activities and overall market conditions.

As regards employment of youths, employers participating in the FGDs were reluctant to show their preferences in recruitment of any particular age cohort. They insisted on candidate selection decisions based on the candidates' skills and knowledge and general attitude towards work and no discrimination based on gender or other factors. In the same vein, employers also mention new possibilities to find workers through recruitment of migrants and foreign workers. Finally, they also expect public policy measures in support of local businesses in the same manner as foreign investors, including subsidies and tax incentives. They believe that instead of attracting foreign investors and supporting big companies by offering employer subsidies, the state should invest money in growth of smaller companies and local entrepreneurs as well as promotion of entrepreneurship, particularly among the younger generations.

EMPLOYER FGDs: EMPLOYMENT PLANS AND INCENTIVES

Employer, big company, manufacturing, Kragujevac: The employment plans I have seen in my company mainly focus on the younger generation. We do have formalised employment plans in our company, yet we don't follow them strictly. We don't particularly look for young workers, but I am sure that as a separate age cohort they will account for the highest share in our company.

Employer, IT company, Novi Sad: It is increasingly difficult to find good workers. People are leaving. Labour demand has doubled, and the educational system can't meet the demand by producing competent staff. Plus this retraining which is problematic.

Entrepreneur, Leskovac: Foreign companies receive employers' subsidies and local entrepreneurs don't. If we would get EUR 10 000 per open post, we would also employ more workers.

5. POLICY APPROACHES FOR LABOUR MARKET AND SOCIAL INCLUSION OF YOUNG PEOPLE

This chapter provides an overview of policies and programmes for supporting the labour market and social inclusion of young people, through training and retraining, stimulative measures for youth employment as well as incentives and support for young entrepreneurs. Examples of building capacity and partnerships at local, regional and national level in the area of youth promotion are also presented. The chapter identifies available information regarding the impact of these initiatives and draws several lessons and reflections on policy approaches towards young people's employment, skilling and social inclusion.

5.1 Youth policy in Serbia

The Law on Youth, passed in mid-2011, regulates measures and activities that aim to improve the social position of young people and create conditions for the realisation of needs and concerns in all areas of interest to young people. The law is implemented by the central government, autonomous provinces and local government units. The law is based on several principles that guarantee equal opportunity, active participation, responsibility and solidarity of youths while prohibiting any type of discrimination. The main subjects of youth policy in Serbia are government, MoYS, youth offices, youth agencies, Association of Youth Workers, and the National Youth Council of Serbia (KOMS). Most of them operate on all three levels: national, regional and local.

The basic principles of action and expected results of the youth policy are defined through the National Youth Strategy which was adopted by the government for a 10-year period at the proposal of the MoYS. The current strategy was adopted in 2015 and covers the period from 2015 to 2025. The strategy defines nine strategic goals focused on the improvement of the position of youths in the fields of employment and entrepreneurship; education; active participation in society; health and well-being; safety; social inclusion; mobility; information; and culture. The MoYS is responsible for the coordination, development and improvement of youth policy, policy implementation and implementation of the National Youth Strategy, as well as other national plans and programmes related to young people. The Advisory Council on Youth encourages and coordinates activities related to the development, implementation and realisation of youth policy and proposes measures for its improvement. It consists of representatives of the administrative body whose scope include areas of interest to youths, associations and federations, youth offices and distinguished professionals. The Advisory Council on Youth participates in the development, implementation and monitoring of public policies at the national, regional and local level. When it comes to the monitoring process and especially data collection, youth offices as well as other institutions and associations that conduct youth activities are instrumental. Bodies and organisations in charge of youth policies at the local level include local government, youth advisory councils as parliamentary advisory bodies, youth offices, a city councillor in charge of youths, as well as associations that conduct youth activities.

The strategic goals are operationalised through action plans that are enacted on a two-year period. More precisely, the National Action Plan determines the following indicators: level of implementation of activities, period of implementation (time required to achieve the envisaged goals, results and activities), level of implementation (national, regional or local), stakeholders and participants in the implementation process, sources of verification of specific objectives and activities, and budget for the implementation. The funds for the realisation of action plans are provided from the state budget, the

budget of local government and Instrument for Pre-Accession Assistance (IPA) funds. The current action plan determines the activities that will be realised in 2018, 2019 and 2020. In 2019, the MoYS provided over RSD 143 million (EUR 1.22 million) for projects aimed at achieving all nine goals of the National Youth Strategy. The plan is for 8 700 young people to be covered through projects aimed at stimulating various forms of employment, self-employment and youth entrepreneurship. This also includes active youth participation in society, the use and creation of cultural content, non-formal education and information adapted to the needs of young people, while the youth voice is also being heard through the work of the Advisory Council on Youth, as a government advisory body. Approximately 10 000 people will be covered by activities promoting healthy and safe lifestyles and quality pastimes through other projects, aimed at implementing the goals of the National Youth Strategy.

One of the key stakeholders in relation to youths is SIPRU. Since its establishment, SIPRU's primary mandate has been to strengthen the government's capacity to develop evidence-based social inclusion policies, as well as to coordinate and monitor policy implementation in line with international standards and good practices in Europe. SIPRU facilitates building of capacity and processes towards a more effective development and implementation of social inclusion policies in all public administration bodies, with a view to enabling Serbia to establish a monitoring system based on social inclusion indicators and develop integrated social inclusion youth policies. To achieve its mission and goals, SIPRU cooperates with many national and local organisations as well as international donors. For example, the Swiss Confederation has provided support through several projects under SIPRU organisation. One of the most comprehensive projects aiming at enhancing the social inclusion process in Serbia for the period 2009–21 is the project Support to Improve Social Inclusion in the Republic of Serbia, whose activities are financed by the Serbian government and the Swiss Confederation, represented by the Swiss Agency for Development and Cooperation. Also, SIPRU is responsible, among others, for the Education to Employment (E2E) programme, in coordination with line ministries concerning youth employment, as well as the promotion of the needs of young people. The programme aims to develop the strategic framework at the national and local level, which should increase the employability and employment of young people[21].

Another important actor for youth policy in Serbia is KOMS, which represents the association of about 80 youth organisations in Serbia. It is a member of the European Youth Forum. Its mission is to represent the interests of young people by developing a partnership with the state, inter-agency and international cooperation, and encouraging the active participation of young people and the organisational development of its members. KOMS is dedicated to empowering youth organisations through networking and training and through the provision of evidence-based policy. Its projects have included mobilising the youth vote, training on youth policy and advocacy, awareness campaigns, youth research, and youth participation at events. It is estimated that 150 000 young people are reached indirectly through KOMS' actions every year. The funding of their activities, infrastructure and staff at the secretariat is project based, supplemented by membership fees. KOMS is trying to lead inclusive policymaking via invitations to the members of the unions and political parties to be involved in consultative processes. In 2016, KOMS presented the Monitoring Matrix for Enabling Environment for Youth Development, which consists of several indicators for monitoring and evaluation. The matrix describes the main principles and standards that have been identified as crucial for the legal environment to be considered as supportive and enabling. The matrix is organised around three

[21] For more details about the E2E programme, please see Section 5.2.

areas, each divided by sub-areas: basic legal freedoms; framework for financial viability and sustainability of civil society organisations (CSOs); and government–CSO relationship. The matrix aims to define an optimum situation for youths bearing in mind that the main challenges lie in implementing the indicators and monitoring the situation with the legal framework and its practical application. The aim of KOMS research (Stojanović, 2019) on the position and needs of young people in Serbia was to collect, through different methods and techniques of data collection, all official data that exists on youths, as well as to identify young people's habits, attitudes and problems that they face. The research is aimed at all youth policy-makers, especially decision-makers, at both national and local levels, with the goal for them to familiarise themselves with the position of young people and to shape their policies so as to improve the position of young people in Serbia.

As regards employment policy, including policies and programmes for youths, the Ministry of Labour, Employment, Veteran and Social Affairs (MoLEVSA) is the most relevant governmental body responsible for issuing the National Employment Strategy as the main long-term strategic document as well as more concrete annual action plans. The latest National Employment Strategy covering the period 2010 to 2020 envisages the need to undertake actions to improve employability and employment of youths through specific active labour market policies (ALMPs) targeted at youths and sets quantitative targets as indicators of success of implemented policies and programmes[22]. Implementation of youth employment policies and programmes – including a defined set of ALMPs, target groups, quantitative goals and allocated funds – is planned on an annual basis and included in the national employment action plans (NEAPs)[23]. NES is the main government agency responsible for implementation of ALMPs envisaged in NEAPs.

Due to high unemployment rates, long-term unemployment and the overall weak position of young people on the local labour market, unemployed youths have been recognised as a vulnerable and hard-to-employ group. Therefore, a set of various services and measures has been created and implemented through NES which include those targeting youths as well as general ALMPs implemented by NES where young clients are often given priority in delivery. Since 2013, services and measures offered to young registered unemployed people have been delivered under a specially created Youth Service Package. Currently, NES implements the following ALMPs prioritising young clients:

- apprenticeship programme for youths with high educational attainment and apprenticeship programme for unemployed youths with secondary education;
- employer subsidy for hard-to-employ candidates, including youths with no and low qualifications and youths housed in institutions and foster families;
- subsidies for self-employment.

In addition, as part of the Youth Service Package, registered young unemployed people have been offered various services and general ALMPs, such as employment fairs, active job search training, job clubs, professional practice programmes, and training on acquisition of practical skills, functional basic education and development of entrepreneurship skills. Table 5.1 shows involvement of youths in NES programmes for 2017 to 2019. As can be seen, based on the number of individual employment plans, the number of served young clients decreased substantially in 2019.

[22] National Employment Strategy for the period 2010–20, pp. 39 and 50, see: www.gs.gov.rs/english/strategije-vs.html

[23] NEAPs are issued annually, see: www.minrzs.gov.rs/sr/dokumenti/predlozi-i-nacrti/sektor-za-rad-i-zaposljavanje/nacionalni-akcioni-planovi-zaposljavanja-0

TABLE 5.1 YOUTH PARTICIPATION IN MOST RELEVANT MEASURES AND SERVICES OFFERED THROUGH NES BY NUMBER OF YOUNG RECIPIENTS, 2017–19

Type of measure/service	Main category (Eurostat)	2017	2018	2019
Youth package based on number of created individual employment plans	multiple categories	219 908	239 379	162 738
Apprenticeship programme for youths with university degree	special support to apprenticeship	na	na	128
Apprenticeship programme for unemployed with secondary education	special support to apprenticeship	na	na	251
Professional practice programme	special support to apprenticeship	3 915	4 444	3 726
Acquisition of practical skills	special support to apprenticeship	225	247	267
Employment fairs	client services	19 893	18 267	14 586
Active job search training	client services	17 366	16 958	15 448
Job clubs	client services	2 347	2 750	2 563
Functional basic education for adults	institutional training	487	432	432
Training for the labour market	institutional training	66	262	309*
Training at the request of employer	workplace training	208	264*	289*
Subsidies for self-employment	start-up incentives	956	2 610*	1 027
Training for development of entrepreneurship	start-up incentives	3 262	3 098	2 831
Public works	direct job creation	2 080	1 773	1 189

Note: * Including clients under direct grant IPA 2013.
Source: NES annual reports for 2017, 2018 and 2019.

It should be noted that every young person registered at NES can be included in those ALMP measures and services that can contribute to their employment and increased chances of employability, which is determined through the assessment of employability and developing an individual employment plan. Young clients are offered various services and engaged in ALMPs. Accordingly, each young client may receive a combination of services and measures that are incorporated in their individual employment plan. However, creating an individual employment plan is not a guarantee that each young client will participate in measures suggested within the plan.

Possibilities to be engaged in ALMPs are subject to annually allocated budget and additional funds from various donor programmes. As can be seen from the asterisks in Table 5.1, several ALMPs in 2018 and 2019 were co-financed through the direct grant IPA 2013. For example, additional funds allocated in subsidies for self-employment contributed to an increase of more than 150% in the number of young recipients in 2018 in comparison with 2017 and 2019. On the other hand, it is evident that the number of young people involved in training and other relevant ALMPs is rather small, which

leads to the concern that young clients may actually have quite limited access to these measures and services. Such concern has also been supported by the evidence obtained from our youth FGDs[24]. In general, young people complained about not being adequately informed about requirements for occupations in demand and overall lack of guidance over their career development. Additionally, a few of them who were informed about NES programmes and interested in participating pointed out the lack of such opportunity. In particular, they explained that registration for ALMPs did not really mean that they would be included, as they had never managed to attend training or receive a self-employment subsidy they had applied for.

YOUTH FGDs: ALMPs AND LABOUR MARKET INFORMATION

Male, 29, Pirot: Young people are not aware of what an occupation really means. They lack information.

Female, 29, Kragujevac: Yes, at NES they offered me a professional practice programme, it was for a year, paid directly to young employees, not employers. I applied but the money was spent immediately; I didn't get it.

Female, 25, Roma, Pirot: The number of available educational programmes and training options for young people should be increased. I went to NES, asked if they could offer me some training programmes, they said – tell us what you would be interested in and we will call you – but after 1.5 year, no one called me back.

Female, 24, Novi Pazar: I have plans and projects, I have already founded one association but there was no chance for growth. Now I would like to open a physical therapy office. I already have a plan, my parents can't afford to take such a risk, but I will do it myself. I work and I will save some money. NES provides RSD 200 000 for start-ups and I have applied for it. They haven't called me back yet.

Apart from programmes implemented within the employment policy for young people that are financed from the state budget, there are also several donor programmes, externally financed by international donors, including the EU, and co-financed by the Government of Serbia. Typically, most relevant ministries and government institutions act as the main executing agencies in such projects or get involved as relevant partners. Joint managerial bodies may allow better cooperation that is often lacking in the implementation of internally funded governmental policies and programmes.

In the next section, we present a brief review of available evidence regarding major donor programmes for labour market and social inclusion of young people, completed or started from 2015 onwards. Selected projects are analysed to better understand the potential impact on improvement of the labour market position of young people. This should result in important lessons learned and new recommendations for policy development. The aim is to introduce innovative actions that would enable easier school-to-work transition, thus reducing the poverty risk faced by disadvantaged youth groups in Serbia.

[24] The detailed methodology is available in Annex 2, while other relevant findings are included in Sections 1.4, 2.2 and 4.3 of this report.

5.2 Overview of programmes for labour market and social inclusion of youths

To the best of our knowledge, all major programmes co-funded by international donors, including the EU and the Government of Serbia tackling problems of youth employment and labour market position are listed in Table 5.2.

TABLE 5.2 EXTERNALLY FINANCED AND CO-FINANCED PROGRAMMES REFERRING TO LABOUR MARKET POSITION AND SOCIAL INCLUSION OF YOUNG PEOPLE

	Title	Donors	Main executing agencies/organisations, project partners and beneficiaries
1.	EU Support to Employment programmes of NES IPA 2013	EU and Government of Serbia	Ministry of Finance's Department for Contracting and Financing of EU Funded Programmes (CFCU), MoLEVSA and NES
2.	Youth Employment Initiative (YEI) project/E2E programme (evaluations and analyses of ALMPs for youths)	Swiss Agency for Development and Cooperation	SIPRU
3.	Education to Employment (E2E) programme	Swiss Agency for Development and Cooperation	SIPRU and NIRAS IP Consult
4.	EU Support to Active Youth Inclusion	EU and Government of Serbia	Contracting authority: CFCU Main beneficiaries: MoLEVSA, MoYS Other beneficiaries: MoESTD, NES, SIPRU, public and private institutions contributing to effective youth employment and employability
5.	Programmes of the EBRD	EBRD	MoLEVSA
6.	Programme for Sustainable Growth and Employment in Serbia: Reforming Vocational Education (VET project) and Youth Employment Promotion (YEP)	Government of Germany	MoESTD (VET) MoYS (YEP)
7.	UNICEF UPSHIFT and U-Report	International donors	UNICEF
8.	Web4Jobs Project	EU	Belgrade Open School
9.	Western Balkans and Turkey (WB&T) for EmploYouth	EU	Ana and Vlade Divac Foundation
10.	Promoting Youth Employment through Social Partnerships and Cooperation	EU	Belgrade Fund for Political Excellence

A common backdrop to most of the listed programmes is their focus on skills improvement during or after completion of the formal education process, and enhancement of employability through improved matching of labour market demand and supply as well as provision of support in self-employment. Also, with no exception, the initiatives insist on connecting various stakeholders at central and local government levels with the private sector and CSOs. Relevant ministries, particularly the CFCU, MoLEVSA, MoESTD and MoYS, have taken the role of the main executing agencies in many of these projects, while many times the SIPRU team has facilitated cooperation between central government institutions and local actors, including many local CSOs and private sector organisations. Most of the

programmes have been implemented through or with the support of NES and its local branch offices. However, the limited capacity of NES in conducting their own ALMPs, and especially when dealing with hard-to-employ groups including youths, has been recognised in several evaluations.

