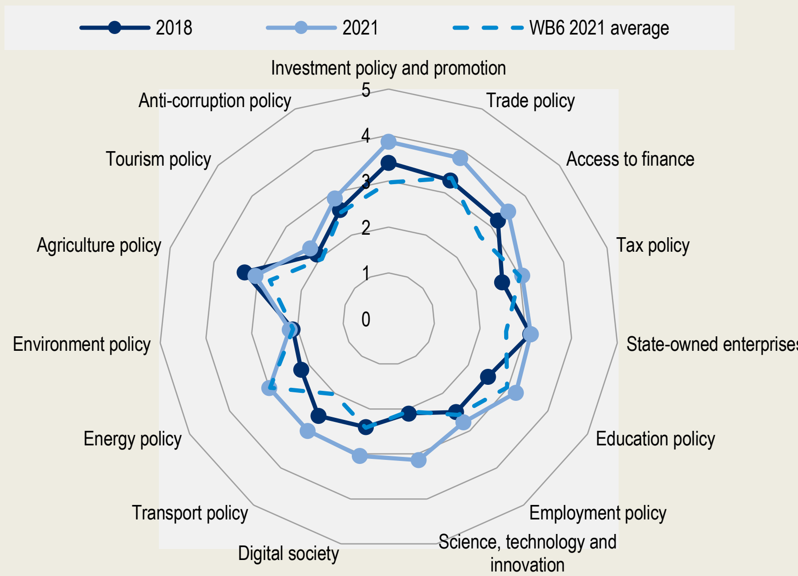
25 Serbia profile

Key findings

Figure 25.1. Scores for Serbia (2018 and 2021)



Note: Dimensions are scored on a scale of 0 to 5. Scores for 2021 are not directly comparable to the 2018 scores due to the addition/removal of relevant qualitative indicators. Therefore, changes in the scores may reflect the change in methodology more than actual changes to policy. The reader should focus on the narrative parts of the report to compare performance over time. See Scoring approach section for information on the assessment methodology. Scores for Dimension 5 Competition Policy are not included in the figure due to different scoring methodology (see Scoring approach).

Serbia has improved its performance since the publication of the Competitiveness Outlook 2018 report in 13 of the 15 policy dimensions[1] scored in the assessment (Figure 25.1). Although this clearly indicates progress in the design of policies to enhance its competitiveness, if these policies are to have a lasting impact then their effective and continuous implementation, monitoring and upgrading should remain a key priority. Serbia achieves its highest average scores in the investment policy and promotion; trade policy; access to finance; education policy; and science, technology and innovation dimensions, all with scores over 3.0. In these five policy dimensions, Serbia also outperforms the WB6 average. The main achievements in those policy dimensions since the last assessment are:

- **Serbia's investment policy is increasingly open and exceptions to national treatment are very limited**. Notably, Serbia's score in the OECD Foreign Direct Investment (FDI) Regulatory Restrictiveness Index, which assesses and benchmarks market access, was 0.05 in 2019, making its FDI regime less restrictive than the OECD average of 0.064. This indicates that its foreign investment rules do not constitute impediments to FDI. As a result, Serbia has been increasingly successful in attracting FDI over the last five years with net inflows increasing from USD 2.3 billion in 2015 to USD 4.3 billion in 2019. This makes it one of the best performers of the WB6 economies and the second largest recipient of FDI among all transition economies. This was also a better performance than the average for upper middle-income countries (2.0% of GDP) and OECD economies (2.4% of GDP) over the same period. Serbia has also adopted a strategic framework for intellectual property (IP) for 2018-22 that focuses on enforcement, and its new Law on Trademarks came into force in 2020, aligning its regulatory framework with the EU directives on trademarks. This marks significant progress in the reinforcement of its IP implementation and enforcement framework since the last assessment.

- **Trade policy is less restrictive, with greater transparency, improved consultations and an enhanced e-commerce policy framework.** All 12 services sectors analysed by the OECD Services Trade Restrictiveness Index methodology showed a greater degree of openness than in previous years. Serbia has carried out economy-wide policy changes to reduce restrictions applied to investors (such as amending its public procurement legislation in 2019). It has also eased services trade between Central European Free Trade Agreement (CEFTA) parties, spurred by the conclusion of the Additional Protocol 6 on Trade in Services to CEFTA in December 2019. It has made progress in strengthening public-private consultations and increasing business participation in the formulation of transparent trade policies, and has been very active in strengthening its digital trade framework. Serbia has revised its electronic commerce framework to align it with the European Commission's recommendations and the E-Commerce Directive 2000/31/EC, and has set up a programme to identify critical challenges to further develop e-commerce in the economy.
- **Alternatives to bank financing have increased.** In December 2020, the legislature broadened the scope of the legal framework by allowing financial leasing companies to be engaged in operating leasing. In addition, as of January 2021, the Financial Leasing Register, which centralises contracts of financial lease of movable and immovable assets, started to allow all types of registration applications to be submitted in electronic form, removing some of the administrative burden on enterprises. With the adoption of the Law on Alternative Investment Funds and by-laws enacted by the Securities Commission, private equity investment funds and venture capital have been able to operate in Serbia since 2020. In June 2021, Serbia and Albania will become the only WB6 economies to regulate the purchasing, selling or transferring of virtual currencies, making initial coin offerings based on blockchain technologies possible.
- **The education system has been strengthened with the introduction of dual education, and early school leaving rates have continued to fall.** In 2018, Serbia introduced a new competency-based curriculum that aims to update classroom practices so that all young people develop the competencies needed to succeed in the 21st century. It also revised its school quality standards in 2017-18 to ensure that all children and young people receive a good quality education by identifying schools where additional resources and support are needed. The early school leaving rate has declined slightly over the last decade and by 2019 it was 6.6%, lower than the EU average of 10.2%. In order to further reduce early school leaving, Serbia has implemented instruments to recognise students at risk of early abandonment, introduced targeted measures for vulnerable groups (e.g. Roma students or students with disabilities) and created individualised educational plans to retain young people in education and training. Serbia has also introduced a dual model for vocational education, mixing work-based and classroom learning, which is guided by curricula in line with the Law on Dual Education adopted in 2019. This should help students in vocational education and training (VET) to better develop their core literacy and numeracy skills, an area where they lag behind their peers in general programmes.
- **The policy framework and financial incentives for science, technology and innovation (STI) have improved**. Since the last assessment, Serbia has adopted two important strategic documents guiding the development of STI – the Smart Specialisation Strategy in 2020, and the Strategy for the Development of Artificial Intelligence. It also adopted the new Law on Science and Research in 2019. Serbia has expanded its support for STI with the establishment of the Science Fund, expected to become a key instrument for project-based research funding. It had a budget of EUR 4.2 million in 2019, rising to over EUR 7.5 million in 2020. Its aim is to provide funding and technical assistance to the research community, including support for young researchers and diaspora engagement, and promote international co-operation and business-academia linkages.

Priority areas

While Serbia did not score below the WB6 average in any of the 15 scored policy dimensions, this assessment did find a number of priority areas that it should address to strengthen its competitiveness further. Serbia's lowest scores were in the environment, tourism and employment policy dimensions, all below 3.0 (Figure 25.1). Further, although Serbia scored just slightly over 3.0 in the state-owned enterprises dimension, at 3.1, its score has not improved since the previous assessment. To improve its performance in those four policy areas, Serbia should:

- **Improve environmental quality of life by reducing air and water pollution.** Although Serbia has a relatively well-developed legislative and policy air quality framework, the population is exposed to air pollutants like fine particulate matter ($PM_{2.5}$) at levels of 25 micrograms per cubic metre ($\mu g/m^3$), more than twice the maximum level set by the World Health Organization (10 $\mu g/m^3$). Serbia should step up its efforts to combat air pollution and climate change, primarily by reforming power generation, which remains the main source of pollution. Serbia will need to phase out coal subsidies and start implementing renewable support schemes. It could also consider subsidies for other forms of heating, such as solar space heating. Despite its abundant freshwater, Serbia also faces increasing water pollution, mostly as a result of continuing discharges of municipal and industrial wastewater into rivers. Around 58% of the population are connected to public sewerage systems, but only 10.5% are connected to public sewerage served by a wastewater treatment plant (compared to 86% on average in the EU). Serbia needs to invest in improving the water supply and sanitation system to treat more wastewater.
- **Empower local actors to manage tourism development**. Vertical co-operation in tourism development has been established and some municipalities and local tourist organisations have started developing tourism programmes. However, the lack of knowledge and skills among local public officials, weak public-private co-operation, and a lack of financial resources are hampering the efficient implementation of these programmes. Serbia should focus on providing co-ordinated expert support, designing tourism master plans, improving capacity building and allocating sufficient budget to implement policy measures at the destination level. It should also strengthen its dialogue and co-operation with private sector stakeholders, especially in discussions on the key challenges of tourism development, such as seasonality, the lack of new and high-quality tourist products, digitalisation and sustainability.
- **Increase efforts to implement employment activation policies effectively.** Although efforts have been made to increase the capacity of the National Employment Service (NES), the number of staff remains too low. The average caseload for each employment counsellor was 827, which is well above the average of EU countries such as France and Germany, where caseloads may vary between 100 and 350. Funding for active labour market programmes (ALMPs) is very low. In 2019 it amounted to 0.07% of GDP, compared to the OECD average of 0.37%. Participation in ALMPs is also very low, especially given the large share of registered unemployed facing severe employment barriers. Therefore, Serbia should strengthen the capacity of the NES and increase funding for ALMPs. In particular, to increase the employment rate of vulnerable groups, it should make more effort to develop integrated approaches and to allocate budget to improve the labour market integration of the most vulnerable groups (e.g. Roma communities, women in rural areas). This will require close co-operation with other key stakeholders at national and local levels.
- **Develop a comprehensive governance framework for all state-owned enterprises (SOEs).** Despite encouraging efforts and plans to reform the SOE sector, Serbia has significant room to align governance further with the OECD Guidelines on Corporate Governance of State-owned Enterprises and to improve SOE governance overall. Serbia should develop a comprehensive

state ownership policy that provides a rationale and expectations for all its SOEs. The 2016 Law on Public Enterprises currently only applies to companies engaged in activities in the public interest. The majority of SOEs (99 out of 156 according to the Ministry of Economy) engage in commercial activities and do not fall under the public ownership framework. A comprehensive state ownership policy is important as external assessments of the performance of Serbian SOEs suggest that these enterprises suffer from inefficiencies and provide low overall returns on the state's investment.

1: Please note that Dimension 5 (Competition policy) is excluded from the key findings section as it uses a different scoring model (See the Scoring approach section for information on the assessment methodology).

Economic context

Key economic features

Serbia is the largest and most diversified economy of the Western Balkan (WB) region. Like most economies in the region, it is also dominated by the services sector, which accounts for 51.1% of gross domestic product (GDP) and 57% of employment. Industry, including construction, accounts for 26% of GDP (roughly half of which is manufacturing) and 27.4% of employment. Even though the value added of the agriculture, forestry and fishing sector has declined considerably over the past decade, to only 6% of GDP in 2019, it still accounts for 15.6% of total formal employment and likely a significant share of informal employment (World Bank, 2021[1]).

Prior to the global financial crisis of 2008, Serbia's economy was driven by high growth in consumption fuelled by credit growth and expansionary fiscal policies. This resulted in high GDP growth, averaging 6.5% per year between 2000 and 2008, but also high imbalances including high current account deficits, which reached 20.2% of GDP in 2008. It also led to high inflation (ranging from 6% to 16% annually) and high and rising risks in the financial sectors, including high levels of foreign exchange-denominated lending and non-performing loans (NPLs) (World Bank, 2021[1]).

Over the past decade, the growth rate of Serbia's economy has moderated, but it has also become more balanced. The immediate aftermath of the crisis was accompanied by weak growth and heightened volatility reflecting large structural imbalances, imported shocks from trading partners in the Eurozone (i.e. the Eurozone crisis of 2011/21) as well as the devastating floods that impacted much of the region in 2014. However, since 2015, concerted efforts to restore macroeconomic and fiscal stability have started to pay off. Private investment has increased by more than 30% since 2014, on the back of declining and stabilising inflation, declining public debt, declining NPLs, etc. Investment was also supported by an increase in FDI, particularly in export-oriented manufacturing, which led to a significant boost in export performance. Manufacturing exports have risen by nearly 52% since 2015 and in 2019 they accounted for 65% of total exports. Service exports, driven by the information and communication technology (ICT) sector, grew by 16% per year between 2017 and 2019 and accounted for 30% of total exports in 2019 (SORS, 2020[2]).

However, despite this recent progress, many structural challenges continue to undermine the growth of the Serbian economy. Investment (as a share of GDP) remains lower than most of its peers as well as the OECD and European Union (EU) averages, and, with the exception of FDI, it is still mostly directed into low-productivity sectors. Moreover, even though FDI investments over the past decade have been concentrated in technology-intensive sectors like automotive and electronics, their impact on GDP growth and productivity has been moderated by their high import intensity and limited linkages with suppliers in the domestic economy. As a result, the growth in labour productivity has been relatively limited. In 2019, value added per worker in industry (including construction) and agriculture in Serbia was roughly one-quarter of the EU average, while in services it was even weaker, at 20% of the EU average (World Bank, 2021[1]).

These challenges are also reflected in labour market outcomes. Even though unemployment has declined significantly to 9% in 2020, the high level of long-term unemployment is a concern. Likewise, the share of young people who are not in employment or education, at 15.1%, is higher than the EU and OECD averages, as well as aspirational peers in Central Europe and the Baltic states. More progress is also needed to boost the labour force participation of women and other vulnerable groups and achieve more inclusive growth – see Structural economic challenges.

Serbia has significant potential to boost its export-driven growth in the coming decade by maintaining macroeconomic stability and addressing key constraints to investment and growth in the tradable sector. These include increasing the transparency and predictability of regulations that affect business, reducing red tape and corruption, and levelling the playing field for all actors in the economy. In line with its aspirations to foster faster and more sustainable growth through smart specialisation, Serbia also needs to improve the skills of its workforce and strengthen the capacities of its small and medium-sized enterprises (SMEs) to innovate and adopt new technologies. These reforms will also be critical for fostering deeper linkages with Serbia's growing and increasingly diverse FDI sector and global value chains.

Table 25.1. Serbia: Main macroeconomic indicators (2015-2020)

Indicator	Unit of measurement	2015	2016	2017	2018	2019	2020
GDP growth[1]	% year-on-year	1.8	3.3	2.1	4.5	4.2	-1.0
GDP per capita[2]	Current international $	14 928	15 858	16 611	17 736	18 930	19 231
National GDP[2]	USD billion	39.7	40.7	44.2	50.6	51.5	..
Inflation[1]	Consumer price index, annual % change	1.4	1.1	3.1	2.0	1.8	1.6
Current account balance[1]	% of GDP	-4.4	-2.9	-5.2	-4.8	-6.9	-4.3
Exports of goods and services[1]	% of GDP	45.3	48.6	50.5	50.8	52.1	47.7
Imports of goods and services[1]	% of GDP	52.3	53.4	57.1	59.2	61.0	56.6
Net FDI[1]	% of GDP	5.1	5.2	6.2	7.4	7.8	6.2
Public and publicly guaranteed debt[3]	% of GDP	70.6	68.6	58.7	54.4	52.9	58.2*
External debt[4]	% of GDP	73.5	72.0	65.1	62.2	61.9	..
Unemployment[1]	% of total labour force	17.7	15.3	13.5	12.7	10.4	9.0
Youth unemployment[2]	% of total labour force ages 15-24	42.6	34.5	31.5	29.4	27.1	..
International reserves[1]	In months of imports of G&S	6.6	6.2	5.4	5.4	5.7	6.1
Exchange rate (local currency/euro) [1]	Value	120.7	123.1	121.4	118.3	117.9	117.6
Remittance inflows[2]	% of GDP	8.5	7.9	8.1	8.8	8.2	7.3
Lending interest rate (BELIBOR)[5]	% annual average	..	3.4	3	2.5	1.2	1.2
Stock markets (if applicable)[1]	Average index	1 359	1 584	1 562	1 583	1 543	1 543

Note: G&S = goods and services. Belgrade Interbank Offered Rate (BELIBOR is the benchmark rate offered on dinar deposits by BELIBOR panel banks; * estimates for 2020.

1. (EC, 2021[3]), *EU Candidate Countries' and Potential Candidates' Economic Quarterly (CEEQ) Q1 2021*, https://ec.europa.eu/info/sites/default/files/economy-finance/tp048_en.pdf.

2. (World Bank, 2021[1]), *World Bank WDI data*, https://databank.worldbank.org/source/world-development-indicators.

3. (World Bank, 2020[4]), *World Bank Western Balkans Regular Economic Report*, https://www.worldbank.org/en/region/eca/publication/western-balkans-regular-economic-report.

4. (EBRD, 2020[5]) *Transition Report 2020-21*, https://2020.tr-ebrd.com/countries.

5. (IMF, n.d.[6]), *IMF Data*, https://data.imf.org/regular.aspx?key=61545855.

Sustainable development

Over the past decade, Serbia has made progress in reaching the targets of the United Nations Agenda 2030 for Sustainable Development, but across most Sustainable Development Goals (SDGs) considerable challenges still remain (Table 25.2). Serbia has achieved the 2030 SDG target in two areas: 1 – poverty, where the headcount ratio[1] of those living on both USD 1.90 and USD 2.30 per day are lower than their respective targets and 4 – quality education, where the rates of net primary enrolment, lower secondary completion and literacy are above 97% and on track to reach the 100% SDG targets. In all other areas, moderate or significant progress will still be needed to reach the SDG targets by the end of this decade (Sachs, 2021[7]).

Table 25.2. SDG Trends

SDG	Current Assessment	Trends
1 - No poverty	SDG achieved	On track or maintaining SDG achievement
2 - Zero hunger	Significant challenges remain	Moderately improving
3 - Good health and well-being	Significant challenges remain	Moderately improving
4 - Quality education	SDG achieved	On track or maintaining SDG achievement
5 - Gender equality	Significant challenges remain	Moderately improving
6 - Clean water and sanitation	Significant challenges remain	Moderately improving
7 - Affordable and clean energy	Challenges remain	Moderately improving
8 - Decent work and economic growth	Significant challenges remain	Moderately improving
9 - Industry, innovation and infrastructure	Significant challenges remain	Moderately improving
10 - Reduced Inequalities	Significant challenges remain	Information unavailable
11 - Sustainable cities and communities	Significant challenges remain	Stagnating
12 - Responsible consumption and production	Significant challenges remain	Information unavailable
13 - Climate action	Challenges remain	Stagnating
14 - Life below water	Information unavailable	Information unavailable
15 - Life on land	Major challenges remain	Stagnating
16 - Peace, justice and strong institutions	Significant challenges remain	Moderately improving
17 - Partnerships for the goals	Challenges remain	Moderately improving

Note: The order of progress (from greatest to least) is as follows: SDG achieved; challenges remain; significant challenges remain; major challenges remain.
Source: (Sachs, 2021[7]), *Sustainable Development Report 2021: The Decade of Action for the Sustainable Development Goals*, https://s3.amazonaws.com/sustainabledevelopment.report/2021/2021-sustainable-development-report.pdf.

The moderate challenges lie in two SDG areas: 7 and 13 – affordable and clean energy and climate action, as well as SDG 17; partnerships and financing to meet the goals. With respect to clean energy and climate action, Serbia still needs to make significant progress in reducing carbon dioxide (CO_2) emissions toward the ultimate goal of carbon neutrality. Some progress is also needed to improve the population's access to clean cooking fuels and technology (Sachs, 2021[7]).

There are significant gaps with regard to the SDG agenda targets in all other areas. These include SDG 3 – health and well-being, where greater progress is needed to reach universal health coverage from the current coverage ratio of 65%. With respect to SDG 6 – clean water and sanitation, the share of the population with access to clean drinking water has fallen, while progress needs to be made to improve the treatment of waste water. Reducing unemployment remains the most important challenge to meeting the SDG 8 – decent work and economic growth, while in the area of innovation (SDG 9), expenditure on research and development (R&D) remains well below the target. Significant reduction in air pollution and improved recycling can contribute to more sustainable cities and economies (SDG 11). Reducing corruption remains the biggest challenge for SDG 16 – peace, justice and strong. Last but not least, major efforts are needed to protect terrestrial and freshwater sites important to biodiversity (SDG 15) (Sachs, 2021[7]).

Structural economic challenges

Serbia faces a number of key structural challenges that undermine its competitiveness, investment and integration into global value chains (GVCs).

Strengthening education and skills is key to upgrading and building a knowledge economy

Even though Serbia outperforms many regional peers with respect to student performance in standardised exams and other learning outcomes, it still lags behind the Central and Eastern Europe (CEE) region as well as the EU and OECD averages.

- **Spending on education lags behind aspirational peers**. At 3.6% of GDP in 2016, public spending on education is lower than the EU average of 4.7% of GDP and the OECD average of 5% (World Bank, 2021[1]). Financing per student has increased in recent years at the pre-primary and tertiary level, but has declined for primary and secondary education, and remains lower than in Serbia's WB6 peers as well as the EU economies. The low spending on secondary education partly reflects the limited practical training Serbian schools offer compared to CEEC countries. For example, vocational education and training (VET) schools require significant additional infrastructure and special equipment to enable practical learning for their students, but many Serbian schools focus on more theoretical knowledge, which limits the demand for such additional investment. Limited funding for the professional development of teachers further exacerbates the challenge of improving the quality of education (Maghnouj et al., 2020[8]).
- **Education needs to be more relevant to labour market needs**. Serbia could do considerably more to align its education with the needs of the labour market. In the latest Skills Toward Employment and Productivity (STEP) survey of employers, skills were identified as the most significant constraint on hiring, followed by lack of experience, as identified by 50% of the firms surveyed (World Bank, 2018[9]). Firms have noted the lack of not just technical skills but also cognitive skills, which are not well integrated into the curricula of educational institutions. This is very important as these skills are highly relevant in more knowledge-based activities and thus critical for economic upgrading. Recent reforms in the VET education system to introduce dual education modelled on the systems in Austria, Switzerland and Germany is an important step in the right direction (Government of the Republic of Serbia, 2020[10]). Further investments in adult education and lifelong learning could also help to address the skills gaps through opportunities for upskilling and reskilling.

Strengthening the institutional and business environment is critical for boosting domestic and foreign investment

Over the past decade, Serbia has made significant progress in improving its investment environment. Thanks to reforms to streamline the process of issuing construction permits, the introduction of an e-permitting system and electronic value-added tax (VAT) returns and social security contributions, Serbia has facilitated the operations of businesses on its territory, which has resulted this has resulted in a strong increase in its overall ranking on the Doing Business assessment from 88th in 2010 to 44th in 2020 (World Bank, 2020[11]). However significant challenges still remain:

- **Bureaucracy and red tape** remain an important challenge in Serbia. In the latest Business Environment and Enterprise Performance Survey (BEEPS) survey, Serbian firms cited notable challenges in dealing with the administration, including obtaining licences and permits and dealing with the tax administration. For example, it takes on average 98 days to obtain an operating licence in Serbia, compared to 24 days in Eastern and Central Europe and 28 days globally (World Bank, 2019[12]). Tax administration also remains relatively cumbersome: Serbian firms have to make 33 tax payments per year, which is twice as many as the other WB6 economies. Nearly half of the firms surveyed in BEEPS also noted that they had to meet with tax officials twice a year on average (World Bank, 2019[12]).

- **Corruption** remains an important cost and obstacle to doing business. In the latest BEEPS survey, a larger share of businesses in Serbia reported having to provide gifts to obtain licences than in regional and global peers. For example, the bribery incidence while obtaining operational licences was 18% in Serbia compared to 9% for the Eastern and Central Europe region (World Bank, 2019[12]). The latest Transparency International Index ranks Serbia 91st out of 191 economies (Transparency International, 2019[13]), which reflects not only bribery and petty corruption but also the continuing prevalence of high-level corruption. Stronger and more consistent prosecution and sanctioning of such corruption will be critical to strengthening investor confidence in the economy (European Commission, 2019[14]).
- **Contract enforcement** is slow, costly and unreliable. Contract enforcement takes on average 622 days, which is longer than the OECD and Eastern and Central Europe averages (590 and 497 days respectively) and is more protracted than in the global leaders in the Doing Business index (120 days) (World Bank, 2020[11]). Contract enforcement is also quite costly: at 39.6% of the claim value, it is nearly twice as expensive as the OECD average of 21.5%. Finally, there is a lack confidence in the judicial system to make fair and impartial decisions. In the latest, Regional Cooperation Council (RCC) barometer survey, 73% of respondents stated that they do not trust the court system and 76% that they do not believe that the judiciary is independent of political influence. Likewise, 67% of respondents do not believe that the law is applied equally to everyone (Regional Cooperation Council, 2019[15]).
- **Predictable regulatory environments and transparency** will also be critical for boosting investment. While Serbia has set up a regulatory and institutional framework for effective, inclusive, and evidence-based policy making, in practice, institutional co-ordination and implementation still require considerable improvement. For example, enterprises operating in Serbia note the lack of timely and regular consultation in the process of drafting legislation. Businesses also complain that there is a lack of clear instructions on the implementation of regulations, which adversely affects their operations (Foreign Investors Council, 2019[16]).

Access to finance could be further improved, particularly for micro and small enterprises and start-ups

- **The banking sector** in Serbia is relatively well-developed and competitive and it is able to serve established enterprises well thanks to a wide range of financial products and the lowest interest rates in the region. Likewise, Serbian enterprises report lower shares of loans that require collateral (41% in Serbia compared to the 76% global average) and lower collateral requirements compared to many regional peers (101% in Serbia compared to the 200% global average) (World Bank, 2019[12]). That said, the lending environment for micro and small enterprises as well as newly established businesses is still relatively unfavourable, especially when compared to aspirational peers or the EU and OECD economies. This includes access to finance from banks, whose stringent requirements on turnover, years of operational history, etc. are difficult for SMEs to meet. It also reflects the relatively limited non-bank financing options – see Access to finance (Dimension 3).

Cross-cutting and sector-specific constraints undermine the growth of key sectors

- **Agriculture** is an important sector in Serbia, accounting for 6% of GDP, 13% of exports and 15% of employment in 2019. Agriculture in the northern region of Vojvodina is relatively highly productive and its exports are competitive. However, the majority of the sector is not very productive, characterised by small-scale farming, and highly fragmented and uncertain land tenure.

Productivity growth is further hampered by generous agricultural subsidies, which are still highly important for supporting rural economies. Finally, state-owned land, which still accounts for a large share of agricultural land, is only available on short-term leases which discourages investment. According to recent estimates, about one-third of state-owned agricultural land is not used (World Bank, 2020[17]).

- **Manufacturing**: Over the past decade, Serbia has attracted considerable FDI in export-oriented manufacturing, particularly in the automotive and electronics industries. However, most of this investment has been in low-value-added, labour intensive industries. Upgrading to more technology- and knowledge-intensive activities will first and foremost require better knowledge and skills. Some other important considerations include reducing the infrastructure gaps compared to competitor economies. This includes hard infrastructure as well as customs and logistics services.
- **ICT services**: ICT is a fast-growing sector with considerable potential for growth in both value added and exports in Serbia. As a globally expanding industry, ICT could benefit from Serbia's relatively low cost but highly skilled ICT workforce. According to the latest Startup Genome, Serbia ranks in the top five countries for ICT talent in the world (Startup Genome, 2020[18]). This sector has shown robust growth over the past decade. Its share of service exports rose from 6.5% in 2008 to 20% in 2019. The sector also has considerable scope for improving the productivity of other sectors. The biggest constraints to its growth include continuing challenges in secondary and tertiary education and lifelong learning; regulation and taxation of the sector, including competitive safeguards and cybersecurity; and insufficient digital connectivity outside the main urban areas (World Bank, 2020[17]).

