

SERBIA

EDUCATION, TRAINING AND EMPLOYMENT DEVELOPMENTS 2020

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KEY POLICY DEVELOPMENTS IN EDUCATION, TRAINING AND EMPLOYMENT (SEPTEMBER 2019–SEPTEMBER 2020)

Prior to the COVID-19 crisis, the pace of gross domestic product (GDP) growth picked up in Serbia as domestic demand strengthened. External imbalances widened but their financing remained healthy due to high inflows of foreign direct investment. Price pressures remained subdued and inflation expectations were contained. By reducing the budgetary deficit and maintaining a prudent fiscal stance, Serbia significantly improved debt sustainability. Labour market performance improved, with the lowest unemployment rates in the last decade; this was also due to large-scale emigration. The COVID-19 crisis, however, is projected to adversely affect the economic outlook in 2020, in particular as regards GDP growth, public finances and employment.

Digitalisation continues to top the list of government priorities. The government's main objective in this area is to improve the quality of public services by ensuring interoperability, efficient coordination, project management and legal certainty over e-government and the use of open data. An upgraded e-government national portal is set to be rolled out in 2020, serving as a one-stop shop for e-government services and as a central point of access for business and citizens alike.

Tackling disparities in human capital development is being addressed but in an uneven manner throughout the country. Measures are not always designed and tailored to well-identified needs. The issue of adequate resources to implement the measures remains problematic.

Young people in Serbia continue to experience great difficulties in the labour market. It takes two years, on average, for a young person in Serbia to find their first stable employment after finishing education (European Union (EU) average: 6.5 months). Such a prolonged transition from school to work has adverse effects on other transitions to adulthood. The recent economic recession resulted in reduced demand for young workers, which further undermined their chances of successfully moving from school to work. The situation might worsen, given the prolonged effects of the COVID-19 crisis in Serbia and around the world.

Some progress was made in increasing the participation of disadvantaged students in all levels of education. This was achieved by, among other targeted measures, an increase in scholarships for exceptional and low-achieving students, affirmative action and an increase in the number of pedagogical assistants. However, the implementation of measures for reducing dropout rates and segregation needs to be strengthened, especially at local level. The rulebook for teaching and adult education assistants was adopted, a step forward in regulating the conditions for their engagement.

A national qualifications framework has been established based on the principle of embedded social partnership. However, the development or updating of qualifications remains strongly dependent on external support. More efforts are needed to develop

trusted systems for validating non-formal and informal learning, the latter being essential to secure more dynamic skills acquisition pathways. Serbia needs to upscale such a practice at system level.

The interinstitutional discussions for the drafting of the new Education Strategy 2030 started in 2019. The work is ongoing.

Serbia is moderately prepared in the area of social policy and employment. The country made limited progress in further aligning its legislation in this area with the EU acquis. Further to recommendations made by the European Commission, budget allocations for active labour market policies increased slightly in 2019 but decreased again in 2020. They are far too low to cover the number of jobseekers, and the financial and institutional resources available for employment and social policies are insufficient to target young people, women and long-term unemployed people more systematically and improve the adequacy of social benefits for people below the poverty threshold.

1. KEY DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

With a population of just under seven million, Serbia is the most populated country in the Western Balkans. The population of Serbia is ageing, and the demographic transition will continue over the next few decades, during which the balance between the younger and older cohorts will continue to skew towards the latter.

The economy grew for the fourth consecutive year in 2018, and 2019 also brought a positive economic situation, with growth matched by increasing employment. Early estimates foresee a drop of between 4 and 6% in gross domestic product (GDP) in 2020 due to COVID-19. Thousands of citizens are at risk of losing their jobs, and temporary government support measures (such as unemployment benefits, deferrals and/or waivers of tax and social security contributions) have an important fiscal impact.

Services are consolidated as the largest contributor to national GDP, while the information and communications technology (ICT) sector is reaping the benefits of the global demand for advanced technology. At the same time, manufacturing and agriculture remain important as broad sectors for the national economy.

Digitalisation and innovative activities are the country's top strategic priorities (Government of the Republic of Serbia). Since 2010, the ICT sector has been flourishing; it has contributed incrementally to GDP growth and has more than doubled exports. While outsourcing from abroad represents an important portion of current income, local capacity for new ICT products is strong too. Serbia's strategy aims to shift to a higher proportion of original ICT development, with a view to reducing the country's dependence on fluctuations in external demand, and to even stronger value generation by consolidating the top end of the ICT value chain (ETF, 2020a). The ICT sector is a national driver of change. The plans include digitalisation in public administration, increasing e-delivery of public services and ensuring that ICT permeates all sectors of the economy.

The main tool of industrial policy remains the strategy and policy for industrial development, scheduled to run from 2021 to 2030. The new strategy puts an emphasis on replacing the current model of competitiveness, based on cost advantage, i.e. a cheap low-skilled workforce, by a model based on skill advantage, i.e. knowledge-based industries. The action plan for the strategy's implementation should be developed using, among other things, the findings of the smart specialisation exercise. A smart specialisation strategy was also adopted in February 2020.

In sectoral policies, the current support for investment continues to prioritise manufacturing. Until recently, the policymaking approach was not sector-specific, resulting in a lack of specific sector policies and programmes (except in tourism). This has changed recently, as four sectors (food processing, wood and furniture, rubber and plastic, and machinery and equipment) have been identified as sectors with the highest growth potential among industries.