Most of the projects presented here have been selected specifically as they put emphasis on different actors who are important in helping young people to find employment. Below we present a brief review based on available documents on project websites, as well as consultations with our partners and persons responsible for implementation of these projects.

The projects include those intended to strengthen the capacity of NES to implement their employment programmes based on analysing labour market skills demand and better targeting specific vulnerable groups including youths (e.g. institutional programmes and active labour market measures targeting youths), as well as those more focused on engaging CSOs as alternative providers of services helping young people in their search for jobs (e.g. grass roots programmes tackling youth unemployment). Under institutional projects and active labour market measures targeting youths, we briefly review the latest IPA 2013 direct grant to NES and present findings from the final evaluation and impact assessments of three active labour market measures directed at youths. The evaluation was performed under the first phase of the YEI project/E2E programme implemented by the SIPRU team who engaged FREN to conduct the impact evaluation. For the grass roots programmes tackling youth unemployment, we present components of the E2E programme implemented by NIRAS IP Consult through local partners in Pirot, Novi Pazar, Kragujevac, Kruševac and Knjaževac. In addition, here we also present the EU Support to Active Youth Inclusion project, which launched a new grant scheme 'Development of innovative, integrated youth-tailored services and active inclusion models' that provides technical assistance for its implementation.

Along with the projects focused on labour market and employment, we briefly review projects mainly linked with formal education and its adjustment to better meet the needs of the skilled workforce, as well as projects supporting informal education programmes to develop students' skills as required by employers. Such programmes have been categorised as education for labour market programmes, including the VET and YEP projects (Table 5.2, item 6). Finally, among other programmes, we list a few initiatives and projects coordinated by UNICEF, as well as local non-governmental organisations (NGOs) and private foundations, such as Belgrade Open School, Belgrade Fund for Political Excellence and Ana and Vlade Divac Foundation.

5.2.1 Institutional programmes and active labour market measures targeting youths

EU Support to Employment programme

This programme was created as part of the EU IPA 2013 as a direct grant awarded to NES for the period 2018 to 2020. The overall project budget is EUR 5 million, with EUR 4.5 million donated by the EU, and EUR 500 000 financed by the Government of Serbia. Aligned with the direct grant, the EU IPA 2013 also funded technical support for employment policy capacity development, with EUR 1.8 million for the period 2017 to 2019[25]. The programme was developed based on the country's needs stated in the ETF's Review on Human Resources Development (2010) and the chapter on human resource development in the intersector document 'Needs of the Republic of Serbia for International Assistance 2011–2013'. Improving the position of young people in society was listed in the document among the main objectives and priorities that should be addressed in national programmes and action

[25] www.nsz.gov.rs/live/o-nama/Projekti/eu_podr_ka_nacionalnoj_slu_bi_za_zapo_ljavanje___ipa_2013.cid43306

plans (EU Delegation to the Republic of Serbia, 2013). While the programme was not created specifically for young people, it aimed at reducing poverty and social exclusion in Serbia by addressing the needs of disadvantaged groups, including youths.

The programme objective was to allow more efficient and effective matching of labour market demand and supply, thus contributing to its better functioning by building a more knowledgeable and skilled labour force, planned to be achieved through four active labour market measures: (1) training programmes at the request of employers; (2) subsidies for opening new jobs; (3) subsidies for self-employment; and (4) training programmes for the labour market. All four measures targeted various disadvantaged groups, whereas the first and third measures specifically targeted young people.

As some of the measures are still not completed and there are no available monitoring and evaluation reports, it is difficult to assess the impact of the programme on the enhancement of employment and employability of youths and improving their position on the labour market. Yet, it should be noted that several activities, particularly related to the technical assistance, procurement and administration issues subject to CFCU approval, fell significantly behind the planned schedule. This limited the possibility to implement measures in the set period of time and might have negatively affected their effectiveness and overall impact. However, in 2018 more than 100 young individuals received training for a known employer (first measure) and more than 500 received subsidies for self-employment (third measure).

ALMPs, including Youth Service Package, Professional Practice and Acquisition of Practical Knowledge

The Youth Service Package, an ALMP specially developed for assisting unemployed youths[26] and delivered between 2013 and 2015, aimed at intensifying cooperation between NES counsellors and unemployed youths as well as guiding young unemployed people throughout the process of finding jobs. It was based on joint development of individual employment plans, guidance in active job search, as well as offering various kinds of training (e.g. active job search and job clubs) and support in obtaining relevant skills while increasing their employability.

Under the YEI, later renamed the E2E programme[27], SIPRU supported the evaluation of youth service packages and relevant programmes and measures financed from the budget of Serbia aimed at young people (Marjanović et al., 2017), as well as the Analysis of Public Expenditure Assessment. The main findings of the evaluation of the Youth Service Package are described below.

The Youth Service Package and relevant programmes and measures financed from the state budget matched the needs of youths looking to improve their overall position on the labour market. However, there were also a few shortcomings. Firstly, a negative trend was recorded with youth participation in ALMPs: their share in the total number of people targeted by these measures declined from 51% (before package introduction) to 41% in 2015, which was contrary to the planned result. Secondly, the share of youths in training and further education programmes declined from 26.5% in 2011 to 9% in 2015. Thirdly, the intensity of cooperation with youths, as measured by the nine available indicators, recorded a relative decrease compared to the intensity of cooperation with other groups. The

[26] The programme was implemented from 2013 to 2015, whereas the Youth Service Package was offered through NES in the following period, in accordance with NEAPs delivered after 2015.

[27] YEI was initiated in 2015, and in 2016 it was renamed the E2E programme, consisting of two phases, first phase from 2015 to 2019, and the second phase from 2020 to 2023. YEI is conducted by SIPRU on the national (policy) level while the activities on the local level are conducted by NIRAS IP Consult.

evaluation showed that a good feature of the programme was a reduction of the number of days needed to conclude an individual employment plan with a young person after they have registered with NES as unemployed. The fact that funds for ALMP declined and were at the record low level of only 0.03% of GDP in 2014 was not enough to explain the decline in the relative share of youths in all ALMPs, especially not in the 'soft' (low-cost) measures.

FREN's evaluation found that relatively few NES counsellors conducted individual interviews in a manner that ensured the collection of all relevant information essential for a realistic employability assessment. In addition, recommendations for referral to measures were often given in an approximate manner, rather than based on an assessment that the participation in a specific measure would increase a young person's likelihood of finding employment. It was also concerning that employment counsellors did not sufficiently recognise active job search support as their primary task, either in practice or in interviews with the evaluator.

As the programme itself was created mainly to combine already existing services and measures directed at youths under one holistic package, NES counsellors were insufficiently aware of the aspects that distinguished the Youth Service Package as a separate ALMP from their common services and measures offered to unemployed youths before it was introduced in 2013. Therefore, they seemed to simply neglect it and not consider it in their assessments.

In conclusion, the evaluator (FREN) recommended that NES liaises with the MoYS in order to overcome limited funding for active measures. The MoYS was found to be a key stakeholder in this respect as it supported CSOs/local government units in implementing projects aimed at enhancing youth employability and improving the conditions for their employment. Therefore, it was claimed that cooperation between these two institutions would offer NES an opportunity to become involved in the project participant selection process, thus enabling a larger number of its hard-to-employ young clients to participate in measures to promote their employment, even when no funds are available for active measures.

Another finding showed that support for youths would be further improved if the needs that exceed the strict boundaries of employment-related problems, which are identified during individual interviews, were addressed by referrals to relevant institutions. This entails intensifying cross-sectoral cooperation and cooperation among local-level service providers, and in particular familiarity with the work and domains of other service providers, especially those in the education, social and health sectors. In a similar vein, it would be necessary for NES to become more involved in the activation process of young social assistance recipients by intensifying cooperation with centres for social work.

In addition to the Youth Service Package, two other ALMPs – Professional Practice (introduced in 2011) and Acquisition of Practical Skills (introduced in 2012) – were also created to target young people. The evaluation refers to 2013 when 1 960 individuals (out of which 21 had a disability) took part in the Professional Practice programme and 68 in Acquisition of Practical Skills. Females had a much higher share, almost 70%, in the first measure and 38% in the second. Professional Practice was targeted at highly educated youths without or insufficient work experience, while Acquisition of Practical Skills was created to offer training for occupations to unemployed people without qualifications. As in the case of the Youth Service Package, the final evaluation of these ALMPs was conducted by FREN.

The key question for evaluation was whether participation in these programmes increased the likelihood of participants finding and retaining gainful employment.

The evaluation showed that the Professional Practice programme did not achieve the expected effect, i.e. the participants' labour market position did not improve after receiving the measure. A somewhat different effect was observed with the Acquisition of Practical Skills programme – a statistically significant positive effect of the programme on key labour market outcomes was seen, namely an increase in employment and decrease in inactivity. Despite better results, employers showed lower interest for this programme. This could be due to an obligation to hire the participants upon completion of the programme. At the same time, our focus groups with employers showed that what is missing is better communication between NES and employers.

Hence, FREN's recommendations stress the necessity for NES to put additional effort into enhancing its cooperation with employers, as well as into improving its image among employers, as they represent potential partners. Also, when it comes to the measures such as Acquisition of Practical Skills, employers should be selected based on their capacity to deliver training in a high-quality manner, taking into account their spatial and human resource capacity, i.e. the number of staff to train young participants. FREN therefore advised considering the possibility of developing cooperation between NES and the Institute for Improvement of Education.

On the positive side, all three programmes initiated and implemented in the period covered by FREN evaluation have proven to be sustainable and are still available to young NES clients. However, their effectiveness has not been assessed in the most recent period, and based on available data we can only point at a rather limited number of recipients, particularly for Acquisition of Practical Skills (less than 300 young people per year in the period 2017 to 2019 as shown in Table 5.1).

5.2.2 Grass roots programmes promoting youth employment

Education to Employment (E2E) programme

E2E is an eight-year partnership project of the governments of Switzerland and Serbia implemented by the SIPRU team on the national level and NIRAS IP Consult on the local level. The first phase of the programme was completed in the period from 2015 to 2019. Its second phase is expected to end in 2023. The Swiss government donated CHF 8.2 million for the implementation of the first phase, while the Serbian government contributed another CHF 8 million. The Swiss donation for the second phase will provide another CHF 8 million for the implementation of activities while the Serbian government will contribute as in the previous phase[28].

The goal of this programme is to promote an inclusive and sustainable increase in youth employment. The project should improve youth prospects in Serbia through (1) changing policies in the areas of youth employment and the relevant legal framework; and (2) development of knowledge and skills that employers are looking for. The programme has been implemented by NIRAS IP Consult and SIPRU in partnership with key line ministries responsible for youth employment and employability policies in Serbia: MoLEVSA, MoESTD and MoYS. Locally, programme activities were implemented in selected pilot municipalities by engaging local partners, in particular CSOs from Novi Pazar, Pirot, Kragujevac, Kruševac and Knjaževac.

The pilot phase of the E2E programme, implemented nationally by SIPRU, lasted from October 2015 to October 2016 and supported 10 innovative approaches involving 106 young participants in solving

[28] https://znanjemdoposla.rs/en/about-e2e/

problems of youth employability through local partnerships between CSOs and private sector, local and regional institutions.

The innovative capacity of the proposed approaches has been evaluated based on seven criteria:

1. responds to societal needs and puts people/beneficiaries in the focus of the action;
2. contributes to efficient use of resources;
3. improves everyday life of citizens and target groups;
4. contributes to cooperation and partnership between various sectors;
5. changes relationships between service suppliers and beneficiaries;
6. has a transformational role in reducing inequalities;
7. empowers citizens as partners and co-authors in developing proposals.

In terms of skills development, the available evaluation document shows that the concept of entrepreneurial training and professional apprenticeships appeared to be highly innovative (SIPRU, n.d.). The programme combined theoretical and practical teaching activities in companies, farms or in other spaces with experts for entrepreneurship and for small and medium enterprise development. Another value added of such training programmes is contribution to the development of self-assurance and enhancement of motivation of young people included in the project.

The evaluation also shows that of the seven innovative criteria, building cooperation and partnerships between various sectors got the highest score. This is followed by empowerment and inclusion of the target group (criterion 7), thus enabling young people to act as partners and co-creators of solutions for increasing their employability. Yet it also shows that participating organisations point to the lack of their own capacity to advocate for their initiatives at the grass roots level, thus still being in need for support from SIPRU, which over the course of the project has been perceived as quick, timely and continuous. Local partners have also proposed development of a national platform for dialogue on policies that could increase employability of young people; this is because local partners believe that local institutions do not have capacity to set up priorities and plan the budget necessary to integrate measures for increasing employability of young people into local action plans.

Based on the experiences from the pilot phase, SIPRU started implementation of the first phase of E2E in 2016, when nine separate projects dedicated to provision of support for youth employment and enhancement of youth employability were launched. The number of participants almost doubled (200 compared to 106 in the pilot phase) including mostly those with tertiary and secondary levels of education (37% and 33.5% respectively), followed by current students (28%), while the share of persons with primary education remained negligible. According to the evaluation of all nine projects[29], participation in the programme contributed to improvements in the range of skills and competences of young beneficiaries. Moreover, project participants claimed that the project contributed to the development of their interpersonal and working competences through practical training (professional and entrepreneurial), mentor support and the professional knowledge of the educators. They also felt they received an impetus to continue improving their competences, and the programme changed their perceptions regarding higher flexibility and mobility in the labour market. According to them, their

[29] Periodic evaluation of the local Youth Employment Initiative programmes, SIPRU (2018) (http://socijalnoukljucivanje.gov.rs/en/periodic-evaluation-of-the-local-youth-employment-initiative-programmes/)

empowerment has come through the acquisition of new knowledge, skills, contacts and greater self-confidence, thus giving them new motivation for the creation of new business ideas.

In the final years of the first phase of the E2E programme (2018–19), an additional 345 participants were included in various projects, mostly recruited from those with lower levels of education, with only 14% of them with higher education. Evaluation of the programme showed that supported projects have made positive changes in their local communities, including but not limited to the following:

- The programme contributed to the improvement of planning and programming of local policies aimed at increasing employability of young people. As a result, some local governments have allocated additional funds in their local budgets for financing similar initiatives, thus ensuring sustainability of successful programmes.
- Capacity of the local NGOs in dealing with young people has improved.
- Cooperation between academia, business and the public sector has increased. In that regard it is important that intersectoral partnerships and platforms have been created which may further ensure sustainability of such projects.
- The programme was successful in reaching hard-to-employ groups (e.g. long-term unemployed, young people without qualifications, people with disabilities, people in informal employment, youths from rural areas, members of minority communities, and families receiving social assistance), with the average share of participants belonging to these groups around 64%.
- The employment rate of young people one year after the end of the programme, was 58.5%.