Better management of public finances is needed to support the long-term development of the economy

- Serbia went into the COVID-19 pandemic with already relatively high levels of public debt and more limited fiscal space than many WB6 economies. Increased spending in the aftermath of the global financial crisis coupled with weaker revenue performance had led to higher fiscal deficits and public debt, which rose from 30% in 2009 to 70% in 2015 (Government of the Republic of Serbia, 2020[19]). Strong fiscal consolidation efforts took place during 2015-19, but the pandemic has added renewed fiscal pressure due to the need for significant support against the economic and social consequences of the crisis. Like many economies around the world, Serbia will need to build up stronger fiscal buffers in the post-recovery phase in order to strengthen its capacity to respond to future shocks. This will entail addressing significant outstanding structural constraints including broadening the tax base to improve revenue performance and better and more efficient public spending. It will also include reforming the state-owned enterprise (SOE) sector which remains relatively large compared to regional and global peers (IMF, 2019[20]).

Stronger environmental protection will be critical for long-term development and well-being

- **Air pollution** is a major concern for cities across Serbia. The annual exposure to particulate matter pollution PM2.5 at 25.1 μg/m^3 2017 is almost double the EU average of 13.1 μg/m^3 and the OECD average of 12.5 μg/m^3 (OECD, 2020[21]). It is also 2.5 times the World Health Organization (WHO) recommended maximum level of 10 μg/m^3. The pollution is caused mainly by the transport and energy sectors. Pollution is exacerbated in winter months when residential heating, including heating by solid fuels, adds to the pollution from other sources. In the latest Balkan Barometer survey, 67% of people surveyed in Serbia identified air pollution as a serious problem, half of whom considered it a very serious problem (Regional Cooperation Council, 2019[15]).
- **Climate change**: Serbia is vulnerable to the impacts of climate change due to its high exposure and low resilience to natural hazards, particularly floods. Yet its transition to low-carbon growth has

been slow and more efforts are needed to strengthen its resilience to these hazards. The economy is still highly dependent on lignite coal and its intensity of energy consumption is high. Strengthening environmental sustainability and acting on climate change will require significant investments in infrastructure especially in the areas of waste and wastewater management, pollution control, and clean energy. It will also require better environmental policies and strengthening the capacities of the relevant authorities (World Bank, 2020[22]).

More inclusive growth is needed to improve the incomes and well-being outcomes for all citizens.

- Even though incomes, as measured by GDP per capita, have improved substantially over the past decade, inequality remains an important challenge and has improved little over the past decade (Solt, 2019[23]). There is also considerable regional inequality. For example, the Belgrade region is home to about one-quarter of the Serbian population but it accounts for over 40% of GDP, while the region Južne i Istočne Srbije, in the southern and eastern parts of Serbia, also has one-quarter of the population but generates only 13% of GDP. The poverty rate in the latter region is also three times higher than in the Belgrade region and it also lags considerably behind on access to various services. For example, one-third of the population in the region do not have access to the water supply system (SORS/World Bank, 2016[24]).

COVID-19 has exacerbated structural challenges

The COVID-19 pandemic has had a significant impact on the Serbian economy over the past year. The brunt of the impact was felt in the second quarter (Q2) of 2020 when domestic and external demand were hit hard by COVID-related restrictions on movement and disruptions in value chains. However, significant fiscal support and some recovery in demand mitigated the decline in the second half of the year and GDP contracted by only 1.1% in 2020, well below the other economies in the region. Exports and investment were most strongly impacted, contracting by 3% and 2.8% respectively, while private consumption declined by 2.5%. The decline in imports (4%) and the boost in government consumption mitigated the fall in domestic and external demand (EC, 2021[3]).

The service and manufacturing sectors were most strongly affected by the crisis. Retail and wholesale trade, transport, and tourism and hospitality were most affected, declining by 16.7% y-o-y in Q2. Meanwhile, professional, scientific, technical, administrative and support activities declined by 20.6% y-o-y in the same period. Industrial output fell by 7.1% y-o-y. Some sectors saw an increase in output in this period, including the ICT sector (up 5.4% y-o-y) and agriculture (2.2% y-o-y) (EC, 2020[25]; EC, 2020[26]).

Serbia implemented the largest fiscal support package in the region to counter the impact of the crisis and this helped contain the fallout in the labour market as well as among the most vulnerable populations. The package included a wide range of measures to support enterprises including the deferment of labour tax and contribution payments as well as corporate income tax payments, wage subsidies, and a moratorium on enforcement and interest on tax debt. Serbia also introduced a state guarantee scheme for bank lending to SMEs in order to support their liquidity. The fiscal package also contained measures to reduce the impact on vulnerable citizens, including a one-off payment to all pensioners (OECD, 2021[27]).

These measures helped to reduce the impact of the crisis on the labour market. Unemployment continued to decline in 2020 (from 10.4% in 2019 to 9% in 2020), while the decline in employment was minimal at 0.2% compared to the previous year (EC, 2021[3]).

Many of the structural challenges discussed above have played a role in either amplifying the impact of the COVID-19 pandemic or limiting the scope of the policy responses to it. The crisis has, therefore, provided important lessons on how to build more resilient economies and institutions:

- **Fiscal policy:** Among its political and administrative responses to the COVID-19 pandemic, Serbia introduced a number of tax policies including:
  - Deferral of personal income tax (PIT), corporate income tax (CIT) and social security contributions (SSCs) from 1 April to 30 June 2020, and exceptionally until 31 July 2020. In July 2020, these measures were extended until January 2021.
  - A wage subsidy scheme paid directly to employers of three minimum net salaries per employee, strictly to be used for the payment of salaries. These payments are conditional on employers not reducing the number of employees by more than 10% and not paying dividends until the end of 2020.
  - VAT exemption on goods and services for public health institutions during the state of emergency.

  Serbia has implemented a relatively narrow set of responses to COVID-19 compared to other WB6 economies. For example, unlike some, Serbia did not introduce a public loan guarantee, direct cash transfers to households, or deferral of households' and businesses' fixed costs. Its fiscal response has been critical to preventing significant economic fallout from COVID-19 especially for labour market outcomes, but it has resulted in a significant narrowing of the fiscal space. With revenues likely to be weaker in the wake of the crisis, particularly if the recovery is slow, improving the efficiency of public spending will be critical over the coming months, as will prioritising expenditures that can support the recovery and promote productivity growth and structural transformation for stronger and more resilient long-term growth. This also includes increasing public investment which has suffered significantly due to high and rising current expenditure. The crisis also highlights the importance of rebuilding fiscal buffers in the post-crisis period. In addition to better management of expenditures, this will also require tackling some of the structural constraints that undermine revenue performance.
- **Innovation and technology adoption:** The COVID-19 crisis starkly demonstrated the importance for firms of being able to adapt to new challenges and changing circumstances. It also revealed the advantages that firms embracing digitalisation and modern practices have over others. The resilience of the recovery will therefore depend on addressing the structural issues limiting innovation and technology adoption among firms (see the Structural economic challenges section above) and to what extent digitalisation and digital skills become mainstream.
- **Access to finance:** The crisis has highlighted the significance of having a well-developed and diversified financial sector that can respond to the financing needs of enterprises not only during a crisis but also during the recovery phase. As in the rest of the region, the main instruments for providing additional liquidity for enterprises during the crisis came from government support through subsidised lending or lending guarantees. But a robust financial sector comprised of diversified financial institutions that can provide financing for riskier and innovative ventures and not just established enterprises will be very important during the recovery phase and beyond.
- **Informality:** The large informal sector – and significant levels of informal employment even within the formal sector – have limited the scope of measures aimed at protecting the income and employment of people in the most affected sectors. Informality is widespread in these sectors, including retail trade and tourism, and informal firms have not been able to benefit from government subsidies, favourable loan terms and loan guarantees, and other support measures. Developing a more resilient economy will also depend on enhancing the incentives for formalisation and improving the oversight and sanctioning of non-compliance.
- **Health sector**: The crisis highlighted the importance of building a strong and resilient health sector that can better cope with pandemics and other pressures. Even though health outcomes in Serbia are generally strong relative to its income level, the sector still faces some important challenges. First, preventative care is not as well developed as many advanced economies which means that unhealthy lifestyles and the continued rise in non-communicable diseases are likely to place a

significant burden to the health sector in the future. Second, the continued widespread evasion of health insurance contributions as well as corruption within the system limits the financing available for health care and increases the out-of-pocket expenditures for many people (European Social Policy Network, 2019[28]; World Bank, 2021[1]). A significant share of these expenses also goes to informal payments in return for better quality of care (Radošević and Filipović, 2019[29]).

EU accession process

Serbia has advanced considerably on the path to EU accession since it submitted its EU membership application in December 2009. It became an EU candidate country in March 2012 and just over a year later, in June 2013 it began accession negotiations. As of May 2021, Serbia had opened 18 out of the 35 chapters of the accession negotiations and it has provisionally closed 2.

Advancing the socio-economic reform agenda remains a critical priority in Serbia's path to EU membership. As the government negotiates its accession to the EU, the findings in this Competitiveness Outlook 2021 provide the monitoring and guidance needed for the government in meeting the requirements related to a number of critical chapters of the *acquis* when negotiating its accession to the EU. It also provides a good basis for assessing the critical challenges that the economy faces as a starting point for the development of the Economic Reform Programmes (Box 25.1).

Box 25.1. Economic Reform Programmes

Since 2015, all EU candidate countries and potential candidates prepare Economic Reform Programmes (ERPs) which play a key role in improving economic policy planning and steering reforms to sustain macroeconomic stability, boost competitiveness, and improve conditions for inclusive growth and job creation. The ERPs contain medium-term macroeconomic projections (including for GDP growth, inflation, trade balance and capital flows), budgetary plans for the next three years and a structural reform agenda.

The structural reform agenda includes reforms to boost competitiveness and improve conditions for inclusive growth and job creation in the following areas:

1. Public Financial Management
2. Green transition
3. Digital transformation
4. Business environment and reduction of the informal economy
5. Research, development and innovation
6. Economic integration reforms
7. Energy market reforms
8. Transport market reforms
9. Agriculture, industry and services
10. Education and skills
11. Employment and labour market
12. Social protection and inclusion
13. Healthcare systems

The structural reforms part of the ERPs is organised in two parts:

- A first part identifies and analyses the three key challenges across those 13 areas. The identification and prioritisation of key challenges imply a clear political commitment at the highest level to address them and the ERPs should propose a relevant number of reform measures to decisively tackle each of them in the next three years.
- A second part provides an analysis of the remaining areas (not included as key challenges) and may propose additional reforms to address them.

The European Commission and the European Central Bank then assess these programmes, which form the basis for a multilateral economic policy dialogue involving the enlargement economies, EU Member States, the Commission and the European Central Bank. The dialogue culminates in a high-level meeting during which participants adopt joint conclusions that include economy-specific policy guidance reflecting the most pressing economic reform needs. The findings of the Competitiveness Outlook provide guidance to the six Western Balkans EU candidates and potential candidates in identifying the key obstacles to competitiveness and economic growth, and in developing structural reform measures to overcome them.

Source: (European Commission, 2021[30]), Guidance for the Economic Reform Programmes 2022-2024 of the Western Balkans and Turkey, https://ec.europa.eu/neighbourhood-enlargement/sites/default/files/erp_2022-2024_guidance_note.pdf; (European Commission, 2018[31]), Economic Reform Programmes: Western Balkans and Turkey, https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/20180417-erp-factsheet.pdf.

EU financial and development support

The EU is the largest provider of external financial assistance to Serbia. Since 2007, the EU has provided EUR 2.79 billion in assistance aimed at strengthening democracy, governance and the rule of law; boosting competition, innovation, agriculture and rural development; improving environmental outcomes, etc. A further EUR 5.5 billion has been provided through lending from the European Investment Bank (EIB) since 1999. The Western Balkans Investment Framework (WBIF) has provided EUR 210.2 million in grants that have leveraged investments of an estimated EUR 5.4 billion. Finally, the EU has provided grant financing of EUR 162.2 million to support Serbia's reconstruction efforts in the aftermath of the devastating 2014 floods (European Commission, 2021[32]).

In addition to grant funding and lending, the EU also provides important support through guarantees that support public and private investment by reducing the risks and costs associated with those investments. The new Western Balkans Guarantee Facility is expected to mobilise up to EUR 20 billion in investment over the coming decade.

The Connectivity Agenda seeks to support investments in sustainable transport and clean energy. Set up under the WBIF, the latest package, which was presented at the Western Balkans Summit in Sofia on 10 November 2020, completes the delivery of the EU's 2015 pledge to finance EUR 1 billion of investment in support of better connectivity in the region. It also represents the first step in the implementation of the flagship projects under the Economic and Investment Plan for the region (European Commission, 2021[33]).

The EU has also been instrumental in supporting Serbia's response to the COVID-19 pandemic. It provided EUR 93.4 million in bilateral assistance from the Instrument for Pre-Accession Assistance (IPA) 2014-20 to cover the urgent needs of Serbia's health sector and to support the economic and social recovery in the aftermath of the crisis. Serbia and other Western Balkan economies have also been recipients of the EU's regional economic reactivation package of EUR 455 million, a EUR 70 million package to help the WB economies gain access to vaccines and a further EUR 7 million of EC/WHO joint assistance to support vaccination readiness and health sector resilience (European Commission, 2021[32]).

Scope and methods

Process

Following the first two Competitiveness Outlook assessments, published in 2016 and 2018, the third Competitiveness Outlook assessment cycle for the WB6 economies was launched virtually (due to the COVID-19 pandemic) on 3 April 2020. The OECD team introduced Serbia's Competitiveness Outlook Government and Statistical Office Co-ordinators[2] to the new digitalised assessment frameworks (see Assessment methodology and process chapter for details). The two primary documents for assessing each of the 16 policy dimensions – the qualitative questionnaire and statistical data sheet – were explained in depth, giving particular attention to new questions and indicators. The OECD team also explained digital solutions to be used to disseminate the material together with the detailed guidelines, tutorials and information on the assessment process, methodology and timeline.

Following the launch of the assessment, the Ministry of Finance of the Republic of Serbia and the Public Policy Secretariat of the Republic of Serbia disseminated the materials among all 16 Policy Dimension Co-ordinators and Statistical Office contact points in Serbia. Where additional guidance was needed, the OECD team held teleconferences with Dimension Co-ordinators and Statistical Office contact points in April and May 2020.

All 16 Dimension Co-ordinators and Statistical Office contact points completed the assessment between April and May 2020. They assigned a score (see Scoring approach) to each qualitative indicator used to assess the policy dimension in question, accompanied by a justification. The completed assessments (qualitative questionnaires and statistical data sheets) were returned to the OECD team between May and July 2020.

The OECD reviewed the inputs and, where necessary, requested additional information from the Ministry of Finance of the Republic of Serbia, the Public Policy Secretariat of the Republic of Serbia, Policy Dimension Co-ordinators and Statistical Office contact points. The updated assessment materials were sent back to the OECD between July and September 2020. In addition, the OECD organised policy roundtable meetings between October and November 2020 to fill in any remaining data gaps, to get a better understanding of the policy landscape, and to collect additional information for indicators where necessary.

Based on the inputs received, the OECD compiled the initial key findings for each of the 16 policy dimensions. It then held consultations on these findings with local non-government stakeholders (including chambers of commerce, academia and NGOs) in November 2020. As a follow up, the OECD presented the preliminary findings, recommendations and scores to the Competitiveness Outlook Government Co-ordinator,[3] Policy Dimension Co-ordinators and Statistical Office contact points at a virtual meeting on 4 February 2021. The draft Competitiveness Outlook economy profile of Serbia was made available to the Government of Serbia for their review and feedback from mid-January to mid-February 2021.

Scoring approach

Each policy dimension and its constituent parts are assigned a numerical score ranging from 0 to 5 according to the level of policy development and implementation, so that performance can be compared across economies and over time. Level 0 is the weakest and Level 5 the strongest, indicating a level of development commensurate with OECD good practice (Table 25.3).

For further details on the Competitiveness Outlook methodology, as well as the changes in the last assessment cycle, please refer to the Assessment methodology and process chapter.

Table 25.3. Competitiveness Outlook scoring system

Level 5	Level 4 plus independent impact evaluation. Results of monitoring and impact evaluation inform policy framework design and implementation updates in line with OECD good practice
Level 4	Level 3 plus evidence that the framework is monitored and, if necessary, adjusted accordingly
Level 3	Level 2 plus some concrete indications that the policy framework is being implemented effectively
Level 2	Framework specifically addressing the policy area concerned is solidly in place, officially adopted by the government or parliament (where applicable). The framework includes policy features necessary for it to have an impact
Level 1	Existing draft or pilot policy framework with signs of government activity addressing the policy area concerned
Level 0	No framework (e.g. law, institution, project, initiative) exists for the policy topic concerned

Exceptions

Unlike the other 15 policy dimensions, competition policy (Dimension 5) is assessed using yes/no answers to 71 questions in a dedicated questionnaire. A “yes” response (coded as 1) indicates that a criterion has been adopted, whereas a “no” (coded as 0) indicates the criterion has not been adopted. The overall score reflects the number of criteria adopted. Moreover, some qualitative indicators which have been added to this edition of the assessment for the first time, are not scored due to the recent character of the policy practice they capture and the unavailability of relevant data.

Investment policy and promotion (Dimension 1)

Introduction

Serbia has slightly improved its performance in the investment dimension. The economy's score has increased from 3.4 in the 2018 Competitiveness Outlook to 3.9 in the 2021 assessment, with notable progress in enhancing its investment policies and introducing stable green investment initiatives (Figure 25.1). Serbia is the best-performing economy among the Western Balkan six (WB6) economies regarding investment policy and promotion dimension, driven by its above-average ratings for each sub-dimension (Table 25.4)

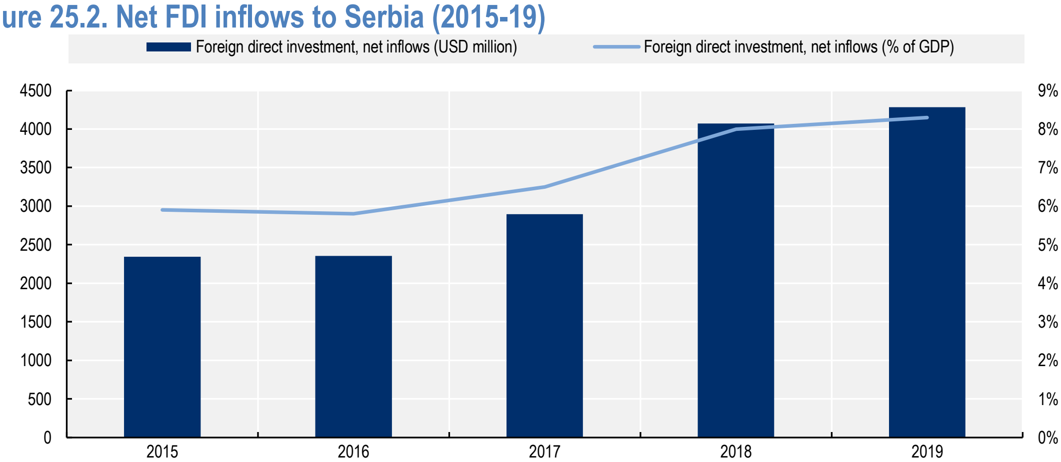
Table 25.4. Serbia's scores for investment policy and promotion

Dimension	Sub-dimension	Serbia	WB6 average
Investment policy and promotion dimension	Sub-dimension 1.1: Investment policy framework	4.1	3.2
	Sub-dimension 1.2: Investment promotion and facilitation	3.9	3.0
	Sub-dimension 1.3: Investment for green growth	3.0	2.0
Serbia's overall score		**3.9**	**3.0**

State of play and key developments

Overall, Serbia has been increasingly successful in attracting FDI over the last five years with net FDI inflows increasing from USD 2.3 billion in 2015 to USD 4.3 billion in 2019 (Figure 25.2). Net inflows averaged 6.9% of the economy's GDP over the last five years, making the Serbia one of the best performers in the WB6 and the second largest recipient of FDI among the transition economies after the Russian Federation. This is also a better performance than the average for upper middle-income countries (2.0% of GDP) and OECD economies (2.4% of GDP), over the same period. In 2019, the total stock of FDI stood at USD 44 billion. FDI is primarily concentrated in manufacturing, trade, real estate and logistics, and financial mediation, with the vast majority coming from the EU (70%) followed by the Russian Federation, Switzerland and Hong Kong, China.

Figure 25.2. Net FDI inflows to Serbia (2015-19)



Source: (World Bank, 2020[34]), Doing Business: Serbia 2020, https://www.doingbusiness.org/content/dam/doingBusiness/country/s/serbia/SRB.pdf.

StatLink https://doi.org/10.1787/888934256216

Sub-dimension 1.1: Investment policy framework

Overall, Serbia has a clear and comprehensive **legal framework for investment** activities and the conduct of business. The economy has a unified investment regime that covers both local and foreign investors under the Law on Investment which was last amended in 2018. The law provides foreigners with the same treatment as nationals, imposes no restrictions on investment activities, allows foreign companies to own 100% of a domestic company, and permits the repatriation of profits and dividends without limitations or restrictions. Serbia's legal framework for investment also provides guarantees and safeguards for investors that are in accordance with EU standards. In addition, the Law on Investment is being revised to include additional protections for investors and is expected to be completed in 2021. However, there have been no significant changes to the legislative and regulatory framework recently as the pace of reform that made the economy successful in attracting FDI over the last decade has slowed.

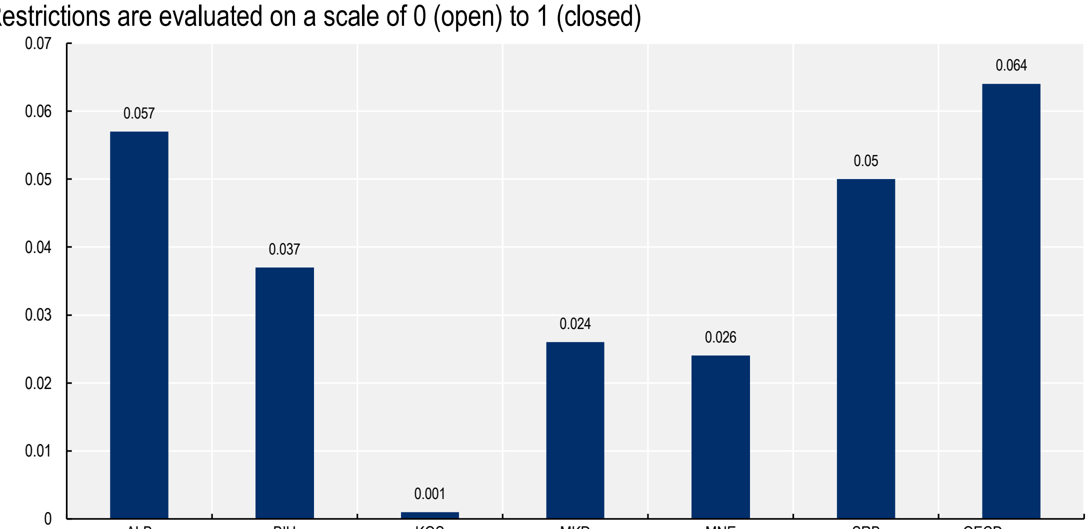
The government is endeavouring to ensure that the regulatory framework for investment is consistent, clear, transparent, readily accessible and does not impose undue burdens. The authorities publish a plan of changes to legislation and regulations including deadlines on line, while all proposed and adopted legislation are available on the Parliament's website (Parliament of the Republic of Serbia, n.d.[35]). Draft legislation that significantly affects the legal regime in a specific field or if the subject matter is an issue of a particular interest are made available on line for consultation as required by Serbian legislation.

In Serbia, investors report that public consultations are not consistently held in accordance with regulations. They report the following shortcomings: 1) limited time for inputs – although the Rules of Procedure require at least 15 days from the public call for submissions, and public hearings from the public call for submissions, investors report an average of 7 days, while the EU guidelines recommend 20 working days;[4] 2) consultations are held at a late stage of policy making; 3) the continued frequent use of the urgent procedure for adopting laws which deprives stakeholders from providing inputs; and 4) limited use of shareholders' contributions in the final texts. According to the EU, the regulatory framework for public consultations was improved with amendments to the Laws on State Administration and on Local Government and the Law on the Planning System, requiring that public consultations are organised early in the policy-making process (EC, 2020[36]).

In Serbia, the market is open and **exceptions to national treatment** are very limited. The economy's score in the OECD FDI Regulatory Restrictiveness Index, which assesses and benchmarks market access and exceptions to national treatment, was 0.05 in 2019 (Figure 25.3), making its FDI regime less restrictive than the average for OECD economies of 0.064, and indicating that foreign investment rules do not constitute impediments to FDI (OECD, 2020[37]). It is worth noting that the economy maintains some restrictions for services, notably in the media and transport sectors.

Figure 25.3. FDI Regulatory Restrictiveness Index (2019)

Restrictions are evaluated on a scale of 0 (open) to 1 (closed)



Source: (OECD, 2020[37]), FDI Regulatory Restrictiveness Index (database), http://www.oecd.org/investment/fdiindex.htm.

Serbia also maintains licence requirements for investments in a number of activities for both local and foreign investors. Licensing obligations apply to the following sectors: finance, energy, mining, pharmaceuticals, medical devices, tobacco, arms and military equipment, road transportation, customs processing, land development, electronic communications, auditing, waste management, and production and trade of hazardous chemicals. However, there is no list of sectors where foreign investment is prohibited or where discriminatory conditions apply.

Investor protection against expropriation without fair compensation is enshrined in the Serbian Constitution and the Law on Investments, and its modalities are defined by the Law on Expropriation and the Law on General Administrative Procedure. The Law on Investments stipulates that expropriation can occur only when it is in the public's interest and in a non-discriminatory manner.

The Law on Expropriation stipulates the rules, procedures and competencies for determining the amount of compensation for expropriation. The evaluation is performed with the support of sectoral experts (forestry, agriculture, construction or economic) and indicates that compensations shall be paid to the investor without delay and shall include the legal default interest in case of delay, calculated from the date of expropriation until the date of payment. Decisions on expropriation by local self-government administrations are subject in the first instance to an appeal before the Ministry of Finance (MoF).

The Administrative Court decides the legality of the Ministry of Justice's final decision on expropriation. Once the decision has been made, parties to the expropriation may agree on the expropriation fee before the competent local self-government body. The local municipal court is authorised to intervene and decide the level of compensation if there is no mutually agreed resolution within two months of the expropriation order. However, although the law clearly defines direct expropriation and appropriate compensation measures, it does not recognise the concept of indirect expropriation, leaving unnecessary room for interpretation and difficulties in estimating the amount of compensation. Serbia has also signed a large network of bilateral investment treaties, which provide an additional layer of protection for foreign investors.