In terms of enterprise policy, the strategy to support the development of small and medium-sized enterprises (SMEs), entrepreneurship and competitiveness, scheduled to run from 2015 to 2020, is the key policy document. As a response to the COVID-19 outbreak, the government adopted a set of measures – deferral of tax obligations, payment of salaries to employees (primarily aimed at assisting SMEs), access to additional loans – which all aim to alleviate the negative consequences of the crisis for businesses. By June 2020, the number of companies in the process of privatising had fallen to 72, down from 87 at the same time the year before. This does not meet the target set by the Serbian authorities (50 companies by the end of 2019) due to a lack of interest on the part of investors in most of the companies in the portfolio (European Commission, 2020a).

Serbia is well prepared in the area of science and research. Some progress was made with the adoption of the first smart specialisation strategy and the new law on science and research. National funding for research increased, in particular through the newly established Science Fund, but remains low as a percentage of GDP. Last year's recommendation has therefore not been sufficiently addressed. In the coming year, Serbia should address the following issues in particular: start to implement the smart specialisation strategy; continue to increase national funding for research; and stimulate more intense cooperation between industry and academia, in line with the national research strategy.

Since the opening of Serbia's accession negotiations in January 2014, 18 out of 35 chapters have been opened, two of which have been provisionally closed. The European Commission's assessment of Serbia, including the setting out of reform priorities with a view to joining the European Union (EU), was presented on 6 October 2020 (European Commission, 2020b).

2. EDUCATION AND TRAINING

2.1 Trends and challenges

While the student population has continued to decrease due to negative demographic trends and emigration, participation in compulsory education is now virtually universal. In 2019, the gross enrolment rate reached 100% in primary education and 94% in secondary education (World Bank, 2020). Serbia has also made progress in expanding access to pre-primary and higher education. The rate of early school leavers increased slightly to 6.8% in 2018 from 6.2% in the previous year.

The attainment of tertiary level qualifications for people aged 30 to 34 is slowly increasing, reaching 33.5% in 2019, below the EU target of at least 40%. Participation in lifelong learning dropped slightly to 4.1%, which is far below the national and EU targets (7% and 15%, respectively).

Serbia spends the least on secondary education. It allocates considerably fewer resources to secondary education on a per student basis and as a percentage of GDP than EU and Organisation for Economic Co-operation and Development (OECD) countries, despite having similarly high enrolment rates (Maghnouj et al, 2020). Spending on secondary education is especially low considering that Serbia has very large shares of students enrolled in vocational programmes, which are often more expensive on a per student basis. The mostly theoretical nature of Serbia's vocational education and training (VET) programmes can help explain the low per student spending, whereas these programmes tend to be more costly across OECD countries because of the need to adapt infrastructure and materials for practical learning.

A snapshot of the education system in Serbia shows that it is organised at (pre-)primary, secondary and tertiary levels. Serbia uses International Standard Classification of Education (ISCED) 2011 for education and other related statistics. The non-compulsory status of (upper) secondary education seems to directly affect the compatibility of youth competences with labour market needs, leading to a higher incidence of unemployment among young people and fewer chances to develop skills and competences within a lifelong learning context. Young people in Serbia spend an average of about 12 years in formal education; the average duration for their European counterparts is 17 years. In 2018, the share of young people (15–24) who completed at least upper secondary education was 70% in Serbia, while in the EU the average was 85%.

General education programmes and four-year VET programmes lead to an award or certificate that allows students to continue at tertiary or university level. Data for the VET stream shows that most students study economics, law and administration (13.3%), electrical engineering (10.9%), health and social welfare (9.6%), machinery and metal processing (8.7%) and trade, catering and tourism (8.1%). Of the major study programmes, the most competitive enrolment process is in area of health and medical studies, followed by economics, law and administrative studies. Trade, catering and tourism seem to be less attractive. Most probably, wages and working conditions (e.g. seasonal employment, informality) within these sectors may lead to a negative perception and lower preference for these educational options. However, over the longer term, lower enrolments in trade and hotel/restaurant/catering fields of study will fuel skills shortages in economic sectors with growing potential in both Serbia and the wider region. The employment rate of VET graduates (aged 20–34) remains low at 53.6%, significantly below the EU average of 76.8% (ETF, 2019).

Provision of and enrolment in post-secondary (non-tertiary) education is extremely limited in Serbia, although transition studies are available. The experiences of other European countries reveal that post-secondary VET graduates enjoy a smoother pathway to employment, including a better match between their skills and their jobs. Statistical sources show that about 1 300 students participate in post-secondary studies, mostly related to metal processing, electrical engineering, trade, catering and tourism, and transport (ETF, 2019).

Employers' perceptions and available research reveal that VET studies are not very relevant to labour market demand in Serbia, where practical skills are the main requirement (ETF, 2019). The overall enrolment policy will need to adapt in line with future skills requirements. A number of policy initiatives aim to make VET (and the overall skills development process) more relevant to the labour market and societal needs in Serbia. Such initiatives include the promotion of dual education, the

development of a national qualifications framework and the sustainable establishment of sectoral skills councils.

Faced with an increasing demand for higher skills levels, the VET system is lagging behind post-secondary provision as well as short-term tertiary courses. As a result, the competition between secondary VET and higher education is strong on the education offering and labour demand sides. This competition is partly artificial, ignited by the limited VET offering. Post-secondary VET could cater for students' aspirations to develop as individuals and employers' demands for stronger skills levels. More generally, it is critical that VET is re-profiled as a high-quality option and the potential paths towards personal development, careers, complex jobs, further specialisation or starting an enterprise are highlighted.