The Third National Report on Social Inclusion and Poverty Reduction, adopted by the Government of Serbia, contains measures to address youth unemployment, based on the experience gained from testing innovative models.

The E2E programme also resulted in a number of recommendations for the improvement of policies and processes at the national level. For instance, sometimes limited capacity of NES, especially when dealing with hard-to-employ groups, prompted CSOs to advocate for the legislation that would allow them to provide services in the field of employment (similar to what already exists in the system of social protection and informal education). This is where CSOs believe that help from the SIPRU team is needed in advocating for the implementation of these recommendations.

This specific recommendation – to develop a legal framework that would allow CSOs to provide services in the field of employment – has been welcomed by MoLEVSA. The ministry, as a partner and institutional focal point for the implementation of project activities, follows carefully the work of CSOs that are part of the project. The ministry is well aware of the results CSOs achieved in providing support to youths in searching for a job. In direct contact with ministry representatives involved in project activities, SIPRU was informed that the ministry understands arguments for inclusion of CSOs in service provision. At the time of drafting, stakeholders were discussingAmendments to the Law on Employment and Unemployment Insurance that would allow CSOs to be considered service providers along with NES. Prior acquisition of a licence would be a pre-condition for performing these services.

In addition, the programme evaluation pointed out that combining several different measures and services has good effects in working with hard-to-employ categories. Also, it highlighted the importance of further promotion of intersectoral cooperation at the local level, and further strengthening of trust among corporate, public and civil sectors.

EU Support to Active Youth Inclusion project

The EU Support to Active Youth Inclusion project under the IPA 2014 budget line comprises (1) the grant scheme 'Development of innovative, integrated youth-tailored services and active inclusion models' started in December 2018, and (2) technical assistance, started in February 2019. The grant scheme is set to last 15 to 24 months, while the technical assistance was scheduled to run from February 2019 until June 2021. The total value of the grant scheme is EUR 4 069 214, with an additional EUR 596 800 for the technical assistance (EU Support to Active Youth Inclusion, n.d.).

The main contracting authority of the project is the CFCU, which is also the main beneficiary together with other relevant ministries, including MoLEVSA and MoYS. In addition, there are other beneficiaries of the project, such as the MoESTD, NES, SIPRU, and many public and private institutions whose activities are directed at contributing to effective youth employment and employability. These are the public and private institutions operating on the local level offering support and services to disadvantaged youths and thus are capable of developing innovative approaches that may contribute to improving the position of youths on the local labour markets.

The project aims to increase youth employment by enhancing their activity, providing opportunities for early acquisition of work experience and entrepreneurship practices, and activation of social welfare beneficiaries. Its specific objectives include (1) support in developing youth employment initiatives and active inclusion mechanisms and models; (2) capacity building and technical assistance to the beneficiary institutions in grant scheme management; (3) capacity building and technical support for the local grant beneficiaries in managing EU-funded projects, thus contributing to successful implementation of the supported actions; and (4) active inclusion policy development based on the results from awarded grant projects. As such, the programme combines institutional support and grass roots-level initiatives, yet the financial support directed into grant schemes offered to public and private institutions on the local level is comparatively higher than investment in institutional capacity development.

The successful implementation of the grant scheme through effective and efficient activities of private and public institutions awarded grants should lead to new initiatives and innovative models enhancing youth employability and active inclusion. Twenty-four different projects have been awarded grants, ranging from EUR 97 000 to EUR 226 000[30], lasting from 15 to 24 months. Many of these projects were still to be completed by the end of 2020; therefore, it is still too early to analyse the overall impact of the grant scheme and/or individual projects.

Although no evaluations of the EU Support to Active Youth Inclusion project were available at the time of writing, the expected impact and outcomes affecting youths as the main target group are expected to be evidenced through the following:

- improvement of social inclusion of youths in Serbia;
- increased employment, youth activity, work experience and entrepreneurship among youths;
- livelihood of the youth population improved through the implementation of active inclusion initiatives;
- relevant institutional and other stakeholders will have increased awareness, sensibility and sense of ownership, as well as capacity for further support to development of youth employability and social inclusion measures.

[30] A full list is available on the project website: www.ukljucivanjemladih.rs/?lang=en

In addition, the positive impact and outcomes are also expected to benefit relevant institutions, including governmental bodies as well as public and private institutions (i.e. grant scheme beneficiaries), which need to be evidenced after completion of the project.

5.2.3 Education for labour market programmes

Programmes of the EBRD

In order to address the issue of youth inclusion, in May 2019, the EBRD launched its first Economic Inclusion Strategy. The idea was to build inclusion elements directly into investments across different sectors and industries. For instance, the EBRD decided to provide support to its clients in manufacturing, retail or power and energy in developing tailored work-based training and employment programmes.

Among other things, EBRD activities are also focused on enabling a more inclusive procurement process. In Serbia, along with EUR 100 million that the bank provided for the upgrade of 1 200 km of roads, technical assistance was offered in support of the development and introduction of a new requirement in the procurement process. The idea was to encourage private sector suppliers to offer on-site training opportunities for unemployed young people. Implementation of this project demonstrated the importance of investing effort into youth activation and outreach when targeting low-skilled unemployed young people.

Furthermore, at the policy level, EBRD activities are dedicated to bringing together employers and the education sector to reform and improve national skills standards and apprenticeship models, as well as towards introducing equal opportunities policies and practices at company levels. In Croatia, the bank established the Private Sector Youth Initiative to address the skills mismatch of young people and support young women in their professional development through the provision of high-quality internship and mentoring opportunities. In this project, the EBRD and the Croatian Employers' Association are working closely with private sector companies, professional women's associations and academic institutions. The idea is to allow young people to gain their first work experience and facilitate their route into employment. This initiative is due to be expanded to Serbia in the coming years. For the first time in Croatia and the Central and South Eastern Europe region, employers and students have access to a 'toolkit' including internship and mentoring manuals, available on the Private Sector Youth Initiative website. The website also provides an interactive online platform facilitating the matching of students with prospective employers. The initiative also fosters closer engagement between employers and academia to make curricula in higher education more relevant for local industries.

The EBRD in Serbia is supporting the establishment of Sector Skills Councils in close cooperation with the MoESTD[31]. The aim is to ensure that employers' needs are taken on board in developing education policy, occupational standards and learning curricula, and that they provide opportunities for students to gain practical knowledge and experiences prior to entering the labour market. The EBRD and MoESTD plan to engage private companies in the development of educational policies and qualifications standards to ensure provision of education that will meet existing and projected employers' needs. FREN is currently working for the EBRD in identifying occupations, skills and knowledge that are or will be in high demand in those two targeted sectors. The EBRD is further supporting the development of a labour market information system to provide automated data retrieval

[31] http://rs.n1info.com/Vesti/a592009/EBRD-i-Ministarstvo-prosvete-mladi-strucne-vestine.html

necessary for the creation of sector profiles, which is also of importance in developing informed education policy. These initiatives are part of the overall EBRD contribution to private sector development in Serbia and the country's further move to a sustainable and green economy covered by 260 different projects worth more than EUR 5.6 billion, thus making the EBRD one of the biggest international investors in the country.

Each of the EBRD's investments must have a specific and measurable transition impact – in this case, that of economic inclusion. Each project will have targets set, i.e. number of youths trained (e.g. in-house training, training in collaboration with accredited training providers); in some cases, targets may also be set for the number of youths employed after the training. As a rule, the more ambitious the transition impact is, the more likely the project will be approved. The EBRD provides technical assistance to their clients in order to achieve the target set, if there is need for such assistance.

Programme for Sustainable Growth and Employment in Serbia: VET project and Youth Employment Promotion (YEP)

The VET project and YEP are both delivered under the Programme for Sustainable Growth and Employment in Serbia coordinated by GIZ and commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ).

The VET project conducted from 2013 to 2015 aimed at the further modernisation of six occupational profiles[32] by introducing elements of dual training in 52 vocational schools. Overall, it cost EUR 2.4 million. The main target group included graduates of primary schools that are eligible for and interested in three-year vocational secondary education, with special focus on marginalised youths from poor households. The MoESTD's Department for Secondary Vocational Education along with the Institute for Improvement of Education selected vocational schools and companies to be engaged as the main implementing organisations. The final evaluation showed that the project proved to be very successful for relevance, successful for effectiveness, efficiency and sustainability, and rather successful for impact.

Among the project results, it has been noted that selected partner schools have developed stronger cooperation with 200 companies where students can complete their dual training programme, and approximately 2 700 students have been trained in these occupations. Profiles modernised in accordance with the project goals are found to be different from non-modernised profiles in several ways. The amount of practical lessons in a company (dual training) is higher than in non-modernised profiles. Students attending companies for practical lessons actively participate in the work process instead of being just observers, and they have a trained instructor mentoring them throughout the process. Also, the project offered training for the teaching staff in schools with modernised profiles. Such training allowed teachers responsible for designing and implementing the profile modernisation to adequately adjust their teaching to the new curricula.

An impact evaluation of the VET programme (Leibniz Institute for Economic Research, 2019) showed that graduating from a modernised VET profile has a number of positive effects, including that graduates believe they are more ready to work. While no measurable impact was found on the overall probability of being employed six months after graduation, students in modernised profiles were more likely to obtain their first job in the training companies. This is in line with some predictions that the whole dual education project was made to benefit the companies involved in this project. The students

[32] These are locksmith-welder, electrician, industrial mechanic, fashion tailor, mechanic for motor vehicles, and electro-fitter for networks and installations.

were also more likely to use their VET skills and knowledge in their current job, and to earn higher wages.

Yet as noted above, the impact evaluation was given the lowest score (rather successful) in comparison with other evaluation criteria. Among other things, it should be noted that to measure the impact of these types of programmes, it is important to have good-quality data on both schooling and labour market outcomes. While good-quality data on labour market outcomes is generally available from NES, there is still a vast gap in the data that needs to be collected about schools and the education system. The Ministry of Education is currently setting up an information system which will include background and educational data on students attending compulsory education in Serbia. Once the information system with individual-level school data is established, it could be possible to design an evaluation and monitoring system for VET profiles.

Following the VET project, YEP was implemented in the period 2015 to 2019. It targeted mainly unemployed youths (aged 15 to 35) from disadvantaged regions in Serbia, particularly those belonging to the most hard-to-employ and vulnerable groups (e.g. those with low/no qualifications, low-skilled, Roma, long-term unemployed and NEET) with the aim to enable young people to better position themselves on the local labour market. To achieve such an objective, a few ALMPs were offered to youths participating in the project including various types of training and assistance in self-employment and employment in social enterprises (e.g. career management and entrepreneurial skills; job search skills; job-related skills in textile industry, welding, customer service sector, automotive industry and IT; assistance in starting their own agricultural businesses; assistance in initiating their own start-up companies; and support for capacity building programmes for social enterprises).

The MoYS led this project, though its implementation was strengthened through established strong cooperation at the grass roots level, i.e. with local youth offices, local government, vocational schools, NGOs, entrepreneurship hubs, cooperatives, NES and private sector companies. The project established public–private partnership agreements with private sector companies. In some cases, agreements also included external training providers (e.g. vocational schools and institutes) and local governments. The agreements typically specified that training firms and other partners would contribute at least 50% of the total estimated training costs.

For most of participants in the programme, the training was not related to their educational background, suggesting that many were looking to train for new occupations. Hence, their main aim was reskilling rather than upskilling. Short-term training was in the form of employer-based training offered by firms involved in the project and training in simulated workplace environments conducted by vocational training institutes. Measures were specifically designed to the target group and local labour market demand in marginalised regions. In terms of the demand, inputs were received from local private sector employers, training providers and local branches of the national employment office. Bearing in mind the low level of education of the programme participants, occupations were selected from the area of welding, industrial machinery operation, textile industry and tourism. Most of the participants of employer-based training received training that was not related to their educational background. Almost all participants were primarily motivated by the offered employment opportunity in the training firm. In contrast, the key rationale for institute-based training participants was getting a certificate and improving their job prospects.

The project resulted in more than 10 000 youths participating in various activities, including more than 1 000 Roma and 200 returnees from EU countries, while almost 500 young people were provided assistance to start their own agricultural businesses through cooperatives, and 64 found employment

in one of the 21 social enterprises partnering with the project. Looking at the other projects focused on direct support/services for youths, this one seems the most mature and comprehensive and also significant in terms of target group size.

The results of the impact evaluation show that:

- Employer-based training has a sizeable and sustained impact on registered formal employment. One reason is that participants were largely hired and retained by the training firm.
- Institute-based training also has a positive impact on formal employment but much less than employer-based training. For instance, the impact assessment suggests that participants of employer-based training have a 45-percentage point higher employment probability and in the case of institute-based training 16-percentage point higher probability of being employed than in the absence of the project.
- The majority of employed participants in both training options were very satisfied with their employment, were working in the same field as the training, and reported earnings roughly around the national median wage.

Finally, as of 2017 the project opened The National Dialogue on Youth Employment as a new platform for promoting lessons learned and outcomes of the project aiming at providing inputs in the form of new ideas, sharing experiences and knowledge to assist the Serbian Government and relevant institutions when drafting new policies, practices and strategies for youth employment (SIPRU, 2017).

5.2.4 Other programmes

In addition to the above-listed international donor programmes, there are many other smaller-scale initiatives undertaken by UN institutions in Serbia as well as acknowledged local NGOs whose activities are directed at the enhancement of economic and social well-being and international cooperation. All projects presented here have been carried out by Serbian NGOs aiming to improve the situation for youths through provision of various services including informal education but also aiming at initiating wider cooperation among young people, public authorities, civil society and other relevant partners in the Western Balkans.

Here we present in brief the projects coordinated by UN institutions, i.e. UNICEF Serbia, Belgrade Open School, Ana and Vlade Divac Foundation, and Belgrade Fund for Political Excellence. A common feature of these projects is that they have been implemented on a wider regional or international level, thus involving partners from peer countries as well as connecting young people across national borders.

ILO: Youth Employment Initiatives

UN institutions in Serbia have actively been supporting youth employment over the last two decades, coordinating several big-scale projects, such as Youth Employment and Migration as well as YEP. ILO Serbia coordinated both projects.

These projects were completed before 2015 and thus are not covered extensively in this review. Yet, it is important to mention that as a result of these projects, two models for assisting youth employment have been generated, put into practice and mainstreamed, including the Youth Service Package, analysed above, and the Youth Employment Fund.

Based on the initiative of four UN institutions, the Youth Employment Fund resulting from the Youth Employment and Migration project was supported with almost EUR 4 million from the governments of

Spain and Serbia and delivered through NES in 2011. However, though these two models were created to enhance employment of youths, certain drawbacks in their implementation (particularly the Youth Service Package) and lack of sustainability (Youth Employment Fund) have limited their impact.

UNICEF: UPSHIFT AND U-Report

Though known for offering programmes mostly focused on children, UNICEF Serbia has recently started services aiming at development of adolescents and youths, mainly those aged 15 to 24. UNICEF works jointly with local partners to raise awareness of problems for youths in Serbia and promote the need for their active participation in development of an inclusive and stimulating environment. In meeting this goal, UNICEF cooperates with MoYS, MoESTD and the cabinet minister in charge of demography and population policy.

UNICEF Serbia offers the possibility for young people to take part in its global UPSHIFT programme, which combines social entrepreneurship, innovations and team spirit while empowering youths, particularly those belonging to marginalised groups, to take an active part in creating solutions to problems faced in their local communities[33]. The programme offers three-day workshops and mentoring to selected teams, as well as financial support for implementation of developed solutions resulting from their teamwork. As such, the programme is believed to contribute to networking and new skills and promotes the idea of entrepreneurship among young people.