When it comes to **dispute settlement**, foreign investors have the same rights and remedies before the national court system as domestic investors. The justice system is continuing its reform efforts[5] to achieve the objectives included in the National Strategy for Judicial Reform and National Anti-Corruption Strategy. The judiciary is being reformed to reinforce its independence and efficiency and limit political interference. Overall, the court system is functioning well, and investors can generally rely on it to settle a wide range of disputes. However, it is still suffering from significant backlogs of cases despite improvements in recent years. Serbia also has commercial courts which have first instance jurisdiction in commercial matters. The economy's laws and regulations on commercial matters are consistent with international benchmarks, but the system suffers from the congestion of the commercial courts, uneven implementation of decisions and challenging contract enforcement (EC, 2020[36]).

As part of its efforts to reinforce make the judiciary more efficient, Serbia has improved its alternative dispute resolution mechanisms. There are opportunities for mediation to resolve disputes between private parties, including in commercial matters, regulated by the 2014 Law on Mediation. Serbia also ratified the Convention on the Settlement of Investment Disputes between States and Nationals of Other States (ICSID Convention) and the 1958 Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York Convention) which mean it recognises foreign arbitral awards. The Law on Arbitration and the Law on Management of Courts regulate proceedings and jurisdiction over the recognition of foreign arbitral awards. However, the enforcement of an arbitration award can be a slow and difficult process due to a number of reasons including political motivation and limited enforcement capacity (US Department of State, 2020[38]).

Serbia has sound and modern[6] **intellectual property (IP) rights legal framework**, which are harmonised with EU legislation and meet the minimum requirements of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) even though Serbia is not yet a member of the World Trade Organization (WTO). It is a member of the World Intellectual Property Organization (WIPO) and adheres to the main international treaties and conventions on IP rights including the Berne Convention and the Paris Convention.

Serbia is reinforcing its IP implementation and enforcement efforts**.** Recent positive progress includes the adoption of a strategic framework for intellectual property for 2018-22 that focuses on enforcement, as well as the new Law on Trademarks that came into force in 2020 which has aligned the economy with EU Directives 2015/2436 and 2004/48 on trademarks. The new law has also introduced an efficient opposition procedure in line with European standards, by extending opposition filing deadlines and publishing trademark applications before trademarks are granted, as well as developing new provisions to strengthen trademark protection and combat counterfeiting more effectively. Overall, the procedures for the registration of industrial property rights and deposit of works and authorship with the Serbian Intellectual Property Office are efficient and in line with EU standards (US Department of State, 2020[38]).

The Intellectual Property Office (IPO) is the main institution in charge of IP rights in Serbia. It is well staffed and efficient at registering trademarks (EC, 2020[36]). It offers online registration procedures for patents, trademarks and industrial designs. Its website includes all national databases for patents, trademarks, industrial designs and geographical indications of origin. The office has also issued several publications aimed at supporting SMEs dealing with IP rights. It co-operates with the following IP enforcement institutions: the customs administration, the market inspectorate, the tax administration, the Public Prosecutions Office, the Ministry of Health, the Ministry of Interior and Courts, the Agency for Medicines and Medical Devices, and the Tourist Inspectorate. However, co-ordination with other IP-related institutions should be reinforced.

While Serbia does not have specialised courts to hear IP-related cases, it has established several courts competent to hear civil intellectual property rights (IPR) cases. According to the Law on Organization of Courts and the Law on Seats and Territories of Courts and Prosecutor’ s Office, the Commercial Court in Belgrade, the Higher Court in Belgrade, the Commercial Court of Appeal and the Court of Appeal in Belgrade may handle civil law IPR cases. While the judges in these courts who regularly handle civil IPR cases do not exclusively adjudicate IPR disputes, the judges of the Education and Information Centre (EIC), a special organisational unit of the IP office, regularly partake in IPO-organised seminars on IPR, most recently on harmonisation with EU Directive 2015/2436 on copyright and related rights as well as enforcement.

The government has also reinforced its **intellectual property rights awareness-raising efforts**, which are included in the National Intellectual Property Strategy for the Period 2018-2022. The 2019 EU Serbia report indicated that the government’s new strategic framework on IPR, focusing on the enforcement of intellectual property rights is fully aligned with the relevant EU Directive (EC, 2020[36]). Development of a platform for exchanging data among the enforcement institutions is underway within the framework of the ongoing Twinning Project 2016, which brings together public administrative institutions of EU member states with pre-accession economies to share expertise on the protection and enforcement of intellectual property rights. Although the platform was expected to be finished by the end of 2021, many of the planned awareness-raising activities were postponed due to the COVID-19 pandemic. However, Serbia’s IPR awareness-raising fair is currently still planned to take place during 2021 if the circumstances of COVID-19 permit.

Sub-dimension 1.2: Investment promotion and facilitation

Serbia has a solid **investment promotion agency structure and strategy** for promotion and facilitation. According to the Law on Investments, the Development Agency of Serbia (RAS) is the sole agency in charge of promoting and facilitating investment projects at the national level. The agency has a wide scope of activities as its mandate encompasses export promotion and SME development as well as investment promotion. The agency is also involved in the design and implementation of all investment promotion policies, programmes and measures. These include the Strategy for Development of SMEs, Entrepreneurship and Competitiveness 2015-20 and the Strategy and Policy of Industrial Development 2011-20, as well as preparing the new industrial development strategy and policy for 2021-30.

RAS is well funded by the state budget. It has a large staff (29 employees) in comparison to similar bodies in other WB6 economies, and they have regular training. The agency submits a work plan, financial plan and annual report to the government each year. Its performances are regularly benchmarked internationally and RAS usually takes part in benchmarking surveys and mystery shopper programmes performed by international organisations (Multilateral Investment Guarantee Agency, International Finance Corporation, World Bank, World Association of Investment Promotion Agencies, etc).

Investment facilitation services and activities include the development of free economic zones. Serbia has currently developed 15 free economic zones that host the majority of foreign investors. As of 2018, the zones have recorded investments amounting to EUR 3 billion (since 2008), attracted 204 multinational companies and created jobs for more than 35 000 employees. These zones accounted for 14% of Serbian exports, for a total turnover of EUR 5 billion. All 15 free zones are obliged to submit an annual report on their business activities. Based on those reports, the MoF provides consolidated reports to the government.

RAS has developed an investor targeting strategy based on its strategic framework for 2017-19. Key developments include a clear definition of the **investor targeting** function with expected values, follow-up activities and lessons learned. RAS is conducting targeted outreach campaigns followed by the follow-up mechanism and evaluating any lessons learned. This strategy has selected key sectors for attracting FDI based on Serbia’s competitive advantages, giving priority to projects that have the potential to benefit SME development, export promotion and regional development. The agency is also striving to reinforce linkages between local firms and multinational companies by facilitating contacts between them and through the implementation of a supply chain support programme that relies primarily on working groups consisting of representatives from the public sector and companies.

Serbia also provides tax **investor incentives** targeting large projects, with no special groups or regions are benefitting more than others. According to the Law on Company Income Tax, any company that invests approximately EUR 8.5 million in fixed assets in Serbia and employs at least 100 additional employees throughout the investment period enjoys a 10-year corporate income tax incentive. These tax incentives are applicable for business entities registered in Serbia and operating under the Serbian Tax Administration. Serbia also provides a cost-based tax incentive scheme for qualifying R&D investment expenses as well as a 30% tax credit for investments in new companies performing innovative activities, provided the investor maintains less than 25% ownership. The free economic zones also offer exemption from VAT for income generated through commercial activities. All tax incentives are consolidated under the Tax Administration Office in the MoF.

Serbia has strongly reinforced its investment facilitation activities, as reflected by its improved ranking in the World Bank Doing Business Index from 91st in 2015 to 44th in 2020 (World Bank, 2020[34]). It has made significant procedural improvements in dealing with construction permits, trading across borders, protecting minority investors and resolving insolvency. RAS co-ordinates and facilitates activities on investment project development. According to the Law on Investment, for projects of national significance, project teams are formed with representatives from different levels of administration (local, central) with authority to collect mandatory documentation from other public offices on the investor’s behalf. RAS is in charge of co-ordinating the work of project teams. The agency also acts as a one-stop-shop for both local and foreign investors. However, it is not entitled to approve any document on behalf of other institutions for the purpose of facilitating investment projects.

The official mandate of RAS extends to **aftercare activities** and this function has been defined as a permanent activity since the 2017-19 strategic framework. RAS has an aftercare unit that remains in continuous contact with foreign investors doing business in Serbia in order to get feedback on where it could better assist the company or how the business environment could be improved. The agency is also striving to develop and maintain strong collaborations with business associations such as the Chamber of

Commerce and Industry and the Foreign Investment Council as well as through the establishment of a working group consisting of representatives from the public and private sector.

Sub-dimension 1.3: Investment for green growth

Serbia has begun developing a sound **investment policy for the promotion of green investment** and has established comprehensive legislation outlining its green growth priorities and objectives. As part of EU accession negotiations, Serbia adopted the Multi-annual Investment and Financing Plan (MIFP) for the environment in January 2020, further aligning its environmental priorities with Chapter 27 of the EU *acquis*. The MIFP includes an overview of investments needed for compliance, project cost estimates and assessment of potential sources of finance. It discusses the affordability of projects, defines priorities for investment and develops a financing strategy with investment needs, finance sources and the timing of individual projects. A priority investment plan was developed for projects to be started by 2029, based on detailed pipelines of required investments in waste, wastewater and drinking water infrastructure. However, no documents related to the 2020 MIFP are available to the public.

Serbia respects core investment principles such as investor protection, intellectual property rights protection and non-discrimination in areas inclined to attract green investment. These procedures are either part of individual institutional operational frameworks or part of multi-sectoral operational frameworks. For instance, the Ministry of Environmental Protection co-operates with Serbian Chamber of Commerce over regulatory frameworks, project implementation and matters relevant to EU integration. This inter-institutional co-operation between public and private institutions ensures lower costs cutting, simplified administrative procedures and a generally supportive environment for investment in new technologies, innovations, products and workplaces.

Serbia has shown commitment to creating predictable strategic and legal frameworks that are aligned at a national and sub-national level. In 2019, the economy adopted its National Strategy for Sustainable and Integrated Urban Development as well as a three-year action for its implementation. The strategy covers sustainable economic development, urban development and settlement management, social well-being, and environment quality, further aligning the economy with the European Union Urban Agenda. The strategy also addresses, among other things, climate change monitoring; air pollution; the protection of water resources and land, water, sewage and waste management infrastructure; and electricity infrastructure. It also covers the institutional framework needed to implement these areas of the strategy at local and national government levels.

Serbia has also developed a strong framework for making and implementing the choice of **public and private partnerships for green growth**. The economy's public-private partnership (PPP) framework is governed by the Law on Public Procurement and the Law on Public Private Partnership and Concessions, which was last amended in 2016 to account for PPP projects growing in both complexity and value. The law was amended with input from the European PPP Expertise Centre, an advisory service of the European Investment Bank.

Since 2012, Serbia's Public-Private Partnerships Commission has been providing professional support to PPP parties by overseeing concession proposals, holding consultations, giving advice, implementing best international practice and enforcing co-operation between government authorities and PPP parties. The commission is composed of nine government representatives, including those from the Ministry of Mining and Energy as well as the Ministry for Environmental Protection. Since 2017, Serbia has committed to several PPP projects in renewable energy or green growth areas, including four high-value wind farm PPPs[7] as well as a high-value PPP project for the Belgrade municipal waste-treatment facility.

The way forward for investment policy and promotion

Serbia has an open economy and a clear pro-investment stance that has successfully attracted FDI over recent years. Yet improving its attractiveness as an FDI destination requires further policy adjustments and reforms in the following areas:

- **Accelerate reforms to the legal and regulatory investment framework**. In order to retain its competitiveness as a leading destination for FDI, Serbia should continue to improve its legal framework for investment, in particular by amending investment law to provide additional guarantees and protection for investors, and improving its public consultation processes by involving stakeholders earlier in the policy-making process and allowing them enough time to comment.
- **Reinforce the independence, resources and capacity of the courts, particularly for commercial disputes**. Improving the functioning of the commercial courts over the protection of property rights and the enforcement of contracts will be crucial to underpinning Serbia's economic performance and its ability to attract investors while reducing transactions costs. In the long run, a more efficient judiciary could encourage investments and promote the establishment of economic relationships while having a positive impact on competition and innovation.
- **Increase the take up of mediation mechanisms**. While Serbia has developed mediation mechanisms that are aligned with EU standards, their use remains limited, preventing them from alleviating the pressure on the courts. Raising public awareness of alternative dispute mechanisms could represent a first step towards this goal.
- **Reinforce efforts to implement the IPR framework and strengthen enforcement bodies**. Successful implementation of the strategic framework for intellectual property for 2018-22 will require solid governance, co-operation and co-ordination among the multiple actors involved in the implementation and enforcement of IPR rights, and increased resources and regular training on IPR matters.
- **Reinforce IPR awareness-raising efforts**. While the IPR strategic framework focuses on enforcement, it is also crucial to increase awareness about IP protection and management strategies among policy makers and in business communities. This could be done by improving access to information and regularly organising joint events with the private sector and the education system.
- **Continue to strengthen the capacity of RAS's staff**. While the national investment promotion agency has played an important role in attracting investors, it will be crucial to strengthen the capacity of its staff, notably in areas related to investor targeting and support for SMEs to enable RAS to reinforce linkages between local firms and multinational firms.
- **Reinforce the investment facilitation role of RAS through better co-ordination with other government bodies and agencies**. RAS acts as the main counterpart for investors but its role is hampered by its inability to facilitate its administrative procedures directly and effectively. Reinforcing its role of collecting and validating administrative procedures and/or strengthening its co-operation with the responsible government bodies and agencies will improve its ability to work alongside investors during the project definition and establishment phase, as well as to continue to assist investors once a project has been implemented.

Trade policy (Dimension 2)

Introduction

Serbia's performance on the trade policy dimension has improved since the last assessment. The economy's score has increased from 3.5 in the 2018 Competitiveness Outlook to 3.8 in the 2021 assessment (Table 25.4) with notable progress having been made on all sub-dimensions. Serbia improved the legal framework of its trade policy-making process through the implementation of a new trade facilitation body and expert groups. Its inter-institutional co-ordination mechanism has proved effective and the Ministry of Trade, Tourism and Telecommunications (MTTT) has established a National Co-ordination Body for Trade Facilitation which ensures co-operation between various government authorities, organisations, the business community and other foreign trade stakeholders. Public-private consultations have been strengthened and the business community have greater involvement in the formulation of trade policy. Serbia had made efforts to increase stakeholder participation in both the formation and implementation phases of policy making, as mandated by the amendments to the Law on State Administration. It has also significantly increased trade regulatory transparency by ensuring openness at all stages of the public consultation process through new obligations to publish relevant information, documents and assessments.

Serbia is integrated into the global network of international trade agreements. The economy extended its trade network by signing a free trade agreement (FTA) with the Eurasian Economic Union (EAEU) on 25 October 2019. Some challenges, however, remain unchanged since the last cycle of analysis. Very little progress has been made in accession to the WTO since the last review and a number of bilateral treaties are in the preparation phase.

Significant progress has been made in opening up trade with the conclusion of Additional Protocol 6 to the Central European Free Trade Agreement (CEFTA) in December 2019. Serbia continues to make progress in increasing the attractiveness of its economy by amending and adopting policies on trade in services. It has not reported any protectionist legal changes. This is particularly important in a context where regulations restricting services have tended to increase among OECD economies in 2020 (OECD, 2021[39]). By amending the new Public Procurement Law, Serbia has horizontally increased the attractiveness of all its sectors to trade in services since the last review round. The law is now fully harmonised with EU directives, including the abolition of preferential price conditions for domestic suppliers for the selection of tenders and the award of contracts. It has also taken major steps to open up the markets in certain specific service sectors, such as architecture, which has seen the most significant fall in restrictiveness among the sectors analysed. Further efforts could be made to improve company regulations and amend cumbersome procedures for obtaining business visas.

Serbia has a strong policy framework for e-commerce which has improved since the last assessment. The Law on Electronic Commerce has been amended to align it with the EU *acquis* and a working group has been set up to identify key challenges to e-commerce development. In October 2019, an action plan was created to improve e-commerce in Serbia.

Table 25.5. Serbia's scores for trade policy

Dimension	Sub-dimensions	Score	WB6 average
Trade policy dimension	Sub-dimension 2.1: Trade policy framework	3.8	3.5
	Sub-dimension 2.2: Services trade restrictiveness	n.a.	n.a.
	Sub-dimension 2.3: E-commerce and digitally enabled services	4.0	3.1
Serbia's overall score		**3.8**	**3.4**

State of play and key developments

Serbia’s exports of goods and services have been steadily growing since 2015. Overall trade increased from 115.8% of GDP in 2018 to 112% in 2019 in real terms, compared with 97.4% in 2015.

Exports of goods reached EUR 16.4 billion in 2019, while imports reached EUR 22.0 billion. The external deficit on trade in goods and services in 2019 amounted to 10% of the economy's GDP (official balance of payments statistics). In 2019, exports of goods and services were 50.8% of GDP while imports were 51%. Due to the pandemic, exports of goods and services as a share of GDP fell to 48.7% in 2020, while imports of goods and services fell to 56.7%. Serbia is a net exporter of commercial services, with commercial exports accounting for EUR 6.7 billion against EUR 2 billion in imports.

The introduction of a 100% customs duty by Kosovo on imports from Serbia and Bosnia and Herzegovina at the end of 2018 strongly affected Serbia's trade of goods and explains some of the variation in the main export and import destinations. Although it is difficult to establish the exact amount, the losses have been estimated at around EUR 400 million, or about 1% of GDP per year (European Commission, 2019[14]). These tariffs were lifted by Kosovo on 1 April 2020 and other non-tariff barriers for deliveries from Serbia were lifted in early June.

The EU is Serbia’s main trade partner, followed by the CEFTA economies. In 2019, the EU accounted for 66.7% of Serbia’s exports. Trade with CEFTA signatories accounted for 17.4% of total exports and 4.0% of total imports in 2019. Italy (12.2% of exports) and Germany (11.9%) were the main export destinations, followed by Bosnia and Herzegovina (7.9%). In 2019, Germany (12.9%) and Italy (8.7%) were also among Serbia’s main suppliers, together with the Russian Federation (9.7%) and the People’s Republic of China (9.4%).

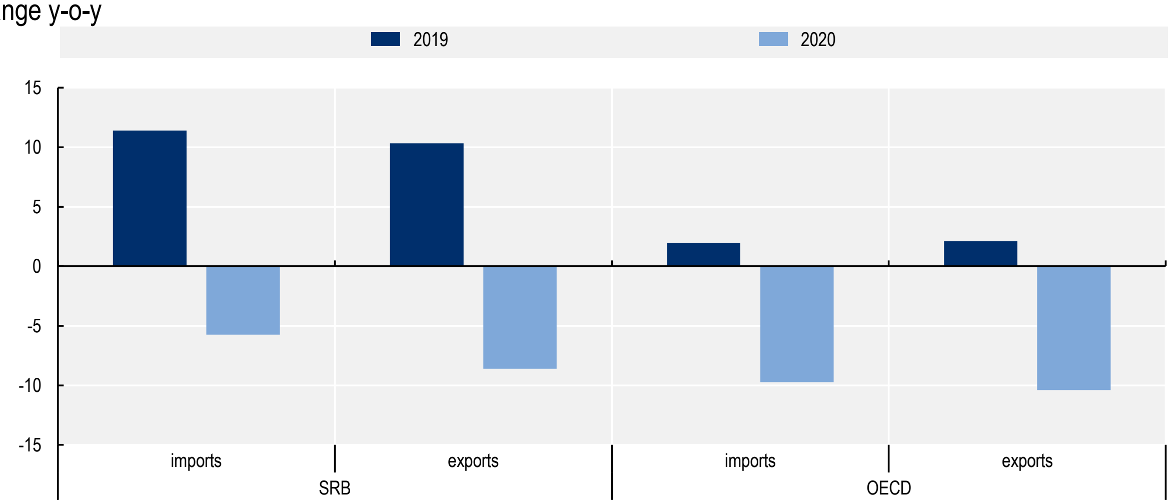
Like all economies, Serbia was affected by the COVID-19 pandemic. Containment-related export bans, restrictions on the movement of people, and closures of shops and services, which were in force from mid-March until the first week of May 2020, led to a decline in imports and exports in Q2-Q3 2020 compared to 2019 (Figure 25.4). The fall in GDP was more minimal (by 1% y-o-y). The COVID-19 outbreak means private consumption has plummeted, which was the largest contributor of the negative growth in the economy. Compared to other economies in the region and globally, Serbia was not the most severely affected; imports of goods and services declined by 5.8% and exports by 4.9% which was a smaller fall than the OECD average.

Exports of goods fell by 2.3% y-o-y in 2020, while imports declined by 3.5% leading to improvement of external goods trade balance by 7.1% (official balance of payments statistics). A geographical diversification of Serbia’s export base resulted in increased exports to the United States (by 18.7% y-o-y), China (by 11.5% y-o-y) and Turkey (by 10.3% y-o-y), as well as Poland (by 16.2% y-o-y), Hungary (by 8.6% y-o-y), and Romania (by 8.0% y-o-y) in the EU. These helped compensate for a decline of exports to Italy (by 19.3% y-o-y) and CEFTA economies (by 8.5% y-o-y). Exports to Serbia’s main trading partner, Germany, remained almost the same as in 2019 (decrease by only 0.7% y-o-y).

The largest reduction in goods imports in 2020 was from the Commonwealth of Independent States (CIS) (by 39.9% y-o-y) mainly due to low oil prices, and CEFTA economies (by 8.4% y-o-y). Imports increase from China (by 28.3% y-o-y), Hungary (by 11.7% y-o-y), and Slovenia (by 11.2% y-o-y).

Figure 25.4. Impact of COVID-19 on trade, Serbia versus the OECD (2019-20)

% change y-o-y



Source: (IMF, 2020[40]), *World Economic Outlook* https://www.imf.org/en/Publications/WEO; (OECD, 2020[41]), *OECD Economic Outlook*, https://doi.org/10.1787/0d1d1e2e-en.

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Industries in the WB6 economies were affected by the supply shock caused by the COVID-19 pandemic and the resulting slowdown in trade flows. The decline in Serbia's exports was primarily due to the breakdown of global value chains. As one of the economies in the region with a higher level of integration into GVCs, and which has maintained its manufacturing base, it felt the immediate effects more severely but also saw its trade flows decline much less in the long run. The region's relatively low level of development and sophistication, has limited most WB6 economies to backwards linkages, mainly as assembly centres (World Bank, 2020[4]). Trade in intermediate industrial goods linked to global value chains accounts for about two-thirds of Serbia's exports (OECD, 2020[42]). The disruption in supply chains resulting from the combined slowdown of manufacturing production in China and reduced demand in the United States and the EU has brought some production and trade to a virtual standstill. This was the case for Serbia, where GVCs are concentrated in a few sectors (automotive, electrical equipment, machinery, chemicals and metals) and linked to a single European country (Germany). However, once the supply of raw materials was restored and demand from the EU stabilised, production and exports resumed to.

The closure of EU borders to non-EU citizens and other regulatory responses, combined with the existing logistical challenges of the Western Balkans, have particularly affected freight transport services. The WB6 set up the CEFTA co-ordinating body to exchange information on trade in goods at the beginning of the pandemic. They also set up priority "green lanes" with the EU and "green corridors" within the WB6 to facilitate the free movement of essential goods through priority "green" border/customs crossings (within the WB6 and with the EU). At the peak of the crisis (April to May 2020), most road transport in WB6 economies passed through these green lanes and corridors. These have helped to maintain a certain degree of international trade in goods in the region. In fact, only about 20% of the goods benefitting from the Green Lanes and Corridors regimes were basic necessities, the rest being regular trade. Such inclusive regional co-operation has proven to be very efficient in mitigating the consequences of the COVID-19 pandemic and helping the region's economies to recover.

Sub-dimension 2.1: Trade policy framework

The Republic of Serbia boasts a comprehensive network of **inter-institutional co-ordination** mechanisms to formulate trade policies and regulations with the co-operation of expert groups, co-ordination bodies and civil society, under the direction of the MTTT. In addition to its existing trade policy mechanisms, Serbia established the National Co-ordination Body for Trade Facilitation (NTFB) in 2017, which meets at least twice a year and ensures the effective facilitation of foreign trade and co-ordination efforts through the co-operation of various government authorities, organisations, the business community and other foreign trade stakeholders.[8] Four expert working groups have been established under the auspices of the NTFB and meet whenever necessary.[9] The NTFB formulates action plans for each group (currently for period 2020-21), in close co-operation with representatives of the business community in order to address the most relevant issues of trade facilitation for the private sector, and evaluate the previous action plan outcomes.

Serbia has significantly strengthened and formalised its **public-private consultation** process on regulatory issues, including trade issues, since the last assessment. The Law on the Planning System (2018) obliges the government to conduct public consultation processes at all stages in the development of public policy legislation. A 2018 amendment to the Law on State Administration required the authorities to conduct consultations and ensure public participation early in the preparation of draft laws, regulations and other acts including regulations on trade issues. The rulebook governing the Guidelines of Good Practice for the Realisation of Public Participation in the Preparation of the Draft Laws and Other Regulations and Acts, was adopted in 2019, further defining the process and methods of consultation. In January 2020, the government adopted guidelines on the inclusion of the civil society in working groups for drafting regulations and public policies.

The business community regularly engages with the NTFB and its expert groups through a platform where companies and interested parties can easily ask questions and submit proposals. Private sector organisations are members of each expert working group, so business community representatives are included from the start of the drafting process. As a result, many of the activities that are formalised in the action plans are proposed by private stakeholders and accepted by public institutions, members of the NTFB. In line with the Law on Planning Systems, the competent authorities are required to publish the findings of regulatory impact assessments conducted in the process of preparing legislation.

Since the assessment in 2018, Serbia has made progress in developing new bodies to strengthen public-private partnerships and improve business community involvement in the formulation of trade policy. The government has made strides in increasing stakeholder participation among non-governmental organisations (NGOs), academia, the private sector and chambers of commerce[10] in both the formation and implementation phases of policy making, as mandated by the amendments to the Law on State Administration.

Serbia has also significantly improved the transparency of its regulation by making consultation with all relevant entities mandatory in order to ensure openness, while obliging the competent authorities to inform the public at an early stage of the preparation of draft laws and relevant regulations. The new legislation in force has put in place a system that limits the use of shortened procedures for the adoption of regulations, including those affecting trade. As part of the consultation process, the authorities need to publish information on the options being considered and call on the public to submit proposals and written comments. The e-government portal[11] has dedicated applications redirecting to all ongoing consultation processes that are being conducted by the line ministries. When a public debate is required, the competent authority is obliged to publish on public websites and on the e-government portal the draft law, the presentation of the problem in a specific area, its causes, the objectives and the expected effect of the adoption of the law, and the rights and obligations of the entities covered by the law.

However, Serbia has not yet fully established a dedicated operational website that can act as a hub for all public-private consultations. A website is envisaged and the authorities are very active in implementing it in order to provide the public and all interested parties with an overview of all phases of the preparation of laws and other regulations. The portal should be operational by the end of the first quarter of 2021. As the site is not yet fully operational, the positive effects of the regulation on PPCs have yet to be quantified. There are very limited concrete data on the number of regulations affecting trade adopted under simplified procedures in the current regulatory context[12] and reporting on the effectiveness of consultations is still limited. The Public Policy Secretariat (PPS) collects statistics on the number of legislative projects that have gone through public consultation, but this reporting is still done on an ad hoc basis. Furthermore, a number of local private sector stakeholders reported that the time allocated for public consultations was sometimes too limited. In addition, the implementation of comments in draft regulations does not always seem to be carried out in a fully harmonised way.

