

SERBIA

**EDUCATION, TRAINING AND EMPLOYMENT
DEVELOPMENTS 2021**

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KEY POLICY DEVELOPMENTS IN EDUCATION, TRAINING AND EMPLOYMENT

The Serbian economy grew for the fourth consecutive year in 2019, which brought a positive economic situation with growth matched by increasing employment. Services have been consolidated as the largest contributor to national gross domestic product (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 of the national economy.

The COVID-19 crisis adversely affected Serbia's growth in GDP, which showed a -1.0% annual change (2020). Due to COVID-19, thousands of citizens lost or are at risk of losing their jobs. The government has undertaken temporary support measures, such as unemployment benefits, deferrals and/or waivers of tax and social security contributions, the payment of salaries to employees (primarily aimed at assisting small and medium-sized enterprises (SMEs) and providing access to additional loans – which were all aimed at alleviating the negative consequences of the crisis for businesses with an important fiscal impact.

As of 1 June 2020, the Government of the Republic of Serbia had adopted several sets of policy measures to mitigate the impact of Covid-19 on the economy and the world of work. Policy measures were organised around four pillars: stimulating the economy and employment based on international labour standards; supporting enterprises, jobs, and incomes; protecting workers in the workplace; and relying on social dialogue for solutions (ILO & EBRD, 2020).

In 2020 an upgraded e-government portal was rolled out as a one-stop-shop and a point of access for businesses and citizens. This encouraged the Serbian government to promote the information communications technology (ICT) sector and related training and employment policies. Small and medium-sized enterprises (SMEs) form the backbone of the Serbian economy and [account for two thirds of formal business sector employment](#). 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.

Compulsory education is now virtually universal, and Serbia has made progress expanding access to pre-primary and higher education. International assessments show that the learning outcomes of students in Serbia remained stable, with slight improvements among the highest-achieving students. Serbia spends a modest share of public resources on education compared with the European Union (EU) average. Public spending on education has reduced over the years and stood at around 3.3% of GDP in 2019, below the EU average of 4.7%. It is also below the UN benchmark of at least 4.6% GDP to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (SDG 4). This means that there are widening educational inequities, and many students continue to leave school without mastering basic skills for further education, work, and life. Differences in access and outcomes persist across socioeconomic groups and regions (OECD, 2020).

During the period 2020-2021, the Serbian government launched strategies and reform measures which were aimed at enhancing skills for education, employability, and competitiveness by raising the level of digitalisation, the automation of domestic industry and the implementation of scientific technical and innovative solutions. A skills agenda was drawn up based on three strategies: Strategy on Scientific and Technological Development 2021-2030; Employment Strategy 2021-2026; and Strategy for Development of Education in Serbia; and the Action Plan 2021-2030 was established. They all include structural and reform measures which are aimed at enhancing skills for education,

employability, and competitiveness by raising the level of digitalisation, the automatisisation of domestic industry and promoting scientific technical and innovative solutions.

Digitalisation and education reform remain the top two priorities for the Serbian government. The proposed reform for education provision foresees the upgrading of the digital infrastructure in education and training, the development of the new education management information system (EMIS) and the establishment of an analytical unit for regular analyses. The Employment Strategy 2021-2026 defines reform steps aimed at establishing an efficient labour market in line with the accelerated technological development as well as the prioritisation of youth employment.

As pointed out in the joint assessment report of the International Labour Organization (ILO) and the European Bank for Reconstruction and Development (EBRD) (ILO, 2020), with the gradual transition of government responses from immediate crisis management to the implementation of recovery measures, several concerns are emerging, such as increasing levels of youth unemployment and the implications of rising debt for issues of intergenerational justice, as well as threats to the wellbeing of young people and future generations. An inclusive response to and recovery from the crisis requires an integrated approach to public governance that anticipates the impact of response and recovery measures across different age cohorts, as well as the impact of twin transitions (green and digital). The European Commission Economic and Investment Plan for the Western Balkans plan identifies 10 investment flagships. It will help Serbia, like all the other Western Balkan countries, to address some of the challenges discussed in this report. It is aimed at spurring long-term recovery, accelerating the green and digital transition and fostering regional cooperation and convergence with the EU.

1. KEY DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

▪ Political developments and health situation

In Serbia's socioeconomic and political spheres, the negative impact of economic stagnation of the past decade was magnified by the devastating impact of the COVID-19 pandemic. The latter unleashed an unprecedented health, social and economic crisis. It resulted in increased costs related to health and other welfare necessities in the face of reduced labour incomes.

The economic growth stagnation resulted in a sharp decline in employment, and an accompanying increase in poverty. For lower-income earners, people residing in rural areas and the Roma population, the impact of the COVID-19 crisis on household incomes and broader welfare status is likely to be disproportionate, thereby widening existing inequalities. A considerable number of individuals lost their jobs (World Bank, 2020).

▪ Demographics

As per Republic of Serbia Statistical Office (SORS 2021), the estimated number of populations in 2020 was 6,899,126 (the estimations are based on the results of natural changes statistics and population internal migration). Observed by sex, 51.3% were women (3,538,820) and 48.7% were men (3,360,306). The depopulation trend continued, meaning that population growth rate, compared with the previous year, was negative and amounted to -6.7%.

Serbia's population is getting smaller, older and the country is rapidly losing its human capital. Serbia's most significant "export item" is labour and not – as is commonly presumed – steel, automobiles, or raspberries. Some 14% of people born in Serbia live abroad, which is four times the world average of around 3.5% (UN DESA, 2019). The European Training Foundation (ETF), together with the Vienna Institute for International and Economic Studies (wiiw) undertook a study in 2020 concluding that Serbia's biggest export 'product' is labour, with some 14% of Serbian natives living abroad at any given time. Private remittances from abroad increase disposable income in the country by more than 8%. Up to 2020, while the total stock of Serbian-born emigrants was increasing only slowly, migration flows were accelerating, i.e., there were more emigrants, but, on average, they were staying abroad for a shorter time". Labour migration and depopulation remain some defining features of Serbia's economy and society, and a topic that periodically dominates public debate. It implies shifts in the population structure and, consequently, customer needs. (Mihail Arandarenko, ETF, 2021).