In addition, UNICEF Serbia has recently put into operation a new platform – U-Report – dedicated to raising the voices of young people. U-Report has been created to provide an opportunity for young people to express their opinions on various issues and thus actively contribute to development of new models that might become useful in solving problems they face. It is available to all institutions and organisations who may want to hear what young people think on important issues, including their opinions on policies and programmes and other opportunities designed to foster their economic and social position. It is also available for collecting suggestions and ideas from young people and testing reactions to various initiatives. As such, U-Report represents a valuable tool to open new space for active participation of youths and inclusion of those whose voice might not be heard enough in development of new policies and measures to address various relevant problems.

Belgrade Open School (BOS): Web4Jobs

BOS is a local NGO that has been operating in Serbia for more than 25 years, focusing on provision of informal education for young people to enable easier school-to-work transition, contributing to their career development and improving their overall labour market position. It has initiated and coordinated a number of small-scale programmes dedicated to enhancement of soft skills and obtaining practical experience through internships in respected companies or through simulations of the working environment. It has also participated in a number of projects and open dialogue dedicated to fostering youth employability and employment as a relevant partner to SIPRU, MoLEVSA, MoESTD and other local NGOs and youth associations (e.g. Novosadski Edukativni Centar and KOMS). BOS operates several platforms dedicated to youths, including the following:

- BOŠ Karijera (https://karijera.bos.rs/) offers support in personal career development, active job searching (e.g. preparation of CVs) and promoting youth entrepreneurship.

[33] www.unicef.org/serbia/upshift

- BOS for Youth/BOS Mingl (www.mingl.rs/bos-za-mlade.html) shares information about various educational programmes for young people dedicated to the improvement of their knowledge and skills while enabling easier school-to-work transition.
- Web4Jobs (www.web4yes.eu/) functions as a one-stop-shop that connects young unemployed people from the Western Balkans and aims to improve their knowledge relevant for entering their local labour markets, thus contributing to better preparation and easier school-to-work transition.

The Web4Jobs platform integrates and promotes online youth mobility in the Western Balkans, as well as providing them with national e-services. It also serves as a regional online staffing platform and will facilitate outsourcing and virtual work at the regional level. The platform was designed under the Web4Jobs project as an important regional initiative that gathers institutional bodies (i.e. public authorities) and CSOs together.

The Web4Jobs project will last 36 months (starting from January 2018) and has been supported under the framework of the Civil Society Facility and Media Programme 2016–17 Consolidating Regional Thematic Networks of CSOs by the European Commission and co-financed by the EU. It is designed to deliver innovative cross-sectoral approaches and provide opportunities for young unemployed people to enhance employability and employment. The project aims to address existing challenges of insufficient cooperation among public institutions and civil society in the Western Balkans, promoting the need to establish open dialogue and contributions of relevant actors in designing new policies and public decision-making with regard to measures and services tackling youth unemployment.

The project is run by a consortium of seven organisations including BOS and involves many regional partners from public institutions (including the MoYS; MoLEVSA; Ministry of Labour and Social Politics of North Macedonia; Employment Agency of Kosovo; Public Employment Service of Canton Sarajevo, Bosnia and Herzegovina; Municipality of Tirana, Albania; NES from Montenegro; Ministry of Labour and Welfare from Montenegro; Ministry of Sports – Directorate for Youth from Montenegro; and Union of Free Trade Unions from Montenegro) as well as local initiatives and NGOs[34].

Ana and Vlade Divac Foundation: WB&T for EmploYouth project

The Ana and Vlade Divac Foundation is a private foundation gathering funds from more than half a million individuals as well as almost one thousand private companies and various organisations, with a mission to securing quality life to vulnerable groups and their integration into a local and wider community by strengthening equality, solidarity and tolerance in society. Lifelong learning and skills development represent one of the Foundation's core values. Part of its work is therefore dedicated to economic empowerment and promotion of employment, with young people one of their main target groups.

The Foundation currently carries out the WB&T for EmploYouth project under the wider Youth Balkan Hub Western Balkans and Turkey Regional Programme financed by the EU[35].

The WB&T for EmploYouth project aims to contribute to strengthened regional collaboration, participatory democracies and the EU approximation process in the WB&T in the area of youth employment. It focuses mainly on creating informed and consultancy-based solutions for improved youth employment policies, increasing capacity of CSOs to pilot and promote innovative solutions for

[34] A full list is available on the project website: www.web4yes.eu/initiatives#

[35] Information collected from the Foundation and project websites: www.divac.com/Economic-Empowerment-and-Promoting-Employment/2724/WBT-for-EmploYouth.shtml and https://ybhwbt.eu/

improved employment of youth NEETs in the WB&T, and increasing engagement and influence of CSOs in raising public awareness of youth employment in the WB&T. The project is carried out by five youth organisations: Ana and Vlade Divac Foundation from Serbia; Prima Association from Montenegro; Mladiinfo International from North Macedonia; Partners Albania for Change and Development from Albania; and Community Volunteers Foundation from Turkey. The main associates of the project are public authorities from participating countries including the Public Employment Service in Albania; the Ministry of Sports and Youth of Montenegro as well as the Chamber of Economy of Montenegro; the Agency for Youth and Sport of North Macedonia as well as the Local Government Municipality of Gazi Baba in North Macedonia; the MoYS of Serbia and SIPRU; and the Women's Labour and Employment Initiative in Turkey.

Its activities resulted in setting up a new method (Youth Participation Index) of measuring the level of opportunity for young people to participate in decision-making processes of public authorities in charge of creating public policies and measures tackling youth unemployment. It has been stressed that one of the biggest challenges in all countries refers to employment of young people. Yet even more importantly, the Index has indicated that the most vulnerable youth groups have remained invisible, as data on them has been insufficiently and inconsistently collected.

Belgrade Fund for Political Excellence (BFPE): Youth Employment through Social Partnerships and Cooperation (YESPC)

The BFPE is an NGO created in 2003 to contribute to democratic transformation and European integration of Southeast Europe. Its activities include political education of relevant actors, initiating dialogue among stakeholders, advocating rule of law, and organising regional and pan-European events bringing together political leaders and important decision-makers to discuss relevant issues regarding world politics, economic development and social well-being.

Among many initiatives, the BFPE implemented the YESPC project. The project, carried out from 2014 to 2016, resulted from previous cooperation between the BFPE and the Kosovo Foundation for Open Society related to the Local Networking for Sustainable Development initiative that had initially opened space for cooperation between local governments in Serbia and Kosovo. YESPC was supported by the EU through the Programme Support to Civil Society 2013 of the Balkan Fund for Democracy and the Office for Cooperation with Civil Society of Serbia in partnership with organisations from Kosovo. It was implemented in six local municipalities in Serbia and Kosovo, including Niš, Vranje, Leskovac, Prizren, Peć and Kosovska Mitrovica, and its beneficiaries included local and youth CSOs, local governments, educational institutions, private businesses and their associations, relevant professional associations and trade unions. In comparison with other projects listed above, YESPC did not provide any specific services or measures directly for youths, but rather served as a platform for exchange of knowledge and experiences among partner institutions and decision-makers in Serbia and Kosovo.

Its specific objectives and activities were related to:

- familiarising key stakeholders in youth employment in Serbia and Kosovo with their peers across the border and initiating platforms for exchange of ideas and best practices;
- increasing the knowledge and capacity of local stakeholders for tackling youth unemployment in innovative ways and through participatory processes;
- initiating social dialogue on youth employment policies at local level and raising awareness in local communities and among national policy-makers.

Based on project activities and cooperation with numerous local partners, a policy brief document (Vladisavljevic, 2016) was produced at the end of the project in 2016 to enable comparison of youth unemployment policies directed at enhancement of employability and employment and available and new job opportunities for youths between Serbia and Kosovo.

5.3 Main lessons and policy approaches for labour market and social inclusion

The review of youth policies in Serbia as well as major externally financed and co-financed projects has brought to light the need for continued support targeted at young people, in particular those most vulnerable.

Youth policies in Serbia are well developed, at least judging by the available strategic documents (e.g. National Youth Strategy and National Employment Strategy), responsible institutions (e.g. MoYS, MoLEVSA and SIPRU) and relevant actors on both national and local levels (e.g. KOMS, NGOs and youth offices). Despite this, many problems may still occur when it comes to the implementation of these policies and programmes. Most of these problems result from weak coordination among institutions and inefficient use of resources. The funds directed into programmes for youths are substantial but still not enough to serve the existing needs of young people for their social inclusion, improvement of conditions for easier school-to-work transition and enhancement of their labour market position. However, the available funds could be more efficiently used, provided that better coordination among institutions and better targeting is achieved. The former requires development of an improved system of allocation of funds and monitoring and evaluation based on evidence collected from all relevant stakeholders with centralised access to the database. Otherwise, many independent initiatives and programmes currently implemented will stay fragmented and thus have limited overall impact.

The National Employment Strategy and NEAPs envisage employment policies and programmes for youths. Since 2013, the NEAPs have provided a package of services for youths: the Youth Service Package. To a certain extent, this policy programme mimics a youth guarantee but is generally underfunded and thus has limited availability for registered young unemployed people. Although it has been sustained over quite a few years, its effectiveness remains questionable as neither NES counsellors nor young clients are fully aware of this programme. The Youth Service Package includes the provision that, within the first three months of registered unemployment, an employability assessment is carried out and an individual employment plan is drafted, including identifying the programme which would be most beneficial to promoting the young person's employability and preventing skills erosion. In theory, each young client should be offered employment or participation in an ALMP. However, one-day activities such as employment fairs or a course in writing a CV are also counted as participation in an ALMP. Moreover, an individual employment plan is not a guarantee that a young client will receive any other service or ALMPs available through NES, yet it would be enough to be considered as a relevant youth employment policy programme.

The Youth Service Package has in many aspects failed in providing a youth guarantee for most unemployed youths, and the most relevant ALMP measures for youths remain not very well targeted at the most vulnerable groups. Somewhat better targeting is achieved for people with disabilities and Roma, but even that is often dependent on additional funds obtained from various internationally funded programmes. Many training measures targeted at vulnerable groups have seen a decline in coverage. Among them, the Professional Practice programme, targeting those with at least a secondary degree, used to cover on average 5 000 people, yet in 2019 the number was below 4 000 (see Table 5.1). The Acquisition of Practical Skills programme, which until 2017 covered only those people without

qualifications, has been divided into two programmes aimed at (1) redundant workers and long-term unemployed with qualifications; and (2) unskilled workers. The first programme stream, aimed at vulnerable groups (long-term unemployed or those without qualifications), had the combined coverage of less than 1 000 people until 2017, whereas more recently it has dropped to less than 300 people.

One of the main advantages of externally funded and co-funded programmes listed in Table 5.2 remains in their potential to involve several stakeholders on various issues related to the improvement of the youth position in Serbia. In a similar manner to government policies, the main drawback of the programmes revolves around their rather limited scope as well as weak targeting of the most vulnerable individuals.

Out of the reviewed projects, YEP paid most attention to vulnerable youths. Focus was on young people with low/no qualifications, low-skilled, Roma and NEETs, but not many of them were long-term unemployed. The programme provided training irrespective of the young people's educational background. Hence, young programme participants aimed to reskill rather than upskill, suggesting that many were ready to train for new occupations just to get the job. In a similar manner, available evidence from the WB&T for EmploYouth project indicates that the most vulnerable youth groups remain invisible, as data on them is insufficiently and inconsistently collected. Thus, the project makes additional effort to combat this, focusing particularly on the issue of developing an evidence-based system that would allow better targeting and improved employment of young people from vulnerable groups.

Evaluation of the E2E programme shows that the share of participants with the lowest level of education remained negligible through almost the entire project and we know from data analysis that they are in the most precarious situation. First of all, it takes them much longer to find a first job after completing school compared to young people with higher levels of education. The fact that young people living with parents with a low level of education are exposed to poverty or social exclusion more than other groups could indicate an existence of the vicious circle of poverty.

On the other hand, the E2E programme, supported by the Swiss Agency for Development and Cooperation in cooperation with SIPRU, was the most comprehensive of all the programmes reviewed. The programme offered a whole range of services to young people, including information about job opportunities and counselling, and screening and evaluation of applicants' capabilities, leading to measures that could increase employment and employability of young individuals. Multi-sectoral cooperation was the backbone of the programme, and models were adjusted to the needs of the targeted groups. As an organisation that has worked with CSOs for more than a decade, SIPRU is trusted and knows the situation in the non-governmental sector. This is not the first time that SIPRU has been seen as the voice of the CSOs and an institution that can better articulate the interests of the sector and advocate for certain legislative changes at higher levels of government.

Despite covering a relatively small number of young people, training programmes in the E2E programme contributed to the development of self-assurance of young people and brought empowerment through the acquisition of new knowledge, skills and contacts. Greater self-confidence regarding competences in the labour market gave young programme participants impetus for the creation of new business ideas.

As a common feature, the skills components either in the form of improving current skills or gaining new ones as well as gaining professional experience (internships and apprenticeships) are included in most of the above-listed externally funded projects. The EBRD is a relative newcomer to organisations offering a social dimension in its programmes. The bank is focused on improvement of skills and

cooperation between private sector companies and educational institutions. Each project will have targets set, i.e. number of youths trained, and where needed the EBRD plans to provide technical assistance to its clients in order to achieve the targets.

Without exception, all of the projects discussed have intended to connect various stakeholders to work together towards the same goal: increase employment and employability of young people. The main difference between the projects reviewed here is that some contribute more to the empowerment of CSOs and sometimes even the private sector while building their capacity to deal with young people, whereas others work more with academic institutions. Finally, several smaller-scale projects also insist on cross-border cooperation among relevant stakeholders, including public authorities and civil society, as well as youth networking on the regional level. These smaller-scale projects rely heavily on the use of digital platforms and organising online workshops, discussions and research tools.

In conclusion, both national youth policy and programmes as well as those supported by international donors are shaped to address the needs of the supply and demand sides of the labour market. They mainly focus on improvement of skills through training and retraining and offer opportunities for gaining practical knowledge. As regards the most vulnerable groups, employment is supported through employers' subsidies, but also public works. Employment of young people is also supported by subsidies for self-employment to encourage new business start-ups and youth entrepreneurship. The currently offered programmes could be further adjusted as many young unemployed people remain outside of the scope and local employers (small companies and entrepreneurs) complain they are discriminated against regarding subsidies in comparison with big companies and foreign investors.

For registered unemployed people, the programmes are often offered to those whose chances of finding a job are higher, while those who are most vulnerable, most hard to employ and at the same time at the highest risk of poverty and social exclusion stay out of reach and are not fully included in ALMPs. Many objective reasons, such as inactivity of young people from the most vulnerable groups, limited access to NES branch offices due to high transportation costs or lack of information and low family support, may explain such a situation yet responsible institutions, and particularly NES, must find new ways to ensure better targeting. This calls for increasing NES capacity (e.g. engage more counsellors, allocate additional funds and reach vulnerable young people while working on seasonal jobs) to promote the Youth Service Package among the younger generation, but also to provide services and measures to highly vulnerable groups and find new ways to reach those who constantly stay out of scope.

It should also be noted that externally funded programmes seem quite fragmented but also overlapping in many regards. Their scope seems narrow, mostly with pilot programmes available to a limited number of young people in selected areas. While many of these focus on vulnerable groups, their overall impact on social inclusion is negligible. Another issue is sustainability of undertaken actions. A restricted number of piloted measures continue to be implemented once these projects are completed. It would be advisable to establish a special body that can act as a hub, i.e. a central unit gathering all relevant information (project descriptions, monitoring reports and evaluation reports) on various programmes implemented on both national and local levels, as well as involving both governmental and non-governmental organisations. Such a body could also be responsible for developing a methodology and conducting periodical evaluations of all available programmes within a defined timeframe, directed at improving the position of youths and analysis of the programmes' impact on this, as well as overall institutional capacity building with regard to creation and implementation of youth policy.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary of key findings and conclusions

Youth participation in the labour market

The overall situation in the Serbian labour market improved for young people in the 2015–18 period. Employment increased while unemployment dropped. The employment rate for young people of around 21% was close to average for the Western Balkans (20% in 2018), but still far from average for EU Member States (35% in 2018). The unemployment rate for young people declined significantly, from 43.2% to 29.7%, much more than for the whole working-age population (which saw a 5 percentage point decrease). Despite improvements, the youth unemployment rate was double of that for the EU-28 in 2018 (15.2%).