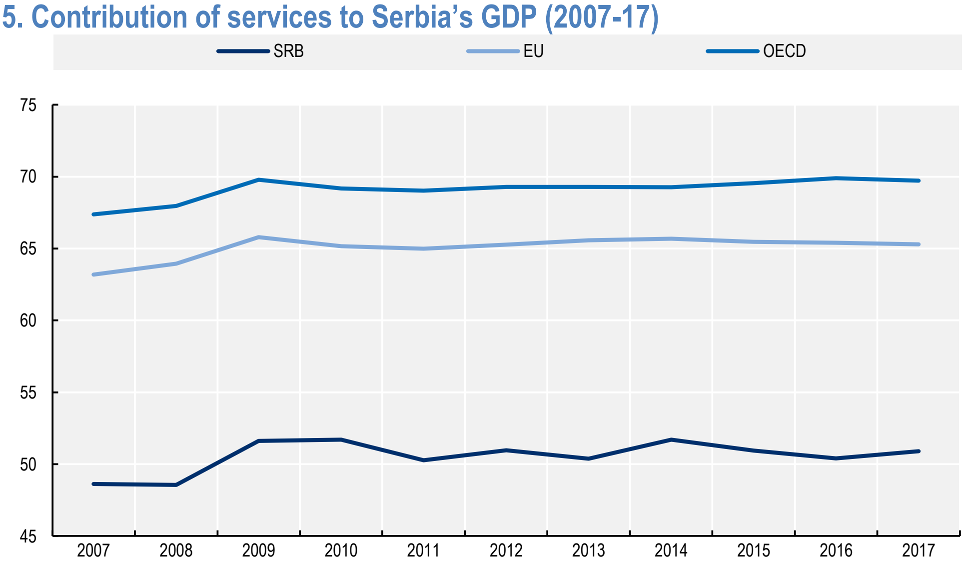
In the area of bilateral and multilateral **free trade agreements**, no progress has been made in Serbia's accession to the WTO since the last assessment. Serbia compensates for this through bilateral treaties and partnerships, notably by an FTA with the Eurasian Economic Union (EAEU) signed on 25 October 2019. The agreement was ratified in February 2020, but has not yet entered into force. This only extends the agreement to Armenia and Kyrgyzstan, as Serbia had already signed treaties with the other parties of the EAEU. Negotiations for a free trade agreement with Ukraine are ongoing. Since December 2018, negotiations are also underway on a bilateral investment treaty with South Korea. Discussions on a future trade agreement with the United Kingdom started in 2019. Serbia has also amended a series of existing treaties such as Protocol I and Protocol III on Trade in Services to the Agreement on Free Trade with Turkey, which entered into force on 1 June 2019. Similarly, Serbia supported the adoption of the Additional Protocol 5 (on trade facilitation) to the CEFTA on 26 May 2017, and the Additional Protocol 6 on Trade in Services to the CEFTA on 18 December 2019, which entered into force on 11 January 2021. Finally, Serbia has signed a limited, strategic partnership agreement signed in August 2009 with China.

Overall the integration of Serbia into international trade is half-hearted, with the economy having strong legal bases with major partners, in line with its regional integration policies and with the EU, but limiting trade outside this scope. This is particularly negative as Serbia is the largest economy in the WB6 region, and this status quo may hinder the benefits of a favourable regulatory regime for foreign direct investment in this economy (see investment chapter) and close the doors to third country investors.

Sub-dimension 2.2: Services trade restrictiveness

Services contribute almost two-thirds of GDP in the WB6 economies, underlining how strongly economic growth, innovation and labour markets depend on effective policies on services that promote open and competitive service markets. In Serbia, services contribute to more than 50% of GDP (Figure 25.5) and account for more than 57.5% of employment.

Figure 25.5. Contribution of services to Serbia's GDP (2007-17)



Source: (World Bank, 2019[43]), *World Development Indicators* (database), http://data.worldbank.org/datacatalog/world-development-indicators.

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Enhancing openness of trade in services can improve domestic firms' efficiency and productivity. Trade in services allows countries to specialise according to their comparative advantages in services and skills.

The potential gains from liberalising services trade are significant because increased domestic and foreign competition, complemented by effective regulation, can enhance performance (OECD, 2018[44]) and lower trade costs related to regulatory barriers (Box 25.2).

Box 25.2. The costs of regulatory barriers to trade in services

Recent OECD analysis has found that restrictions on trade in services significantly affect trade by increasing the costs for firms operating in the host economy (Rouzet and Spinelli, 2016[45]) Trade costs arise both from policies that explicitly target foreign suppliers, and more generally from domestic regulation that falls short of best practice in the area of competition and rule-making. The costs resulting from barriers to trade in services are much higher than those from trade in manufactured goods.

Trading services is costly. The studies show that policy-induced services trade costs are relatively high. Expressed as percentages of total trade value, average multilateral costs for cross-border services trade are around 57% for communication services and 54% for business services, around 60% for transport services, around 103% for insurance services, and around 255% for financial services. Even exporting to the most liberal countries still requires compliance with regulation at a cost that correspond to around 30% of the export value in most sectors and nearly 90% for financial services. Within the European Single Market, however, services trade costs are significantly lower – policy-induced costs of cross-border services trade are at around 10% in most sectors and around 32% for financial services.

Source: Benz and Jaax (2020[46]), "The costs of regulatory barriers to trade in services: New estimates of ad valorem tariff equivalents", http://dx.doi.org/10.1787/bae97f98-en.

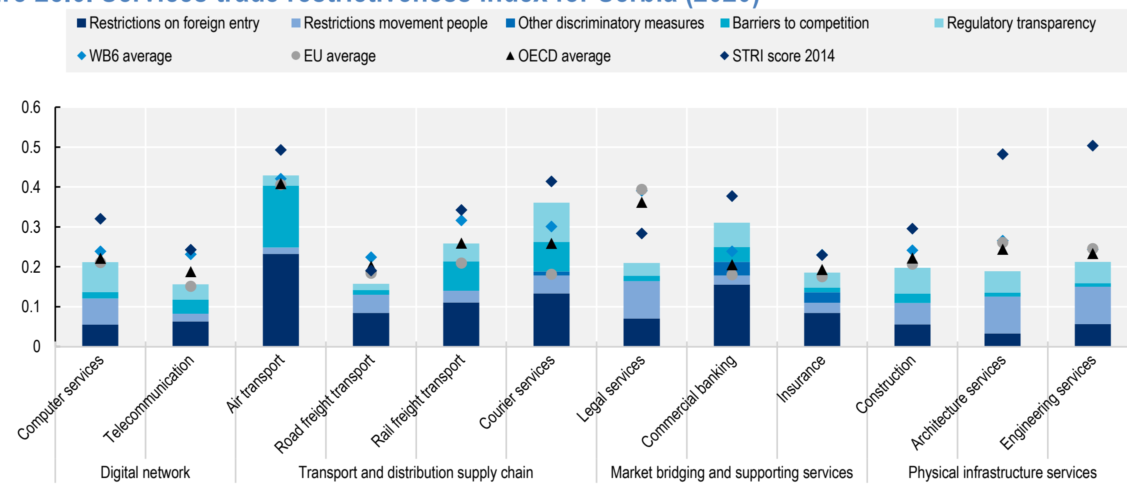
The OECD Services Trade Restrictiveness Index (STRI) was used to **analyse barriers to trade for 12 services sectors** in Serbia. The OECD STRI project is a unique, evidence-based diagnostic tool that inventories trade restrictions in 48 economies,[13] allowing economies to benchmark their services regulations against global best practice, identify outlier restrictions, and prioritise reform efforts. For this CO assessment cycle, the 12 services sectors are grouped into four clusters: 1) transport and distribution supply chain (air transport, road transport, rail transport, courier); 2) market bridging and supporting services (commercial banking, insurance, legal services); 3) physical infrastructure services (construction, architecture, engineering); and 4) digital network services (computer services, telecommunications).

Information was collected from the WB6 economies' laws and regulations, and indices were calculated for seven years (2014-20). These composite indices quantify restrictions across five policy areas: foreign entry, movement of people, barriers to competition, regulatory transparency and other discriminatory measures. The indices quantify regulatory restrictions in each of the 5 policy areas for the 12 sectors by giving them a value between 0 and 1. Complete openness to trade in services gives a score of 0, while being completely closed to foreign service providers yields a score of 1.[14]

Each policy area is composed of a series of measures. These measures are called "horizontal" if they are present in all sectors, or "sector specific" if they only affect a particular sector.[15] The STRI measures the most-favoured-nation (MFN) restrictions and does not take into account any specific concessions, such as regional trade agreements or mutual recognition agreements (Geloso Grosso et al., 2015[47]).

Figure 25.6 shows Serbia's score in the 12 sectors covered by the STRI project along with the average and the lowest score among the WB6 economies. Serbia has a lower score on the STRI than the WB6 average in 8 out of 12 sectors. Compared to the STRI project member states, Serbia is in the low range for the restrictiveness of its service sectors. Legal services, architecture services and telecommunication services are the three least restrictive sectors (those with the lowest STRI score). Commercial banking, courier services and air transport are the three relatively most restrictive sectors.

Figure 25.6. Services trade restrictiveness index for Serbia (2020)



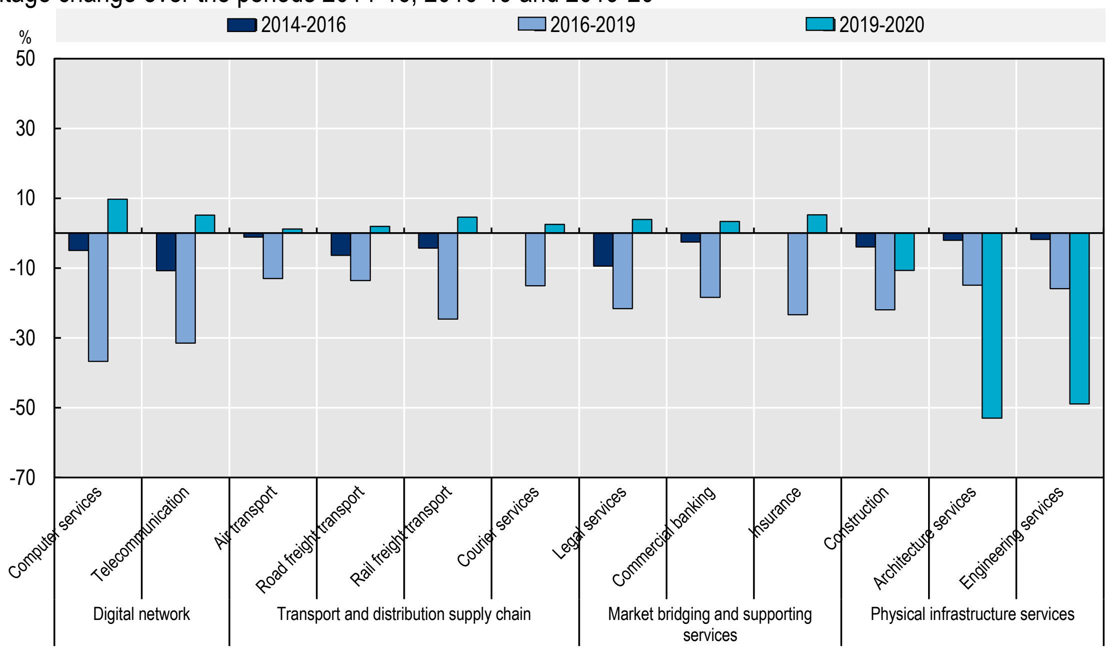
Note: (0=no restrictions, 1=fully restricted); average represents the WB6 average for 2020; Bulgaria, Croatia and Romania are not OECD members nor OECD STRI key partner economies and therefore are not covered by STRI indices; key partners to the STRI project are Brazil, the People's Republic of China, Costa Rica, India, Indonesia, Kazakhstan, Malaysia, Peru, the Russian Federation, South Africa and Thailand.
Source: (OECD, 2020[48]), *Services Trade Restrictiveness Index Regulatory Database*, http://oe.cd/stri-db.

StatLink https://doi.org/10.1787/888934256273

Serbia has demonstrated a continued willingness to lower restrictions affecting trade in services, as Figure 25.7 shows. The slowdown in reforms to open up services markets in 2019-20 is explained by the focus of all regulatory change in the economy on measures to safeguard public health and the economy in the context of the COVID-19 pandemic. It should be noted that there are no trends towards regulatory protectionism in the WB6 region, including Serbia, although some minor restrictive policy changes were introduced in 2020. Refraining from introducing disproportionate limitations on services is particularly important in a context where recent OECD studies of member states tend to show a growth in the number of protectionist regulations hindering services in 2020 (Banja et al., 2017[49]).

Figure 25.7. Serbia's Services Trade Restrictiveness Index by sector (2014-20)

Percentage change over the periods 2014-16, 2016-19 and 2019-20



Note: Negative values indicate a reduction in the restrictiveness of the economy's trade regulatory environment.
Source: (OECD, 2020[48]). Services Trade Restrictiveness Index Regulatory Database, http://oe.cd/stri-db.

StatLink https://doi.org/10.1787/888934256292

The following analysis starts with the horizontal measures that are included in all sectors and that typically hamper services trade in the economy as a whole. In particular, in the area of general business regulations, restrictions on the movement of service providers, standards for the cross-border transfer of personal data, the legal framework for public procurement and the screening of foreign investment. It then displays the STRI scores, explains sector by sector what drives the results, and provides a brief description of the most common restrictions and good practices. Box 25.3 presents the modes of supply of trade in services as defined by the General Agreement on Trade in Services (GATS) and used in the OECD STRI.

Box 25.3. Examples of the four services supply modes

The definition of trade in services under the General Agreement on Trade in Services (GATS) has four components, depending on the territorial presence of the foreign service provider and the consumer at the time of the transaction. Pursuant to Article I:2, the GATS covers services supplied.

Mode 1: Cross-border: Services are provided from the territory of one member into the territory of any other member.

Example: A consumer in economy A receives services from abroad through its telecommunications or courier infrastructure. These supplies may include any type of consultancy, legal advice, architectural services, or computer related services.

Mode 2: Consumption abroad: Services are provided in the territory of one economy to the service consumer of any other economy.

Example: Nationals of economy A have moved abroad as tourists, students, or patients to use respective services.

Mode 3: Commercial presence: Services are provided by a supplier of one economy, through commercial presence, in the territory of any other economy.

Example: The service is provided within A by a locally-established subsidiary, or representative office of a foreign-owned and controlled company (bank or insurance company, air company, construction firm, etc.).

Mode 4: Movement of natural persons: Services are provided by a foreign supplier, through the presence of natural persons of an economy in the territory of any other economy.

Example: A foreign national provides a service within A as an independent supplier (e.g., IT consultant) or employee of a service supplier (e.g. IT consultancy firm).

Source: (WTO, GATS, 1995[50]), Article I:2 ; (WTO, n.d.[51]), Trade in services modes of supply, https://www.wto.org/english/tratop_e/serv_e/cbt_course_e/c1s3p1_e.htm.

Cumbersome horizontal business regulations affect firms' ability to operate

There are a number of areas where Serbia could improve its *general business regulations*. Foreigners are limited in their ability to acquire or use land and real estate.[16] The STRI methodology captures cases where economies have minimal capital requirements in their legislation. In order for a limited liability company to be established and registered in Serbia it must deposit a minimum amount of capital, which in theory affects the operating capacity of foreign companies. However, the effect of this measure is marginal in practice as, according to the Company Law, the minimum share capital for limited liability companies is 100 dinars, which is less than EUR 1. Moreover, the minimum capital does not have to be paid before or at the time of registration; shareholders are able to commit to fulfil this obligation in the foundation deeds within a predefined period of time.

General *restrictions on the movement of people* also limit trade in services in Serbia. Although significant progress has been made in easing movement between the CEFTA economies through the conclusion of Additional Protocol 6 to the CEFTA Agreement, nationals from non-CEFTA and EU economies are subject to restrictive requirements. Serbia does not apply quotas or labour market tests for foreigners from third countries, which has a positive impact on its STRI score. The length of stay of Independent service suppliers and intra-corporate transferees in Serbia is limited to 12 months. Contractual service suppliers can initially only stay up to 3 months. The 12-month duration is comparable with those observed in the EU Member States participating in the STRI project, but less than best practice elsewhere which is more than 36 months (OECD, 2020[48]). The length of stay for contractual service suppliers falls short of both EU and OECD best practice, however.

Finally, the STRI indices in the partner countries of this project are very often negatively impacted by the World Bank *Doing Business* indicators, particularly for registering a company (World Bank, 2020[52]). Serbia has made it much easier to start a business on its territory and is therefore very attractive. There are seven steps involved in starting a business in Serbia: 1) notarisation of the deed of incorporation; 2) opening a bank account and paying the registration fees; 3) obtaining a registration certificate, tax identification number, pension fund (PIO Fund) and health fund certificates, and the certification of signatures (three copies) for opening a bank account; 4) the affixing of a stamp and a seal; 5) registering employment contracts with the organisation / employment fund; 6) obtaining an electronic certificate; and 7) registering the ultimate beneficial owners (UBOs). This is below the maximum set as good practice by the STRI. Likewise, the procedure takes 5.5 days to completed and the total cost of all the official procedures needed to register a company is 2.4% of per capita income, also very competitive compared to other economies in the region.

The legal framework for public procurement has also improved. Serbia has reduced limitations in this area since the last review cycle. The new Law lifted the domestic prices preferences or conditions on foreign contractors to source personnel and products locally when selecting tenders and awarding contracts that hindered the public procurement process. The new regime does not bias the conditions of competition in favour of local firms. Moreover, the regulations on public procurement explicitly prohibit discrimination against foreign suppliers,[17] which is relatively rare among the WB6 and has a highly positive impact on Serbia's STRI score. No procurement regime is applied to foreign suppliers below the value thresholds.[18]

Serbia's laws and regulations do not require the consideration of economic interests in the *screening of foreign investments* but nor is it explicitly excluded. The economy does not set a threshold above which a foreign investment project is subject to screening.

Restrictions in specific services sectors[19]

Beyond the horizontal issues affecting Serbia's trade in services across all sectors, a number of sector-specific restrictions still remain in the 12 sectors analysed.

Air transport services are defined as passenger and freight air transport (code 51 under the International Standard Industrial Classification – ISIC Rev 4), carried domestically or internationally. The STRI for this sector only covers commercial establishments. In light of the range of air transport sub-sectors, the STRI's approach is to focus on measures affecting carriers' transport of passengers and goods between points. Airport management and other aviation services are only relevant where regulations enacted by relevant authorities could affect the ability of foreign carriers to transport passengers and goods between points. The other aviation services are covered more fully in the STRI for logistics services.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.165 and 0.601. The WB6 average is 0.421, which is roughly in line with the EU average of 0.406 and the OECD average of 0.409 (where 0 signifies a completely open sector, and 1 a sector closed to foreign service providers). With a score of 0.429, Serbia is the second most-restrictive of the WB6 economies.

Due to the regulatory structure of the sector, which is largely driven by a multilateral approach, there is limited variation in STRI scores across the WB6 economies. Serbia is no exception, as its regulatory environment in this sector is largely aligned with EU regulations.

Restrictions on foreign entry play a prominent role in Serbia's STRI score for this sector. Like 40 other OECD and STRI key partners (OECD, 2020[53]), Serbia limits the equity share that foreign natural or juridical persons can hold in an air transport services company to 49%. This restriction is, however, in line with European Union legislation. Serbia follows a liberal approach in the leasing of foreign aircraft without crew (dry lease), which allowed subject to prior authorisation. In contrast, the lease of foreign aircrafts with crew (wet lease) is prohibited.

The other major category that influences Serbia's STRI score is *barriers to competition* due to the non-competitive allocation of slots. Like many economies, Serbia maintains public ownership of its national carrier Air Serbia. Slots at airports with high demand are allocated on the basis of historical rights, prohibiting the commercial exchange of slots. However, half of the slots remaining after the historical allocation go to new entrants, which reduces the degree of restrictiveness in the sector.

Road freight transport (ISIC Rev 4 code 4293) covers commercial road freight establishment only. Cross-border trade is governed by a system of bilateral and plurilateral agreements which provide for permits, quotas and other regulations.

The 2020 scores for all OECD member states and STRI partners in this sector range between a very low 0.124 and a high 0.624. The WB6 average is 0.225, demonstrating the region's open approach towards transport services, although still more restrictive than the averages for the OECD (0.201) and EU (0.184). Serbia is the second least restrictive of the WB6 economies with a score of 0.158. Due to the wide spread of scores in this sector, Serbia compares well against many OECD member states; against EU countries, Serbia is only slightly more restrictive than the best performer (the Czech Republic) and less restrictive than the worst performer (Poland).

Serbia's score is worsened by cross-cutting factors affecting the whole economy, particularly those related to movement of people. Professional qualifications are paramount in this sector, particularly for truck drivers, who must obtain a special licence that demonstrates their professional competence. However, Serbia does not have procedures in place to recognise certificates gained abroad, meaning foreign licences are not recognised and imposing *restrictions on the movement of people*.

Sector-specific regulations also impose *restrictions on foreign entry* in Serbia. One such is the existence of a regime of discretionary authorisation. Within 15 days of receipt of a request, the transport ministry assesses whether Serbia has adequate transport capacities, i.e. a certain type and number of vehicles, and decides on the allocation of licences on a case by case basis. Serbia also applies an economic needs test before issuing a licence to transport freight within its borders. If Serbia has adequate transport capacity for the transport licence requested, the ministry will reject the request. In this sector, truck drivers providing cross-border road transport services (Mode 1) are highly dependent on visa measures. Thus, any regime that grants them adaptations to the general visa regime has positive effects on the fluidity of transport and thus the attractiveness of this activity within the host economy. Among the measures that can be found among the best STRI performers is the possibility to obtain a visa at the border or even a simple visa exemption for the entry/temporary transit of the crew. In that regard, Serbia do not grant any visa exemptions for third-country truck drivers. However, preferential treatment (in the form of a non-visa regime) is given to nationals from the WB6 and the EU economies.

Rail transport (ISIC Rev 4 code 4912) is provided over a dedicated network; the market structure may take different forms. The two most common are: 1) vertically integrated rail services firms owning and managing both the infrastructure and the operation of freight services; and 2) vertical separation between the infrastructure management and operations. Regardless of the market structure, there are well-established best practice regulations that also take into account competition from other modes of transport, particularly road transport.

The 2020 scores for all OECD member states and STRI partners in this sector range between a very open 0.129 and 1, indicating the sector is completely restricted, while the WB6 average is a relatively low 0.317. Serbia, with a score of 0.259, is the median WB6 economy, scoring higher than the EU average (0.259) and in line with the OECD (0.209). Serbia is also substantially in line with EU's worst performer (Poland).(See Trade policy (Dimension 2) regional chapter)

Serbia's score for this sector is negatively affected by the lack of grants of access rights, *restricting foreign entry*. Rail companies from neighbouring economies are granted access to Serbia's rail network to operate international and domestic cargo services.[20] Railway operators must also be established locally in order to provide services in Serbia and require an operating licence. The procedure for issuing railway licences and safety certificates is in accordance with the EU regulations (Directives 2012/34, 2004/49, 2016/798) governing this area. According to the rulebook on transport licences in railway traffic, operators must submit a business plan when applying for a licence to prove their financial capability.

On the issue of the *movement of people*, some professions in the sector, such as train drivers, need a licence in order to operate. This is in accordance with EU Directive 2007/59/EC on the certification of train drivers, and overall Serbia does not impose any additional burdens on foreign service providers.

Barriers to competition are an important contributor to the STRI score for this sector. Access fees are calculated by the infrastructure manager following certain predefined criteria. These fees must also be approved by the government. Prices for rail services are also regulated through formal government approval of the level of tariffs. The infrastructure manager regulates congested traffic and decides on requests to use congested tracks. Serbian Railways was split into subsidiaries responsible for cargo, passenger and infrastructure in 2015. Srbija Kargo is Serbia's main rail freight operator and it is state-owned.[21] While the Railway Law stipulates that both public and private companies may participate in railway infrastructure, the state has a monopoly on this sector. The activity of infrastructure management is considered a natural monopoly and activity of public interest according to the Law on Railways, which is in accordance with EU Directive 2012/34.

Courier services (ISIC Rev 4 code 53) comprises postal and courier activities. While courier services have traditionally been an important means of communication, the rise of modern ICT means letters are less frequently used for communication. The STRI for courier services covers regulations that have an impact on the pick-up, transport and delivery (door-to-door) of letters and parcels, and express delivery services, regardless of who provides the service. These services include both addressed and unaddressed items.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.106 and 0.881, while the WB6 average is 0.301. With a score of 0.361, Serbia is in the median position among WB6 economies, and is more restrictive than the EU average of 0.181 and the OECD average of 0.259. Serbia's score has become less restrictive in this sector since 2014 but is still affected by two sector specific measures: the fact that the designated universal service provider is the state-owned Post of Serbia and preferential treatment of the designated postal operator .

A new law on postal services entered into force in November 2019. It replaced the Postal Act and harmonised the regulatory framework fully with the first and second EU postal services directives and partly with the third.

Serbia does not impose a commercial presence requirement, but cross-border services do require a local presence in Serbia, affecting foreign entry. Postal operators are able to provide postal services on the basis of a permit. As in many other economies, Serbia grants the designated postal operator two reserved areas: a monopoly on a subset of the range of universal services. Universal postal services in Serbia include collection, sorting, transport and delivery of letter-post items weighing up to 2kg as well as collection and delivery of letter-post items weighing up to 10kg in domestic and international postal traffic, and delivery of parcels up to 20kg in international postal traffic. As regards *barriers to competition,* Serbia's designated universal postal services operator is the public company Pošta Srbija (Post of Serbia), which could act as a barrier to competition. There is at least one other dominant provider in the courier services market. Postal operators in the economy are obliged to submit the price list of postal services to the designated Agency, RATEL no later than three days before its implementation begins. The postal operator is also obliged to apply the postage in accordance with the price list of postal services.

Sectoral *regulatory transparency* measures include customs and licensing procedures. Serbia requires postal operators to bear the costs of a licence fee. The operators must also pay an annual fee of 0.4% of the total revenue generated from the provision of postal services.

Legal services (ISIC Rev 4 code 691) cover advisory and representation services in both domestic and international law and, where relevant, measures are entered separately for each of them. International law includes advisory services in home-country law, third-country law, international law, and appearing in international commercial arbitration. Domestic law extends to advising and representing clients before a court or judicial body in the law of the host country.

The 2020 scores for all OECD member states and STRI partners in this sector range between a very open 0.141 and 1, while the WB6 average is 0.391. With a score of 0.209, Serbia is the least restrictive of the WB6 economies, and is also less restrictive than the averages for the EU (0.394) and OECD (0.362).