▪ Economic developments, informal economy, remittances

According to the Serbia Statistical Office site(<https://www.stat.gov.rs/en-US>), the GDP rose 2% in Serbia in second quarter of 2021. Gross Domestic Product of Serbia grew 1.3% in the second quarter of 2021 compared to the previous quarter. This rate is 7 -tenths of one percent " less than the figure of 2% published in the first quarter of 2021. The year-on-year change in GDP was 13.6%, 119 -tenths of one percent more than the 1.7% recorded in the first quarter of 2021. The GDP figure in the second quarter of 2021 was \$15,717 million (Serbia Statistical Office, 31.08.2021).

The COVID-19 pandemic hit the Serbian economy hard. According to an assessment of the socioeconomic impact of the crisis (OECD, 2021), business operations were interrupted in over two thirds of SMEs. 20% almost ceased their operations, while an additional 49% lacked resources and operated with a reduced capacity. While the pandemic exacerbated existing challenges for SMEs, such as access to finance and markets, it also opened up new opportunities with the rise of "nearshoring".

In March 2020 the Serbian government adopted its Industrial Policy Strategy 2021-2030. Furthermore, the Strategy for Scientific and Technological Development includes higher and targeted funding to

scientific research contributions to the economic and social development. Science shall be linked more closely with industry and the public sector, systems to manage science and innovation be improved, and the work of different institutions and stakeholders be better coordinated. The overall aim is to enhance competitiveness by raising the levels both of digitalisation and automatisisation of domestic industry and of scientific technical and innovative solutions. The total volume of investments in industry is planned to increase.

Serbia is enhancing its efforts to adjust and to accelerate its technological developments, to design and offer new services and products using digital technologies and respond in compliance with the Green Deal and the Green Agenda for the Western Balkans. The later will present a push and, at the same time, a call for the transition towards a green and circular economy.

In 2021, the ILO Overview of the Informal Economy in Serbia provides a detailed description of the size and characteristics of the informal economy and employment in Serbia. The size of the informal employment is 18.7%, with no major gender differences: rates are 18.4% for men and 19.0% for women. The total of 18.7% was composed of 6.2% in the informal sector, 8.0% in the formal sector and 4.5% in households (ILO, 2021).

The flow of foreign remittances into Serbia decreased from €3.52 billion in 2019 to €3.12 billion in 2020, on the backdrop of travel restrictions and decreasing economic activity in destination countries. However, according to the Serbian Central Bank (April 22, 2021), total foreign remittances to Serbia increased in the first two months of 2021 by 12.2% year-on-year to €506 million euro.

2. EDUCATION AND TRAINING

2.1 Trends and challenges

In the past years, Serbia has taken various new policy or legal initiatives in education. These include the adoption of laws on higher education (2018), adult education development, the national qualifications framework, work-based learning, career guidance, as well as procurement processes related to education and training providers. Serbia has made improvements in terms of access to education. Furthermore, international assessments show that learning outcomes have remained stable in recent years, with slight improvements among the highest-achieving students. However, a large share of students in Serbia continue to leave school without mastering basic competences. This signals a widening of gaps in education and inequalities. Serbia allocates fewer resources to secondary education, as a percentage of GDP and on a per-capita basis, than EU and OECD countries, despite having similarly high enrolment rates (Maghnouj et al, 2020).

Serbia has a multi-faceted career guidance system in place (see: <https://www.euroguidance.eu/guidance-systems-and-practice/national-guidance-systems/guidance-system-in-serbia>, updated in March 2020). Its continuous development has been given higher importance in the last years.

In its Economic Reform Programme for the period 2021-2023, Serbia committed itself to education and training reforms with a view to joining the EU. These include developing digital skills, lifelong learning, and qualifications in line with labour market needs; improving school- to- work transition through work-based learning; piloting Youth Guarantee and improving skills information. Serbia's Education Development Strategy 2030 focuses on education for sustainable development. digital education and entrepreneurial learning, Beside the overall reform efforts to be undertaken, the focus will be on digital education and entrepreneurial learning, dual education training and apprenticeships- all in partnership between public and private actors.

Serbia has participated in the EU Research and Innovation programmes since 2007. Since then, Serbia has made a lot of progress regarding national research and innovation policies. It is the most successful country in the region in Horizon 2020. Areas of success in Horizon 2020 include ICT and Agricultural research as well as scientific cooperation in Energy. National efforts in supporting innovation have become highly successful and are complemented by a Smart Specialisation Strategy (EC, Horizon 2020 key figures,2020). The Government of the Republic of Serbia adopted its Smart Specialisation Strategy for the period 2020-2027 in February 2020. This strategy puts emphasis on the development of skills in relevant economic sectors. One of the key pillars of the strategy is development of required skills through reforms in the education and training. The strategy defines the economic sectors that deliver high-quality, and highly skilled jobs and that contribute to greater and faster growth of companies. The strategy connects faculties, rectorships, science and technology parks and VET schools, all done through the collaboration of science and industry.

▪ Education expenditure, access, participation and early leaving

Public expenditure for education as a % of GDP decreased in recent years – from 4.3% in 2010 to 3.8% in 2015 and 3.6% in 2018. The share of education in total public expenditure in 2018 was 8.8%. While the student population continues to decrease, participation in compulsory education is now virtually universal. In 2019, the gross enrolment rate reached 100% in primary education and 94% in secondary education. Serbia has also made progress in expanding access to pre-primary and higher education. The rate of early school leavers decreased slightly to 5.4 % in 2019 from 6.8% in 2018. The attainment of tertiary-level qualifications for people aged 30 to 34 is slowly increasing, reaching 33.5% in 2019.