The youth labour force participation rate has remained largely unchanged in recent years. This is partially related to the high number of young NEETs. The NEET rate of 16.5% was below average for the Western Balkans (22.5%) but still higher than the EU-28 in 2018 (10.5%).

As a result of the Covid-19 pandemic, Serbia adopted a very generous and comprehensive economic package of near universal support to both firms and citizens, one of the largest among the Western Balkan economies.

The latest rapid assessment of the employment impacts and policy responses caused by the Covid-19 crisis identify a number of sectors in which workers and enterprises are severely affected: wholesale and retail trade; accommodation; transport; food and beverages; service activities; forestry and logging; and crop and animal production (ILO, 2020a).

In these sectors, almost 314 000 individuals work on their own account and over 267 000 are informal workers; 735 000 people work in micro-enterprises; and over 100 000 have only a fixed-term contract.

Already vulnerable workers – informally employed, self-employed, low-wage earners, employees with non-permanent contracts and in small firms, as well as women and young people – are at the highest risk of suffering from this economic downturn. On the other hand, the large share of young people employed in vulnerable jobs in retail, food and beverages, computer programming, consultancy and related activities may have a larger negative impact on jobs compared with the baseline scenario.

The activity rate of young women fell during the 2015–18 period while that of men increased, and the gap now stands at 13 percentage points. The employment rates increased for both genders in the same period and the gap between men and women decreased to 10 percentage points. The unemployment rates decreased almost equally for both genders and the gap now stands at 4 percentage points in favour of young men.

Looking at regional differences, the northern region of Vojvodina had the best labour market indicators in 2018, with the highest activity and employment rates and the lowest unemployment and informal employment rates. Vojvodina also has the highest share of waged employees, whereas unpaid family members are more numerous in Šumadija and West Serbia. In urban areas there are lower employment, lower activity and higher unemployment rates for young people compared to rural parts of the country, mostly as a result of later entry into the labour market due to more years of schooling.

This is why rural areas have more vulnerable employment, with higher informality and higher share of self-employment.

The employment rate increases with the level of education, as well as the unemployment rate. Between 2015 and 2018, the employment rate increased most for those with low and high levels of education, while youths with VET education experienced the largest reduction in the unemployment rate (16 percentage points).

Young people are in a more precarious situation in the labour market compared with their older peers. Their informal employment rate reduced by 10 percentage points between 2015 and 2018, and that roughly corresponded to a drop in the number of unpaid family members. Yet, the informal youth employment rate, close to 30%, was still higher than that for the overall working-age population (20%). The number of young people with permanent contracts increased over the last couple of years, reaching 50%, but this is still far from the 80% of adult workers on permanent contracts. Part-time working options are not abundant in Serbia and that is why there is no big difference in the number of young and older workers working part-time.

Furthermore, the share of young persons with low wages was three times higher than the share of those that earned high salaries. This is due to the educational structure of employed young people, the majority of whom have high school diplomas and one-third have a low educational level. Finally, another indicator of precarious working conditions is related to working hours. More than 40% of young people worked overtime, so longer than standard working hours.

Labour market transitions of young people

In 2015, the average school-to-work transition took more than two years in Serbia. This was much longer than the EU average of 6.5 months. First-time jobseeking took more time for women and youths in rural areas. Having a university degree halved the job search period, while for young people with the lowest level of education, it took 19.4 months longer than someone with a high level of education to find a first job. This is important to bear in mind given that some programmes for youths have focused on people with tertiary education who have the highest unemployment rates but which are only temporary in nature. In the EU, the number of students in the 15–24 age bracket who combine work and education was double that in Serbia and this can explain the very long school-to-work transition for students in the country.

A longer transition to the world of work impacts the age at which young individuals leave the parental home and start living alone or with a partner. In Serbia, they are on average six years older than their peers in the EU when starting an independent life.

The availability of latest high-quality LFS panel data allowed us to draw a number of important conclusions regarding labour market transitions of young people between employment, unemployment and inactivity. First, in 2017, a significant share of unemployed youths aged 15–34 remained in the same status one year later or withdrew from the labour market (around 60%) after being discouraged by poor employment prospects or by low marketability of their skills. Therefore, the education system in Serbia, which is not fully adjusted to the labour market demand and as such contributes to skills mismatches and fails to develop young workers' practical and soft skills, is one of the primary issues that need to be taken into consideration when addressing high youth unemployment and high outflows from unemployment to inactivity.

Second, half of inactive young people not participating in education remained in the same status a year later. This finding reveals that the key issue is not necessarily tackling youth unemployment but stimulating transition out of inactivity.

Third, young people who remained unemployed, inactive and not participating in education, or informally employed for over a year or longer, were more likely to be exposed to social exclusion and poverty. Our results show that at least 15% of young people may find themselves in such a situation.

Fourth, the informal sector played a significant role in facilitating outflows from unemployment and inactivity to employment, providing additional job opportunities for the unemployed and inactive but also having more job destructions (in relative terms) than the formal sector (8.8% and 4%, respectively).

Our results also show that 60% of young people (15–24) remained in NEET status for at least one year. These young people may experience troubled reintegration into the labour market or even be exposed to poverty or social exclusion if detached from jobs or education for long periods. They may also experience lower wages when they find a job due to skills obsolescence. Hence, the NEET persistence rate should be regularly calculated and monitored.

Young people at risk of poverty and social exclusion

Young people in Serbia are not only trapped in the troubled labour market situation but also exposed to other risks such as poverty and material deprivation. Their AROPE rate, despite being reduced in the 2015–18 period, is still higher than for the general population and one of the highest rates compared to other countries in Europe. Serbia's south and less populated areas have higher AROPE rates. Young people are more numerous in VLWI households than the general population and that contributes to their social exclusion. Also, those living with parents that have lower levels of education are more exposed to social exclusion.

Around 14% of young people aged 15–24 lived in 2018 in VLWI households and are exposed to the risk of poverty. Our findings indicate that being in a VLWI household is not the only reason for the elevated risk of poverty that young people face. Another reason is the low earnings of those with standard or near-standard work intensity, as the share of young people with low wages is three times higher than the share of those with high wages. Youths are more exposed to the combination of these risks than the total population (14.3% and 9.6%, respectively). The combined risk of VLWI and low wages is highest for the youngest (15–19) and declines further with age, which is in line with increased educational level and employment rates. Young people aged 15 to 29 from the southern region and thinly populated areas were more likely to experience both risks than those in the northern region and intermediate and densely populated areas.

Almost half of young people exposed to both the risk of poverty and VLWI are at the same time severely materially deprived, as they cannot afford at least four out of nine items necessary to lead an adequate life. Youths are more likely to face all three risks than the total population (6.4% and 4.1%, respectively) and this multiple risk decreases with age.

Our results show that youths faced not only multiple risks but persistent risks. Most of the poor people experienced persistent poverty, while most of those who lived in households with VLWI were (and continue to be) chronically trapped in such households (90% and 88%, respectively). In addition, most of those persistently living in such households appear to also be exposed to persistent poverty (77%).

We propose that these few indicators of persistent youth vulnerability should be regularly calculated and used to better capture 'exclusion profiles' of young people.

Almost 20% of young people aged 18 to 24 experienced persistent poverty in 2015 and this risk significantly increased in 2018 to 26%. Serbia had a higher persistent at-risk-of-poverty rate for youths than all EU-28 countries. Young people were more likely to be in persistent poverty than the total population and this risk decreased with age. Although not used very often, it would be advisable to monitor changes in vulnerability of young people based on this indicator, as the likelihood for a person to exit poverty falls the longer the person remains at risk of poverty.

For young people who persistently live in households with VLWI, in 2018, 15.8% of young people (15–24) were trapped in households in which members worked very little, as they lived in such households in at least two out of the last three years. Young people are much more likely to live in such households than the total population (10.8%).

We examined a few new indicators of persistent youth vulnerability based on a panel component of the SILC or LFS data that should be regularly calculated and used, in conjunction with the standard cross-section indicators of poverty and social exclusion defined by Eurostat:

- youths aged 15 to 24 who persistently live in households with VLWI;
- youths aged 15 to 24 who are persistently at risk of poverty and persistently live in households with VLWI;
- persistent NEET rate.

These indicators enable better capturing of 'exclusion profiles' in monitoring and evaluation used to measure progress in the active social inclusion of young people. Furthermore, they also enable monitoring of both multiple risks that young people may face and their persistent risks.

Skills mismatches at younger ages

The concept of skills mismatches at younger ages is built on previous conceptual and empirical analyses conducted by the ETF on skills mismatches in Serbia and ETF partner countries and Eurostat experimental indicators.

Our results based on the unemployment rate, unemployment to employment ratio and the NEET rate show that young people with an intermediate non-VET education experienced the easiest transition into the labour market. Highly educated young people encountered barriers when entering the labour market given significant labour market mismatches. It seems there is oversupply of tertiary graduates that do not match the needs of the labour market and/or a mismatch exists in the types of skills taught. Older youth groups were seen as being especially vulnerable in the labour market, due to the higher share of unemployed and inactive people among those not participating in education or training.

Despite improvement between 2015 and 2018, substantial regional labour market disparities still exist. The unemployment rate and unemployment to employment ratio were lowest in the Vojvodina and the Belgrade regions, while the NEET rate was lowest in the Belgrade region. All these rates were highest in the underdeveloped region of South and East Serbia. The unemployment rate and unemployment to employment ratio were higher in rural than in urban areas, while the opposite holds for the NEET rate, which is higher in rural areas. This result suggests that when non-employment (related to unemployment or inactivity) among those not participating in education or training is taken into account, young people in urban areas experience an easier and quicker school-to-work transition.

Another two measures of skills mismatch, the variance of relative unemployment rates and the coefficient of variation by level of educational attainment, suggest that although the youth unemployment rate across educational groups became less scattered over the 2015–18 period, the difference between the educational attainment of youths wishing to enter the labour market and of total youths increased. The coefficient of variation differentiating between youths with VET and non-VET levels of education was twice as low compared to the indicator for youths with all education levels, while this difference for the working-age population was rather small. The mismatch decreased with age, which is expected as different age cohorts were exposed to various levels of education.

The overqualification rate by level of education, an indicator that provides insight into vertical occupational mismatch, was much higher for youths with a tertiary education than those with a medium level of education. Around 39% of young people aged 20 to 29 with a tertiary education worked in occupations for which a tertiary education was not required. On the other hand, young people with a non-VET education were the least likely to be overqualified, at 7.7%, and twice as low compared to those with VET education. Although some of these mismatches might be voluntary in nature and/or a short-term strategy in order to acquire work experience and relevant skills required to secure stable employment in future, they are primarily a sign of low job creation for tertiary graduates who accepted positions below their level of formal education, as no other job opportunities were available, or a sign of mismatch by the types of skills taught. It seems that skills acquired in formal education were not what employers need, which points to the quality and relevance of education and training systems. The most common difficulties encountered by employers were shortage of the right workers and workers' lack of required knowledge, skills and work experience. Employers were not satisfied with education outcomes, as around half of firms covered by the 2015–16 STEP employer survey reported that general education and training systems do not meet the skills needs of businesses.

The overqualification rate for both levels of education was most widespread in rural areas and in the region of South and East Serbia, while for a medium level of education it was also evident in the Vojvodina region.

Another type of skills mismatch between employees' attained field of education and the job requirements, referred to as horizontal mismatch, appears quite large; the largest mismatches are observed in agriculture; science, mathematics and computing; humanities, language and arts; and services. In contrast to vertical mismatch, the overqualification rate by field of education appears more common among employed persons aged 15–34 with secondary education than among those aged 25–34 with tertiary education (41.8% and 30.5%).

Overall, youths were seen as being particularly vulnerable in the labour market as a result of their lack of prior work experience; the scarcity of professional networks and contacts; the low-quality education or training they may have received; and their skills being mismatched to labour market demands. Furthermore, our results show that skills mismatch of young people varies by education level, age group, type of settlement and region. Hence, several conclusions can be drawn: (1) university graduates seem to be in the worst position in the labour market not only related to the unemployment rate, unemployment to employment ratio and the NEET rate but also as to the overqualification rate; (2) based on these mismatch indicators, young people with VET education experienced wider mismatches than their VET counterparts, which suggests that VET profiles should be kept up to date, while modernising general education would help rebalance away from over-enrolment in VET education (World Bank, 2019); and (3) the greatest skills mismatch is observed in the underdeveloped region of South and East Serbia.

Forecasting labour market demand and supply with key implications for the younger generations

With the population over 15 projected to shrink by 500 000, or 9%, between 2020 and 2030, and the population aged between 15 and 29 to shrink by over 120 000, or 11%, the two key forces shaping the size and structure of labour market demand and supply in Serbia will be demographic decline, exercising the downward pressure on employment and economic growth, pointing at the expansion of employment. When modelling the labour force participation of young people, especially those below 25, there is a need to anticipate the changing balance between the extension of education and growing demand for young workers, fuelled by economic growth and increased replacement demand. Furthermore, the fast-growing phenomenon of online work for international employers/customers via digital platforms, also known as telemigration, represents a particular challenge as this form of resident employment cannot be directly brought into relation with GDP growth.

Our projections are based on the conservatively estimated long-term links (elasticities) between GDP growth differentiated by sectors and corresponding employment growth. After accounting for the negative impact of Covid-19 on GDP growth in 2020 and 2021, following the current and most conservative estimates of the European Commission, growth is expected to return to stable and relatively high annual rates of 4% until the end of the period. On the supply side, the age structure of employment had to be corrected to account for the growing shortage of prime-age workers. The improvement in the labour market indicators picks up in the second half of the 2020s.

The transformation of the labour market is stunning, especially in terms of unemployment rates, since the unemployment rate for the adult population is projected to drop from 13.4% in 2020 to as low as 3.0% in 2030. At the end of the period in 2030, the unemployment rate for the age group 15–19 will stand at 16.1%, for the age group 20–24 at 15.5% and for the age group 25–29 at 6.5%. This seems a great improvement over the current situation and an enviable achievement overall but for the two younger groups would still mean unemployment rates five times the average rate, and twice the average for the 25–29 age group.

The activity rates of two younger ‘true’ youth age groups (15–19 and 20–24) will remain stagnant over the 10-year period from 2020 to 2030. This is part of the long-term trend in which increased and then plateaued participation in education limits the share of active young persons. Thus, the activity rate is projected to remain in single digits for the age group 15–19 (9.4% in 2020 and 9.0% in 2030), to remain rather stable at slightly below 50% for the age group 20–24 (48.4% in 2020 and 49.8% in 2030), and to increase, but at below the average speed, from 79.3% in 2020 to 83.9% in 2030 for the age group 25–29. With this limited supply potential, the speed of increase in employment rates by five-year age groups will largely reflect the relative decline in their underlying populations. Between 2020 and 2030, this decline will be highest for the age group 25–29, and lowest for the age group 15–19.

A special survey on the digital economy in Serbia during the Covid-19 lockdown in April 2020 found a general resilience of this sector. Although many interviewed freelancers reported problems maintaining the same intensity of online work, overall, the optimistic attitude regarding expectations for a fast recovery prevailed. More generally, there is a prevailing opinion that the Covid-19 generated labour supply shock will speed up digital transformation of work and expand the prevalence of work-from-home and remote work jobs and tasks.