Serbia's score is negatively affected largely due to foreign entry restrictions and *restrictions on the movement of people*. There are relatively stringent procedures on foreign lawyers who wish to practise in Serbia. A licence is needed to provide legal services in Serbia. Foreign citizens registered in the Register A of the Directory of Lawyers, are limited to giving oral and written legal advice and opinions related to the application of the laws of their home country and international law. Foreign citizens registered in Register

B of the directory (i.e. to be permitted to provide advice on Serbian law as a foreign licensed lawyer), have the same advocacy rights as domestic lawyers, although for the first three years after registration, foreign lawyers can only act in Serbia via a partnership with a domestically licensed lawyer. In order for foreign professionals to enter Register B as a fully locally licensed practitioner, they must, in addition to other conditions, have passed the bar exam in the Republic of Serbia. Foreign lawyers are not able to obtain authorisation for temporary entry to carry out a specific project or to advise in some areas of legal services.

Restrictions on foreign entry are especially present in domestic law in Serbia. The law requires that equity shares of legal services firms may only be held by licensed lawyers or firms in Serbia. Registration with the establishment of a legal entity in Serbia indicating commercial presence is required to provide cross-border services (Mode 1 – see Box 25.3). A lawyer is required to have an office in Serbia, meaning that local presence is also required. The Bar Association is obliged to enable candidates to take a lawyer's oath, provided they have paid the costs of registration, and, if they are foreign citizens, provided they have submitted proof of a concluded contract of professional liability insurance in the Republic of Serbia.

Regarding *barriers to competition*, Serbian law does not permit lawyers, joint law firms or law firms to advertise.

Commercial banking (ISIC divisions 64-66) is defined as deposit-taking, lending and payment services. Commercial banking services are traded business to business, as well as business to consumer for retail banking. Efficient banking services are one of the backbones of a dynamic economy; they provide financing for investment and trade across productive activities, thus underlying all value chains.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.131 and 0.517, while the WB6 average is 0.239. With a score of 0.311, Serbia is the second most-restrictive of the WB6 economies in this services sector and is also more restrictive than the OECD average (0.205) and the EU average (0.180). However, it has made progress since 2014.

Serbia’s scores are mainly influence by three policy areas: restrictions on foreign entry, barriers to competition and regulatory transparency. These results reflect the particular characteristics of the sector as well as the policy environment in which it operates. As the banking sector plays a key role in each economy but can pose risks to financial stability, restrictions on entry and competition have sometimes been used as a means for authorities to maintain control over the operation of the sector in the absence of effective prudential regulation.

Regarding *foreign entry*, Serbia does not limit the share of foreign equity capital in local banks, nor does it restrict the establishment of foreign bank branches or the licensing of foreign-owned banks which is a positive outcome of the Banking Law. Furthermore, licensing is done according to objective and transparent principles applied in the same way as to domestic banks. Finally, Serbia’s regulation of cross-border mergers and acquisitions is non-discriminatory. Restrictions remain, however: foreign banks need to have a commercial presence in Serbia to provide services to residents. In the same logic, at least one of the members of the board of directors of a commercial bank must be a resident.

In barriers to competition: Serbia’s STRI scores are positively affected by its adequate regulation of financial products and the full operational, managerial and fiscal independence of its supervisory authority from the government. Finally, none of the largest commercial banks are state-owned. In consequence, this STRI category is up to speed with STRI best performers.

As regards *regulatory transparency* The authorities are obliged to provide reasons for rejecting an application for a licence within a maximum of 15 days, in line with OECD good practice on the matter. However, the time and cost required to resolve a debtor's insolvency contributes negatively to Serbia’s score in this area.

In *other discriminatory measures* Serbia's adherence to International Reporting Standards (IFRS) improves its STRI score in the area of other discriminatory measures. Its regulations are in line with Basel

II, while the implementation of Basel III recommendations is ongoing: Since December 2016, the National Bank of Serbia has adopted a set of regulations implementing Basel III standards[22] – see Access to finance (Dimension 3) – which also positively affects the openness of Serbia's commercial banking sector.

Insurance services (ISIC Rev 4 codes 651 and 652) comprise life insurance, property and casualty insurance, reinsurance and auxiliary services. Private health insurance and private pensions are not covered.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.104 and 0.565, while the WB6 average is 0.231. With a score of 0.185, Serbia is the third most-restrictive of the WB6 economies in this sector and lies between the EU average of 0.175 and the OECD average of 0.193. The relatively low spread of scores in this sector means that differences in rankings are dictated by measures with a limited impact on the trade in services. Thus, it is more relevant to note that Serbia maintains a very high level of attractiveness, including in comparison to EU and OECD states.[23]

Serbia's STRI scores in this sector are mainly influenced by two policy areas: foreign entry restrictions and regulatory transparency. These results reflect the particular characteristics of the sector as well as the wider policy environment. In general, as with the wider financial services sector, insurance relatively non-restrictive in Serbia. the main factors that make Serbia's banking sector relatively also apply for insurance. Serbia does not limit the share of foreign equity capital in local (re)insurance companies, nor does it restrict the licensing of foreign-owned (re)insurance companies. Licences are issued according to objective and transparent principles with no distinction made between foreign-owned and domestic companies. Serbia's regulation of cross-border mergers and acquisitions is non-discriminatory.

A few policies increase the *restrictions on foreign entry* in this sector, however. Foreign insurers need to have a local presence in Serbia to provide services to residents. Serbia also restricts the operation of branches of foreign insurance companies operating in its territory. At least one member of the board of directors of a foreign insurance company must be a resident. In addition, the Insurance Act sets a requirement for Serbian language proficiency as a prerequisite for obtaining a managerial position in a (re)insurance company.

Before 2019, *other discriminatory measures* affected the openness of the insurance sector because of Serbia's deviation from international standards on transparency and anti-money laundering (AML) and combatting the financing of terrorism (FATF 40). In 2019, as part of a major legal reform, Serbia introduced a new AML law as well as by-laws that regulate specific AML activities for the insurance industry. These measures have increased the openness of the sector.

Construction services (ISIC Rev 4 codes 41 and 42) cover the construction of buildings (residential and non-residential) as well as construction work for civil engineering. Construction has historically played an important role in the functioning of economies, providing the infrastructure for other industries. It accounts for a significant share of GDP and employment in most countries. There is a good deal of regulatory complementarity between the construction services sector and architectural and engineering services (below). The regulatory landscape of Serbia reflects these similarities, with all three sectors having very similar STRI scores.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.123 and 0.464, while the WB6 average is 0.242, the OECD average is 0.222 and the EU average is 0.207. Serbia is the second least-restrictive of the WB6 economies in this sector with a score of 0.198, placing it within the range of EU and CEEC scores. Serbia scores more liberally than the worst-performing CEEC country (Slovenia) but more restrictive than that region's best performer (the Czech Republic).

Serbia's score in the sector is mostly driven by horizontal measures such as restrictions on the acquisition and use of land and real estate by foreigners and local presence requirements for cross-border supply

Construction services is a labour-intensive sector (skilled and unskilled), which means it generally accounts for a higher share of employment than GDP in most economies. The potential for mechanisation and automation, and thus capital-intensive production, remains limited. *Restrictions on the movement of people* are applied across the board in Serbia and thus have a significant impact on this sector. Serbia's score is also affected by restrictions applied to architecture and engineering services, discussed below.

The movement of people is also restricted by licensing requirements to provide engineering services in Serbia. In 2018 an amendment to the law extended licensing requirements to all types of design and construction, whereas previously it only applied to specific sectors such as airports, railways, waste treatment plants and renewable energy facilities.

Architecture services (ISIC Rev 4 code 711) cover architectural services and related technical consultancy. These services form the backbone of the construction sector, with key roles in building design and urban planning. An important feature is the regulatory complementarity between architecture, engineering and construction services. Architectural and engineering activities are often combined into projects managed by a single company, and are sometimes subsumed in the building and construction sector. The STRI definition of architecture services includes several related activities, such as advisory and pre-design architectural services, architectural design, contract administration services, and urban planning and landscape architecture services.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.113 and 0.684, while the WB6 average is 0.265. With a score of 0.189, Serbia is the second least-restrictive of the WB6 economies in this sector and is also less restrictive than the EU (0.260) and OECD (0.244) averages. Its score is mostly affected by licensing requirements and the lack of temporary licensing system.

Serbia places restrictions on the *movement of people* in this sector with licence requirements with no temporary licensing system in place, meaning foreign architects cannot be granted temporary entry to carry out a specific project or provide advice in some area. Serbia has limited the negative impact of this by implementing a procedure for recognising foreign qualifications in 2020. Even so, applicants with a qualifying licence in their home country must take the general part of the professional exam and must fulfil the conditions prescribed in the law. However, some foreign licences are recognised on a reciprocal basis, mainly applying to CEFTA and EU licensed professionals.

As regards *restrictions on foreign entry*, Serbia restricts cross-border services. In consequence, services can only be supplied via some form of local presence in the economy, but there is no obligation to establish a commercial presence. Foreign authorised persons are only recognised in Serbia upon proving the conclusion of a professional liability insurance contract in the state in which they reside. Moreover, the contract if accepted in Serbia only if the insured is covered by a guarantee that is equivalent or comparable to the amount of insurance determined by the regulations governing professional liability insurance for performing activities in the field of spatial planning and construction in Serbia.

Engineering services (ISIC Rev 4 code 711) cover several related activities, such as engineering and integrated engineering services, and engineering-related scientific and technical consulting services. Engineering services are the backbone of construction and supply. Engineers are involved in the construction of key infrastructure, such as buildings and roads. They also play an important role in the development of production processes and the adoption of new technologies

The 2020 scores for all OECD member states and STRI partners range between 0.118 and 0.575, while the WB6 average is 0.243. Serbia, with a score of 0.212 is less restrictive than the averages for the EU (0.245) and the OECD (0.233). As in the architecture services sector, the engineering sector's score is mostly affected by licensing requirements and the lack of a temporary licensing system.

In engineering services, the results are mainly due *to restrictions on the movement of people.* A licence or permit is required to practise and there is no temporary licensing system, which means that foreign engineers cannot enter Serbia temporarily to carry out a specific project or to provide advice in certain fields. On the positive side, Serbia implemented a procedure for recognising foreign qualifications in 2020. Even so, applicants with a qualifying licence in their home country must take the general part of the professional exam and must fulfil the conditions prescribed in the law.

Computer services (ISIC Rev 4 codes 62 and 63) are defined as computer programming, consultancy and related activities, and information service activities.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.123 and 0.448, while the WB6 average is 0.232. Serbia's score is 0.212, making it the second-best performer in the region, marginally more restrictive than the EU average of 0.211, but more open than the average for the OECD (0.221).

This sector is very rarely regulated by sectoral legislation and in Serbia computer services are only subject to the general laws that apply to the economy as a whole. Therefore, restrictions on the movement of people account for one-third of the total score in this sector. The need for skilled labour, combined with the complementarity between cross-border trade and movement of people explain why these restrictions feature prominently in this sector in Serbia.

The telecommunication sector (ISIC Rev 4 codes 611 and 612) comprises wired and wireless telecommunications activities. These services are at the core of the information society and provide the network over which other services including computer services, audio-visual services, and professional services are traded.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.108 and 0.682, while the WB6 average is 0.231. Serbia's score of 0.156 is in line with the EU average of 0.151, and it is a little more open than the OECD average of 0.188. The economy is the third most-restrictive of the WB6 economies.

Serbia' score in this sector depends on three policy areas: restrictions on foreign entry, barriers to competition and regulatory transparency.

In order to ensure fair competition in the telecommunications market, Serbia has an independent telecommunications regulator, RATEL, which is separate from stakeholders and the government. It operates without state intervention. RATEL has sufficient regulatory powers to regulate the sector effectively through ex-ante regulations applied in accordance with EU precepts to ensure that no single operator with significant market power in certain market segments (inevitable in certain cases) is bound by appropriate pro-competition regulation in place for operators that already have significant market power. Ex ante regulations are applied on the basis of a regularly conducted market analysis and readily available on the RATEL website. The government maintains the presence of an SOE as the majority shareholder in one of the main telecoms providers, *Telekom Srbija*. Serbia applies a "use-it-or-lose-it" policy to frequency bands – an important measure that prevents incumbent operators from over-holding valuable frequency licences as well as free tradable spectrum and telecom services.

In absolute terms, the regulatory framework of the telecommunication sector in Serbia is competitive and constrained only by horizontal measures that apply to the economy as a whole, most notably for the movement of people. Although telecommunications lend themselves easily to cross-border trade from a technical point of view, such restrictions account for a modest share of the total STRI score in this sector. Cumbersome procedures to obtain visas and register companies also negatively affect the sector to some extent.

Sub-dimension 2.3: E-commerce and digitally enabled services

E-commerce can bring significant gains for businesses, driving firms' process innovation (Ferencz, 2019[54]). In can enlarge businesses' market scope, reduce the operational costs of various business activities and lower barriers to entry, thus intensifying competition (OECD, 2013[55]). E-commerce also benefits consumers by providing information on goods and services, helping consumers identify sellers and compare prices, while offering convenient delivery and the ability to purchase easily via a computer or mobile device (OECD, 2013[55])

In the context of the COVID-19 pandemic, e-commerce has proved essential for maintaining trade flows despite restrictions put in place to preserve public health. Buying online rather than in person also reduces the risk of infection. Being able to keep selling in locked-down economies preserves jobs despite social distancing and movement restrictions. E-commerce also increases public acceptance of prolonged physical distancing and allows people to maintain a certain level of consumption. (World Bank, 2020[56])

It is clear that 2020 will prove to have been a turning point in e-commerce. This digital transformation underlines the importance of adopting a more holistic approach to policies as well as increasing international co-operation (Ferencz, 2019[54]).

This sub-dimension assesses policies which are implemented in parallel with those of the Digital society (Dimension 10). However, it focuses mainly on the trade in digitally enabled services given the rapid growth of trade in services in the region.

Serbia has a strong **e-commerce policy framework** and has made substantial changes since the last assessment cycle to meet the challenges of a growing trade sector.[24] The economy can boast of having the most complete e-commerce legal regime in the WB6 region. E-commerce policy falls under the remit of several institutions: the MTTT, the National Bank of Serbia, the Customs Administration, the MoF, and the Statistical Office of the Republic of Serbia (SORS). Serbia's institutional framework allows for effective institutional co-ordination between these ministries and agencies over e-commerce.

Serbia's e-commerce strategic framework was substantially updated in January 2019 after the MTTT set up a multi-stakeholder working group to identify the main obstacles to the development of e-commerce. In October 2019, following a proposal by this working group, the government adopted the Programme and Action Plan for the Development of E-Commerce for the period 2019-20. This action plan was prepared in cooperation with the United States Agency for International Development (USAID) Growth Cooperation Project.[25] The Action Plan' activities include the general removal of regulatory barriers to trade but also incentives for e-traders such as tax breaks or training, and activities related to promoting e-commerce and improving consumer confidence, logistics, and financial infrastructure. The ministry, in co-operation with relevant partners and stakeholders, implements these activities. The main purpose of the programme is to support the integration of SMEs selling online via social networks or other unregistered means into the registered online sales network – see Digital society (Dimension 10).

Modern e-commerce regulation needs to focus, among other things', on a number of key elements such as electronic documentation and signature, online consumer protection, data protection and privacy, cyber security, intellectual property rules and intermediary liability. While maintaining an attractive regulatory environment that refrains from creating disproportionate rules such as licensing requirements for e-commerce platforms, limitations on the type of goods that can be sold online (other than for generally accepted public policy considerations), and restrictions on cross-border data flows. In this respect, Serbia demonstrates an effective legal framework with only residual gaps remaining. These are well known to the Serbian authorities.

The Law on E-commerce, adopted in 2009, has been complemented by the recently adopted 2019 Law on Trade. Together they form the basis of Serbia's legal environment for e-commerce. Both have been successively updated in 2018 and 2019 to bring them into line with EU Electronic Commerce Directive 2000/31/EC. In order to close some of the remaining gaps, the government is working on improving the consumer protection rules through a new strategy and amendments to the above-mentioned laws and the Consumer Protection Act. The MTTT has also published a series of guides to inform consumers of their rights and to increase their confidence in the digital economy – see Digital society (Dimension 10).

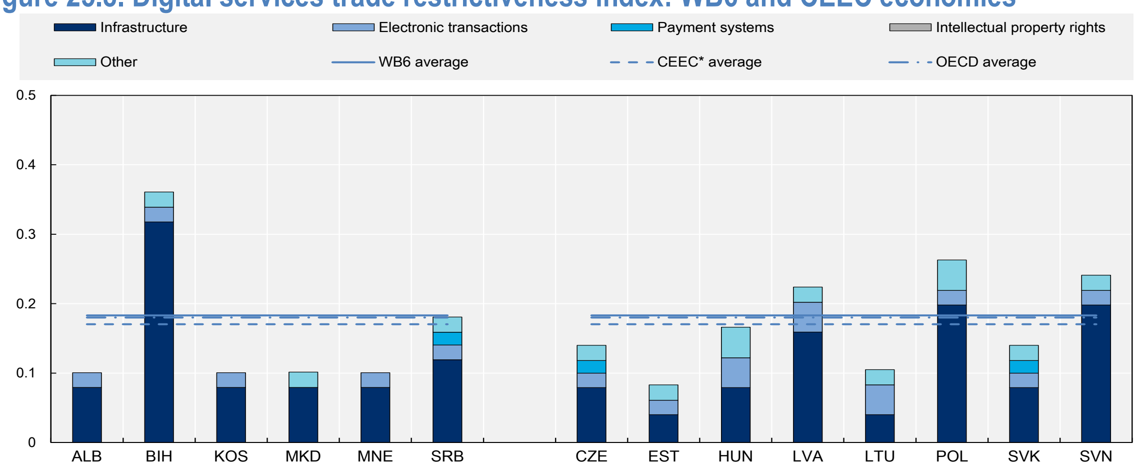
However, challenges remain; one missing element, which is also a restriction on the trade in services, is the lack of a proper online dispute resolution (ODR) mechanism in Serbian legislation.

In absolute terms, the regulatory environment is not an obstacle to the development of e-commerce in Serbia. The SORS publishes e-commerce performance indicators every year. The report covers statistics on the devices available in households, frequency of computer and Internet use and enterprises using computers or the Internet for business purposes.. The National Bank of Serbia also publishes data related to e-commerce, such as payment transactions for the purchase of goods and services via the Internet.

The OECD digital STRI captures the **restrictiveness of digital enabled services** due to cross-cutting barriers that inhibit or completely prohibit firms' ability to supply services electronically, irrespective of the sector. The regulatory data underlying the digital STRI were extracted from the existing OECD STRI database and data collected under public laws and regulations affecting digitally enabled services. The digital STRI aggregates the identified barriers to trade into a composite index. In accordance with the OECD STRI methodology, it uses a binary scoring system where 0 indicates there are no trade restrictions and 1 that restrictions are in place. The rating takes into account specific regulatory and market characteristics as well as the links and hierarchies between regulatory measures affecting digitally enabled services (López González and Ferencz, 2018[57]).

Serbia's score on the STRI index in the digital sector covered by the STRI project is shown in Figure 25.8.

Figure 25.8. Digital services trade restrictiveness index: WB6 and CEEC economies



Note: (0=no restrictions, 1=fully restricted); average represents the WB6 average for 2020; *CEEC=Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic and Slovenia (Bulgaria, Croatia, and Romania are not OECD member states or OECD STRI Partner economies and therefore do not have calculated STRI indices); the absence of a category in the graph means that it is exempt from restrictions.
Source: (OECD, 2020[48]), *Services Trade Restrictiveness Index Regulatory Database*, http://oe.cd/stri-db.

StatLink https://doi.org/10.1787/888934256311

Globally the 2020 scores in this sector are moderate to high, ranging from 0.043 to 0.488, while the WB6 average is 0.183. Serbia's score is 0.181, which makes it the second most-restrictive of the WB6 economies. It should be noted, however, that the WB6 economies tend to be very open in this sector compared to the average for states participating in the digital STRI. In absolute terms, Serbia is therefore a very open economy for foreign digital service providers. Moreover, the variations in this sector in the region are very small, so the differences in scores are due to a limited number of regulatory measures.

The scores for most economies across OECD and partner states are driven by *infrastructure and connectivity* measures. This is usually the result of a lack of effective telecoms infrastructure regulations, especially in the area of interconnection. However, this is not the case in Serbia, where regulations are largely aligned with international good practice. Similarly, although Serbia has stricter rules than the OECD guidelines in this area, it does not impose excessive conditions on cross-border data flows beyond those put in place to ensure the protection and security of personal data. Like 11 other participating economies, Serbia requires that some types of data be stored locally, but the transfer of copies abroad is allowed under terms specified in articles 63-71 of the Law on Personal Data Protection.

Businesses do not need any specific licences or authorisations for e-commerce activities on top of the ordinary commercial licences. However, Serbia des require a local presence in order to operate an e-commerce business.

Serbia has implemented international standards for electronic contracts and key electronic authentication measures such as the recognition of electronic signatures. However, as noted above, it lacks a proper dispute settlement mechanism to resolve litigations arising from cross-border digital trade which also affects its openness towards digitally enabled services.

Policy areas relating *to intellectual property rights* and payment systems account tend to be less important to states' STRI scores. Serbia is relatively open in this category from a regulatory point of view. There are no intellectual property protection regulations that treat foreigners less favourably than nationals.

The way forward for trade policy

Despite having taken some significant steps to improve its trade policy framework, especially in the area of consultations, the government could improve its policy making in the following areas:

- **Enhance the quality of the public consultation process**. Although, from the regulatory point of view, Serbia has a theoretically flawless public-private consultation mechanism for its trade policy-making process, in practice its implementation has not been as effective as it could be. Serbia should continue to limit the adoption of laws affecting trade through shortened or exceptional procedures and should ensure longer deadlines for consultation procedures in order to respond to criticism from economic actors. Serbia should also raise awareness among the Serbian business community about their increased right to participate in legislative processes that affect them.
- **Expand the network of bilateral and multilateral FTAs**, as no progress has been made in Serbia's accession to the WTO since the last review round. A number of bilateral treaties are in an embryonic phase.
- **Broaden efforts to ease the trade in services and open markets beyond the commitments due to regional trade agreements**. Significant improvements have been made among the WB6 economies to open services trade through the conclusion of CEFTA Additional Protocol 6 in December 2019. Nonetheless, The STRI analysis of Serbia's regulatory environment affecting trade in services has provided some insights into where domestic reforms could help to attract new businesses from third countries and improve competitiveness:
    - **Relax the conditions for the temporary movement of people** for third-country service providers to further encourage innovation and knowledge transfer from third countries and contribute to economic growth. A starting point could be to extend the period intra-corporate transferees and independent service providers can stay from the current 12 months, and the very short period for contractual service providers (3 months). Although the current regulation is in line with the relevant EU legislation, the best practice prescribed by the OECD is 36 months for all categories of service providers (for the first permit).
    - **Reduce the remaining barriers to market entry and competition** in commercial banking, courier services and air transport by lifting some of the existing restrictions on services in trade. In the courier services sector, this would mean amending the preferential subsidy treatment available to the designated public postal provider, which is entitled to reimbursement of the net cost incurred in providing this service if it can prove that they are greater than the revenue generated in the previous year and represent an unfair burden on the postal operator's business. The restriction on foreign banks from operating in the economy through a branch

could be abolished. In the air transport services sector, “wet” leasing of foreign aircrafts could be allowed and the slot allocation process amended to no longer give priority to historic slots.

- **Strengthen the regulatory framework for e-commerce and digitally enabled services**. Some limitations remain in this area, in particular on settling disputes that may arise from e-commerce transactions. A first step should be the establishment of a national ODR platform based on the EU model (Box 25.4) The platform should be designed to resolve disputes over the online purchase of goods and services without the intervention of a national court. This process is known as alternative dispute resolution and is faster and cheaper than a court case. The ODR platform should net affiliated with any merchant but should provide an independent dispute resolution body that could be called upon at any time to deal with a complaint from any party to an e-commerce contract. The body should be an impartial organisation or person that helps consumers and online traders and is independent of, but approved by, the authorities and meets quality standards of fairness, transparency, efficiency and accessibility.

Box 25.4. The European Online Dispute Resolution (ODR) platform

The European ODR platform was set up to make online shopping safer and fairer through access to high-quality dispute resolution tools. EU Regulation 524/2013 provides the framework, the creation of the EU ODR platform and required every e-shop in the European Union to provide a link to the platform enabling European consumers to electronically submit their complaints. From 9 January 2016, all online retailers and traders in the EU, Iceland, Liechtenstein and Norway have been obliged to provide an easily accessible link to the ODR platform and an email address for the platform to contact the consumers.

Consumers can use the EU ODR platform to solve any problem directly with the trader. The platform initially acts as an intermediary between the parties in the dispute by notifying the traders of the issue. If the trader is willing to discuss the dispute, the platform allows the exchange of messages directly via a dashboard which allows users to send attachments such as product photos and schedule online meetings. If the parties request it, or if the dispute cannot be resolved amicably within 90 days, the platform refers the dispute to a dispute resolution body. Although the model is mainly aimed at disputes initiated by a consumer, some European countries allow traders to also file complaints against consumer. However, the consumer must reside in Belgium, Germany, Luxembourg or Poland.

Source: Regulation (EU) No 524/2013 of the European Parliament and of the Council of 21 May 2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (Regulation on consumer ODR); The European Online Dispute Resolution (ODR) platform, https://ec.europa.eu/consumers/odr/main/?event=main.trader.register.

Access to finance (Dimension 3)

Introduction

Serbia has made further progress to enable businesses to access finance, improving its performance to a score of 3.3 well above the regional average of 2.6 (Table 25.6). Serbia scores the best in all the sub-dimension as well as being the best overall performer in the Western Balkan region.

Table 25.6. Serbia' scores for access to finance

Dimension	Sub-dimension	Score	WB6 average
Access to finance dimension	Sub-dimension 3.1: Access to bank finance	4.4	3.4
	Sub-dimension 3.2: Access to alternative financing sources	2.5	1.9
	Sub-dimension 3.3: Mobilisation of long-term financing	3.8	2.8
Serbia's overall score		**3.3**	**2.6**

State of play and key developments

Sub-dimension 3.1: Access to bank finance

Serbia's financial sector is bank dominated; the banking sector accounts for around 90% of the overall financial sector's assets which is considerably more than in the euro area (around 45%). As of end 2020, there were 26 banks operating in the economy. This is a relatively large number compared to similar economies – for example, there are 13 banks operating in Hungary, 16 in the Czech Republic and 17 in Bulgaria. The top three banks together hold 36.1% of the total banking assets, while the three state-owned banks had a combined market share of 7%. According to the regulations, a bank can only operate in Serbia if it is registered as a domestic legal entity, regardless of whether the owner of the bank is from a foreign country. Since 2010 five banks have had their licences revoked by the National Bank of Serbia (NBS), due to undercapitalisation and their inability to maintain the minimum required level of financial operability.

Serbia has a relatively well established regulatory framework for the **banking industry** which is in line with Basel II and Basel III recommendations (EC, 2019[58]). In December 2016, the National Bank of Serbia adopted a set of regulations implementing Basel III standards. The most significant changes these introduced were: new capital standards strengthening capital requirements, improvements to the risk management process to ensure proper coverage of all risks with capital, the introduction of capital buffers, leverage ratios, and the introduction of minimum standards for liquidity risk management and minimum liquidity ratios.