Tertiary education suffers from the fact that there is a loose connection to labour demand, research and innovation and other key sectors that would attract university graduates. The main drawbacks seem to be traditional teaching methods, obsolete curricula, limited opportunities to gain practical skills and insufficient integration of university research and innovation (there are initiatives to build and consolidate such hubs). Education, especially higher education, remains a high-risk sector for corruption.

Measures in the area of continuing training may counteract some of these initial education shortcomings. Although participation in lifelong learning has seen a slight increase, the share of people aged 25 to 64 in education or training remains stubbornly around 5%. There is indeed a great need for skills development for the ageing active population. Serbia has to move towards expanded and qualitatively sound continuing training, and ensure that lifelong learning becomes a key element of the education system, in particular in the area of VET. Continuing training should become the norm, for people in employment as well as unemployed people, and to the extent possible to attract inactive people to the labour market.

To improve the content of initial VET, there needs to be a well-designed methodology to forecast future job changes, sector by sector or, where possible, activity by activity. It needs to be possible to estimate the changes brought about by innovation, the impact of technology on job destruction and the scope for continuity in existing job profiles. Serbia has established some of the basic components of system evaluation. However, the lack of a national assessment of student learning and a fully functioning education management information system leaves Serbia without an adequate evidence base to guide and monitor policy reforms, making it difficult to understand the main issues stalling educational improvement (Maghnouj et al, 2020). It is recommended that Serbia focuses its new post-2020 Education Strategy on key national priorities that can improve teaching and learning.

While Serbia has made improvements in access to education, international assessments show that learning outcomes have remained generally stable in recent years, with slight improvements among the highest-achieving students. Moreover, a large share of students in Serbia continue to leave school without mastering basic competences (Maghnouj et al, 2020). These signals widen educational inequities.

Educational institutions were closed in mid-March due to the COVID-19 pandemic. Distance learning for pre-university students, including VET, was organised via national and local television broadcasters. Schools were encouraged to maintain the learning process, primarily by means of digital tools. Rulebooks on assessment were adapted to enable more flexible assessment of students' achievements. Further efforts are needed to compensate for the learning gaps caused by digital exclusion in this period, in particular among disadvantaged students (ETF, 2020b).

As a response to the COVID-19 crisis, there is a new Bylaw on Special Educational Programme. This document defines how teaching and learning are to be implemented in the event of a state of emergency or unpredictable circumstances – currently the ongoing COVID-19 crisis. Some of the main recommendations in the document relate to: an acceptable deviation from the content of the formal curriculum (every teacher can adapt up to 20% of the curriculum); shorter school hours (direct teaching with students lasts 30 minutes instead of the usual 45); and evaluations based on learning outcomes. Additionally, some recommendations and frameworks have been developed for teachers in relation to COVID-19 prevention. One of them is also related to vocational education, the 'Framework for assessment of capacity of primary and secondary schools for implementation of distance education in cases when direct work with students is suspended'¹.

The European Investment Bank and its Serbian counterparts are currently appraising a EUR 100 million (USD 109 million) school digitalisation project in Serbia. The potential investment will encompass the introduction of the internet, new IT equipment, e-books, e-classrooms and e-diaries into schools. It will also include the training of teachers on how to conduct digital education. Among other benefits, this project will enable primary and secondary schools across Serbia to conduct online teaching without interruption, even in situations when it is essential to stay at home due to virus outbreaks or natural or other disasters. The European Investment Bank has also allocated EUR 200 million for the construction of science and technology parks in Belgrade, Nis and Novi Sad, which promote a range of activities including advanced technologies and digitalisation.

Serbia has benefited from its cooperation with the EU by creating opportunities for improving education and training with the help of various EU programmes. From 2014 to 2018, Serbia received about EUR 140 million in assistance for the development of education at all levels – from preschool to higher education. Serbia became a partner country in the Erasmus+ programme in 2019.

2.2 Education and training policy and institutional setting

The Ministry of Education, Science and Technological Development is responsible for designing education policies for all levels, from pre-primary to higher education. Despite its role in steering Serbia's education system, the ministry itself has limited capacity to conduct an evaluation of the system, largely because some of the institutions and tools required to conduct this process remain underdeveloped.

While Serbia's specialised educational institutions have significant technical expertise, most do not have enough staff and are underfunded. The Institute for Improvement of Education is responsible for curriculum development, the quality assurance of textbooks and the coordination of continuous professional development (CPD) for teachers, school principals and professional associates (support staff). The institute played a central role in Serbia's curriculum reform: the rollout of new curricula for grades 1, 5 and 9 began in 2018. This body also is responsible for VET school examinations and adult education; however, the majority of staff working on VET issues within the Institute for Improvement of Education will soon move to the newly established National Education Qualification Agency (Maghnouj et al, 2020).

The Institute for Education Quality and Evaluation is the leading agency on policies related to assessment and system monitoring. The autonomous province of Vojvodina has specific

¹ See <http://www.mpn.gov.rs/wp-content/uploads/2020/08/ZVKOV-Okvir-obrazovanje-na-daljinu.pdf>

responsibilities related to education in this territory. The National Education Council has a strictly advisory role that spans all education levels, with the exception of higher education. The 35 members of the council represent a wide range of stakeholders, including university professors and teacher associations. Within its advisory role, the council helps to monitor and coordinate the development of education and training in Serbia. It also relays the interests and needs of all social partners (Maghnouj et al, 2020).

In February 2020, the European Association for Quality Assurance in Higher Education suspended the membership of the Serbian National Accreditation Body. This was due to insufficient compliance with the principles of quality assurance set out in the European Standards and Guidelines for Quality Assurance in the European Higher Education Area. The Serbian National Accreditation Body may reapply to renew its membership in 2022.