Summary of focus group discussions with young people and employers

Conclusions deriving from statistical analyses have in many aspects been supported by qualitative data collected in FGDs. This is particularly true for the younger generation's overall position on the local labour market and their transition from school to work, adulthood and poverty, as well as to employers' plans for new employment. The labour market position of youths is relatively unfavourable due to high expectations of local employers regarding applicants' work experience and practical skills prior to applying for a job as well as rather low wages offered based on the applicants' overall low level of work experience. While there are plenty of available jobs for young people, these are mainly low-paid jobs, most of which do not require higher education. Therefore, young people face a precarious position as they are expected to agree to work for lower wages, under temporary contracts and with limited possibilities to develop their skills and get promoted. This situation affects their transition to adulthood as those who accept lower-paid jobs can afford it only if they stay living with their parents.

Combining work and education is present but relatively rare. However, young people are generally aware that, should it be possible through the education system, this could speed up their school-to-work transition, allowing them to develop practical skills and obtain work experience well before formally entering the labour market. Family background, i.e. living in families with VLWI, is believed to be the main reason for living in constant poverty, yet young people add low educational attainment as a relevant factor of poverty, while, as expected, local employers point to the lack of required skills. This also highlights a certain gap between perceptions and expectations of young people and local employers. On the one hand, young people accuse employers of insisting on work experience and practical skills they do not have due to the failure of the education system to assure it and using it as an excuse to offer them lower-paid jobs and unfavourable contracts. On the other hand, local employers see young people as unrealistic in their expectations, with low motivation to work and lacking the required skills and competences. However, both groups agree that there are plenty of jobs available to young people, while employers also call attention to the difficulties they face when recruiting young employees who do not agree to work for the offered wage. Therefore, local employers consider the main problem in the labour market supply as the inability to find a labour force that matches the required skills and competences. Moreover, due to negative demographic trends as well as continual migration, particularly of younger generations, local employers believe that it will be even more difficult to fill the vacancies. Only a few big companies have formal employment plans which rely on employment of youths. Employers generally hesitate to give advantages to any particular age cohort or category of unemployed people while insisting on non-discrimination of anyone who has the required skills and competences for the offered post.

Finally, among both groups, there are certain expectations related to public policy. Young people expect the state to issue policies that will guarantee easier access to jobs, for example by passing restrictions on employers asking for five years' work experience of a young candidate who has just completed education, but also putting pressure on the education system to allow work and studies to be combined, to provide more practical hours and enable learners to acquire practical skills and experience. Employers also expect state support but primarily by allowing subsidies for training and employment of young people, promoting entrepreneurship among young people and also supporting local employers to develop and employ young people, as well as developing an education system that will allow better matching of labour force acquired knowledge and skills with the labour market requirements in the short and long run.

Policy approaches for labour market and social inclusion of young people

The main pillars of youth policy in Serbia are set in the Law on Youth (2011). Youth policy approaches are further developed under strategic documents such as the National Youth Strategy and in the sphere of youth employment as well as NEAPs. ALMPs directed at youths are planned on an annual basis within NEAPs and implemented by NES. At present, NES offers a combination of services and ALMPs for youths under one Youth Service Package, thus in a way mimicking the Youth Guarantee. However, the Youth Service Package is offered only to a limited number of registered unemployed youths, whereas participation in ALMPs is even more restricted due to limited budget. Therefore, the most relevant ALMPs for youths (including apprenticeship programmes, acquisition of practical skills and training programmes for the labour market and at the request of employers) are available for only a few hundred registered young unemployed people, whereas the measures more directly enhancing employment of youths, such as the employers' SSC subsidy and subsidies for self-employment, are available for about 1 000 young clients each. The structure of served clients also shows that the most vulnerable groups often stay out of reach of these measures, which suggests that NES must put additional effort into better targeting to include more young unemployed people facing multifaceted vulnerability, such as Roma, people with disabilities, those living in poverty (families with VLWI), no/low educated, young people without parents in foster families or institutions, and long-term unemployed.

NES measures are often supported in funding and/or capacity development by internationally funded and co-funded projects. In addition, international donors including the EU support various projects enhancing youth employability and employment which are implemented through consultancy agencies and local NGOs. Many of these projects involve various stakeholders at national and local levels, thus allowing space for inter-institutional cooperation among various sectors (i.e. employment and education) as well as local organisations and NGOs. However, even among such projects, dedicating special attention to the most vulnerable youths is not very common. Of all the reviewed projects, only the YEP focused on young people with low/no qualifications, low-skilled, Roma and NEETs, but not many of them were long-term unemployed. Evaluation of the E2E programme showed that the share of participants with the lowest level of education remained negligible through almost the entire project and we know from data analysis that these people are in the most precarious situation. The WB&T for EmploYouth project confirms that the most vulnerable youth groups have remained invisible, as data on them has been insufficiently and inconsistently collected.

Most of the reviewed programmes are oriented towards skills improvement. This comes either in the form of improving current skills or gaining new ones as well as gaining work experience (internships and apprenticeships). The E2E programme dedicated special attention to building essential skills. It also contributed to developing young people's self-assurance and greater self-confidence regarding their competences in the labour market.

Programmes intend to connect various stakeholders to work together towards the same goal: increase employment and employability of young people. Some projects contribute more to the empowerment of CSOs and sometimes even the private sector while building their capacity in dealing with young people, whereas others work more with academic institutions. Several smaller-scale projects also insist on cross-border cooperation among relevant stakeholders, including public authorities and civil society, as well as youth networking at the regional level.

Novel youth indicators and sources of information

We examined a few new indicators of persistent youth vulnerability based on a panel component of the SILC or LFS data: (1) youths aged 15 to 24 who persistently live in households with VLWI; (2) youths aged 15 to 24 who are persistently at risk of poverty and persistently live in households with VLWI; and (3) the persistent NEET rate. The first two indicators are based on a panel component of the SILC data and provide important insights into the situation of youths not only in the current year but also at least two out of the preceding three years. Hence, these indicators could easily be used to monitor changes in vulnerability of young people, as the likelihood of a young person in either category leaving that situation falls the longer they remain in these conditions. The third indicator is based on a panel component of the LFS data and is defined as the percentage of young people (15–24) remaining in NEET status for at least one year. As such, this indicator shows that either a significant share of youths remain in NEET status for a year or longer or it is a transient status for most young people.

For the skills mismatch, lessons learned relate to the reliability of indicators of overeducation and undereducation according to occupational level. Since the basic assumption of this empirical method is not fulfilled (i.e. the educational mean and/or mode for each occupation is assumed to be a match for that occupation), overeducation and undereducation according to occupational level are treated as a proxy only, regardless of educational categories used. Our results show that for occupations where overeducation is more prevalent, there will be a small share of those additionally overeducated, given that the mean level of education is artificially high, as many overeducated people have already been included in the data, and, hence, a high share of those are ‘false’ undereducated. This means that, for these occupations, overeducation appears to be underrepresented and undereducation overrepresented. The opposite holds true for occupations where undereducation is dominant. Hence, overeducation and undereducation according to occupational level are not valuable indicators of the degree of vertical mismatch by level of occupation in the case of Serbia.

As regards qualitative findings, lessons learned revolve around the recruitment procedure and overall interest of young people and local employers to participate in FGDs. Cooperation with partners on national and particularly local levels, including local NGOs and youth offices, came out as being crucial for successful recruitment and organisation of FGDs in covered regions. Overall interest of young people and local employers to participate was highly satisfactory. Generally, the lower number of employers participating in FGDs may be explained by the lack of time rather than low interest.

Improved evidence stemming from qualitative studies calls for additional effort to be put into targeting more vulnerable groups, including young people with no and low qualifications, those living in absolute poverty, Roma and people with disabilities. While young representatives of the named target groups (except for those with no or low qualifications) were recruited in our study, many of them had already been offered chances to develop their skills and competences through various youth programmes and initiatives. Therefore, many issues affecting the most vulnerable unfortunately remained invisible, as are those young people belonging to these groups.

However, it should also be noted that participation of the most vulnerable young people in FGDs is not only hard to arrange due to social exclusion, but also as some might struggle to verbalise their opinions. For example, in our FGDs we had a few people with disabilities who included people with sight impairment and young people with dyslexia. They contributed much to our discussion yet needed help to participate in a few written exercises. By contrast, the lower the level of educational attainment of a young person as well as their families, the harder it was to get them involved in discussions. For

this reason, it is advisable to use specially trained interviewers able to better approach such groups and use other available methods of qualitative research (such as personal interviews) when trying to collect qualitative data on the most vulnerable young people.

6.2 Recommendations

Based on the findings of the quantitative and qualitative analysis and several exchanges and discussions with national stakeholders, a series of avenues for further actions have emerged.

There is a need for further investment in training of NES employment counsellors in order to increase their capacity. Evaluation of the Youth Service Package showed weak spots in the process of conducting interviews with unemployed individuals and referring them to various ALMPs. Counsellors also did not sufficiently recognise active job search support as their primary task, either in practice or in interviews with the evaluator. Also, when a new service appeared, such as the Youth Service Package, the evaluation showed that counsellors were insufficiently aware of the aspects that distinguished the package as a separate ALMP from their common services and measures offered to unemployed youths.

Measures to assure implementation of the Youth Guarantee should be improved, as well as broadening the accessibility of ALMPs to widen the scope of served clients. Although it has made a sound starting point, the Youth Service Package as it is has failed to offer possibilities for enhancement of employment and employability to a substantial share of the young population. Therefore, NES should use all resources to reach youths, targeting those who may lack information for various reasons (e.g. living in remote areas, those with no/low education or those living in poverty). Moreover, the measures ensuring implementation of the Youth Guarantee require additional financial funds to cover much bigger needs of the younger generation for specific interventions (e.g. apprenticeship programmes, training, and subsidies for employment and self-employment).

ALMPs should be more oriented towards vulnerable groups and those facing multifaceted vulnerability such as young Roma, young people with disabilities, young people with low/no qualifications and young people without parental care who are at particularly high risk of labour market exclusion. Being young and facing any or a few other factors of vulnerability additionally exposes them to long-term unemployment and poverty. Therefore, targeting the most vulnerable youth groups needs to be significantly improved. Existing programmes need to be adjusted in terms of procedures, size and targeting and new ones need to be introduced to respond to the changing overall labour market situation and the changing absolute and relative position of multi-vulnerable groups. This should include the development of new programmes exclusively or dominantly targeting the most disadvantaged groups and/or groups of young unemployed people whose relative position has worsened the most.

There is a need to establish better cooperation between NES and other relevant actors. Evaluation of the ALMPs identified that support would be further improved if cross-sectoral cooperation and cooperation among local-level service providers, especially those in the education, social and health sectors, are intensified. Also, the evaluation indicated that efforts should be put into enhancing cooperation between NES and employers. This is also the case for cooperation among various governmental institutions as well as those operating on national and local levels.

Networking of various stakeholders involved in numerous policy interventions and programmes for youths can be achieved by establishing a central youth programming unit. Such a unit would serve as

a hub to collect information on all ongoing interventions, monitor their implementation, provide common evaluations after receiving all individual monitoring and evaluation documents, and disseminate results in the form of takeaways relevant for developing further interventions. The unit could be established as a governmental body in charge of developing an evaluation methodology, conducting evaluations, ensuring cooperation between various stakeholders and programmes, publishing analyses and participating in the development of new interventions and constant improvement of the legal framework. Alternatively, such a unit could also be established as a new department within NES, SIPRU, or relevant ministries.

To measure the impact of the VET programmes, it is important to have good-quality data on both schooling and labour market outcomes. While good-quality data on labour market outcomes is generally available from NES, there is still a vast gap in the data that needs to be collected from schools and the overall education system. Therefore, there is a need for the swift introduction of a tracer study or graduate tracking mechanism to evaluate and monitor the VET programmes.

Educational programmes at secondary vocational schools should be aligned to actual and future labour market demand. The GIZ-supported YEP showed that for most participants in the programme, the training was not related to their educational background, suggesting that many were looking to train for new occupations in demand on the labour market. Hence, the main aim of the programme participants was reskilling rather than upskilling.

Lack of work experience was found to be one of the main impediments for youths entering the labour market, which has led to calls for instant action in both employment and educational policies. The dual education system being developed in vocational schools should be further developed and promoted among both young candidates and employers. To allow students to gain work experience, work-based learning is recommended for general secondary education, and particularly in university curricula. In addition, entrepreneurship programmes, including simulations and working in virtual enterprises, should be accessible to more secondary school as well as university students and not only to those studying economics and business. This would probably lead to further promotion of entrepreneurial culture and development of entrepreneurial skills. However, young people will also need additional support to opt for self-employment, including mentoring about finances, marketing and taxation as well as personal (psychological) guidance when starting a new business.

To improve their prospects of finding a job soon after completing education, young people need to have access to professional orientation and career counselling in the early stages of their educational path, even while in primary schools. Professional orientation and career counselling have only been accessible to a limited number of students in both primary and secondary schools where professional staff (e.g. school psychologists) and/or NES career counsellors provide group information on available educational programmes as well as occupational requirements. On the other hand, individual career counselling and professional orientation sessions are highly restricted due to a lack of professional staff. Hence, more professional school staff and counsellors at NES and career development centres should be engaged to provide this service to young students who might be interested in receiving support in selecting their future occupation and also for creating realistic expectations of their first job(s). Recently introduced legal documents related to elementary education, secondary education and dual education impose the requirement to create teams for professional education within schools. However, this may not be enough unless guarantees are made that the teams will be adequately staffed and equipped in order to provide a high-quality service, i.e. both group and individual counselling to primary and secondary school students.

There is a need to continuously improve data and evidence on youths regarding the labour market and social situation and effectiveness of policies and programmes. To measure youth vulnerability, indicators of persistent youth vulnerability should be regularly calculated and used, in conjunction with the standard cross-section indicators of poverty and social exclusion, which are regularly calculated by the SORS and included in the Eurostat database.

Besides novel indicators of persistent youth vulnerability, we also recommend the following to SORS:

- Better territorial coverage of standard poverty and social exclusion indicators based on NUTS 2 regions is required. Youth vulnerability indicators based on SILC data described in Chapter 2 is based on NUTS 1 regions – North and South regions – as the SORS does not provide standard poverty and social exclusion indicators by NUTS 2 regions (Vojvodina, Belgrade, Šumadija and West Serbia, and South and East Serbia).
- There is a need for better territorial coverage of horizontal mismatch indicators. It would be useful if SORS could provide data on horizontal skills mismatch rates by field of education, by region and by type of settlement. This indicator at the national level is calculated by Eurostat only, so we could not obtain data on young people working in an occupation (ISCO 2008) that matches the field of education in ISCED-F in order to provide regional and urban/rural disaggregation of this indicator.
- It would be useful to calculate weights for panel components of the LFS data, given that SORS provides only cross-sectional weights.

These indicators would enable better capturing of 'exclusion profiles' in monitoring and evaluation used to measure progress in the active social inclusion of young people. Furthermore, they would also enable monitoring of not only multiple risks that young people may face, but also their persistent risks.

ANNEXES

Annex 1. Statistical tables and calculations

TABLE A1.1 ACTIVITY RATE, EMPLOYMENT RATE AND INFORMAL EMPLOYMENT RATE BY GENDER FOR YOUTHS AGED 15–24, SERBIA AND EU, 2015–18 (%)

	Serbia				EU			
	2015	2016	2017	2018	2015	2016	2017	2018
Activity rate								
Male	34.5	35.9	36.8	36.3	44.2	44.0	44.0	44.2
Female	24.4	24.2	24.1	23.3	38.8	38.9	39.1	38.9
Employment rate								
Male	22.4	25.8	26.1	26.0	20.5	18.8	16.8	15.1
Female	12.3	14.4	15.3	15.9	18.9	17.3	15.5	14.0
NEET								
Male	20.3	17.2	17.1	16.0	11.8	11.3	10.7	10.1
Female	19.8	18.3	17.3	17.0	12.3	11.9	11.2	10.9
Informal employment rate								
Male	40.7	38.6	32.7	29.0				
Female	34.1	29.9	25.1	25.7				

Source: SORS and Eurostat.