Under the Memorandum on Dinarisation Strategy adopted by the government and the NBS in 2012 and revised in 2018, the NBS implemented a set of measures to encourage local currency lending. This included loan-to-value ratios for foreign currency (FX) mortgage loans, but not for dinar mortgage loans and minimum mandatory down payment for FX household loans. In 2019, the NBS adopted two decisions[26] to reinforce dinar lending to businesses. The amended regulations establish new rules for banks, and created incentives for banks to exclusively lend in dinars to SMEs, entrepreneurs and farmers. Instead of all lending being treated in the same way, as before, dinar exposures are now given a more favourable regulatory treatment – banks will be able to allocate less capital to cover the risks arising from dinar exposures than from non-dinar and FX-indexed exposures.

Supported by these measures, and macroeconomic and exchange rate stability, Serbia has made progress in dinarisation. The main indicators have shown substantial improvement in the dinarisation of deposits of households and the corporate sector. Since the end of 2012, total household and corporate sector deposits in Serbian dinars (RSD) rose by 19.5 percentage points, reaching 38.8% by the end of January 2021; household deposits increased to 26.3%, and corporate deposits increased to 59.0%, both all-time highs.

The increase in household deposits is related to substantial growth of dinar savings:, which rose by 22% in 2018, 30% in 2019 and 17% in 2020, despite the pandemic. The growth of household savings has continued in 2021, by RSD 2.3 billion or 2.5% so far, reaching a peak of RSD 95.3 billion by 4 March 2021.

Dinarisation of receivables to households and the corporate sector combined increased by 9.5 percentage points also reaching an all-time high of 37.5% at the end of January 2021. Dinar receivables to households increased to 55.7%, while dinarisation of receivables to the corporate sector decreased to 21.5 per cent, despite the growth in 2020 (at end-2019 it equalled 14.0%), which is to a large extent driven by increase of corporate dinar lending within the state guarantee scheme. Moreover, interest rates for SME loans indexed to FX decreased to 4.2% in 2018 (from 4.6% in 2017 and 5.7% in 2016), while the interest rate spread between large companies and SMEs increased slightly to 1.9 percentage points (from 1.8 percentage points in 2017).

Serbia has had a **cadastre** and a **registration** system for pledges over movable assets since 2005, which are largely functional and actively used by the local banking system. The real estate cadastre covers the entire territory and is accessible on line; the online data are updated every week. The Register of Pledges is an integrated, centralised, electronic database of registered pledge rights, and it has full geographical coverage. Its data are public and accessible to all interested parties to search on line. In 2019 the registration of two additional types of security instruments on movable assets were introduced (RS Official Gazette, 2019[59]). These are contracts of sale with the retention of ownership rights, and pledge agreements instituting pledges by the transfer of the pledged item into the creditor's possession. According to the law, these contracts are subject to registration as of 1 January 2021.

Collateral requirements are among the lowest in the Western Balkan region, however they remain relatively important especially for smaller firms. In 2019 around 41% of loans required collateral (less than the OECD average of 58%), while on average 101.1% of the borrowed amount is required as collateral, higher than OECD average of 88% (World Bank, 2019[60]). There are no thresholds for loans below which collateral requirements are flexible for small businesses, which could limit smaller firms' access to loans. The NBS regulations only set the rules on the requirement of collateral from the perspective of risk-weighted asset calculations and classification of assets.[27] The regulations neither require nor ban flexibility over collateral for the bank's internal purposes.

Serbia has one credit bureau providing **credit information services,** an organisational part of the Association of Serbian Banks. Its work is regulated by the Law on Banks, the Law on Personal Data Protection, the Law on Information Security and other laws, by-laws and internal regulations. The retention periods for data used in credit reports are three years for individuals and five years for legal entities and entrepreneurs, as of the date of termination of the contractual obligation to the bank. The information collected by the credit bureau covers the entire adult population and is updated daily.

Under **credit enhancement and risk mitigation**, there are two national credit guarantee schemes in Serbia, one aimed at the banks and the second to support export-oriented firms. The Serbian Development Fund issues guarantees to commercial banks lending at subsidised interest rates to SMEs. Similarly, the Serbian Export and Insurance Agency (AOFI) issues guarantees and other forms of sureties for export businesses and investments abroad, such as bid guarantees, performance guarantees, advance payment guarantees, retention money guarantees and maintenance guarantees. The European Investment Fund (EIF) has selected five banks (Raiffeisen, UniCredit, Banca Intesa, ProCredit and Komercialna Bank) to implement the European Union's financing for the Serbian SME guarantee programme. The EIF provides a direct guarantee enabling these banks to support around 1 250 loans to SMEs on favourable terms, such as reduced pricing, lower collateral or longer maturities. Starting from 2020, the EU contribution of EUR 20 million over three years will mobilise up to EUR 180 million in the form of loans on favourable terms.

In addition to these guarantee schemes, in 2020 the government issued the Law Establishing a Guarantee Scheme to support to the economy and mitigate the consequences of the COVID-19 pandemic. It is intended to provide EUR 2 billion of cut-rate funding to micro, small and medium-sized enterprises and entrepreneurs, for liquidity and financing of current assets. The NBS has made additional efforts to support dinar lending under this law. Where banks approving dinar loans under the scheme at interest rates at least 50 basis points lower than the maximum rate prescribed by the law (1M BELIBOR+2.5 pp), the NBS will pay a remuneration rate on dinar required reserves for the amount of these loans at a rate 50 basis points higher than the standard remuneration rate (currently 0.1%).

Since the COVID-19 outbreak, international financing institutions have made significant efforts to support the liquidity of Serbian firms. The European Bank for Reconstruction and Development (EBRD) provided a new credit line of EUR 210 million to Banca Intesa, Erste Bank, Eurobank, ProCredit Bank and UniCredit Bank with the aim of supporting SMEs. The EIB provided a total of EUR 67 million in credit lines to Banca Intesa and Erste Bank, focused on SMEs which commit to generating positive socio-economic impact and contribute towards strengthening economic resilience and sustainable growth in Serbia. The Council of Europe Development Bank (CEB) provided credit lines totalling EUR 50 million to ProCredit and Erste Bank to support urgent working capital requests following liquidity shortages brought on by the COVID-19 pandemic. In addition to these, and in line with the Washington Agreement signed on 4 September 2020, at the White House, the International Development Finance Corporation opened its overseas office in Belgrade, with the announcement of SME support projects worth USD 1 billion that are expected to be realised by the end of Q2 2021.

Sub-dimension 3.2: Access to alternative financing sources

The **factoring** market is still in an early stage of development despite Serbia having had a dedicated law on factoring since 2013. Factoring is mainly driven by banks; as of December 2018 there were 18 factoring providers including 1 state-owned provider (AOFI). The factoring market has declined recent years in terms of total assets: the total volume of factoring assets fell from RSD 28 billion (around EUR 240 million or 0.57% of the GDP) in 2014 to RSD 21 billion (around EUR 180 million or 0.43% of GDP) in Q2 2020. Following recommendations made by the EBRD and the evaluation conducted by the MONEYVAL[28] Committee of the Council of Europe on Anti-Money Laundering requirements, in 2018 the government amended the law on factoring to align it with these requirements. Overall, the law regulates the conditions and manner of performing factoring, types of factoring, rights and obligations of participants in factoring, factoring agreements, reverse factoring, and supervision over factoring, however some additional components are still required such as the establishment of a proper invoice registry and the clarification on local providers' obligations to perform due diligence on customers (World Bank, 2019[61]; OECD, 2019[62]).

The financial **leasing** market in Serbia is relatively small, but has been growing since 2016. The total assets leased increased by 64.9% between 2016 and Q2 2020 to reach an approximate nominal value of RSD 109.3 billion (around EUR 929.7 million). As at the end of Q2 2020, 17 financial leasing companies were operating in Serbia. Seven lessors were 100% or majority owned by foreign legal entities, while 10 were 100% or majority-owned by domestic entities (of which 8 were owned by domestic banks with foreign capital). As of the end Q2 2020, financial leasing was primarily provided for freight vehicles, minibuses and buses (40.4%), followed by passenger cars (37.7%).[29] The Law on Financial Leasing of 2003, amended in 2011 under the supervision of the NBS, regulates financial leasing activities. In December 2020, following the adoption of a new decision,[30] the legislature broadened the scope of the legal framework by allowing financial leasing companies to be engaged in operating leasing. As of January 2021, the Financial Leasing Register, which centralises contracts of financial lease of movable and immovable assets, started to allow all types of registration applications to be submitted in electronic form.

Private equity investment funds and venture capital are regulated by the Law on Alternative Investment Funds and by-laws enacted by the Securities Commission which became effective on May 2020. As a result, the regulatory framework clearly details regulations governing the manner of investment and the instruments in which private equity and venture capital alternative investment funds may invest; the restrictions, types, and timeframes for subscriptions by members or shareholders; the type and extent of restrictions on investment; the calculation of subscriptions; and the determination of the relevant costs. While no activity has been recorded, Serbian firms are more actively using the Enterprise Innovation Fund (ENIF; see Box 25.5)

There is no legal framework regulating the **business angel networks**. One network is operating: the Association of Business Angels of Serbia (ABAS) is a not-for-profit association of private investors which connects start-ups with investors. In 2019, Serbia recorded four business angel investments representing a total value of EUR 310 000, halting a trend of gradual increases between 2014 (EUR 1.8 million in investment) and 2018 (EUR 2.5 million) (EBAN, 2019[63]; EBAN, 2017[64]).

Box 25.5. Enterprise Innovation Fund

The Enterprise Innovation Fund is an active fund managed by South Central Ventures, StartLabs, and Eleven Ventures, focusing on early stage high-growth companies mainly in the tech sector. South Central Ventures offers seed funding up to USD 100 000 per company while StartLabs goes up to USD 50 000 for an equity stake of 10-15%. Eleven Ventures is based in Bulgaria, but also invests in Serbia with pre-seed funding of up to EUR 100 000 for an equity stake of 10-12%. South Central Ventures also offers early stage and growth investments of up to EUR 3 million per company and Eleven Ventures can follow with additional funding as well. All companies offer mentorship to the companies they invest in and connections to boosters, angel investors and venture capital internationally. Eleven Ventures also acts as an accelerator. All funds also invest in other countries in the region. South Central Ventures had nine active investments in Serbia and StartLabs had about seven at the end of 2018. Eleven Ventures has invested in about more than 15 companies in Serbia. Demand for venture capital funding seems to be greater than the available supply, suggesting that there is space for more funds to come in.

Source: (World Bank, 2019[61]), *Serbia New Growth Agenda: Financing for Growth*, https://pubdocs.worldbank.org/en/358601577293558709/SRB-CEM-Financing-for-Growth-wq.pdf; (WB EDIF, 2019[65]), *WB EDIF Annual Report*, http://www.wbedif.eu/wp-content/uploads/2020/05/WB_Edif_AR_2019.pdf.

There are no **crowdfunding** activities in Serbia, nor any regulation of them although the National Bank of Serbia is in the process of drafting a law which will regulate the conditions and manner of providing group financial services. According to an official statement, the NBS will take into consideration provisions of the EU Regulation 2020/1503 on European crowdfunding service providers for business. However, the authorities have not announced a clear timeline for this.

In the area of **initial coin offerings based on blockchain technologies**, the Securities Commission of Serbia, in co-operation with the Prime Minister’s office, issued a statement on the regulation of cryptocurrencies in March 2019. This qualified cryptocurrencies as one of the instruments included under the Capital Markets Act. The use of cryptocurrencies is also governed by the Law on the Prevention of Money Laundering and the Financing of Terrorism, amended in 2019. This regulates the services of purchasing, selling or transferring virtual currencies or exchanging such currencies for money or other property through Internet platform, devices in physical form or otherwise, and custody wallet service providers. Furthermore, in December 2020 the government adopted the Law on Digital Assets which will take effect on 29 June 2021. This law aims to govern the issuance and secondary trading in digital assets, provision of digital asset services, and pledge and fiduciary rights on digital assets, the competencies of the Securities Commission and the NBS, and supervision over its application. In theory, the law offers a comprehensive framework for the development of digital assets but its effect will be assessed in upcoming cycles. It should also be noted that the law open the possibility to raise funds for businesses on crowdfunding platforms through digital currencies.

The NBS has also issued several public warnings on the risk of using cryptocurrencies on its website. According to the report published by Start-up Genome,[31] Serbia is one of the top five economies in the world for blockchain developers and has many product-oriented blockchain start-ups. The biggest initial coin offerings in Serbia include those by MobileGo (USD 56 million) and OriginTrail (USD 22 million).

Sub-dimension 3.3: Mobilisation of long-term financing

Public-private partnerships (PPPs) are moderately well developed in Serbia. Between 2012 and 2019, the Commission for Public-Private Partnership approved 154 PPP proposals, mainly in the sectors of urban transport, highway concession, and sewage and solid waste management and treatment.[32] As of 2019, the total value of contracted PPPs and concessions exceeded EUR 2.5 billion (around 5.9% of GDP), with 10 projects accounting for 98% of the total (Jelena, 2020[66]). The majority of these projects involve the central government or the city of Belgrade.

The Law on Public-Private Partnership and Concessions was adopted in 2011 and amended twice in 2016. It allows for different types of co-operation between the public and private sectors. Projects can be implemented within the time frame of 5 years or up to 50 years. The selection of the private partner is governed under two laws: the law regulating public procurement if the partnership consists predominantly of public works, or by the law on PPPs and concessions if the PPP implies the granting of a concession, or the provision of services with the right to exploit the specific service and to collect payments. However, the reciprocity between both laws has not worked quite so well in practice; both laws have a number of ambiguities over deadlines and some of the procedural steps involved in a PPP that have remained a point of concern for a notable number of stakeholders on the market (CMS Law-Now, 2017[67]).

Serbia's domestic **institutional investor** base remain underdeveloped, limiting capital market development. At the end of 2019, of asset management firms were managing EUR 377.5 million of assets, about 0.9 % of GDP. The first investment funds were established in 2007, right after the adoption of the Law on Investment Funds. Initially, the investment fund industry grew rapidly but the investment fund industry collapsed during the 2008 financial crisis because of the fall in stock exchange prices. The Belgrade stock exchange 15 index (BELEX15[33]) plunged from a historical high at 3 335.2 in May 2007 to a historical low of 347.46 in March 2009. After suffering huge losses during the crisis, most of the funds that continued to operate were transformed from growth funds into money market funds (World Bank, 2019[68]). As of December 2019, five asset management firms were operating in Serbia managing 18 investment funds. Natural persons (93%) are the main categories of clients and of the remaining 7%, 89% are limited liability companies. As of March 2020, the main asset allocation preferences among pension funds were bonds (80.8%), stocks (9%) and private equity (3.3%), indicating limited diversification.

Serbia has **capital markets** but they are relatively underdeveloped. The only market segment that functions comparatively well is the government bond market. The contribution of capital markets to financing the economy is limited. In July 2020 the Belgrade stock exchange (BELEX) registered a total turnover of securities of RSD 2.8 billion (around EUR 23.7 million or 0.06% of GDP). Turnover of shares totalled RSD 133.9 million (around EUR1.1 million or 0.002% of GDP) while Republic of Serbia bonds (RS bonds) totalled RSD 2.7 billion (around EUR 22.9 million or 0.05% of GDP).

The private sector is not making use of the **stock market** for its financing needs. There has been only one initial public offering (IPO) since World War II. Shares of Fintel Energy a.d. were included on the Prime Listing and after the successfully completed IPO, they started trading on 20 November 2018, at an approximate total value of RSD 755 million. The lack of IPOs remains the biggest challenge for the Belgrade Stock Exchange and Serbian capital market. The government never used them as a privatisation model for state-owned enterprises, while companies from the private sector are very hesitant to raise capital through IPOs as there are no success stories. In addition, there are no clear and optimised procedures, nor any prior experience or specific incentives that would encourage IPOs. All this, combined with financing dominated by bank lending has kept companies out of the capital market, leaving the IPO market effectively still in the testing stage.

In order to trade on the Belgrade Stock Exchange, an issuing company may apply for one of the three listing segments in Table 25.7. "Smart listing" was introduced in August 2016, with the aim of supporting the development of start-ups and SMEs, improve their business environment, and promote investment and growth. Yet, as of January 2020, no new businesses have used it to introduce their companies to the stock exchange. If the equity securities do not meet any of the listing standards described in Table 25.7 they may operate in the non-listed segment/open market which is a segment below. If the securities also do not meet the requirements for admission to the non-listed segment of the regulated market, they may be admitted to trading on the multilateral trading facility (MTF). It should be noted that only investment companies with a licence from the SEC may trade on a regulated market or MTF; other persons may only trade on these markets through such investment companies.

Table 25.7. Listing segments of the regulated market in the Belgrade Stock Exchange

	Prime listing	Standard listing	Smart listing
Length of business operations	Minimum 3 years	Minimum 3 years	New companies with up to 3 years of operations
Business results	Net profit	-	-
Opinion of the authorised auditor	Unqualified	Unqualified or qualified	Unqualified or qualified
Minimal amount of capital	EUR 3 million	EUR 2 million	At least 1 million EUR, and no less than EUR 500.000 under special conditions
General conditions during the period of listing	Auditor's report with expressed unqualified or qualified opinion		
	Issuer's webpage – in both Serbian and English		
Special conditions for shares and depository receipts on shares	• at least 25% of total number of issued shares • shares of minimal capital of EUR 1 million which are owned by at least 250 shareholders • shares which are in the ownership of at least 500 shareholders	• at least 25% of total number of issued shares • shares of a minimal amount of capital of EUR 1 million, which are in the ownership of at least 150 shareholders • shares which are in the ownership of at least 300 shareholders	At least 25% of the total number of shares, or shares of a minimal amount of EUR 150.000, under special conditions
	Average value of daily turnover of at least RSD 500 000 and an average daily number of at least five transactions calculated in the last six months, agreement on market making operations concluded, more than 1 000 shareholders, shares in the free float in the total amount of at least EUR 2 million.		

Source: Adapted from the inputs collected from the Government of Serbia.

In December 2016, BELEX joined the SEE Link network, enabling trading on multiple markets participations. SEE Link was set up by three regional stock exchanges with the support of the EBRD in 2014: the Bulgarian Stock Exchange, the Croatian Stock Exchange and the Macedonian Stock Exchange. It aims to integrate regional markets without mergers or acquisition, using only technology. It provides investors easier and more efficient access to those markets through a local broker. Since the launch of the network, five more stock exchanges have joined, including two from Bosnia and Herzegovina, the Ljubljana Stock Exchange from Slovenia, the Belgrade Stock Exchange, e and the Athens Stock Exchange. This regional collaboration could enhance stock market liquidity in the participating economies, but the different legal and regulatory frameworks, the lack of central securities depository links, and different currencies create challenges for market operators which limit more intense trading activity on this platform.

Prior to the COVID-19 pandemic, Serbia was working on developing a comprehensive capital market development strategy. Together with domestic and international stakeholders, such as the World Bank, the EBRD, USAID and the United Nations Development Programme (UNDP), it aimed to assess the potential benefits of the capital market and instruments to boost the financing of both the state and the private sector. One of the most concrete measures foreseen was the inclusion of incentives in order to support and encourage companies to make an initial public offering, however, at the time of drafting this initiative was suspended due to competing priorities related to the pandemic response. In December 2020, Serbia continued the work on the Capital Markets Development Strategy with a new adoption date set for the end of Q2 2021. A number of activities envisioned by the initial strategy have also been adopted during the pandemic, primarily those relating to the efficiency of the corporate bond market.

The government **bond market** has made substantial progress in recent years but the non-government bond markets remain in their infancy. The bond market has a solid foundation in terms of its infrastructure, technology and regulation, but it has not been used extensively by the corporate sector, with private sector bonds only amounting to 0.06% of GDP. The main reason is that corporate bonds are considered to be more expensive than bank financing. In 2019 only one corporate bond was admitted to market, Erste bank a.d.

There are no subsidies to make the bond market more attractive, nor any specific incentives encouraging business to use it. However, in April 2020 the government introduced one simplification measure regarding the public offerings of debt securities to mitigate the impact of COVID-19 (Box 25.6). Investors can easily find information on the maturity, secure/unsecure, liquidation preferences, coupon rate, tax status and call provision in the prospectus but the SEC does not publish bond ratings. These measures resulted in a milestone event in terms of corporate bond market, with a landmark transaction, which saw a private sector company successfully completing a corporate bond issue, listed on the Belgrade Stock Exchange.

Box 25.6. Emergency rules on the issuance of “Corona bonds” in Serbia

On 10 April 2020, the Government of Serbia adopted the emergency Decree on the Procedure for Issue of Debt Securities, which simplifies the current regime regarding public offerings of debt securities by Serbian companies in Serbia. This new simplified regime will be in force for a period of 180 days following the end of the state of emergency.

The decree releases prospective issuers from the obligation to prepare a short-form prospectus. It also cuts down the paperwork needed to obtain the SEC’s approval. Businesses no longer have to submit documents that are publicly available and can be obtained from public registers to the SEC. This relates to current information on the issuer from the commercial registry, published financial statements, stock exchange information in case of public companies, share ownership structure available at the central registry, depository of securities, etc. Information about the issuer and its financial statements do not have to be included in the prospectus, but the prospectus may instead refer or link to publicly available or online information (e.g. the issuer’s website, website of the commercial registry, the central register and depository of securities, or the register of financial statements). The issuer is required to list all referenced documents and webpages on which they can be found, and specify which relevant information can be found in which document and which section of the document.

When applying for the SEC’s approval of the prospectus, if no more than 200 days have passed since the end of the relevant financial year and the date of the application for the SEC’s approval, the issuer is not required to additionally prepare and submit to SEC semi-annual financial statements for the current year.

The SEC is required to approve publication of the prospectus for the offering of debt securities within 10 days from the receipt of the issuer's application (provided that the application is complete).

Following the completion of the public offering, the bond issuer obtains the status of a public company, which triggers various reporting and other regulatory obligations. However, private joint-stock companies or limited liability companies are not required to apply for the listing of their shares at the regulated market.

Source: (SEC, 2020[69]), Republic of Serbia Securities Commission: The process of issuing debt securities in Serbia simplified, http://mail.sec.gov.rs/index.php/en/news/actual/650-the-process-of-issuing-debt-securities-in-serbia-simplified.

The way forward for access to finance

To enhance the banking industry and support businesses' access to finances, policy makers should:

- **Continue efforts to implement crowdfunding legislation in line with EU norms**. In addition to the possibility of investing in these platforms through digital assets, the government should pay attention to facilitating FX investments to potentially attract investments from the diaspora.
- **Consider a business angel network review**. Despite increasing between 2014 and 2018, total business angel investments have only reached around EUR 2 million. A comprehensive assessment of existing investments could help the government to better understand the requirements of business angel networks. Additional policy tools could be deployed to promote further interest including tax incentives. Another option could be to provide support to the existing operator.
- **Promote access to equity capital through the stock market**. The low level of activity and liquidity in the stock market is a barrier for companies that could use it to raise new capital. To stimulate capital market development, the government could encourage the listing of state-owned enterprises which would help increase the size the stock market and its visibility among international institutional investors (see Box 25.7 for an example from Lithuania). To increase their attractiveness, the government could consider a tax credit system for costs related to initial listings and secondary equity offerings by already listed companies. Such a system would allow companies to deduct the listings costs, including any advisory service costs, against the corporate income tax payable up to a certain amount.

Box 25.7. Ignitis Group in Lithuania

Ignitis Group is a Lithuanian state-owned international energy company focusing on renewable energy transitions and one of the largest energy groups in the Baltic region. In October 2020, the previously fully state-owned group was listed on Nasdaq Vilnius and London Stock (LSE) exchanges. Ignitus group's IPO became the largest transaction in the Baltics in several decades, as a total of EUR 450 million of all primary capital was raised by offering 26.91% of the shares and global depository receipts (GDRs) to institutional and Baltic retail investors.

Ignitus group's IPO has already proved beneficial to Baltic capital markets with a 70% increase in Nasdaq Baltic turnover over 2020 and a doubled increase in turnover on the Nasdaq Vilnius market, making Ignitus shares the most traded and accounting for 35% of the total increase on the Vilnius stock exchange. Priority investments were given to high quality and local investors to allow for high-quality distribution among shareholders with approximately 9% of shares allocated to long-term investors while retail and other hedge funds acquired the remaining shares. The group's IPO not only attracted strong interest from the Baltic states, but also by international Nordic, European and other international institutional investors, with the largest minority shareholder being the EBRD with 4% ownership.

According to a statement of the Lithuanian Ministry of Finance, the attracted funds will help with the implementation of the National Energy Independence Strategy by promoting green energy production and ensuring energy security and self-sufficiency. As the Bank of Lithuania requires a prospectus for listings on the Vilnius stock exchange, in line with international best practices, Ignitus group published a document containing risk factors, general information on the offering, payment policies, corporate government strategies and more.

Source: (EBRD, 2020[70]), EBRD Board Report: Ignitus Group IPO, https://www.ebrd.com/what-we-do/project-information/board-documents/1395294375006/Ignitis_Grupe_IPO.pdf?blobnocache=true; (Ignitis Group, 2020[71]), Press Release: Ignitis grupė completed the largest IPO in the Baltic States 2020, https://ignitisgrupe.lt/lt/ignitis-grupe-ivykde-didziausia-baltijos-salyse-ipo.

- **Facilitate market-based long-term debt financing for businesses**. Firms need access to fit-for-purpose financing that meets their needs at various stages of their growth trajectory and development. This will be even more important in the long run as the economy starts to recover from the COVID-19 crisis. Given businesses' dependence on bank financing, on top of the corona bond measures, more extensive use of corporate bond financing could help lengthen maturities, increase resilience and facilitate long-term investments in Serbia. One way to achieve this would be by creating an appropriate credit rating mechanism. The authorities could assess credible and reliable mechanisms, such as the model where central banks play a central role in providing rating services. Another way to increase the liquidity of the bond market could be to establish a special framework coupled with technology platforms such as crowdfunding for private bond placements by smaller companies. One recent and successful example of alternative financing options for SMEs is the Italian mini-bond market framework (see Box 25.8).

Box 25.8. The Italian "Mini-bond" market

In 2012 the Italian Government introduced a series of laws[1] to initiate a mini-bond framework for unlisted companies to enable them to issue corporate bonds. The mini-bond framework provides a simplified process whereby unlisted companies with more than 10 employees and an annual turnover and/or assets in excess of EUR 2 million (except micro-enterprises and banks), can issue bonds that are available only to qualified investors. Firms are not required to publish a public prospectus – an admission document is sufficient.

In response to this new regulatory framework, Borsa Italiana introduced the ExtraMOT PRO segment in 2013, dedicated to the listing of bonds whose trading is only permitted to professional investors. Since its introduction, the mini-bond market has seen steady growth, with the number of issuances increasing from 16 in 2013 to 171 in 2018. The cumulated proceeds during this period amounted to EUR 10.6 billion, 25% of which was raised in 2018. Moreover, mini-bonds have also been securitised through special purpose vehicles which have created a diversified pool of mini-bond issuers available for institutional investors.

In 2019 the government introduced mini-bond placements on equity crowdfunding platforms. In October 2019, the operating rules for equity crowdfunding platforms willing to place mini-bonds were published by the competent authority (Consob). These include that the offers must be published on specific sections of the platforms; the issuers are limited to joint stock companies; and eligible investors are required to hold financial assets of at least EUR 250 000, invest at least EUR 100 000 in the mini-bond, or be client of an asset management company. The first offerings were published on crowdfunding platforms in January 2020.