- **PISA results**

15-year-old students in Serbia underperform in all areas of reading (37%), maths (39.7%), and science (38.3%), although results in mathematics have improved in recent years (OECD 2018). Data are not disaggregated by ethnicity (e.g., Roma) or for students with immigrant backgrounds (a share of the student population of >6%), while students with certain disabilities are excluded from the PISA sample. That is why no policy conclusions are drawn for these groups.

- **Young people not in employment nor education (NEET)**

In 2020, the NEET rate of young people aged 15-24 in Serbia is 15.9% (latest data from 2018). Transition towards the labour market remains difficult in Serbia. This is due to the lack of opportunities to acquire practical experience in the workplace. Employers' perceptions and available research reveal that VET studies are not relevant to labour market demand (ETF, 2020). Enrolments are not adapted to the profiles and skills demanded by employers and according to the labour market needs/sectors' needs. There are ongoing efforts, supported by donor initiatives, to make VET more relevant to labour market needs. include the establishment and sustainability of sectoral skills councils the further development of a national qualifications' framework and the promotion of dual training schemes.

- **Education during the COVID-19 pandemic**

The Serbian Ministry of Education, Science and Technological Development (MESTD) had to react quickly and set up remote learning. Many adopted online learning programmes. Where that was not possible, they turned to television, or even radio. But the crisis exposed the digital divide within country. Many stakeholders, in different seminars and discussions, would confirm that during the pandemic social inequalities in Serbia were magnified, among others, due to the lack of access to digital courses for learners and the non-availability of parents or carers to support them. Teachers experienced already a lack of digital skills and related tools and pedagogy before the crisis. The crisis amplified the need for training for teachers, academics, and other education personnel in relation to the use of ICT technologies to foster inclusion in education. However, while remote teaching exposed many systemic deficiencies. Participants would argue that innovative technologies might also be of help in implementing inclusive education.

2.2 VET policy and institutional setting

- **Strategic and legal framework for VET and adult learning**

In June 2021 the Government of Serbia adopted the education strategy for the period 2021-2030. This strategy refers to all education levels from ISCED 0 to ISCED 8, adult education, teacher education and other relevant aspects of educational system. This new strategy is a step towards the harmonisation of education policies with policies in science, technical and technological development in Serbia. It tends to harmonise the regulations in education with international documents and initiatives (documents of the UN, EU, Council of Europe, etc.). Two general objectives are defined in the document: one related to the pre-university education and the other related to higher education. The first one relates to the increased quality of teaching and learning, fairness and accessibility of pre-university education and strengthened educational role of all educational institutions. The second one focuses on improving accessibility, quality, relevance, and equity of higher education. In accordance with the Strategy, two laws in the field of higher education have been adopted – the Law on Student Organisation and the Law on Amendments to the Law on Higher Education.

- **VET governance and financing arrangements**

MESTD is the key ministry in charge of VET. The National Education Council (NEC) is involved in formulating the national policy and legal frameworks, and in the adaptation of the general subjects and curricula of the VET curriculum. The Institute for the Improvement of Education (IIE) plays a key role in drafting technical documents for VET implementation and is partially involved in the other key functions, apart from mobilisation of financial resources. The Institute of Educational Quality and

Evaluation (IEQE) contributes to defining educational standards for general education and carries out evaluations and research and development activities. Regional School Administrations (RSA) monitor and evaluate schools (including VET schools), and are involved in managing public-private partnerships for VET and in R&D. The role of municipal and local government role is limited to mobilising a specific part of financial resources.

Sectoral organisations, social partners are represented on bodies such as the VET Council and participate in consultations and all key functions, except the management of VET providers and policy evaluations. The Serbian Chamber of Commerce is involved in several processes and governance functions nationally and regionally. By 2021 there are 12 SSCs established. Employers are involved in policy implementation, as members of school boards and by offering students' internships in the company premises. <http://noks.mpn.gov.rs/en/decisions-on-the-establishment-of-sector-skills-councils/>. At this point there has been an enhancement of the sectoral and local aspects of VET governance which are sufficiently regulated and now operating.

VET is publicly funded. It is also financed through cost-sharing schemes including national/sectoral training funds, training tax incentives for companies and workers, and loans. TVET is supported/ co-funded by different donors.

Funds are allocated by the state (as for education as a whole) based on a formula for type of school, student numbers, salaries etc. Budget allocation has been described as inadequate for a lack of orientation on clear objectives and an over-emphasis on input. Local governments partly cover schools' running costs and staff development, which may mean that municipalities cannot fully cover these expenses ([ETF, Serbia VET Governance 2017](#)).

Initial VET is financed through cost-sharing schemes including national/sectoral training funds, tax breaks for companies and workers who invest in training. VET providers include VET schools, adult education institutions, NGOs, adult learning centres and employers. Companies contribute to VET funding by offering equipment and materials for schools or also company internships for students.

- **Quality and quality assurance**

Serbia VET system lacks postsecondary and short-cycle courses at higher skills levels, which are in demand by employers and individuals. People partly enrol in higher education programmes to compensate for the limited higher VET offers (EACEA Serbia National Policies Platform, 2021).

An important development in 2020-2021, is the work done by Serbian Qualifications Agency (SQA), the Council for the National Qualification Framework of Serbia (NQFS), the cooperation with relevant international bodies and the referencing of the NQFS to the European Qualifications Framework, support for the Sector Skills Councils, as well as support to developing qualification standards.

SQA established, and maintains the National Qualifications Register ([NQFS web presentation mpn.gov.rs](#)). The EU support helped digitalise the NQFS Portal, www.noks.azk.gov.rs and is up and running in Serbian (soon in English, too). The portal is designed to have information about all existing qualifications and standards at all levels (including learning outcomes and assessment processes) and providers.

The Serbia National Qualifications Framework (NQFS) was referenced to the European Qualifications Framework (EQF) in 2020 and the full report is published on the European Commission website, [Reports on the referencing of national qualifications frameworks to the EQF | Europass](#).