Vocational colleges are being integrated into vocational academies, with the aim of achieving a higher level of operational efficiency and transparency.

Serbia is moderately prepared in the area of public administration reform, which is also reflected in the institutional set-up of the education and training system. A lack of transparency and respect for the merit-based recruitment procedure for senior civil service positions is an issue of increasingly serious concern (European Commission, 2020c). It is evident in the education sector.

In the area of education and training, the Education Strategy 2020 and its action plan are being implemented, albeit with delays, particularly in higher education. The strategy attaches great importance to teacher education or, more broadly, to the professional development of teachers. In the reporting period, there were no significant breakthroughs in terms of improving initial teacher education. Even after many years, the search for a formula that would systematically ensure the development of modern teacher competences, without impairing the autonomy of the university, remains without an adequate answer. Individual initiatives (institutions, departments, university teachers) and inclusion in international development projects are still the main ways in which teacher education is made more innovative.

Nor were changes made during the reporting period to the way in which trainee teachers are introduced to the working world, their licensing or career advancement in. The mentoring system for trainee teachers has been adequately regulated, but the priorities of the education policy in the reporting period did not include support for its effective implementation. This can be partly explained by the fact that, for several years now, teachers have been predominantly hired by being allocated from other schools. Teacher advancement is also regulated by an adequate legal framework, but the system has not yet been fully implemented. Teachers should be consistently supported in implementing the ongoing outcome-based curricular changes, particularly regarding the development of students' key competences.

Serbia has committed to the Riga medium-term deliverables (Cedefop, 2020). The ETF report on [Serbia](#) (ETF, 2020c) confirms that Serbia has made progress in work-based learning. Serbia adopted the Law on Dual Education in 2017 and three new bylaws in 2018 and 2019. The Chamber of Commerce and Industry of Serbia (CCIS) has adopted three other legal acts to facilitate the implementation of the dual education law. Two more legal acts are being prepared. The CCIS will play a key role in the dual and entrepreneurship education track, which started in the 2019–20 academic year.

The Bylaw on Implementation of Practical Teaching and Professional Practice, the implementation and organisation of practical teaching and professional practice are more closely defined. Practical

teaching and professional practice are forms of teaching that take place in vocational schools only or combined in vocational schools and the workplace. This bylaw also defines the structure and importance of the agreement between the school and the employer where practical teaching and professional practice takes place in the workplace. The role of the employer, the adaptation of practical teaching and professional practice for students with disabilities and the characteristics of the workplace are also defined. This policy change was also followed by a change in the Law on Secondary School.

The Bylaw on Closer Conditions, Methods, Activities and Composition of the Career Guidance and Counselling Team in the Secondary School, which implements educational profiles in dual education, was adopted. This bylaw signals a new approach for career guidance and counselling teams. The main difference between career guidance and counselling teams that work in general secondary schools and those that work in schools operating a dual education system is their composition. Specifically, teams in secondary schools operating a dual education system include the representatives of professional associations, local self-government units and employers (European Commission, 2019). This [cross-sectoral document](#) also serves as a guideline for planning and coordinating career guidance activities in primary and secondary schools as well as in higher education institutions. The document defines four areas of standards: standards for career management skills, standards for career guidance practitioners' competences, organisational standards and programme standards.

The government has created a commission to develop and implement dual education. As part of the dual education model, a number of key issues have been identified for the creation, selection and implementation of profiles: responsiveness to the economy and the labour market; the needs of the local government where the school is located; and the interest that schools have in implementing a certain profile and their capacity to do so. The involvement of companies in dual education is strong; over 600 companies have hosted students to 'learn through work'. Some 84 secondary vocational schools offered dual education in 2018–2019.

The Bylaw on the Quality Evaluation of Institutions defines procedures for external and internal evaluation and their connection with school development plans and evaluation and monitoring indicators. The evaluation procedures described in the bylaw refer to preschool institutions, primary schools and general and vocational secondary schools.

3. LABOUR MARKET AND EMPLOYMENT

3.1 Trends and challenges

Labour market indicators continued to improve in 2019. The employment rate for 15- to 64-year olds increased from 58.8% in 2018 to 60.7% in 2019. Unemployment went down from 13.3% in 2018 to 10.9% in 2019, while the activity rate increased from 67.8% in 2018 to 68.1% in 2019. Youth unemployment decreased from 29.7% in 2018 to 27.5% in 2019.

The small drop in the youth unemployment rate can partly be explained by migration. During the period 2012–2016 around 245 000 people, presumably mostly young people, left Serbia (OECD, 2018). This means that on an annual basis, almost 49 000 people emigrated from Serbia. Recent research conducted by the Statistical Office of Serbia shows that a large number of young people

express a desire to move abroad. The main reason for this is their inability to find a job that matches their qualifications, followed by low pay and a generally low living standard in the country².

Young people in Serbia continue to experience great difficulties in the labour market. The school-to-work transition is fraught with a lot of insecurity. It takes an average of two years 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 has adverse effects on other transitions to adulthood. For example, only 24% of Serbian young people (18–29) do not live with their parents (Popadić et al, 2019).

A particularly vulnerable group in the labour market are young people not in employment, education or training (NEET). They accounted for 15.3% of the total youth population in 2019. Moreover, according to available indicators, the labour market position of young people, especially women, in rural areas is considerably less favourable than young people, especially men, living in urban areas. (ETF and FREN, forthcoming).