TABLE A1.2 ACTIVITY RATE, EMPLOYMENT RATE AND UNEMPLOYMENT RATE BY GENDER AND AGE, 2015–18 (%)

	2015		2016		2017		2018	
	Male	Female	Male	Female	Male	Female	Male	Female
Activity rate								
15–19	13.7	8.1	13.6	8.7	12.8	8.0	12.1	7.0
20–24	59.4	38.2	58.7	38.1	57.2	37.7	57.0	37.4
25–29	81.1	68.3	82.2	69.2	82.5	70.4	85.6	72.4
Employment rate								
15–19	7.7	3.2	8.9	3.5	7.4	3.7	6.9	3.7
20–24	38.8	22.5	40.8	24.9	41.9	25.2	42.4	26.4
25–29	59.9	48.9	61.2	50.1	64.8	52.7	69.3	55.3
Unemployment rate								
15–19	47.5	55.8	37.7	44.8	42.2	53.8	42.9	47.0
20–24	37.5	45.4	30.1	37.8	26.7	33.2	25.7	29.5
25–29	24.2	33.1	22.3	30.2	21.4	25.2	19.0	23.7

Source: Authors' calculations based on LFS data.

TABLE A1.3 MAIN LABOUR MARKET INDICATORS FOR YOUTHS AGED 15–24 BY REGION AND SETTLEMENT TYPE, 2015–18 (%)

	2015	2016	2017	2018
Employment rate by region				
Belgrade	17.2	18.9	19.5	19.8
Vojvodina	19.8	22.6	23.5	25.5
Šumadija and Western Serbia	15.8	17.9	20.2	20.0
Southern and Eastern Serbia	14.6	17.4	19.7	18.4
Employment rate by settlement type				
Urban	15.1	16.9	17.8	16.8
Rural	19.8	23.4	25.3	27.5
Unemployment rate by region				
Belgrade	35.6	33.9	32.0	23.9
Vojvodina	34.7	30.6	30.1	23.0
Šumadija and Western Serbia	46.6	39.7	32.1	33.4
Southern and Eastern Serbia	49.1	41.1	34.0	38.9
Unemployment rate by settlement type				
Urban	45.1	39.2	33.0	33.4
Rural	40.2	31.1	30.7	26.0
Activity rate by region				
Belgrade	28.9	29.2	28.8	26.1
Vojvodina	32.6	33.4	33.6	33.1
Šumadija and Western Serbia	29.2	29.5	29.8	30.0
Southern and Eastern Serbia	28.3	28.5	29.9	30.2
Activity rate by settlement type				
Urban	25.6	26.7	26.6	25.2
Rural	34.5	35.9	36.4	37.2
NEET rate by region				
Belgrade	12.9	11.8	13.7	10.4
Vojvodina	21.1	19.7	19.6	17.7
Šumadija and Western Serbia	20.1	17.1	16.3	16.6
Southern and Eastern Serbia	22.6	21.5	18.7	20.7
NEET rate by settlement type				
Urban	18.2	19.3	14.8	14.4
Rural	23.8	15.1	20.5	19.5

	2015	2016	2017	2018
Informal employment rate by region				
Belgrade	34.2	33.1	27.0	24.8
Vojvodina	36.3	31.5	28.4	23.2
Šumadija and Western Serbia	42.1	39.4	34.5	35.6
Southern and Eastern Serbia	39.4	34.9	29.3	27.8
Informal employment rate by settlement type				
Urban	33.6	30.8	24.2	23.1
Rural	42.3	40.4	35.7	32.1

Source: Authors' calculations based on LFS data.

TABLE A1.4 YOUTHS AGED 15–24 BY EMPLOYMENT STATUS AND GENDER, 2015–18 (%)

	2015	2016	2017	2018
Employees				
Male	58.2	58.9	61.0	61.9
Female	41.8	41.1	39.0	38.1
Total	100	100	100	100
Self-employed				
Male	87.1	86.3	85.1	79.8
Female	12.9	13.7	14.9	20.2
Total	100	100	100	100
Unpaid family members				
Male	72.6	70.2	69.6	62.5
Female	27.4	29.8	30.4	37.6
Total	100	100	100	100

Source: Authors' calculations based on LFS data.

TABLE A1.5 YOUTHS AGED 15–24 BY EMPLOYMENT STATUS, REGION AND SETTLEMENT TYPE 2015–18 (%)

	2015	2016	2017	2018
Employees by region				
Belgrade	24.9	24.3	23.7	22.3
Vojvodina	30.1	30.6	32.2	34.8
Šumadija and Western Serbia	25.7	25.2	25.0	24.2
Southern and Eastern Serbia	19.3	19.9	19.2	18.8
Total	100	100	100	100
Self-employed by region				
Belgrade	15.8	16.5	10.3	20.0
Vojvodina	34.1	33.9	31.3	29.6
Šumadija and Western Serbia	27.6	26.0	26.3	25.6
Southern and Eastern Serbia	22.5	23.6	32.1	24.8
Total	100	100	100	100
Unpaid family members by region				
Belgrade	8.1	7.4	6.6	6.0
Vojvodina	17.2	16.9	16.5	15.0
Šumadija and Western Serbia	48.6	51.1	54.5	61.3
Southern and Eastern Serbia	26.1	24.6	22.3	17.7
Total	100	100	100	100
Employees by settlement type				
Urban	60.1	58.3	55.5	51.8
Rural	39.9	41.7	44.6	48.2
Total	100	100	100	100
Self-employed by settlement type				
Urban	47.8	46.3	44.8	41.9
Rural	52.2	53.7	55.2	58.2
Total	100	100	100	100
Unpaid family members by settlement type				
Urban	18.8	14.7	13.4	12.9
Rural	81.2	85.3	86.6	87.1
Total	100	100	100	100

Source: Authors' calculations based on LFS data.

TABLE A1.6 EMPLOYED BY CONTRACT TYPE AND BY FULL-TIME/PART-TIME WORK FOR ADULTS AGED 25–64, 2015–18 (%)

	2015	2016	2017	2018
Contract type				
Permanent	78.2	76.3	79.7	79.2
Temporary	16.8	18.9	16.9	17.8
Seasonal/occasional	5.0	4.8	3.4	3.0
Total	100	100	100	100
Full-time/part-time work				
Full-time	89.8	89.3	89.8	91.0
Part-time	10.2	10.7	10.2	9.0
Total	100	100	100	100

Source: Authors' calculations based on LFS data.

TABLE A1.7 LABOUR MARKET TRANSITION PROBABILITIES FOR PEOPLE AGED 15–34, Q1 2017/Q1 2018

Q1 2017/Q1 2018	Employed	Unemployed	Inactive	Total
Employed	88.9%	5.1%	6.0%	100%
	45 202	2 586	3 046	50 833
Unemployed	36.6%	41.8%	21.6%	100%
	6 648	7 601	3 931	18 180
Inactive	14.0%	8.8%	77.2%	100%
	8 292	5 232	45 765	59 289
Total	46.9%	12.0%	41.1%	100%
	60 142	15 419	52 742	128 303

Notes: The first row is the transition probability; the second row is the number of observations. We used age group 15–34 in order to have sufficient number of observations. SORS did not calculate panel weights so we used cross-sectional weights.

Source: Authors' calculations based on LFS data.

TABLE A1.8 LABOUR MARKET TRANSITION PROBABILITIES FOR PEOPLE AGED 15–34, Q2 2017/Q2 2018

Q2 2017/Q2 2018	Employed	Unemployed	Inactive	Total
Employed	89.6%	5.3%	5.1%	100%
	50 042	2 970	2 853	55 865
Unemployed	38.4%	39.7%	22.0%	100%
	5 990	6 193	3 427	15 610
Inactive	13.0%	8.7%	78.3%	100%
	7 834	5 230	47 227	60 292
Total	48.5%	10.9%	40.6%	100%
	63 867	14 393	53 507	131 767

Notes: The first row is the transition probability; the second row is the number of observations. We used age group 15–34 in order to have sufficient number of observations. SORS did not calculate panel weights so we used cross-sectional weights.
Source: Authors' calculations based on LFS data.

TABLE A1.9 LABOUR MARKET TRANSITION PROBABILITIES FOR PEOPLE AGED 15–34, Q3 2017/Q3 2018

Q3 2017/Q3 2018	Employed	Unemployed	Inactive	Total
Employed	89.7%	4.5%	5.8%	100%
	54 167	2 736	3 472	60 375
Unemployed	45.7%	40.7%	13.7%	100%
	6 637	5 909	1 986	14 532
Inactive	16.0%	8.7%	75.3%	100%
	8 220	4 482	38 806	51 509
Total	54.6%	10.4%	35.0%	100%
	69 024	13 128	44 264	126 416

Notes: The first row is the transition probability; the second row is the number of observations. We used age group 15–34 in order to have sufficient number of observations. SORS did not calculate panel weights so we used cross-sectional weights.
Source: Authors' calculations based on LFS data.

TABLE A1.10 LABOUR MARKET TRANSITION PROBABILITIES FOR PEOPLE AGED 15–34, Q4 2017/Q4 2018

Q4 2017/Q4 2018	Employed	Unemployed	Inactive	Total
Employed	92.4%	4.7%	2.9%	100%
	51 241	2 587	1 619	55 446
Unemployed	40.9%	38.3%	20.8%	100%
	7 129	6 679	3 635	17 443
Inactive	10.8%	7.8%	81.4%	100%
	5 656	4 046	42 450	52 152
Total	51.2%	10.6%	38.2%	100%
	64 026	13 312	47 704	125 042

Notes: The first row is the transition probability; the second row is the number of observations. We used age group 15–34 in order to have sufficient number of observations. SORS did not calculate panel weights so we used cross-sectional weights.
Source: Authors' calculations based on LFS data.

TABLE A1.11 LABOUR MARKET TRANSITION PROBABILITIES FOR PEOPLE AGED 15–34, INCLUDING INFORMAL EMPLOYMENT AND INACTIVE IN EDUCATION, Q1 2017/Q1 2018

Q1 2017/ Q1 2018	Formal	Informal	Unemployed	Inactive in education	Inactive other	Total
Formal	89.6%	2.6%	4.1%	0.9%	2.8%	100%
	38 283	1 129	1 752	379	1 177	42 720
Informal	25.7%	45.6%	10.3%	6.5%	11.9%	100%
	2 086	3 704	834	523	967	8 113
Unemployed	27.6%	9.0%	41.8%	2.9%	18.7%	100%
	5 019	1 628	7 601	529	3 402	18 180
Inactive in education	5.2%	3.5%	5.4%	82.9%	3.0%	100%
	2 313	1 547	2 399	36 727	1 327	44 314
Inactive other	17.9%	11.7%	18.9%	3.0%	48.5%	100%
	2 675	1 757	2 832	454	7 257	14 976
Total	39.3%	7.6%	12.0%	30.1%	11.0%	100%
	50 377	9 765	15 419	38 612	14 130	128 303

Notes: The first row is the transition probability; the second row is the number of observations. We used age group 15–34 in order to have sufficient number of observations. SORS did not calculate panel weights so we used cross-sectional weights.
Source: Authors' calculations based on LFS data.

TABLE A1.12 LABOUR MARKET TRANSITION PROBABILITIES FOR PEOPLE AGED 15–34, INCLUDING INFORMAL EMPLOYMENT AND INACTIVE IN EDUCATION, Q2 2017/Q2 2018

Q2 2017/ Q2 2018	Formal	Informal	Unemployed	Inactive in education	Inactive other	Total
Formal	88.9%	3.8%	4.0%	0.6%	2.7%	100%
	40 394	1 736	1 799	283	1 209	45 420
Informal	24.6%	51.1%	11.2%	4.5%	8.5%	100%
	2 572	5 341	1 171	471	889	10 445
Unemployed	24.6%	51.1%	11.2%	4.5%	8.5%	100%
	4 635	1 355	6 193	809	2 619	15 610
Inactive in education	5.5%	3.5%	3.4%	85.0%	2.6%	100%
	2 468	1 596	1 521	38 418	1 192	45 195
Inactive other	14.5%	10.5%	24.6%	4.7%	45.7%	100%
	2 191	1 580	3 710	715	6 901	15 097
Total	39.7%	8.8%	10.9%	30.9%	9.7%	100%
	52 260	11 607	14 393	40 697	12 810	131 767

Notes: The first row is the transition probability; the second row is the number of observations. We used age group 15–34 in order to have sufficient number of observations. SORS did not calculate panel weights so we used cross-sectional weights.

Source: Authors' calculations based on LFS data.

TABLE A1.13 LABOUR MARKET TRANSITION PROBABILITIES FOR PEOPLE AGED 15–34, INCLUDING INFORMAL EMPLOYMENT AND INACTIVE IN EDUCATION, Q3 2017/Q3 2018

Q3 2017/ Q3 2018	Formal	Informal	Unemployed	Inactive in education	Inactive other	Total
Formal	88.0%	4.3%	4.2%	0.6%	2.9%	100%
	42 002	2 046	2 007	299	1 403	47 757
Informal	22.9%	57.3%	5.8%	6.6%	7.4%	100%
	2 888	7 231	730	835	934	12 618
Unemployed	32.9%	12.8%	40.7%	2.0%	11.6%	100%
	4 775	1 862	5 909	293	1 693	14 532
Inactive in education	6.1%	4.6%	5.8%	77.1%	6.5%	100%
	2 356	1 787	2 242	29 875	2 505	38 765
Inactive other	17.1%	14.9%	17.6%	3.9%	46.5%	100%
	2 183	1 894	2 240	502	5 925	12 744
Total	42.9%	11.7%	10.4%	25.2%	9.9%	100%
	54 204	14 820	13 128	31 804	12 460	126 416

Notes: The first row is the transition probability; the second row is the number of observations. We used age group 15–34 in order to have sufficient number of observations. SORS did not calculate panel weights so we used cross-sectional weights.

Source: Authors' calculations based on LFS data.

TABLE A1.14 LABOUR MARKET TRANSITION PROBABILITIES FOR PEOPLE AGED 15–34, INCLUDING INFORMAL EMPLOYMENT AND INACTIVE IN EDUCATION, Q4 2017/Q4 2018

Q4 2017/ Q4 2018	Formal	Informal	Unemployed	Inactive in education	Inactive other	Total
Formal	90.2%	3.9%	3.8%	0.9%	1.2%	100%
	41 269	1 775	1 717	435	557	45 753
Informal	33.3%	51.2%	9.0%	1.7%	4.8%	100%
	3 229	4 967	869	167	461	9 693
Unemployed	29.8%	11.1%	38.3%	3.4%	17.4%	100%
	5 198	1 931	6 679	596	3 040	17 443
Inactive in education	5.8%	1.3%	6.3%	83.0%	3.6%	100%
	2 321	500	2 507	33 120	1 442	39 890
Inactive other	11.8%	11.4%	12.6%	3.4%	60.9%	100%
	1 443	1 393	1 539	417	7 471	12 262
Total	42.8%	8.4%	10.6%	27.8%	10.4%	100%
	53 460	10 566	13 312	34 733	12 971	125 042

Notes: The first row is the transition probability; the second row is the number of observations. We used age group 15–34 in order to have sufficient number of observations. SORS did not calculate panel weights so we used cross-sectional weights.

Source: Authors' calculations based on LFS data.

TABLE A1.15 NEET TRANSITION FOR YOUNG PEOPLE AGED 15–24, Q1 2017/Q1 2018

NEET status – Q1 2017/Q1 2018	No	Yes	Total
No	91.7%	8.3%	100%
	43 379	3 944	47 323
Yes	44.0%	56.0%	100%
	3 347	4 259	7 606
Total	44.0%	56.0%	100%
	46 727	8 203	54 930

Note: The first row is the transition probability; the second row is the number of observations. SORS did not calculate panel weights so we used cross-sectional weights.