Serbia has advanced with the development of the National Qualification Framework, quality assurance and governance of the education and training system. These developments have been advanced with the support of IPA Programme (2018-2021). The Ministry of Education, Science and Technological Development, in cooperation with the (SQA) (<http://noks.mpn.gov.rs/en/about-the-agency/>), has compiled list of qualifications including more than 4,000 qualifications for all levels of education. [List of Qualifications as an instrument for monitoring the harmonisation of labour market and education needs](#).

Validation of non-formal and informal learning (VNFIL) is an area where work advanced in the past two years. During a pilot self-assessment, exam methodologies and instruments were designed, based on learning outcomes of qualification standards.

Piloting process of recognition of prior learning (RPL) has begun in February 2021. [On the road to recognition of prior learning: workshop for the development of training programs based on the qualification standard](#)

Twelve Sector Skills Councils are established throughout period of 2020-2022. The EBRD and Serbia's Ministry of Education, Science and Technological Development (MoESTD) have joint forces to ensure that Serbia's graduates at vocational and higher education institutions possess the skills demanded by the labour market. The EU and the European Bank for Reconstruction and Development (EBRD) joint efforts to support the Sector Skills Councils with the aim to harmonise the supply and demand for knowledge, skills and competencies, gap. The first are ICT and Agribusiness sectors, [Analysis of the fastest-growing jobs in the ICT sector and the Agribusiness sector – presentation of the research results](#).

Membership of the Serbian National Entity for Accreditation and Quality Assurance (NEAQA) in the European Association for Quality Assurance in Higher Education (ENQA) was discontinued in February 2020. The decision was made after NEAQA failed to implement, for two years, ENQA's recommendations on better governance and quality assurance. ENQA had encouraged NEAQA to involve all relevant stakeholders in its governance structures, strengthen its financial and institutional independence, and improve its internal operations. The Parliament adopted Amendments to the Law of Higher Education in June 2021, creating conditions for higher financial and institutional independence of NEAQA. However, the NEAQA is yet to revise its main documents (e.g., statute, strategy by 2025, ethical rulebook, accreditation standards etc.) and take concrete steps to meet the ENQA recommendations. In addition, ENQA recommended that the internal quality assurance of higher education institutions be improved. NEAQA may re-apply for membership in 2022.

▪ **Work-based learning arrangements**

Following the Law on Dual Education adopted in 2017, the system is being developed in Serbia with substantial funding and expertise from several donors. Education to Employment (E2E) with a total value of €14.3 million and a programme duration from 2016- 2024, has just issued its third call for project applications. During the first project phase (2016-2019), 1,060 young people had gone through 61 different types of dual training programmes. Another 350 young people from hard-to-place groups received assistance for transport to the companies. 128 companies participated, co-financing training in the average amount of 50%. In addition, 30 partners from both the public sector and civil society participated in E2E. More than 60% of young people were employed after training. This project also envisages support for young people in school and those who are looking for employment through career guidance and counselling services.

The law on dual education is fully implemented as of the 2019/2020 school year. The national work-based learning model in VET is further developed with a particular focus on setting up quality assurance and monitoring mechanisms. The employment rate of VET graduates (aged 20-34) remains low at 53.6%, significantly below the EU average of 76.8%. Efforts have been made also to make the final examinations in secondary education even if postponed for 2021-2022. There has been a wide debate also from the parents on the preparations for introducing the examinations which need to be accelerated to meet the timeline. Due to pandemic the work-based learning was not possible in the period 2020-2021. In the school year 2018/2019, 84 VET schools, or 23% of the total, activated dual training schemes in a total of 32 VET profiles (Government of Serbia, 2019).

▪ **Digital education and skills**

The ETF's 2020 fiche on education and training and employment developments in Serbia notes that its digital workforce makes it one of the top countries globally in the platform economy rankings with 19% of its young people working mostly in technology, graphics, internet design and media.

Nevertheless, a legal framework is needed to recognise this form of employment and protect the well-being and rights of workers and harness their skills for national economy (ETF, 2020).

On 27th February 2020, the Government of the Republic of Serbia adopted the Strategy for Digital Skills Development in the Republic of Serbia for the period from 2020 to 2024. The overall objective of the Strategy is to improve the digital knowledge and skills of all citizens, including members of vulnerable social groups, to enable the monitoring of the development of ICT technologies in all fields and to meet the needs of the economy and the labour market. The first Action plan for period 2021-2022 is rolled out to be followed by second Action plan for period 2023-2024. The key pillars are: 1.) Improving digital competences in the education system (providing conditions for learning and acquiring digital competences in the education system; upgrading curricula for the acquiring of digital competences in pre-university education; 2.) Improving basic and advanced skills for all citizens, providing conditions for the development of different levels of digital skills for citizens; accreditation of digital skills training programs for citizens; raising citizens' awareness of the need to adopt digital skills; improving digital skills for citizens at the local self-government level; 3) Developing digital skills in relation to the needs of the labour market, meeting the needs of the labour market for digital skills at all levels and promoting opportunities in ICT sector; improving cooperation between relevant institutions (public sector, private sector, civil society); developing digital skills of employees, including public administration employees, with a focus on skills that are related to the specifics of the workplace and 4) Lifelong learning of ICT professionals: monitoring the needs of the economy and the ICT sector; monitoring the number of young people, especially women educated and trained in ICT professions; increasing research capacity in the ICT field and finally improving the skills of ICT professionals and promoting lifelong learning.

The European Investment Bank has rolled out the School Digitalisation Project in Serbia (EIB supports digitalisation of Serbian schools with €65 million). The potential investment will encompass the introduction in schools of internet connections, new IT equipment, e-books, e-classrooms, and e-diaries. 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, including in situations of natural or other disasters. IEB financial package will finance also the rolling out of the EU SELFIE tool for the further digitalisation of school-based and work-based learning.