Young people in Serbia are not only trapped in a troubled labour market situation but are also exposed to other risks, such as poverty and material deprivation. A composite indicator that captures all three dimensions of the vulnerability of young people aged 16 to 29 years (low work intensity, relative poverty and material deprivation) – the at risk of poverty or social exclusion (AROPE) indicator – shows that 43% of Serbian young people belong to at least one of these three categories. This above-average AROPE rate for young people in Serbia (compared to 38.7% for the total population) is among the highest compared to EU28 countries (Greece is the only country with a higher AROPE rate for young people: 45.9%) (Government of the Republic of Serbia, 2016).

Serbia is ranked as one of the leading countries in both the world and Europe when it comes to its digital workforce: it ranks among the top 10 countries in the world with a significant number of educated young people who work in the platform economy (19%). The jobs are mostly in technology, graphics, internet design and media. With COVID-19, platform work has ceased to be just a young person's game. Initial reports seem to indicate that the gig economy has suffered less disruption than conventional businesses; after the pandemic, freelancing may become an attractive option for workers who lose their jobs in traditional industries, as platforms make them independent of any one employer. In Serbia, a relatively large number of company employees were suddenly sent home to work online using their firms' platforms or, alternatively, third-party communication and teamwork apps. This was their first taste of the kind of work done by the Serbian platform community, estimated at 2.6% of the country's total workforce.

Gig economy workers are young and highly educated people with university degrees, living in urban areas. They most often provide services in the field of software and technology development (30%), writing and translation (29%) or in the creative and multimedia industry (22%). A significantly lower percentage of digital workers in Serbia are engaged in sales and marketing (3%), clerical and data entry (6%) and professional services (10%). The main motivation for joining the digital workforce includes access to better-paid jobs, access to an extra source of money and an inability to find a job in the offline world. Some digital workers considered to be employed in the offline world, some are registered as unemployed, some belong to the inactive population. Despite good earnings, the income earned by women in digital work reflects the gender pay gap in offline work. Moreover, digital

² See <https://www.stat.gov.rs/en-US/oblasti/stanovnistvo/migracije-stanovnistva>

workers do not enjoy security of employment and predictability of work; they cannot conclude any type of short-term contract in accordance with the local legislation even if they wanted to because there is no legal basis for doing so in Serbia. Digital work as a non-standard form of employment is not recognised by Serbian legislation, and thus in itself cannot be the basis for accessing the social protection system. In order to be able to access social benefits, digital workers in Serbia must resort to other solutions, such as retaining employment in the offline sphere or registering as a business entity (Andjelkovic et al, 2019).

By recognising the importance of non-formal education and training, digital work provides an opportunity for greater horizontal and vertical mobility within the workforce. However, Serbia's non-formal education recognition system is at an early stage of development and does not respond to the pressing needs of this group of young workers.

Serbia has two strong motives for focusing attention on defining appropriate solutions that would reconcile the need to protect the individual rights of digital workers and enable them to contribute proportionately to their own development and well-being in society. The first motive is to preserve the professional workforce that is in high global demand. Digital workers have skills that are in demand and valued across the world, and they can decide to leave Serbia if their needs are not addressed. The second motive is Serbia's long-term goal to build a competitive knowledge-based economy. Seeking solutions that will create a conducive environment for digital workers' prosperity is a milestone on this road. The well-being of all workers and the quality of employment in the digital age must take into account the growing importance of autonomy and atomisation in relation to the social character of work, but not at the expense of solidarity, social justice, and equality (Andjelkovic et al, 2019).

3.2 Employment policy and institutional setting

The 2020 National Employment Action Plan was adopted in December 2019. The first report on the implementation of the employment and social reform programme (for 2016–2017) was eventually published in April 2019, and the second report (for 2018) was published in February 2020.

Budget allocations for active labour market policies increased slightly in 2019 compared to 2018 but decreased again in 2020. They are far too low to cover the number of jobseekers. Only 28% of people who are registered as unemployed benefit from a measure, and most measures are one-off actions such as job search training sessions and job fairs. Measures aimed at promoting the employment of Roma have yet to deliver results. Long-term unemployed people, women, young people and low-skilled workers still face severe challenges integrating into the labour market. There is no consistent implementation of the labour and social welfare legislation or group targeting throughout the country.

Chapter 19 of the Serbia 2020 report (European Commission, 2020a) underlines that Serbia is moderately prepared in the area of social policy and employment. Serbia made limited progress in further aligning its legislation in this area with the EU acquis. Serbia is advised to ensure that adequate financial and institutional resources for employment and social policies are made available to more systematically target young people, women and long-term unemployed people, and improve the adequacy of social benefits for people below the poverty threshold.

The Ministry of Labour, Employment, Veterans and Social Policy cooperates with a number of subordinate institutions, several agencies and institutions, all of which operate within the scope of the ministry: Labour Inspectorate; Directorate for Safety and Health at Work; Republican Pension and Disability Insurance Fund; National Employment Service; Social Insurance Institute; Republic Agency

for the Peaceful Resolution of Labour Disputes of Serbia; Solidarity Fund; Socio-Economic Council of the Republic of Serbia; and Institution of Social Protection.

There are good statistical foundations for analysing skills and occupation needs and trends, such as regular and internationally comparable labour force surveys. The Statistical Office of the Republic of Serbia also monitors economic and demographic trends. In addition, the National Employment Service plays an important role in identifying and anticipating skills needs. It does so through its annual research on labour market demand and short-term projections, vacancy monitoring and administrative data on jobseekers and their integration into active labour market programmes. The Ministry of Education, Science and Technological Development is currently consolidating its monitoring and evaluation systems with a view to enhancing evidence-based policymaking in education and skills and focusing on education system outcomes. For example, a graduate tracer system is in the making. Differentiated monitoring of VET programmes (featuring dual programmes) is also being planned. This would allow decision makers to identify successful and less relevant programmes.