1*:* Law Decree No.83/2012 and its subsequent amendments (Law Decree No. 179/2012; Law Decree No. 145/2013), Law Decree No: 91/2014; Law Decree No: 157/2019, (Fiscal Decree 2020) and Law Decree No: 160/2019 (Budget Law 2020) which created the possibility for unlisted companies to issue corporate bonds through the so-called mini-bond framework.
Source: (OECD, 2020[72]), *OECD Capital Market Review of Italy 2020*, www.oecd.org/corporate/OECD-Capital-Market-Review-Italy.htm.

Tax policy (Dimension 4)

Introduction

Table 25.8 provides Serbia's scores for two tax policy sub-dimensions, against the WB6 average. Serbia scores below the average for the tax policy framework as a result of its poor performance on the tax expenditure indicator, the lowest among the WB6 economies. However, Serbia scores above the WB6 average for tax administration as a result of its strong performance in the function and organisation and taxpayer services indicators: the highest rating possible for both indicators, and the highest among the WB6 economies.

Table 25.8. Serbia's scores for tax policy

Dimension	Sub-dimension	Score	WB6 average
Tax policy dimension	Sub-dimension 4.1: Tax policy framework	2.0	2.6
	Sub-dimension 4.2: Tax administration	3.9	3.3
	Sub-dimension 4.3: International co-operation	n.a.	n.a.
Serbia's overall score		**3.1**	**3.0**

Note*:* Sub-dimension 4.3 on international co-operation is analysed qualitatively and therefore remains unscored.

State of play and key developments

Sub-dimension 4.1: Tax policy framework

Serbia's **tax revenues** as a share of GDP are relatively high. Its tax-to-GDP ratio was 36.8% in 2019, the highest of the WB6 economies, (compared to 30.6% WB6 average) (Table 25.9). This ratio is also above the average for OECD countries (33.8% in 2019). As with most WB6 economies, Serbia's tax-to-GDP ratio has risen since the last Competitiveness Outlook assessment in 2018, increasing from 36.2% in 2015. Serbia relies heavily on revenue from taxes on goods and services and social security contributions (SSCs) to fund its public spending programmes and healthcare system. These taxes accounted for 76.9% of total tax revenues in 2019, which broadly aligns with the 80.7% WB6 average but significantly diverges from the average in OECD countries (58.4%). Consequently, other taxes such as corporate income tax and personal income tax play a smaller role in the tax mix, accounting for only 16.6% of Serbia's total tax revenues (14.9% WB6 average; 33.5% OECD average).

The heavy reliance on SSCs supports the direct funding of the welfare system. It also prevents the need to fund social welfare from general tax revenues, which would create challenges from a budget perspective. However, Serbia could consider rebalancing its tax mix by shifting revenues away from SSCs and towards PIT (OECD, 2018[73]). The very high SSC rates may be having an adverse effect on the functioning of the labour market and comes at the cost of equity, as SSCs are mostly levied at flat rates, while PIT can be levied at progressive tax rates. With regards to taxes on goods and service, OECD research has found that consumption taxes, and particularly VAT, may have less of a distortionary effect on the decisions of households and firms and thus on GDP per capita than income taxes (Johansson et al., 2008[74]).

Table 25.9. Serbia's tax revenues as a percentage of GDP

	CIT	PIT	SSCs	Goods and services	Tax/GDP ratio
Serbia	2,3%	3,8%	12.5%	15,8%	36.8%
WB6	1.8%	2.7%	9.3%	15.9%	30.6%
OECD	3.1%	8.1%	9.0%	10.9%	33.8%

Note: CIT= corporate income tax; PIT= personal income tax; SSCs= social security contributions.
Source: (OECD, 2020[75]) OECD.Stat, https://stats.oecd.org/ (2019 for overall tax/GDP ratio, 2018 for specific tax/GDP ratio)

Serbia levies a standard CIT rate of 15%, which is, with Albania, the joint-highest rate among the WB6 economies (Table 25.10). This rate is higher than the WB6 average of 11.5% in 2020 but below the average rate in OECD countries (23.3% in 2020). Serbia's CIT revenues amounted to 2.3% of GDP, which sits between the WB6 average of 1.8% in 2019 and the OECD average of 3.1% in 2018. Serbia and Albania have the joint-highest reliance on CIT revenues among WB6 economies, relative to GDP. Dividend income is excluded from the CIT base of resident companies while capital gains are included. A 15% withholding tax is levied on dividend payments to non-residents, but tax treaties may result in a lower rate. Resident individuals receiving dividends are liable for a 15% PIT rate, also withheld at source. Serbia operates a worldwide taxation system whereby resident companies pay taxes on domestic and foreign-sourced income, while non-resident companies are liable for taxes on income originating from Serbia. All of the WB6 economies have adopted a worldwide taxation system, although, such systems are becoming increasingly less common among OECD countries, particularly for small open economies.

Table 25.10. Selected tax rates in Serbia

	CIT	PIT	SSCs	VAT
Serbia	15.0%	15.0%	36.4%	20.0%
WB6	11.5%	12.8%	28.6%	19.0%
OECD	23.3%	42.8%	26.9%	19.3%

Note: CIT= corporate income tax; PIT= personal income tax; SSCs= social security contributions; CIT and PIT averages are based on top statutory rates.
Source: (OECD, 2020[75]) OECD.Stat, https://stats.oecd.org/ (2020 for CIT and VAT, 2019 for PIT and SSCs)

As part of a tax reform in 2018, Serbia introduced a number of new **investment incentives** to its corporate taxes, many of which are cost-based incentives. Cost-based incentives lower the cost of investment and increase with the invested amount. For example, expenses directly related to qualifying research and development (R&D) in Serbia are eligible for a CIT deduction of twice the value of the investment undertaken. In addition, companies investing in the capital of a new company performing so-called "innovative activities" are entitled to a tax credit of 30% of the investment undertaken. To benefit from this tax incentive, the investing company should not own more than 25% of the shares of the newly established company. Another corporate tax incentive allows companies that invest over RSD 1 billion (around EUR 8.5 million) in fixed assets and employ at least 100 employees to be exempt from CIT for 10 years in proportion of the investment undertaken. This proportion is the value of the qualifying investment to the total value of the taxpayer's fixed assets for a period of 10 years. Research shows that cost-based incentives are preferable to profit-based incentives, which run the risk of a high redundancy of expenditure since the relevant investments may have proceeded anyway (UNCTAD, 2015[76]).

In Serbia, individual income is generally taxed at different rates for each category of income. The **personal income tax rate** on labour income is 10% for individuals with a taxable income of six times the average annual salary or less. When the aggregated net income exceeds this threshold, a "complementary income tax" with a 15% PIT rate applies to the portion of income above the threshold. For the self-employed, a flat 10% PIT rate applies. Serbia has the highest reliance on PIT revenues relative to GDP (3.8% compared to the WB6 average of 2.7%) and the second-highest top PIT rate (after Albania). However, PIT revenues remain significantly below the OECD average (8.1% in 2018). Serbia manages these relatively high PIT revenues despite low salaries, a relatively low rate for most taxpayers, informality and increases to the basic allowance in recent years. The monthly basic allowance for wages is currently RSD 16 300 (around EUR 139). It has increased by 38% since 2017, when it was RSD 11 790. A differentiated set of tax rates are levied in Serbia with regard to the taxation of personal capital income. Individuals' income from **dividends, capital gains and interests** are taxed at a rate of 15%. Rental income is taxed more heavily at 20%.

As mentioned above, Serbia raises significant revenues from **social security contributions**: 12.5% of GDP, which is significantly above the average for the WB6 economies (9.3%) or for OECD countries (9.0%). Its SSC rates are comprised of compulsory pension and disability insurance, compulsory health insurance, and unemployment insurance. Serbia has reformed its SSC rates modestly in recent years although the total rate remains high at 36.5%, which is the second highest rate among the WB6 economies (average 29.4% in 2020). In 2019, it reduced the rate of unemployment insurance from 1.5% to 0.75% and in 2020 it reduced the rate for pension and disability insurance from 26% to 25.5%, while health insurance stands at 10.3%. The employer SSC rate is 16.6% and the employee rate is 19.9%. Although the employee SSC rate aligns with the WB6 average of 19.9% in 2019, the employer SSC rate is significantly above the regional average of 9.5%. Serbia is also atypical by OECD standards in having a higher employee SSC rate than the employer rate, although this is common in the WB6 region.

These high SSC rates, combined with PIT, result in a high tax burden on labour income compared to capital income. This differentiated taxation creates an incentive for entrepreneurs to incorporate and receive income in the form of lowly taxed capital instead of highly tax salaries. OECD research shows that high SSC rates can place a significant tax burden on labour income, reducing incentives to work and making it expensive for employers to hire workers, especially low-paid and low-skilled ones. Serbia's large informal economy is likely related to the very high SSCs (OECD, 2018[77]). Moreover, SSCs are mostly levied at the same rate for all income levels,[34] and as such, they do not contribute to making the taxation of labour income more progressive (OECD, 2018[77]).

When it comes to the **design and functioning of the VAT system**, tax revenues from goods and services are relatively high in Serbia, as is common among WB6 economies. Revenues were 15.9% of GDP in 2019, the same as the WB6 average (15.9%) but significantly above the OECD average (10.9%). The standard VAT rate in Serbia is 20%, which is similar to the average rate of OECD countries (19.3% in 2020) and WB6 economies (19% in 2020). The VAT base is narrowed by a reduced rate of 10% which applies to a wide range of basic goods and services. These include food products, medicines and textbooks, as well as natural gas, transport and other services that are temporarily imported. OECD research has found that reduced rates are not an effective way to target those on low incomes, and can be regressive in some instances (OECD, 2018[77]). The combination of high SSCs, a high standard VAT rate and low PIT rates results in a tax system that is overall flat and very unlikely to play much of a role in reducing inequality.

The mandatory VAT registration threshold in Serbia in 2020 is RSD 8 million (around EUR 68 000). This threshold is relatively high compared OECD countries and WB6 economies. Reducing the VAT registration threshold could be investigated as a policy option as it would bring additional businesses in the tax base and increase tax revenues. Such a policy would likely need to be accompanied by a strengthening of the tax administration and VAT simplification measures.

Despite the wide range of corporate tax incentives in Serbia, the economy currently does not operate a regular **tax expenditure report,** unlike a number of other WB6 economies. For example, Albania implemented a tax expenditure report in 2019 and North Macedonia and Montenegro are currently in the process of doing so. Serbia should develop a regular tax expenditure report which would allow it to monitor the use and effectiveness of tax incentives and tax expenditures along with the tax revenue forgone (OECD, 2010[78]). The report should identify, measure and report on the cost of tax expenditures in a way that enables their cost to be compared with direct spending programmes (IMF, 2019[79]). The authorities could also conduct cost-benefit analyses to evaluate whether specific tax incentives are meeting their stated objectives and, if not, whether they should be abolished or replaced.

With regards to the **modelling and forecasting of tax revenues**, Serbia carries out projections and estimates of tax revenues for all major taxes using macroeconomic modelling. The MoF does not currently use micro-simulation modelling to analyse tax policy proposals. As a result, there may be scope for Serbia to develop micro-simulation models using tax and survey data to estimate the cost and distributional outcomes of different policies.

Sub-dimension 4.2: Tax administration

Serbia redesigned the **functions and organisation** of its tax administration in July 2019. The organisation is based around the different functions of a tax administration, with divisions such as audit, tax collection and taxpayer services. The tax administration carries out most classical tax administration functions, including tax fraud investigation. This function is usually the responsibility of a special police department in other WB6 economies. The tax administration collects all taxes, with the exception of taxes on immovable property, which are collected by local governments. Serbia follows OECD good practice in having a unified body that covers all taxes and all the core tax administration functions, which is an important factor in strengthening the efficiency of the tax administration (OECD, 2018[77]). Monitoring of the tax administration's performance is carried out by the State Audit Institution which issues an annual report. Similarly, regular assessments are carried out by the Fiscal Council, an independent body which reports to the National Assembly of Serbia. Serbia also took part in the Tax Administration Diagnostic Assessment Tool (TADAT), an international assessment programme for tax administrations.

Serbia's **compliance assessment** follows a risk-based approach. Each month, taxpayers are selected for audit on the basis of a wide range of risk criteria. The tax administration also carries out an annual audit plan. This plan includes a breakdown by types of taxpayer, activities, company type and company size. OECD research shows that risk-based selection is a key element of effective and efficient compliance programmes as it allows administrations to make effective trade-offs and make the best use of their resources (OECD, 2018[77]). It conducts several types of audits, ranging from general comprehensive audits to more targeted ones.

In terms of **independence and transparency**, a legal framework regulates the role of the Tax Administration. Serbia adopted the Tax Administration Transformation Programme 2015-20 in 2015. Among other objectives, this programme aims to improve the strategic management within the Tax Administration. As part of this initiative, an action plan was produced for the period 2018-23. It included the creation of several permanent committees such as an organisational transformation committee, a business oversight committee and a compliance committee. With regards to disciplinary sanctions, the administration has established rules and procedures against the abuse of tax collection. Their application is monitored by the Internal Control Department. This department also performs direct and indirect controls on the legality, timeliness, responsibility and efficiency of actions by the tax administration's employees. OECD research suggests that corruption among employees of a tax administration may deter individual taxpayers from paying taxes (OECD, 2018[80]).

In Serbia, electronic **tax filing** is mandatory for companies and entrepreneurs. Individuals may file tax returns either on paper or electronically. Tax returns for CIT and the personal business income of the self-employed are submitted annually. Payments are made monthly in the form of advance payments. Serbia's tax administration has a built-in system for the validation of reported data. It performs a variety of mathematic, logical and syntactic verification, and tax returns are corrected if necessary.

Various **taxpayer services** are at the public's disposal in Serbia, including online access to information, electronic communications with taxpayers, electronic submission of requests for reimbursement, and online tax payments and in-person inquiries. The Protector of Citizens is an independent state body that protects the rights of citizens and controls the work of administrative bodies. Taxpayers who believe they have been harmed by an act, action or omission of the tax administration, can turn to the Protector of Citizens. An assessment of the efficiency of the delivery of taxpayer services is conducted quarterly by the Ministry of Finance.

Sub-dimension 4.3: International co-operation

As with other WB6 economies, Serbia has become increasingly involved in dialogue and reforms related the **international tax framework** in recent years. As a member of the Inclusive Framework on BEPS (base erosion and profit shifting), it recently signed the OECD Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS. This was implemented in January 2019. Serbia also joined the OECD Global Forum in March 2018 and implemented the Convention on Mutual Administrative Assistance in Tax Matters in December 2019. Serbia's assessment by the OECD Global Forum on exchange of information upon request (EOIR) was initially scheduled for the second half of 2021 but was postponed to the first half of 2022 because of COVID-19. The economy has yet to engage in initiatives in the field of automatic exchange of information (AEOI). It has transfer pricing rules in place, based on OECD transfer pricing guidelines. This involvement in the international taxation framework could help it to protect its domestic tax base from erosion due to tax avoidance and evasion.

Serbia is engaged in several initiatives in the field of **digital taxation**. With regards to VAT, it has not formally implemented the international guidelines on VAT/goods and services tax (GST). However, it levies VAT on cross-border digital services using a logic close to the "destination principle",[35] the cornerstone of the international VAT/GST guidelines. Serbia levies VAT in the place where the service recipient is established. Concerning taxation of individual income arising from digital platforms, the Strategic Risk Department of the Tax Administration carried out an analysis assessing tax compliance. This analysis found a poor reporting of revenues from digital platforms and a low rate of tax compliance among individual taxpayers. As a result, the Tax Administration requested data from commercial banks on payments received by individuals from digital platforms. It is currently developing a risk response plan to audit these taxpayers.

With regards to the OECD's Tax Challenges Arising from Digitalisation project, Serbia intends to actively participate in discussions on Pillar 1 and 2. Developments taking place at OECD level might have an impact on Serbia's taxation of corporate income, especially under Pillar 2. The GLOBE proposal intends to define a minimum taxation of corporate profits. Although Serbia has relatively high CIT rates compared to the other WB6 economies, it still may be affected by this proposal. Its comprehensive investment tax incentives regime lowers the effective tax rate of corporate profits. Depending on the minimum tax rate set, Serbia could be faced with the choice of either redesigning its tax incentives to increase the effective rate on corporate profits to the level of the minimum tax, or risk forgoing tax revenues to foreign jurisdictions. This topic will have a great importance in the near future and Serbia may wish to evaluate its position and prepare an action plan.

Serbia is engaged in moderate **regional co-operation** with other WB6 economies. In 2006, an Agreement on Co-operation and Mutual Assistance was concluded with Bosnia and Herzegovina, Bulgaria, North Macedonia, and Montenegro. Serbia would benefit from more regional tax co-ordination and tax co-operation. The intensification of co-operation efforts would help tackle tax avoidance and evasion in a coherent manner across the region. As Serbia faces similar challenges similar to other WB6 economies, it will benefit from intensifying information sharing and learning from its peers' experience.

The way forward for tax policy

To enhance the tax policy framework and achieve their objectives, policy makers may wish to:

- **Strengthen its support to the economy and facilitate the economic recovery** in light of COVID-19 with targeted tax and subsidy measures. Serbia implemented a relatively narrow set of measures to mitigate the effects of COVID-19 on its economy and citizens. It may wish to strengthen existing efforts, while focusing on measures that could spark economic recovery.
- **Diversify the tax mix by strengthening the role of corporate and personal income taxes**. Serbia's tax revenues rely heavily on SSCs and taxes on goods and services. There is scope to

diversify the tax mix and focus on taxes that stimulate growth or make the tax system more progressive.

- **Instigate a regular report on tax expenditures**. Serbia recently implemented a diversified set of investment tax incentives. A regular tax expenditure report would help assess tax revenue forgone from all tax expenditure and would increase transparency on the revenue costs and, ideally, their distributional impact, which would result in better-informed tax policy making.
- **Weigh the advantages and disadvantages of its differentiated taxation of capital and labour income**. Taxing capital and labour income differently allows for more targeted tax policies. However, it may create distortionary spillover effects and encourage business owners to take advantage of this difference by incorporating and receiving income in the form of capital rather than labour income. Serbia may wish to assess its position on this issue.
- **Broaden the VAT base** by reducing the list of goods and services taxed at the reduced rate and, possibly, by lowering the VAT registration threshold. Broadening the VAT base could be accompanied by additional measures to strengthen the VAT administration.
- **Strengthen the design and progressivity of the PIT**. Revenues from the PIT are relatively high compared to regional average but low when compared to OECD countries. Several initiatives could strengthen its design and raise additional revenue. Serbia could also introduce a new progressive PIT rate schedule.
- **Rebalance the taxation of labour income away from high employer and employee SSCs**. This imbalance may affect labour market outcomes, especially for informal, low-skilled or low-income workers. There is scope to rebalance the tax mix away from SSCs and towards PITs.
- **Develop an action plan in case consensus is found on a possible global minimum tax** amongst members of the OECD/G20 Inclusive Framework on BEPS. Although a global minimum tax will very likely be lower than the current statutory CIT rate, Serbia could still face a choice of either redesigning its investment tax incentives or risking forgoing tax revenues. The government should evaluate its position on this issue and prepare an action plan
- **Implement micro-simulation models to analyse the impact of tax system changes**. Although Serbia implements models to forecast tax revenues it would benefit from implementing micro-simulation models to assess the impact of tax reforms.
- **Continue to strengthen the functioning of the tax administration**. Control of the tax administration is carried out by the State Audit Institution and the Fiscal Council. The economy is also engaged in the TADAT and the Tax Administration Transformation Program 2015-20. These initiatives are critical in building public scrutiny and Serbia is encouraged to continue these and other efforts to strengthen the functioning of its tax administration.
- **Continue to engage with the international tax community and implement international best practice**. Since the last assessment, Serbia has strengthened its involvement in international tax matters and this approach is very much welcomed.
- **Carry out a cost-benefit analysis on the merits of its worldwide taxation system for resident corporations**. For small open economies such as Serbia, worldwide taxation may entail high administrative costs without raising significant revenues.
- **Foster regional co-operation and co-ordination on common tax issues**. Serbia shares common challenges with other WB6 economies and enhanced collaboration might benefit all economies involved. Areas such as tax compliance, training of tax administration officials or exchange of information would greatly benefit from a co-ordinated regional approach.

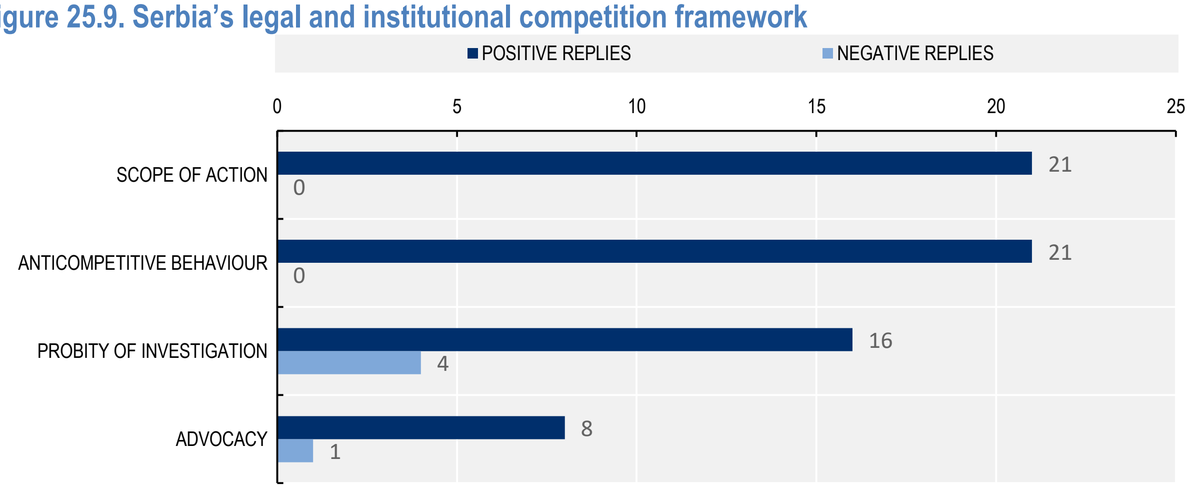
Competition policy (Dimension 5)

Introduction

Unlike the other dimensions, where indicators are allocated a score from one to five, the Competition policy dimension assesses four policy areas (i.e., scope of action, anticompetitive behaviour, probity of investigation and advocacy) is based on yes/no (coded as 1/0) answers to the 71 questions in the questionnaire administrated by the OECD. Where a response to a question is yes (coded as 1), then we refer to this as an adopted criterion. Each of the four policy areas has a different number of possible criteria that can be stated as having been adopted. Each policy areas is assessed though data collected from the questionnaire indicators and by measuring the number of criteria adopted. The new fifth policy area (implementation) is not scored, but is a quantitative analysis of how many competition decisions have been adopted by the competition authorities. The anti-competitive behaviour and implementation policy areas are discussed together below.

Figure 25.9 shows the number of positive (alignment to good practices) and negatives replies to the questionnaire administered by the OECD, with respect to each of the policy areas for this dimension. It is clear that Serbia is fully aligned to international best practice in the scope of action and its powers to fight anti-competitive behaviour. Some minor discrepancies persist in the probity of investigation and competition advocacy.

Figure 25.9. Serbia's legal and institutional competition framework



Source: Based on the OECD assessment.

Serbia has not made substantial changes to its legislative framework on competition since the previous Competitiveness Outlook assessment. The legal provisions regarding anti-competitive agreements, abuse of dominance and merger review are closely aligned with those in the Treaty on the Functioning of the European Union and consistent with international standards.

The Commission for Protection of Competition (CPC), established in 2005, is the body responsible for implementing competition enforcement and advocacy in Serbia. It is an independent institution, provided with skilled and qualified staff. The CPC is a well-established competition authority in the context of the Western Balkan economies. After carrying out some significant cases in the last few years, it has the potential to make its competition enforcement even more impactful. In the area of advocacy, the CPC has endeavoured to embed competition principles in national laws and regulations and promote a competition culture.

State of play and key developments

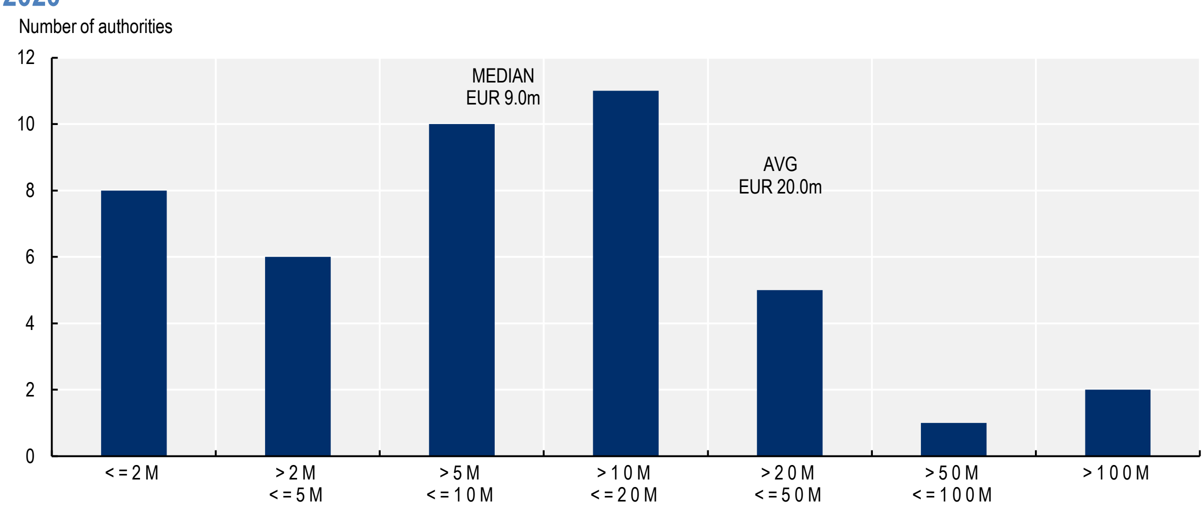
Sub-dimension 5.1: Scope of action

The Council of the CPC consists of the President of the Commission and four members, elected from among eminent experts in the field of law and economics, particularly the field of competition protection. They are elected for a five-year term by the National Assembly, on being proposed by the committee in charge of trade operations, and they can be re-elected after serving their term. The candidates' interviews are streamed on line. The current council was appointed in 2019.

The total number of CPC staff has been steadily growing over the past few years, from 39 in 2015 to 49 in 2019. This figure is limited but reasonable compared with other OECD and non-OECD countries. In comparison, according to data from the OECD CompStats database,[36] the 15 competition authorities in small economies (with a population below 7.5 million) had an average of 114 staff in 2019, of whom 43 were working on competition.

The CPC's budget for competition law and policy has increased over the years. In 2015 it was EUR 2.7 million, rising to EUR 4 million in 2018 and EUR 4.4 million in 2019. Despite being high in comparison with WB6 economies, this budget is still small compared with foreign competition authorities. As Figure 25.10 shows, the CPC's budget places it well below the median of EUR 9 million. Its budget is small even when comparing it against the comparable budgets of the 15 competition authorities in small countries, which averaged EUR 5.4 million in 2019.

Figure 25.10. Distribution of the budget of competition agencies participating in OECD CompStats 2020



Note: Based upon the 43 authorities in the CompStats database that provided budget data for four years solely for competition activities.
Source: OECD CompStats Database.