- **Donor support to education and VET for young people and adults**

Donor funding has helped fill some of the resource gaps in Serbia's education, training, and employment sector EU Instrument for Pre-accession Assistance (IPA)-significant financial and technical resources to support education reforms. EU support continues to be crucial for the implementation of Serbian policies to enhance skills for employment. IPA Programmes provide key technical support and funding for the education and training and employment (https://eeas.europa.eu/delegations/serbia_en).

There are many bilateral donors support for skills development and youth employment. Some of them are fully funded by the respective donors or there are also co funding with the Serbian Government contribution.

EU Sector Budget Support (SBS) programme. European Union disbursed the third tranche of EUR 6.5 million end of January 2021, bringing the total EU grant support to 20.8 million euros.

IPA Project "Development of an integrated system of national qualifications in the Republic of Serbia" (2018-2021). National Qualification Framework, quality assurance and governance of the education and training system.

Swiss-funded "Education to Employment (E2E)" is an eight-year partnership project, launched in 2015 and will run until end 2023. It is an eight-year partnership project of two governments-Switzerland's and Serbian-designed to create preconditions for a faster recruitment and youth employment. This eight year of project implementation of the Swiss Government made € 12.3 million available, while the Serbian Government contributed €6 million. ([About E2E | Znanjem do Posla](#)).

Serbian-German and Serbia-Swiss Agency- cooperation in this field focuses on private sector development, financial system development and vocational training and the labour market. The total budget of approximately 95 million EUR. For more details: German Federal Ministry for Economic Cooperation and Development (BMZ)(<https://www.bmz.de/en/countries/serbia/priority-area-sustainable-economic-development-56418>); Swiss Agency for Development and Cooperation (SDC)([Swiss Cooperation Strategy for Serbia 2018 – 2021 \(PDF, 867.6 kB\)](#), <https://www.niras.com/news/second-e2e-cooperation-agreement-signed/> .

GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH), has been and continue to support on skills for employment. The ongoing Programme: “Dialogue on Employment Creation, Initiative and Dual Education / Sustainable economic growth and employment” is direct support to the VET schools and private sector, <https://www.giz.de/en/worldwide/86542.html>).

3. LABOUR MARKET AND EMPLOYMENT

3.1 Trends and challenges

▪ Labour market and employment challenges in general

Despite recent improvements of specific labour market indicators, young people in Serbia continue to experience difficulties in accessing the labour market, to find a stable job and remain in employment. 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, the youth unemployment rate (age group 15–24) for 2020 was 26.6%, with a higher incidence among females, 29.5%.

In 2020, ETF looked closer to the youth situation in Serbia (ETF 2021). According to the finding, 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). A particularly vulnerable group are young people who did not complete secondary education and are not in employment, education, or training (NEETs). The rate (15-24) stood at 15.9% in 2020. The labour market position of young women, and those from rural areas, is considerably less favourable, compared to young men and those living in urban areas.

Based on the analysis, there is a consensus that addressing Serbia's labour market problems is critical to enhancing growth and job creation. A low labour force participation, relatively high unemployment, particularly among youth and other disadvantaged groups, and rising gaps currently impede the efficient use of human capital and the prospects for sustainable economic growth and welfare improvement. Although there has been progress, more jobs are needed if Serbia is to catch up with neighbouring countries in the EU. A robust employment growth would require policies that boost private sector job creation on the demand side, that reduce barriers and disincentives to work and improve workers' skills on the supply side, and that ensure that labour market intermediation and institutions facilitate employer-employee matches.

▪ Employment

NES implements employment services and measures in line with the action plan for employment. In 2020 (NES Activity Report 2020), ca. 82,000 registered unemployed benefitted from employment mediation services and 110,000 received information on career development opportunities. NES advisors developed over 855,000 individual employment plans. In what regards activation measures, over 38,000 jobseekers were included in measures for active job search, over 14,000 in additional education and training, over 7,300 jobseekers were job placed thanks to employment incentives for employers and around 4,500 were integrated in public works programmes. (NES Statistical Bulletin September 2021 and NES Activity Report 2020).

Employment in Serbia's formal private sector is low. The full workforce potential is underutilised. Labour productivity and real wages have been relatively flat. Improving skills and reforming labour market policies can boost both employment and productivity. Tackling these issues will not only enhance Serbia's human capital and productivity for higher growth, but will also boost people's incomes, reduce poverty, and grow the middle class. Serbian graduates take long to be absorbed into the labour market. There is a positive relationship between Serbians' level of education and their labour market participation, as well as a clear return on investment for graduates. However, an insufficient relevance of skills acquired in upper secondary and tertiary education leads to a lengthy school-to-work transition and skills mismatches. This might contribute as a push-factor in graduate migration.

To support people working in the platform economy, a legal framework is needed to recognise this form of employment, protect the well-being and rights of workers, and harness their skills for the economy. New mechanisms are needed to ensure that international and national rules protect workers, at the same time as maintaining the flexibility and competitiveness of the platforms and employment opportunities for workers. Employment inequalities, such as the gender pay gap, exist, and need to be addressed within the platform economy (ETF, 2020).

- **Unemployment**

According to the Statistical Bulletin of Serbia National Employment Service (NES), in 2020, the average number of registered unemployed was 509,179, out of which more than 280,000 were women. The number of first-time job seekers has increased significantly in 2020, compared to previous years, representing 50% of total jobseekers. On the backdrop of pandemic crisis and its deep economic impact, the number of vacancies registered throughout 2020 was a bit over 60,000, against figures of around 90,000 reached in 2018 and 2019. Despite difficult labour market conditions, NES managed to support the employment of over 200,000 jobseekers from its registers. Structure of unemployed by qualification shows clearly that education is a significant factor for employment probability.

Latest datasets available (September 2021) reveal that around 30% registered unemployed hold 1st and 4th qualification level and 20% have an education attainment corresponding to 3rd qualification level. The age structure of unemployed registered in September 2021 shows that approx. 20% of unemployed are young (15-29 years old) and 36% are older jobseekers (50-65 years old), underlining that age strongly influence joblessness risk and tailored activation measures and employment-friendly social protection measures are necessary for first time jobseekers and young graduates, and for older workers, who are most exposed to skills depletion, losses and inadequacy due to labour market and technological changes. High proportion of long term unemployed (over one year), standing at around 63% in September 2021, confirms the need to have targeted interventions to address obstacles to activation, including reskilling and upskilling measures (NES Statistical Bulletin September 2021 and NES Activity Report 2020).