In the context of the COVID-19 outbreak, aid instruments were introduced for preventing layoffs and negative labour market trends, by means of direct grants for employee salaries and postponement of tax and social contributions. Workers engaged on a contract basis (temporary or seasonal work contracts, service contracts, agency contracts, vocational training and advanced training contracts, supplementary work contracts) are not covered by these measures. The impact of the pandemic on unemployment needs to be closely monitored and adequate measures implemented. There were no developments as regards preparations for the European Social Fund, apart from a few awareness-raising events (European Commission, 2020a).

Serbia adopted a Law on Work through Temporary Employment Agencies in December 2019. A new law on the right to strike has yet to be adopted. The proportion of undeclared work stood at 18.2% at the end of 2019. Labour inspections focus on tackling undeclared work but have not yet had a significant impact. The Law on Inspection Oversight needs to be amended to comply with the relevant International Labour Organisation conventions ratified by Serbia, notably to ensure that labour inspectors are empowered to enter workplaces freely and without giving notice (European Commission, 2020a).

Serbia has made efforts to create some platforms for the bipartite and tripartite social dialogue, for example in relation to the establishment of the National Qualifications Agency and work-based learning models. However, little progress was observed in 2020.

The adoption of a national Law on Youth in 2011 represents a significant step forward in the realisation of young people's rights. Youth policy and the National Youth Strategy 2015–2025 is being implemented by the Ministry of Youth and Sport. There are several youth representation bodies: a youth parliament, youth councils and/or youth advisory boards, higher education student union(s) and school student union(s). In addition to the ministry, youth policy actors include the Provincial Secretariat for Sports and Youth, line ministries, local self-government units, local youth offices, National Youth Council of Serbia, institutions, youth associations, associations carrying out activities for young people, and other actors participating in the implementation of the Youth Policy.

The Youth Strategy Action Plan 2018–2020 is being implemented. The number of youth policy coordination mechanisms at local level has increased, but they should be strengthened further. A

number of local youth action plans have expired and should be adopted again. An increasing number of young and skilled people are emigrating.

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Recent ETF Country Intelligence Products:

- [Mapping of Covid-19 impact on education and training](#)
- [ETF Torino Process Assessment](#)
- NQF Inventory Country Page <https://openspace.etf.europa.eu/nqf-inventories>
- [Quality assurance fiche](#)

SERBIA: STATISTICAL ANNEX

Annex includes annual data from 2010, 2015, 2018 and 2019 or the last available year.

	Indicator	2010	2015	2018	2019	
1	Total Population (,000) ⁽¹⁾	7,291.4	7,095.4	6,982.6	6,945	
2	Relative size of youth population (age group 15-24 and age in the denominator 15-64, %) ^{(1) c}	20.1	18.5	18.3	18.2	
3	GDP growth rate (%)	0.7	1.8	4.4	4.2	
4	GDP by sector (%)	Agriculture added value	6.6	6.7	6.3	6.2
		Industry added value	25.3	25.7	25.5	25.6
		Services added value	51.7	50.9	51.0	51.2
5	Public expenditure on education (as % of GDP) ⁽¹⁾	4.3	3.8	M.D.	M.D.	
6	Public expenditure on education (as % of total public expenditure) ⁽¹⁾	10.1	8.9	M.D.	M.D.	
7	Adult literacy (%)	M.D.	M.D.	M.D.	M.D.	
8	Educational attainment of adult population (aged 25-64 or 15+) (%) ⁽²⁾	Low ⁽³⁾	21.2	16.5	16.2	16.2
		Medium ⁽⁴⁾	59.4	59.1	58.0	57.9
		High ⁽⁵⁾	19.3	24.4	25.9	26.0
9	Early leavers from education and training (aged 18-24) (%)	Total	8.3	7.5	6.8	6.6
		Male	9.2	7.7	6.8	6.5
		Female	7.2	7.2	6.8	6.7
10	Gross enrolment rates in upper secondary education (ISCED level 3) (%) ^(e)	85.0	91.4	89.6	M.D.	
11	Share of VET students in upper secondary education (ISCED level 3) (%)	76.1	75.1	74.0	M.D.	
12	Tertiary education attainment (aged 30-34) (%)	20.5	28.9	32.8	33.5	
13	Participation in training/lifelong	Total	4.0	4.8	4.1	4.3
		Male	3.9	4.5	3.7	3.8