Source: Authors' calculations based on LFS data.

TABLE A1.16 NEET TRANSITION FOR YOUNG PEOPLE AGED 15–24, Q2 2017/Q2 2018

NEET status – Q2 2017/Q2 2018	No	Yes	Total
No	94.1%	5.9%	100%
	47 854	3 011	50 865
Yes	39.3%	60.7%	100%
	3 281	5 062	8 343
Total	86.4%	13.6%	100%
	51 135	8 073	59 209

Note: The first row is the transition probability; the second row is the number of observations. SORS did not calculate panel weights so we used cross-sectional weights.
Source: Authors' calculations based on LFS data.

TABLE A1.17 NEET TRANSITION FOR YOUNG PEOPLE AGED 15–24, Q3 2017/Q3 2018

NEET status – Q3 2017/Q3 2018	No	Yes	Total
No	89.0%	11.0%	100%
	40 963	5 047	46 009
Yes	39.2%	60.8%	100%
	3 089	4 800	7 888
Total	81.7%	18.3%	100%
	44 051	9 846	53 898

Note: The first row is the transition probability; the second row is the number of observations. SORS did not calculate panel weights so we used cross-sectional weights.
Source: Authors' calculations based on LFS data.

TABLE A1.18 NEET TRANSITION FOR YOUNG PEOPLE AGED 15–24, Q4 2017/Q4 2018

NEET status – Q4 2017/Q4 2018	No	Yes	Total
No	93.0%	7.0%	100%
	41 332	3 115	44 447
Yes	37.7%	62.3%	100%
	3 295	5 446	8 741
Total	83.9%	16.1%	100%
	44 626	8 561	53 187

Note: The first row is the transition probability; the second row is the number of observations. SORS did not calculate panel weights so we used cross-sectional weights.
Source: Authors' calculations based on LFS data.

TABLE A1.19 AROPE RATE AND ITS COMPONENTS BY REGION AND DEGREE OF URBANISATION, AGED 15–29, 2015–18 (%)

	2015	2016	2017	2018
At-risk-of-poverty or social exclusion rate				
Region				
North	38.4	40.5	36.2	32.6
South	50.7	45.1	40.5	39.6
Degree of urbanisation				
Densely populated area	37.4	41.6	38.2	31.9
Intermediately populated area	43.9	39.4	36.0	33.2
Thinly populated area	52.3	46.5	40.1	42.0
At-risk-of-poverty rate				
Region				
North	22.8	27.2	24.0	22.6
South	36.8	32.9	31.3	30.7
Degree of urbanisation				
Densely populated area	19.9	26.4	24.1	20.4
Intermediately populated area	31.2	27.1	25.9	24.4
Thinly populated area	38.8	35.7	32.1	33.9
Severe material deprivation rate				
Region				
North	23.0	18.0	18.2	15.9
South	23.1	21.9	15.9	13.1
Degree of urbanisation				
Densely populated area	21.5	18.8	17.8	14.4
Intermediately populated area	23.6	21.1	18.0	14.7
Thinly populated area	24.3	20.0	15.7	14.5
VLWI				
Region				
North	17.4	17.4	16.4	15.7
South	22.0	22.1	20.6	19.1
Degree of urbanisation				
Densely populated area	18.0	18.7	17.2	15.4
Intermediately populated area	20.1	18.5	16.6	13.9
Thinly populated area	21.0	21.5	21.0	21.8

Note: There is no region variable with four regions. North consists of Vojvodina and Belgrade region; South consists of Šumadija and Western Serbia and Southern and Eastern Serbia.

Source: Authors' calculations based on SILC data.

TABLE A1.20 POPULATION AT RISK OF POVERTY, LIVING IN HOUSEHOLDS WITH VLWI AND SEVERELY MATERIALLY DEPRIVED BY REGION AND DEGREE OF URBANISATION, AGED 15–29, 2015–18 (%)

	2015	2016	2017	2018
Population at risk of poverty and living in a household with VLWI				
Region				
North	11.1	12.1	13.0	12.4
South	16.9	16.6	15.9	14.8
Degree of urbanisation				
Densely populated area	10.7	12.2	12.9	10.8
Intermediately populated area	15.8	14.2	12.9	11.4
Thinly populated area	16.0	16.4	17.0	17.7
Population at risk of poverty, living in a household with VLWI and severely materially deprived				
Region				
North	6.8	5.4	6.4	5.5
South	8.1	8.5	7.1	5.8
Degree of urbanisation				
Densely populated area	5.9	5.3	5.8	5.1
Intermediately populated area	8.4	8.7	6.5	5.1
Thinly populated area	8.3	7.0	7.9	6.5

Note: There is no region variable with four regions. North consists of Vojvodina and Belgrade region; South consists of Šumadija and Western Serbia and Southern and Eastern Serbia.
Source: Authors' calculations based on SILC data.

TABLE A1.21 AGGREGATION OF EDUCATIONAL ATTAINMENT USED IN THIS REPORT

Aggregated level	Education level in LFS	ISCED classification
Low	No school	ISCED 1–2
	1–3 grades of primary school	
	4–7 grades of primary school	
	Primary school completed (8 years)	
	Lower secondary school (1–2 years)	
	Lower secondary school (3 years)	
Intermediate non-VET	Gymnasium	ISCED 3–4
	Specialisation after secondary school and school for highly qualified workers	
Intermediate VET	Upper secondary school (4 years)	ISCED 3
High	Higher education, first level of faculty (old programme)	ISCED 5–8
	Faculty, academy, undergraduate academic studies, high applied education school, specialised academic studies	
	Master's level academic studies, magisterium, integrated studies (medicine, pharmacy, stomatology and veterinary science – Bologna Process)	
	Doctoral academic studies	

Note: We followed aggregation of educational levels provided in the ETF report on skills mismatch measurement in Serbia (ETF/Vasić, 2019) in order to reach harmonised aggregation across ETF partner countries.

TABLE A1.22 OVEREDUCATION AND UNDEREDUCATION BY OCCUPATION FOR YOUTHS AGED 15–24, 2015 AND 2018 (%)

Occupation	2015		2018	
	Over-education	Under-education	Over-education	Under-education
Armed forces	N/A	N/A	N/A	N/A
Managers	N/A	N/A	N/A	N/A
Professionals	9.0	39.1	7.1	34.4
Technicians and associate professionals	17.4	7.1	19.0	6.4
Clerical support workers	5.8	13.2	8.6	10.8
Service and sales workers	5.9	4.8	4.5	3.7
Skilled agricultural, forestry and fishery workers	8.1	30.6	6.1	27.7
Craft and related trades workers	3.2	9.5	2.7	8.3
Plant and machine operators and assemblers	6.0	10.2	4.4	8.0
Elementary occupations	9.6	26.7	7.9	21.9

Note: There are not enough observations for armed forces and managers. We used 13 levels of education provided in the LFS for this calculation.

Source: Authors' calculations based on LFS data.

Annex 2. Overview of research methodology

Statistical analysis

Statistical analysis of the youth situation in Serbia is based on indicators covering various aspects of labour markets and social vulnerability of young people: (1) the standard labour market indicators including labour market transitions of youths based on the Labour Force Survey (LFS) data; (2) the indicators of school-to-work transition of young people based on the International Labour Organisation's 2015 School-to-Work Transition Survey (SWTS); (3) the indicators of youth vulnerability based on the Survey on Income and Living Conditions (SILC) data; and (4) the indicators of skills mismatch at younger ages based on the LFS data.

As regards the availability of these indicators, the analysis is based on three types of indicators: (1) the standard indicators regularly calculated by SORS for the entire youth population (e.g. the unemployment rate and young people not in employment, education or training (NEET)); (2) these indicators disaggregated by specific subgroups of young population mostly not available in SORS; and (3) proposed innovative indicators for the total youth and specific subgroups that should be regularly calculated and used to measure progress in the active social inclusion of young people in combination with other available indicators.

The analysis is based on microdata from the LFS, the SILC, the SWTS, and employer surveys conducted by the National Employment Service (NES). Both cross-section and panel LFS and SILC are used. Panel data is mostly used for the analysis of innovative indicators. Depending on specific indicator and sample sizes, disaggregation is done by specific age groups (15–19, 20–24, and 25–29 if we consider a broader age group of young people), gender, educational level, type of settlement and regions. The reliability of indicators is carefully examined due to potential low number of observations of some youth categories.

General and youth labour market forecasts were carried out using the labour supply and labour demand projections. Labour supply forecasts were based on the population projections, taken from a reliable external source (Penev, 2013), adjusted to fit the LFS data in the starting year. In forecasting activity, we relied on the Cohort Simulation Model, which was developed in 2003 (Burniaux et al., 2004). The activity rates for each 10-year group were estimated based on past trends and expected changes in institutional (such as retirement) rules and behavioural patterns.

Forecasting demand for labour boils down to forecasting employment. Following an already established practice in labour market forecasting in Serbia (Arandarenko, 2017), we used official GDP growth forecasts broken down by three broad sectors (agriculture, industry, services). In the next step, we estimated employment elasticities for each of the three broad sectors. In the final step, unemployment for any given group was obtained as a straightforward residual of participation and employment projections. Labour market forecasts for the young population were broken down into five-year age groups (15–19, 20–24 and 25–29) in order to obtain more accurate activity, employment and unemployment trends.

Qualitative analysis

For the qualitative analysis, we used focus group discussions (FGDs) as a credible qualitative research technique, allowing collection of detailed information on both youths' and employers' perceptions and attitudes with regard to school-to-work transition of young people in Serbia and their labour market position. In line with our research objectives, six FGDs were organised with youths from

different regions in Serbia – Novi Sad, Belgrade, Kragujevac, Novi Pazar, Pirot and Leskovac – from January to February 2020. In addition, three FGDs were held with local employers in Novi Sad, Kragujevac and Leskovac in January to March 2020. In total, 60 people aged 16 to 30 as well as 19 local employers representing private companies of different sizes and industries (including new technologies and energy industries, vehicle industry, pharmaceuticals, manufacturing companies, insurance companies, marketing, media, digital, creative and IT industries as well as a few NGOs and social enterprises) participated in the FGDs. The most relevant demographic information about the FGD participants are shown in Table A2.1.

TABLE A2.1 FGD PARTICIPANTS BY DEMOGRAPHIC CHARACTERISTICS

Focus group discussions	Novi Sad	Belgrade	Kraguje-vac	Novi Pazar	Pirot	Leskovac	Total
Youth							**6**
Number of participants	10	13	8	9	9	11	60
Number of female participants	5	4	5	5	5	9	33
Average age	23	22	23	23	25	25	24
Youngest participant	19	16	19	18	19	16	16
Number of participants belonging to vulnerable groups	4	10	4	1	2	na	21
Number of Roma	1	2	2	na	2	na	7
Number of people with disabilities	1	5	na	1	na	na	7
Employers							**3**
Number of participants	7		5			7	19
Type of companies by size and industry (dominant)	small, IT		diverse			entrepre-neurs	

The Social Inclusion and Poverty Reduction Unit (SIPRU) team as well as our partners such as NIRAS IP Consult and UNICEF Serbia helped us find local organisations[36] who recruited participants in accordance with the set criteria, including gender, age, educational attainment, employment status and place of residence. In addition, we asked the local partners to also recruit young people belonging to vulnerable groups, such as Roma, people with disabilities, national minorities, and institutionalised children without parental care and those living in foster families. In accordance with the set criteria and given instructions, there was an almost equal representation of males and females. Also we managed to have a representative number of young people belonging to various age subgroups within the 15 to 29 age span, with different educational attainment, including higher education, secondary education, those still in secondary school, those with and without work experience, currently employed, unemployed and inactive, as well as Roma, people with disabilities and other vulnerable groups. In the same manner, our local partners recruited employers for the

[36] Local non-governmental organisations and youth organisations, including Centar za omladinski rad Novi Sad (Centre for Youth Work Novi Sad), Business Innovation Centre Kragujevac, Kancelarija za mlade Novi Pazar (Youth Office Novi Pazar), Start-up Centre Pirot and Evropski pokret Srbija u Leskovcu (European Movement Serbia in Leskovac), provided tremendous help while recruiting participants and organising FGDs.

FGDs following the instruction to include those employing young people and representing companies of various sizes and in distinctive industries.

A trained facilitator used an FGD guide as an instrument designed to facilitate discussions which was developed in accordance with our study's main purpose and objectives. The youth FGDs tackled major problems young people were facing in transition from school to adulthood, and particularly in the sphere of labour market conditions and employment possibilities. The topics raised and discussed in detail included the school-to-work transition time, length of job search, transition to adulthood and starting new family lives, labour market perspectives, quality of offered jobs, demand for specific skills and possibilities to acquire those skills, poverty affecting youth vulnerability, and reasons for young people to stay in NEET status for a prolonged period of time. Employer FGDs revolved around the following main topics: current state of the local labour market, possibilities for employment of young people, poverty and employment, short-term youth employment plans and long-term youth employment plans. The findings from these FGDs are discussed in the main body of the file.

Institutions, organisations and local partners involved in the consultations

- Social Inclusion and Poverty Reduction Unit (SIPRU) team
- Ministry of Labour
- Ministry of Education
- Ministry of Youth
- National Employment Service (NES)
- Statistical Office of Serbia
- Belgrade Open School
- International Labour Organisation
- UNICEF Serbia
- Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ, a German development agency)
- Friedrich Ebert Stiftung
- SeConS Development Initiative Group
- Centar za istraživanje javnih politika (Centre for Policy Research)
- NIRAS IP Consult
- EDA (Swiss Cooperation Office in Serbia)
- EU Delegation
- Eptisa/EU Support to Active Youth Inclusion
- Business Innovation Centre Kragujevac
- Start-up Centre Pirot
- Youth Office Novi Pazar
- European Movement in Serbia Leskovac
- Centar za omladinski rad Novi Sad (Centre for Youth Work Novi Sad)

ABBREVIATIONS AND ACRONYMS

ALMP	Active labour market policy
AROPE	At risk of poverty or social exclusion
BFPE	Belgrade Fund for Political Excellence
BOS	Belgrade Open School
CFCU	(Ministry of Finance's) Department for Contracting and Financing of EU Funded Programmes
CHF	Swiss franc (currency)
CSOs	Civil society organisations
E2E	Employment to Education programme
EBRD	European Bank for Reconstruction and Development
ETF	European Training Foundation
EU	European Union
EUR	Euro (currency)
FGD	Focus group discussion
FREN	Foundation for the Advancement of Economics
GDP	Gross domestic product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (a German development agency)
ILO	International Labour Organisation
IPA	Instrument for Pre-Accession Assistance
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
KOMS	National Youth Council of Serbia
LFS	Labour force survey
MoESTD	Ministry of Education, Science and Technological Development
MoLEVSA	Ministry of Labour, Employment, Veteran and Social Affairs
MoYS	Ministry of Youth and Sports
NEAPs	National employment action plans
NEET	(Young people) Not in education, employment or training
NES	National Employment Service (Nacionalna služba za zapošljavanje)
NGO	Non-governmental organisation
NUTS	Nomenclature of territorial units for statistics

OECD	Organisation for Economic Cooperation and Development
RSD	Serbian dinar (currency)
SILC	Survey on Income and Living Conditions
SIPRU	Social Inclusion and Poverty Reduction Unit
SORS	Statistical Office of the Republic of Serbia
STEP	Skills Toward Employment and Productivity
SWTS	School-to-Work Transition Survey
VET	Vocational education and training
VLWI	Very Low Work Intensity
WB&T	Western Balkans and Turkey
YEI	Youth Employment Initiative
YEP	Youth Employment Promotion
YESPC	Youth Employment through Social Partnerships and Cooperation

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