ETF's recent skills mismatch measurement (ETF forthcoming 2022) points to a difficult transition to the labour market. Apart from the lack of sufficient demand for the skills produced, other aspects contributing to unemployment include insufficient practical skills and work experience and the non-attractive employment conditions offered. In recent years young people have, to a certain extent, improved their initially very unfavourable position. In the period 2015–2019, youth employment increased, their activity slightly improved, while unemployment decreased. This decrease indicated that young people in Serbia either found jobs more easily or stayed in education longer in the considered period. The transition by young graduates from school to a first stable and/or satisfactory job in Serbia takes almost two years on average (23.4 months), which compares unfavourably to the 6.5 months in the EU. Youth in rural areas need more time to make the school-to-work transition. For young people with a university degree, it takes only half the time (11.7 months), whereas those with the lowest educational level need 41 months to attain a first job. At least one-third of young people aged 15-24 held jobs requiring lower levels of formal qualifications in 2019. However, this share can be as high as two-thirds in some regions of Serbia. (ETF, forthcoming).

- **Statistical data collection and labour market information**

The Statistical Office of the Republic of Serbia (SORS) carries out quarterly labour force surveys using Eurostat methodologies and publishes data at quarterly and annual interviews. The National Employment Service (NES) maintains a labour market information system that gathers and makes available data to the jobseekers and the public on annual basis.

- **Poverty**

In 2020, ETF jointly with a team of Serbian researchers from FREN, analysed the employment, skills, and social inclusion youth situation in Serbia. 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.

According to the latest data from the Statistical Office of the Republic of Serbia (SORS, October 2021), the at-risk-of-poverty rate was 21.7% in 2020, and compared to 2019, it was lower by 1.5 percentage points. The at-risk-of-poverty or social exclusion rate amounted to 29.8%, and it was lower by 1.9 percentage points relative to 2019. The at-risk-of-poverty rate represents the share of persons whose equivalised disposable income is below the relative poverty line, which amounted to RSD19,381 a month on an average for a single person household in 2019, to RSD34,886 a month on an average for a household with two adults and one child aged below 14, and to RSD40,700 for a four-member household with two adults and two children aged below 14.

Observed by age, the at-risk-of-poverty rate shows that individuals up to 18 years of age were the most exposed to the poverty risk (28.9%), as well as individuals aged 18-24 (25.6%). The lowest at-risk-of-poverty rate was recorded for the group of persons aged 65 years and over (21.1%). By the type of household, individuals in households composed of two adults with three or more dependent children were at the highest risk of poverty (51.9%), followed by individuals living in single parent households with one or more dependent children (41.6%). According to the activity status for persons aged 18 and over, the most exposed to the at-risk-of-poverty were unemployed persons (47.5%), while the lowest at-risk-of-poverty rate was recorded for employees working for employers (6.5%). In case of self-employed persons, this rate amounted to 25.9%. The at-risk-of-poverty rate for pensioners was 17.2%. The 'at-risk-of-poverty or social exclusion rate' amounted to 31.7%, 2.6 percentage points lower than in 2018. This rate shows the share of individuals who are at risk of poverty or are severely materially deprived or live-in households with very low work intensity.

3.2 Employment policy and institutional setting

▪ Strategy and legal framework in the employment policy field

The Ministry of Labour, Employment, Veterans and Social Affairs (MLEVSA) oversees employment policies, while NES is its implementing agency. Other private employment agencies operate on the market. In August 2021, the Employment Strategy of Republic of Serbia 2021–2026, was approved. It defines reform steps aimed at establishing an efficient labour market in line with the accelerated technological developments. The strategy aims at increasing labour demand, a growth of quality employment and relevant labour supply through a better cooperation between various sectors: education, the economy, finances, social protection, and local self-governments. Special measures are envisaged for the improvement of the labour market position of women, youth, disabled persons, social aid beneficiaries, as well as the Roma population. Other vulnerable groups of unemployed people are planned to receive additional, intensive support with their job search, without which they would not be able to (re-)enter the labour market.

▪ Initiatives to boost employment (including Youth Guarantee)

According to the World Bank (2020), Serbia spends with estimated 0.08% of GDP in 2019 relatively little on active labour market policies (ALMPs). However, relatively many unemployed people contact the NES for their job search (71% mentioned this in the 2017 LFS). Hence, it is vital that NES services and programmes are relevant and efficient.

According to the Statistical Bulletin of Serbia National Employment Service (NES), in 2020, the average number of registered unemployed was 509,179, out of which more than 280,000 were women. The number of first-time job seekers has increased significantly in 2020, compared to previous years, representing 50% of total jobseekers. On the backdrop of pandemic crisis and its deep economic impact, the number of vacancies registered throughout 2020 was a bit over 60,000, against figures of around 90,000 reached in 2018 and 2019. Despite difficult labour market conditions, NES managed to support the employment of over 200,000 jobseekers from its registers. Structure of unemployed by qualification shows clearly that education is a significant factor for employment probability. Latest datasets available (September 2021) reveal that around 30% registered unemployed hold 1st and 4th qualification level and 20% have an education attainment corresponding to 3rd qualification level. The age structure of unemployed registered in September 2021 shows that approx. 20% of unemployed are young (15-29 years old) and 36% are older jobseekers (50-65 years old), underlining that age strongly influence joblessness risk and tailored activation measures and employment-friendly social protection measures are necessary for first time jobseekers and young graduates, and for older workers, who are most exposed to skills depletion, losses and inadequacy due to labour market and technological changes. High proportion of long term unemployed (over one year), standing at around 63% in September 2021, confirms the need to have targeted interventions to address obstacles to activation, including reskilling and upskilling measures.