	learning (age group 25-64) by sex (%)	Female	4.2	5.1	4.5	4.8
	Participation in training/lifelong learning (age group 25-64) by education (%)	Low ⁽³⁾	M.D.	0.4	0.2	0.3
		Medium ⁽⁴⁾	4.8	4.5	3.8	3.8
		High ⁽⁵⁾	7.2	9.5	7.7	8.6
	Participation in training/lifelong learning (age group 25-64) by working status (%)	Inactive	5.4	5.5	5.1	5.6
		Employed	3.2	4.4	3.7	3.9
		Unemployed	4.0	4.6	3.8	3.6
14	Low achievement in reading, mathematics and science – PISA (%)	Reading	33.1 ⁽⁶⁾	N.A.	37.7	N.A.
		Mathematics	38.9 ⁽⁶⁾	N.A.	39.7	N.A.
		Science	35.0 ⁽⁶⁾	N.A.	38.3	N.A.
15	Activity rate (aged 15+) (%) ⁽⁷⁾	Total	51.9	56.7	59.9	59.9
		Male	60.4	65.0	67.6	67.4
		Female	43.8	48.7	52.4	52.7
16	Inactivity rate (aged 15+) (%) ^C	Total	53.0	48.3	45.5	45.3
		Male	44.3	39.6	37.1	37.2
		Female	61.0	56.4	53.3	52.9
17	Employment rate (aged 15+) (%) ⁽⁷⁾	Total	41.9	46.6	52.2	53.6
		Male	49.2	54.0	59.5	60.7
		Female	34.9	39.5	45.2	46.8
18	Employment rate by educational attainment (% aged 15+%) ⁽⁷⁾	Low ⁽³⁾	27.3	29.6	33.4	34.8
		Medium ⁽⁴⁾	46.1	49.3	54.6	55.9
		High ⁽⁵⁾	60.8	63.2	69.3	70.5
19	Employment by sector (%) ^C	Agriculture	22.3	19.4	15.9	15.6
		Industry	25.6	24.5	26.9	27.4
		Services	51.9	56.1	57.2	56.9
20	Incidence of self-employment (%) ^C		32.4	30.2	28.2	27.7
21	Incidence of vulnerable employment (%) ^C		28.6	26.3	24.6	24.3
22	Unemployment rate (aged 15+) (%) ⁽⁷⁾	Total	19.3	17.8	12.8	10.5
		Male	18.5	16.9	12.1	10.0
		Female	20.4	18.8	13.8	11.2

23	Unemployment rate by educational attainment (aged 15+) (%) ⁽⁷⁾	Low ⁽³⁾	16.3	15.6	12.6	11.2
		Medium ⁽⁴⁾	22.5	19.4	13.8	11.2
		High ⁽⁵⁾	13.1	15.3	10.9	8.4
24	Long-term unemployment rate (aged 15+) (%) ⁽⁷⁾		M.D.	10.6	6.5	5.3
25	Youth unemployment rate (aged 15-24) (%)	Total	46.3	43.2	29.7	27.5
		Male	45.4	40.1	28.3	26.1
		Female	47.6	48.4	32.0	29.9
26	Proportion of people aged 15–24 not in employment, education or training (NEETs) (%)	Total	20.4	20.1	16.5	15.3
		Male	21.7	20.3	16.0	14.9
		Female	19.0	19.8	17.0	15.8

Last update: End of August 2020

Sources:

Indicators 8, 9, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 - Eurostat

Indicators 14 – OECD,

Indicators 5, 6, 10, 11 – UNESCO, Institute for Statistics

Indicators 1, 2, 3, 4– The World Bank, World Development Indicators database

Notes:

⁽¹⁾ Midyear estimations

⁽²⁾ Active population aged 15-74

⁽³⁾ Low - primary and basic general education

⁽⁴⁾ Medium - general secondary and vocational-technical education

⁽⁵⁾ High - secondary special and higher education

⁽⁶⁾ Year 2012

⁽⁷⁾ Age group 15-74

Legend:

e = estimated

c = calculated

N.A. = Not Applicable

M.D. = Missing Data

ANNEX: INDICATORS' DEFINITIONS

	Description	Definition
1	Total population (000)	The total population is estimated as the number of persons having their usual residence in a country on 1 January of the respective year. When information on the usually resident population is not available, countries may report legal or registered residents.
2	Relative size of youth population (age group 15-24) (%)	This is the ratio of the youth population (aged 15-24) to the working-age population, usually aged 15-64 (74)/15+.
3	GDP growth rate (%)	Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.
4	GDP by sector (%)	The share of value added from Agriculture, Industry and Services. Agriculture corresponds to ISIC divisions 1-5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3 or 4.
5	Public expenditure on education (as % of GDP)	Public expenditure on education expressed as a percentage of GDP. Generally, the public sector funds education either by directly bearing the current and capital expenses of educational institutions, or by supporting students and their families with scholarships and public loans as well as by transferring public subsidies for educational activities to private firms or non-profit organisations (transfer to private households and enterprises). Both types of transactions together are reported as total public expenditure on education.
6	Public expenditure on education (as % of total public expenditure)	Public expenditure on education expressed as a percentage of total public expenditure. Generally, the public sector funds education either by directly bearing the current and capital expenses of educational institutions, or by supporting students and their families with scholarships and public loans as well as by transferring public subsidies for educational activities to private firms or non-profit organisations (transfer to private households and enterprises). Both types of transactions together are reported as total public expenditure on education.

	Description	Definition
7	Adult literacy (%)	Adult literacy is the percentage of population aged 15 years and over who can both read and write with understanding a short simple statement on his/her everyday life. Generally, 'literacy' also encompasses 'numeracy', the ability to make simple arithmetic calculations.
8	Educational attainment of adult population (25-64 or aged 15+) (%)	Educational attainment refers to the highest educational level achieved by individuals expressed as a percentage of all persons in that age group. This is usually measured with respect to the highest educational programme successfully completed which is typically certified by a recognized qualification. Recognized intermediate qualifications are classified at a lower level than the programme itself.
9	Early leavers from education and training (age group 18-24) (%)	Early leaving from education and training is defined as the percentage of the population aged 18–24 with at most lower secondary education who were not in further education or training during the four weeks preceding the survey. Lower secondary education refers to ISCED 1997 levels 0-2 and 3C short (i.e. programmes with duration less than 2 years) for data up to 2013 and to ISCED 2011 levels 0-2 for data from 2014 onwards.
10	Gross enrolment rates in upper secondary education (ISCED level 3) (%)	Number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education.
11	Share of VET students in upper secondary education (ISCED level 3) (%)	Total number of students enrolled in vocational programmes at a given level of education (in this case upper secondary education), expressed as a percentage of the total number of students enrolled in all programmes (vocational and general) at that level.
12	Tertiary education attainment (aged 30-34) (%)	Tertiary attainment is calculated as the percentage of the population aged 30–34 who have successfully completed tertiary studies (e.g. university, higher technical institution). Educational attainment refers to ISCED 1997 level 5–6 up to 2013 and ISCED 2011 level 5–8 from 2014 onwards.
13	Participation in training/lifelong learning by sex, education and working status (age group 25-64) (%)	Lifelong learning refers to persons aged 25–64 who stated that they received education or training in the four weeks preceding the survey (numerator). The denominator consists of the total population of the same age group, excluding those who did not answer the question on participation in education and training. The information collected relates to all education or training, whether or not it is relevant to the respondent's current or possible future job. If a different reference period is used, this should be indicated.
14	Low achievement in reading, maths and science – PISA (%)	Low achievers are the 15-year-olds who are failing level 2 on the PISA scale for reading, mathematics and science.
15	Activity rate (aged 15+) (%)	The activity rate is calculated by dividing the active population by the population of the same age group. The active population (also called 'labour force') is defined as the sum of employed and unemployed persons. The inactive population consists of

	Description	Definition
		all persons who are classified as neither employed nor unemployed.
16	Inactivity rate (aged 15+) (%)	The inactivity/out of the labour force rate is calculated by dividing the inactive population by the population of the same age group. The inactive population consists of all persons who are classified as neither employed nor unemployed.
17	Employment rate (aged 15+) (%)	The employment rate is calculated by dividing the number of employed persons by the population of the same age group. Employed persons are all persons who worked at least one hour for pay or profit during the reference period or were temporarily absent from such work. If a different age group is used, this should be indicated.
18	Employment rate by educational attainment (% aged 15+)	The employment rate is calculated by dividing the number of employed persons by the population of the same age group. Employed persons are all persons who worked at least one hour for pay or profit during the reference period or were temporarily absent from such work. If a different age group is used, this should be indicated. Educational levels refer to the highest educational level successfully completed. Three levels are considered: Low (ISCED level 0-2), Medium (ISCED level 3-4) and High (ISCED 1997 level 5-6, and ISCED 2011 level 5-8)
19	Employment by sector (%)	This indicator provides information on the relative importance of different economic activities with regard to employment. Data is presented by broad branches of economic activity (i.e. Agriculture/Industry/Services) which is based on the International Standard Industrial Classification of All Economic Activities (ISIC). In Europe, the NACE classification is consistent with ISIC.
20	Incidence of self-employment (%)	The incidence of self-employment is expressed by the self-employed (i.e. Employers + Own-account workers + Contributing family workers) as a proportion of the total employed.
21	Incidence of vulnerable employment (%)	The incidence of vulnerable employment is expressed by the Own-account workers and Contributing family workers as a proportion of the total employed.
22	Unemployment rate (aged 15+) (%)	The unemployment rate represents unemployed persons as a percentage of the labour force. The labour force is the total number of people who are employed or unemployed. Unemployed persons comprise those aged 15-64 or 15+ who were without work during the reference week; are currently available for work (were available for paid employment or self-employment before the end of the two weeks following the reference week); are actively seeking work, i.e. had taken specific steps in the four-week period ending with the reference week to seek paid employment or self-employment, or had found a job to start later (within a period of, at most, three months).

	Description	Definition
23	Unemployment rate by educational attainment (aged 15+) (%)	The unemployment rate represents unemployed persons as a percentage of the labour force. The labour force is the total number of people who are employed or unemployed. Unemployed persons comprise those aged 15–64 or 15+ who were without work during the reference week; are currently available for work (were available for paid employment or self-employment before the end of the two weeks following the reference week); are actively seeking work (had taken specific steps in the four-week period ending with the reference week to seek paid employment or self-employment, or had found a job to start later (within a period of, at most, three months)). Educational levels refer to the highest educational level successfully completed. Three levels are considered: Low (ISCED level 0-2), Medium (ISCED level 3-4) and High (ISCED 1997 level 5–6, and ISCED 2011 level 5–8)
24	Long-term unemployment rate (aged 15+) (%)	The long-term unemployment rate is the share of unemployed persons since 12 months or more in the total active population, expressed as a percentage. The duration of unemployment is defined as the duration of a search for a job or as the period of time since the last job was held (if this period is shorter than the duration of the search for a job).
25	Youth unemployment rate (aged 15-24) (%)	The youth unemployment ratio is calculated by dividing the number of unemployed persons aged 15–24 by the total population of the same age group.
26	Proportion of people aged 15–24 not in employment, education or training (NEETs) (%)	The indicator provides information on young people aged 15–24 who meet the following two conditions: first, they are not employed (i.e. unemployed or inactive according to the ILO definition); and second, they have not received any education or training in the four weeks preceding the survey. Data is expressed as a percentage of the total population of the same age group and gender, excluding the respondents who have not answered the question on participation in education and training.

LIST OF ACRONYMS

AROPE	At risk of poverty or social exclusion
CCIS	Chamber of Commerce and Industry of Serbia
CPD	Continuing professional development
ETF	European Training Foundation
EU	European Union
GDP	Gross domestic product
ICT	Information and communications technology
ISCED	International Standard Classification of Education
NEET	Young people not in employment, education or training
OECD	Organisation for Economic Co-operation and Development
SME	Small and medium-sized enterprise
VET	Vocational education and training

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