NES implements employment services and measures in line with the action plan for employment. In 2020 (NES Activity Report 2020), cca. 82,000 registered unemployed benefitted from employment mediation services and 110,000 received information on career development opportunities. NES advisors developed over 855,000 individual employment plans. In what regards activation measures, over 38,000 jobseekers were included in measures for active job search, over 14,000 in additional education and training, over 7,300 jobseekers were job placed thanks to employment incentives for employers and around 4,500 were integrated in public works programmes (Serbia NES Activity Report 2020 and Statistical Bulletin September 2021)

Youth Guarantee (YG) is a flagship programme of the European Commission's Economic and Investment Plan 2021 to 2027 for the Western Balkan region. The YG aims at securing a good quality offer of employment, traineeship, apprenticeship, or continued education to all young people aged 15 to 29 who are not in employment, education, or training. Serbia is committed to design and adopt a YG implementation plan by mid-2022 and carry out pilot initiatives. Furthermore, the Serbian government discussed the establishment of a youth guarantee fund.

Priorities are indicated in the "Employability under the Employment Strategy 2026" Steps to establishing the Youth Guarantee feature in the 2022 Budget Law and Medium-Term Economic Framework (MTEF).

- **Initiatives to increase the capacity of the public employment services**

Each year, the Serbian government drafts a National Employment Action plan, which includes activities assigned to the National Employment Service Serbia (NES). NES is a well-established institution with a clear mandate that it executes effectively. However, NES could do better in monitoring and evaluating its programmes and adapting them to the evolving needs of the population and geographical areas.

- **Donor support to the employment policy field**

In all the ongoing EU projects related to skills for employment. Here in the link is the detailed information: [Inclusive programmes for young people | YouthWiki \(europa.eu\)](#)

Swiss-funded "Education to Employment (E2E)" is an eight-year partnership project, launched in 2015 and will run until end 2023. It is an eight-year partnership project of two governments-Switzerland's and Serbian-designed to create preconditions for a faster recruitment and youth employment. This eight year of project implementation of the Swiss Government made € 12.3 million available, while the Serbian Government contributed €6 million. ([About E2E | Znanjem do Posla](#)).

Serbian-German and Serbia-Swiss Agency- cooperation in this field focuses on private sector development, financial system development and vocational training and the labour market. The total budget of approximately 95 million EUR. For more details: German Federal Ministry for Economic Cooperation and Development (BMZ) (<https://www.bmz.de/en/countries/serbia/priority-area-sustainable-economic-development-56418>); Swiss Agency for Development and Cooperation (SDC) ([Swiss Cooperation Strategy for Serbia 2018 – 2021 \(PDF, 867.6 kB\)](https://www.niras.com/news/second-e2e-cooperation-agreement-signed/), <https://www.niras.com/news/second-e2e-cooperation-agreement-signed/>)

The World Bank helped finance the Serbia Competitiveness and Jobs Project through a loan agreement in the amount of €89.5 million (<https://projects.worldbank.org/en/projects-operations/project-detail/P152104>). The project ended in June 2021.

For further information, please contact: Lida Kita, Senior Human Capital Development Expert – Social Inclusion – Country Liaison for Israel, Serbia, and Turkey, email: Lida.Kita@etf.europa.eu

STATISTICAL ANNEX - SERBIA

Annex includes annual data from 2010, 2015, 2019 and 2020 or the last available year.

	Indicator	2010	2015	2019	2020	
1	Total Population (,000) ^(e)	7,291.4	7,095.4	6,945.2	6,908.2	
2	Relative size of youth population (age group 15-24, %) ^{C (1)}	20.1	18.5	18.2	18.2	
3	GDP growth rate (%)	0.7	1.8	4.2	-1.0	
4	GDP by sector (%)	Agriculture added value	6.6	6.7	6.0	6.5
		Industry added value	25.3	25.8	25.6	24.8
		Services added value	51.7	50.9	51.2	51.5
5	Public expenditure on education (as % of GDP)	4.3	3.8	3.6 (2018)	M.D.	
6	Public expenditure on education (as % of total public expenditure)	10.1	8.9	8.8 (2018)	M.D.	
7	Smart Specialisation Strategy (%)	98.0 (2011)	98.8 (2016)	M.D.	M.D.	
8	Educational attainment of adult population (aged 25-64 or 15+) (%)	Low ⁽²⁾	21.2	16.5	16.2	15.2
		Medium ⁽³⁾	59.4	59.1	57.9	58.6
		High ⁽⁴⁾	19.3	24.4	26.0	26.2
9	Early leavers from education and training (aged 18-24) (%)	Total	8.3	7.5	6.6	5.6
		Male	9.2	7.7	6.5	5.4
		Female	7.2	7.2	6.7	5.8
10	Gross enrolment rates in upper secondary education (ISCED level 3) (%) ^(e)	85.0	91.4	89.4	M.D.	
11	Share of VET students in upper secondary education (ISCED level 3) (%)	76.1	75.1	73.8	M.D.	
12	Tertiary education attainment (aged 30-34) (%)	18.9	29.8	33.4	32.6	
13	Participation in training/lifelong learning (age	Total	4.0	4.8	4.3	3.7
		Male	3.9	4.5	3.8	3.3

	group 25-64) by sex (%)	Female	4.2	5.1	4.8	4
	Participation in training/lifelong learning (age group 25-64) by education (%)	Low ⁽²⁾	M.D.	0.4	0.3	0.6
		Medium ⁽³⁾	4.8	4.5	3.8	3.5
		High ⁽⁴⁾	7.2	9.5	8.6	6.5
	Participation in training/lifelong learning (age group 25-64) by working status (%)	Inactive	5.4	5.5	5.6	5.4
		Employed	3.2	4.4	3.9	3.1
		Unemployed	4.0	4.6	3.6	3.2
14	Low achievement in reading, mathematics and science – PISA (%)	Reading	33.1 (2012)	N.A.	37.7 (2018)	N.A.
		Mathematics	38.9 (2012)	N.A.	39.7 (2018)	N.A.
		Science	35.0 (2012)	N.A.	38.3 (2018)	N.A.
15	Activity rate (aged 15+) (%)	Total	47.0	51.7	54.7	54.0
		Male	55.7	60.4	62.7	62.0
		Female	39.0	43.6	47.1	46.5
16	Inactivity rate (aged 15+) (%) ^C	Total	53.0	48.3	45.3	46.0
		Male	44.3	39.6	37.2	38.0
		Female	61.0	56.4	52.9	53.5
17	Employment rate (aged 15+) (%)	Total	38.0	42.6	49.0	49.1
		Male	45.5	50.3	56.6	56.6
		Female	31.1	35.4	41.9	42.1
18	Employment rate by educational attainment (% aged 15+%) ⁽⁵⁾	Low ⁽²⁾	27.3	29.6	34.8	34.0
		Medium ⁽³⁾	46.1	49.3	55.9	56.6
		High ⁽⁴⁾	60.8	63.2	70.5	69.6
19	Employment by sector(%) ^C	Agriculture	22.3	19.4	15.6	14.6
		Industry	25.6	24.5	27.4	28.0
		Services	51.9	56.1	56.9	57.5
20	Incidence of self-employment (%) ^C		32.4	30.2	27.7	27.0
21	Incidence of vulnerable employment (%) ^C		28.6	26.3	24.3	23.9

22	Unemployment rate (aged 15+) (%) ⁽⁵⁾	Total	19.3	17.8	10.5	9.1
		Male	18.5	16.9	10.0	8.8
		Female	20.4	18.8	11.2	9.5
23	Unemployment rate by educational attainment (aged 15+) (%) ⁽⁵⁾	Low ⁽²⁾	16.3	15.6	11.2	9.1
		Medium ⁽³⁾	22.5	19.4	11.2	9.6
		High ⁽⁴⁾	13.1	15.3	8.4	8
24	Long-term unemployment rate (aged 15+) (%) ⁽⁵⁾		M.D.	10.6	5.3	4.3
25	Youth unemployment rate (aged 15-24) (%)	Total	46.3	43.2	27.5	26.6
		Male	45.4	40.1	26.1	25
		Female	47.6	48.4	29.9	29.5
26	Proportion of people aged 15–24 not in employment, education or training (NEET) (%)	Total	20.4	20.1	15.3	15.9
		Male	21.7	20.3	14.9	17.0
		Female	19.0	19.8	15.8	14.8

Last update: September 2021

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, 7, 10, 11 – UNESCO, Institute for Statistics

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

Notes:

(1) The denominator corresponds to the age 15-64

(2) Low – primary and basic general education

(3) Medium – general secondary and vocational-technical education

(4) High – secondary special and higher education

(5) Age group 15-74

Legend:

e = estimated

c = calculated

N.A. = Not Applicable

M.D. = Missing Data

ANNEX: DEFINITIONS OF INDICATORS

	Description	Definition
1	Total population ('000)	The total population is estimated as the number of people 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.
7	Adult literacy (%)	Adult literacy is the percentage of the population aged 15 years and over who can both read and write a short simple statement on his/her everyday life, and understand it. Generally, 'literacy' also encompasses 'numeracy' – the ability to make simple arithmetic calculations.

	Description	Definition
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 in terms of the highest educational programme successfully completed, which is typically certified by a recognised qualification. Recognised intermediate qualifications are classified at a lower level than the programme itself.
9	Early leavers from education and training (age group 18–24) (%)	Early leavers from education and training are 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 lasting under two 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), 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 (age group 25–64) (%)	Participants in 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 is 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 to reach 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 people. The inactive population consists of all people 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 people who are classified as neither employed nor unemployed.
17	Employment rate (aged 15+) (%)	The employment rate is calculated by dividing the number of employed people by the population of the same age group. Employed people are all people 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.

	Description	Definition
		<p>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.</p> <p>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).</p>
19	Employment by sector (%)	This indicator provides information on the relative importance of different economic activities with regard to employment. Data are presented by broad branches of economic activity (i.e. Agriculture/Industry/Services) 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 people as a percentage of the labour force. The labour force is the total number of people who are employed or unemployed. Unemployed people 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).
23	Unemployment rate by educational attainment (aged 15+) (%)	The unemployment rate represents unemployed people as a percentage of the labour force. The labour force is the total number of people who are employed or unemployed. Unemployed people 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 people in the total active population who have been unemployed for 12 months or more, 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 people aged 15–24 by the total population of the same age group.

	Description	Definition
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 are 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.

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LIST OF ACRONYMS

CPD-Continuing Professional Development

DigComp -European Digital Competence Framework for Citizens

DOL-Distance and Online Learning

ETF- European Training Foundation

EU- European Union

ECTS-European Credit Transfer System

FREN- Fondacija za razvoj ekonomske nauke

GDP-Gross Domestic Product

ICT-Information and Communication Technologies

IT- Information technology

JRC- Joint Research Centre (European Commission's science and knowledge service)

MoESTD- Ministry of Education, Science and Technological Development (Serbia)

NES- National Employment Service Serbia

OECD-Organisation for Economic Co-operation and Development

PISA-Programme for International Student Assessment

SELFIE Self-reflection on effective learning by fostering the use of innovative educational technologies

SQA-Serbian Qualifications Agency

SSC- Sector Skill Council

VET- Vocational education and training

WBL -Work-based learning

FOR FURTHER INFORMATION ABOUT
OUR ACTIVITIES PLEASE CONTACT:
COMMUNICATION DEPARTMENT
EUROPEAN TRAINING FOUNDATION
VIALE SETTIMIO SEVERO 65
I - 10133 TORINO
E: INFO@ETF.EUROPA.EU
T: +39 011 6302222
F: +39 011 6302200
WWW.ETF.EUROPA.EU