In October 2019, the Republic of Serbia introduced a new Law on State Aid Control and established an independent authority, the Commission for State Aid Control (CSAC). The CSAC's mandate encompasses issuing opinions on alignment of laws and regulations with the rules on state aid control, as well as raising awareness about the significance of state aid control.

The provisions of the Law on Protection of Competition contribute to ensuring competitive neutrality, insofar as the **competencies** of the CPC encompass all legal and natural persons that directly or indirectly perform economic activities in Serbia, regardless of their legal status, ownership or state of origin. Competitive neutrality is likely to be key during the COVID-19 crisis, which may further increase the role that states play through SOEs.

The CPC has appropriate **powers to investigate and powers to sanction** and remedy possible anti-trust infringements, i.e. restrictive horizontal and vertical agreements and exclusionary or exploitative practices by dominant firms. The CPC can impose cease and desist orders, remedies, and sanctions on firms that have committed anti-trust infringements. It can also adopt interim measures if the alleged competition restriction could lead to irreversible damages. It can accept commitments offered by the parties to remove the competition concerns and close the investigation.

The CPC can compel investigated firms and third parties to provide relevant information and perform unannounced inspections on their premises. The assessment of alleged anti-competitive conduct follows a thorough scrutiny of the collected evidence, which includes an economic analysis of the competitive effects and of possible efficiencies. In 2015, the CPC introduced a leniency programme, which ensures partial or total immunity from sanctions to firms that reveal the existence of a cartel and/or bring evidence to support a cartel investigation. The programme is consistent with international best practices.

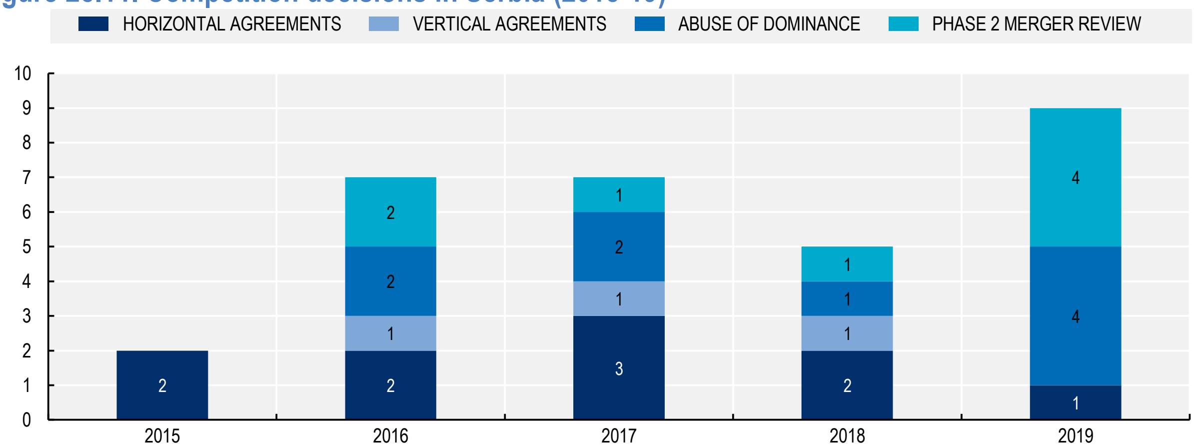
The Law on Protection of Competition provides for *ex ante* control of mergers, following the principles of the EU Merger Regulation. The CPC can compel merging firms and third parties to provide relevant information and can perform unannounced inspections on the premises of the parties in the course of in-depth (so called Phase II) investigations. The assessment of notified mergers must follow a thorough scrutiny of the evidence, which includes an economic analysis of the restrictive effects and of possible efficiencies stemming from the concentration. In cases of significant restriction, distortion or prevention of competition in the relevant markets, the CPC can prohibit the transaction. It can also accept remedies proposed by the merging parties to address possible competition concerns and clear the merger to go ahead. It can also issue conditional approvals, which require merging parties to implement specific conditions.

Regarding **private enforcement**, individuals, firms and consumers – either collectively or through consumer associations – can bring a legal action to seek damages from firms that have committed anti-trust infringements.

Sub-dimensions 5.2 and 5.5: Anti-competitive behaviour and implementation

The anti-competitive behaviour and implementation policy areas together gauge the use of powers and resources in terms of decisions adopted and fines imposed for horizontal agreements, vertical agreements and exclusionary conduct. They also explore the actual activity of the competition authority on reviewing mergers. Serbia's record of competition enforcement is appreciable, particularly compared to the average among WB6 economies, but could still improve (Figure 25.11).

Figure 25.11. Competition decisions in Serbia (2015-19)



Source*:* Data provided by the authorities.

In 2019, the CPC took only one decision concerning anti-competitive **horizontal agreements** (cartels). In previous four years, it had made nine cartel decisions in total, including a few cases of bid rigging in public procurement. The CPC also tackled three cases of **vertical agreements** (in 2016, 2017 and 2018), related to resale price maintenance. It should be noted that the investigation and collection of evidence was often supported by unannounced inspections on the premises of the parties. However, the leniency programme has not been effective to date: the CPC has received only one application in 2018, despite active promotion of the initiative.

The total amount of fines imposed on parties involved in anti-competitive agreements and abuse of dominance reached a peak of EUR 3.8 million in 2018 but then fell to EUR 857 000 in 2019.

The CompStats database can help place these figures in context. On average, the 15 competition authorities in smaller jurisdictions that participated in CompStats made decisions on 3.2 cartel cases per year in the period 2015-19, while the average fines levied on cartel infringers was EUR 2.7 million per year.

The data for 2020 seem to show that the CPC is continuing its enforcement actions on anti-competitive agreements. It issued infringement decisions and imposed fines on the parties in four cases: one related to horizontal price fixing, one to bid rigging and two concerning resale price maintenance.

The CPC also significantly increased the number of decisions on abuse of dominance (**exclusionary conduct**) in 2019, by adopting an infringement decision and closing three other cases with commitments imposed on the parties.

The number of **merger** notifications has almost doubled in four years, from 107 in 2015 to 197 in 2019. However, it should be noted that a significant share of mergers notified to the CPC concern extra-territorial transactions. In the period 2015-19, the CPC carried out eight Phase II investigations and two “gun-jumping” cases (i.e. failure to notify a merger to the competition authority, or implementing all or part of a merger during the mandatory waiting period). None of the transactions were prohibited, but remedies were imposed for five of them between 2016 and 2019. Three additional Phase II merger reviews and two gun-jumping cases were also conducted in 2020. In comparison, during 2015-19 the 15 competition authorities in smaller jurisdictions carried out 2.8 in-depth merger investigations per year on average, out of 30 notifications.

Sub-dimension 5.3: Probity of investigation

The CPC is an **independent** organisation that performs its duties in accordance with the Law on Protection of Competition. The government has no legal right to interfere with its decisions. The CPC is **accountable** for its work before the National Assembly, to which it must submit an annual report.

In terms of **procedural fairness**, the decisions to open formal proceedings and the final decisions finding competition infringements, as well as decisions regarding mergers, are published in the Official Gazette of the Republic of Serbia and on the CPC website.

During the course of the proceedings, the parties under investigation for an anti-trust infringement can consult with the CPC with regard to significant legal, factual or procedural issues and have the right to be heard. Prior to the adoption of a final decision, the CPC must inform the party of the relevant facts, evidence and other elements on which the decision is based, and enable the party to submit its defence. Decisions can be appealed within 30 days before the Administrative Court.

The CPC has published procedural instructions and guidelines explaining its investigative procedures and its criteria for setting fines.

Sub-dimension 5.4: Advocacy

The CPC has wide advocacy powers. It can monitor and analyse competition conditions in specific markets or sectors, issue opinions to the competent authorities on draft or existing regulations that affect competition, and co-operate with state entities to improve the implementation of competition rules. The Department for Legal Affairs is the CPC’s specialised unit in charge of competition assessment, i.e. the scrutiny of laws and regulations aimed at identifying unnecessary restraints on market activities and developing alternative, less restrictive measures that still achieve government policy objectives. Even though public entities have no obligation to do so, they often submit draft laws and regulations to the CPC to seek its advice.

The CPC has engaged in a wide range of initiatives aimed at promoting compliance with competition principles in laws and regulations. The number of formal opinions addressed to the government or courts increased from 28 in 2015 to 70 in 2018. They include an opinion on the regulation of ride hailing services and an opinion on regulation impact assessment, both in 2018. In 2019, the CPC signed a memorandum of understanding with the Public Policy Secretariat to improve the competition assessment of legislation, on the basis of the OECD’s Competition Assessment Toolkit.

The CPC has also conducted outreach activities to promote co-operation with other public authorities, including public procurement officials. Since November 2016 the CPC has been part of a tripartite co-operation agreement signed with the Serbian Anti-Corruption Agency and the Commission for Protection of Rights in Public Procurement Procedures. In October 2019, under the auspices of the EU Twinning project (“Further development of protection of competition in Serbia”) with the Italian Competition Authority, the CPC held a five-day workshop on competition and public procurement. Several Serbian authorities in the field, including the Public Procurement Office, the Commission for Protection of Rights in Public Procurement Procedures, and representatives of large contractors, participated in the event. The CPC also issued Instructions for detecting rigged bids in public procurement procedures in 2011, based on the OECD's guidelines for fighting bid rigging in public procurement.

The CPC has performed a significant number of market studies over the last four years (at least three per year), which allowed it to gain a better understanding of several sectors, including retail, oil derivate retail and baby equipment.

It also performs activities aimed at developing competition culture: it regularly organises training and seminars, disseminates educational materials through dedicated social media accounts, and publishes a weekly newsletter on competition news. The number of advocacy events organised by the CPC has grown steadily over the years, reaching 25 in 2019.

The way forward for competition policy

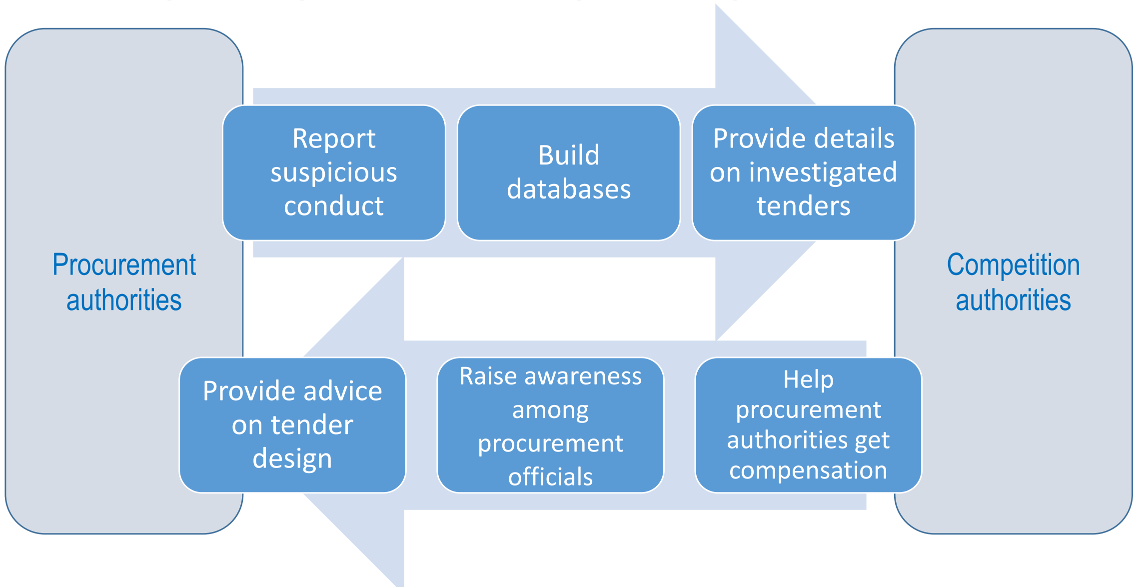
The CPC has been performing positively over the last few years, confirming its place as a leading competition authority in the region. Increasing the number of infringement decisions and the amount of fines levied against anti-competitive behaviour would further strengthen its reputation, thus fostering deterrence and competition compliance and making the leniency programme more effective.

The economic challenges brought about by the COVID-19 pandemic may suggest the CPC should focus its advocacy on the promotion of competitive neutrality, with a view to expanding the role that it can play in the rapid recovery of the national economy.

Policy makers and the CPC should focus on the following measures:

- **Prioritise boosting cartel enforcement and increasing fines**. Cartels are the most clear-cut and undisputedly harmful competition infringements and affect every economy. Although the CPC has successfully conducted some cartel cases over the last few years, it could make more effort to detect and sanction cartels, in order to deliver a strong message that firms that engage in collusion risk to be severely punished. Fines should be high to ensure deterrence and support the effectiveness of the leniency programme. Fines only act as a deterrent insofar as the risk of incurring in fines outweighs illicit gains. Concern over fines is also a key driver for leniency applications, thus fostering the effectiveness of the leniency programme – which has been barely productive in Serbia so far – and further boosting detection.
- **Pay specific attention to public procurement, particularly during the COVID-19 crisis**. Public procurement is a key sphere of action both for cartel enforcement and for competition advocacy. Bid rigging results in significant harm for public budget and taxpayers, dampening of innovation and inefficiencies. The CPC should further extend its co-operation with public procurement bodies to enhance cartel detection and foster bid rigging prevention through better tender design, using best practice guidelines such as those issued by the OECD. The Recommendation of the OECD Council on Fighting Bid Rigging in Public Procurement (OECD, 2012[81]) calls for governments to assess their public procurement laws and practices at all levels of government in order to promote more effective procurement and reduce the risk of bid rigging in public tenders. The Guidelines on Fighting Bid Rigging in Public Procurement (OECD, 2009[82]), which form a part of the recommendation, are designed to reduce the risks of bid rigging through careful design of the procurement process and to detect bid-rigging conspiracies during the procurement process. Figure 25.12 shows how co-operation between competition and procurement authorities can help detect and avoid bid rigging. The OECD can also provide assistance through a project aimed at assessing the main rules governing procurement of public works as well as procurement practices of major public buyers and providing recommendations to design competitive procurement and fight bid rigging in accordance with international good practices, while offering training to both competition and public procurement officials based on the Guidelines on Fighting Bid Rigging in Public Procurement.

Figure 25.12. Example of co-operation between competition and procurement authorities



- **Advocate strongly for competitive neutrality** to ensure that all enterprises face the same set of rules, irrespective of their ownership or nationality. Competitive neutrality occurs where no entity operating in an economic market is subject to undue competitive advantages or disadvantages. In other words, it is a framework within which all enterprises, irrespective of their ownership (state-owned or privately owned) or nationality (domestic or foreign). In most jurisdictions, the state has a dual role as policy maker/sector regulator and supplier or purchaser of goods and services. Consequently, in markets open to competition the state also acts as a market participant and interacts with private businesses, most often indirectly, through SOEs. Governments may be tempted to grant SOEs certain advantages, e.g. privileged market position, soft loans, outright subsidies, regulatory exemptions or tax benefits. Given the importance of SOEs in Serbia and the increased role of the state in the economy that is likely to result from the COVID-19 crisis, the CPC has a decisive role to play to promote competitive neutrality, in co-operation with the Commission for State Aid Control. It might need to discourage the government from granting selective aid to SOEs and resist political pressure to adopt a more lenient approach when investigating SOE conduct.
- **Expand international co-operation and training**. In the face of increasingly complex anti-trust issues and the frequent cross-border nature of competition infringements, the management and the staff of the CPC should have frequent opportunities to meet and participate in policy discussions. International organisations like the OECD, the International Competition Network (ICN) and the United Nations Conference on Trade and Development (UNCTAD) offer valuable opportunities to this end. The OECD-GVH Regional Centre for Competition in Budapest provides an ideal forum for capacity building and sharing of good practices with colleagues from other jurisdictions, focusing on the specific challenges of Eastern European and Central Asian countries. The CPC is already a regular participant in the centre's events and would benefit from actively continuing with this.

State-owned enterprises (Dimension 6)

Introduction

Serbia has made only limited reforms on state ownership since the 2018 edition of the *Competitiveness Outlook* (Figure 25.1). However, the Serbian authorities recently developed a state-ownership strategy document concerning future SOE reforms, which notably envisages a greater centralisation of state ownership responsibilities under the Ministry of Economy as well as the development of an ownership policy. This new policy can contribute to more professional ownership practices, supported by improved SOE performance monitoring.

Table 25.11 provides an overview of Serbia's scores for state ownership practices along with four broad sub-dimensions which are based on elements of the OECD Guidelines on Corporate Governance of State-Owned Enterprises (SOE Guidelines) (OECD, 2015[83]).

Table 25.11. Serbia's scores for state-owned enterprises

Dimension	Sub-dimension	Score	WB6 average
State-owned enterprises dimension	Sub-dimension 6.1: Efficiency and performance through improved governance	2.8	2.2
	Sub-dimension 6.2: Transparency and accountability practices	3.5	3.0
	Sub-dimension 6.3: Ensuring a level playing field	3.3	2.8
	Sub-dimension 6.4: Reforming and privatising state-owned enterprises	n.a.	n.a.
Serbia's overall score		**3.1**	**2.6**

Note: For comparability with the previous assessment, Sub-dimension 6.4 (reforming and privatising state-owned enterprises) has not been scored but is discussed in the text below.

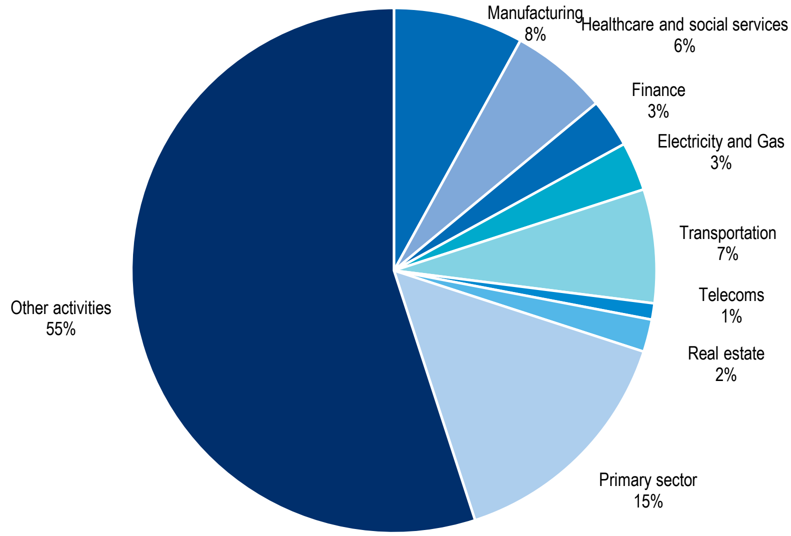
State of play and key developments

Sub-dimension 6.1: Efficiency and performance through improved governance

According to the Ministry of Economy, Serbia has 156 state-owned enterprises (SOEs) and 38 state minority-owned companies. Approximately 57 SOEs fall under the scope of the Law on Public Enterprises by virtue of their involvement in performing public-interest activities.[37] The remaining SOEs operate primarily under the companies law and are not subject to a common state ownership policy.

State-owned enterprises play an important role in the Serbian economy. The SOE landscape is larger than most other economies in the Western Balkans and Central Eastern European region in terms of both employment and productivity (IMF, 2019[84]). State-owned companies are dominant or present in many structurally important sectors, including electricity and gas, transportation (railways, roads and postal services), telecoms, and finance. SOEs are also notably present in the primary sector, including mining and forestry.

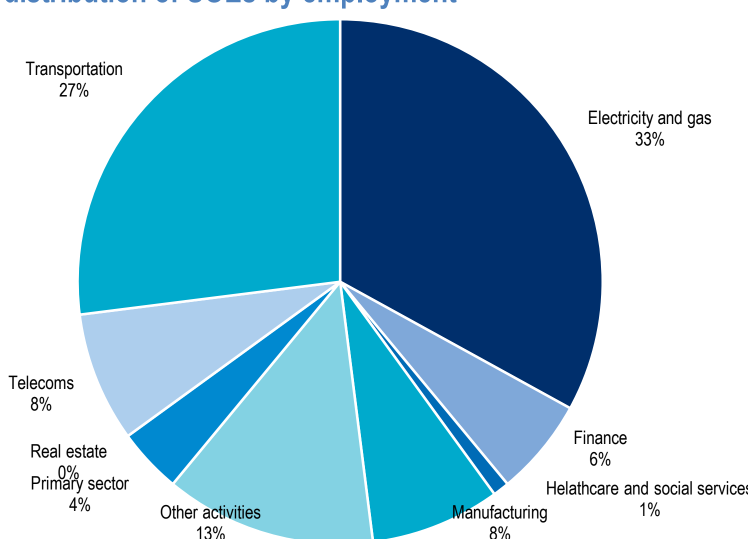
Figure 25.13. Sectoral distribution of SOEs by number of enterprises



Note: Two water supply and sewage SOEs were not included because of their small employment share (29 employees).
Source: Calculations based on information provided by the Serbian authorities.

Figure 25.13 presents the sectoral distribution of SOEs by the number of enterprises. Prominent SOEs include the Public Enterprise Electric Power Industry (EPS), Serbian Railways, Srbijagas, Telekom Serbia and Air Serbia. Measured by their employment share, the majority of Serbian SOEs are concentrated in the electricity and gas sector (33% of all SOE employees), followed by transportation (27%), other activities (13%), manufacturing (8%) and telecoms (8%) (Figure 25.14). SOEs in Serbia employ almost 85 000 people, accounting for an estimated 2.9% of national employment.[38] This share of national employment is similar to the OECD average of 2-3%.

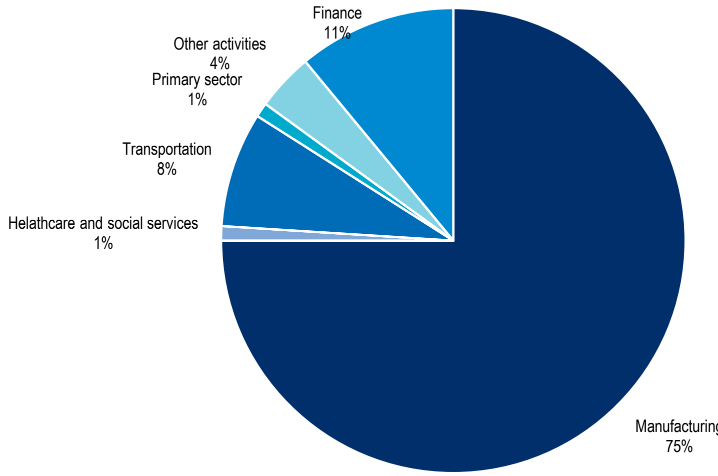
Figure 25.14. Sectoral distribution of SOEs by employment



Note: There are two state-owned water supply and sewage enterprises that employ 29 people and are not included in the figure because of their very small employment share.
Source: Calculations based on information provided by the Serbian authorities.

The state also holds non-trivial minority shareholdings (over 10%) in 38 companies, together employing over 26 000 people and accounting for nearly 1% of total national employment. These companies are highly concentrated in the manufacturing sector (75% of all employment in state minority-owned companies) (Figure 25.15).

Figure 25.15. Sectoral distribution of state minority-owned companies by employment



Note: There is 1 state minority-owned company in the real estate sector, not included here because of its very small employment share.
Source: Calculations based on data provided by the Serbian authorities and the number of employed persons in Serbia (2 938 200) as reported in the national Labour Force Survey Quarter IV 2019 (SORS, 2019[85]).

External assessments of the performance of Serbian SOEs point to inefficiencies and low overall returns on the state's investment in these enterprises. For instance, a 2020 EBRD assessment of 25 emerging economies found Serbian SOEs had among the lowest returns on assets and the largest negative returns on equity (2014-16) (EBRD, 2020[86]).

Serbia has not yet developed a publicly available **ownership policy and rationale** that defines the state's overall ownership objectives, clarifies the main functions of various state bodies and specifies the state's expectations from SOEs. Some elements of an ownership policy can currently be gleaned within the existing legal framework covering SOEs, in particular within the Law on Public Enterprises, and certain strategic documents. However, the Serbian authorities recently developed an overall ownership policy document concerning future SOE reforms.

Serbia has not explicitly defined its rationale for state ownership for the majority of its SOEs. However, given that the Law on Public Enterprises applies only to enterprises that perform public-interest activities, it can be understood that performing public-interest activities ("activities of general interest" in national nomenclature) is one of the rationales for maintaining enterprises in state ownership.[39] In contrast, the rationale for state ownership of other SOEs, namely the companies that are primarily engaged in commercial activities and hence by definition not considered to be "public enterprises", has not been articulated. The authorities therefore need to clearly define and disclose the rationale behind state ownership of SOEs that are incorporated under other legal forms.

There is no co-ordinating body responsible for **professionalising state ownership** across the whole of the government. By law, the Government of Serbia has the ultimate responsibility for exercising ownership rights over SOEs which fall under the scope of the application of the Law on Public Enterprises. The Law on Ministries, the Law on Public Enterprises and the Government's Decision on the division of responsibilities of competent ministries define the roles and responsibilities of various ministries in the government. In accordance with these acts, the government is primarily responsible for exercising ownership rights in SOEs, including the right to appoint and dismiss SOE board members. However, a number of other important responsibilities (e.g. determination of strategic goals) are the responsibility of line ministries for many SOEs. For example, the Ministry of Mining and Energy oversees SOEs involved in the production and supply of electricity and gas. With the adoption of the Law on Public Enterprises in

2016, Serbia has taken some steps towards centralising ownership functions for a portfolio of SOEs under the responsibility of the Ministry of Economy. This is an important advance in its state ownership arrangements, as a more centralised model will help improve monitoring and professionalise and harmonise state ownership practices, which can ultimately lead to better performance and management of SOEs. The new state ownership strategy, currently under development, also foresees the establishment of a state ownership co-ordinating body.

Serbia has professionalised its **board nomination framework** for SOEs by introducing measures such as minimum qualification requirements (e.g. education and work experience) for board members and directors, and clarifying their responsibilities and competencies. The minimum qualifications for SOE board members go beyond what is established by law in most other WB6 economies. For example SOE board members are required to have at least three years of work experience related to the activities of the SOE in question, as well as knowledge of corporate management or finance. The related requirements do not apply to all SOEs, however, only those under the scope of the Law on Public Enterprises.

Although Serbia has made a significant effort to improve the board nomination process, unfortunately, there is still a lack of substantive information to assess if the process is robust in practice. The appointment process does not seem to be transparent and there is a perception that appointments are often influenced by political connections rather than purely based on professional merit. It should also be noted that these qualification requirement elements only apply to the subset of SOEs that operate under the Law on Public Enterprises. In view of the lack of clear facts on the implementation of the process there is still a risk that it will be politicised, especially since there is little evidence about the selection procedures or public tenders for board members.

Regarding the **promotion of independent and professional boards**, the Law on Public Enterprises requires that one member of every public enterprise board must be independent and that both the independent member and the company chief executive officer (CEO) cannot be a member of political party. However, this restriction does not apply to other board members, which, in practice, means that they can be politicians. The issue of political influence on SOE boards has been highlighted in external reviews: see, for example Transparency Serbia (Transparency Serbia, 2017[87]). The 2018 edition of the *Competitiveness Outlook* (OECD, 2018[80]) also raised concerns about politically affiliated persons serving on boards in the region. As no visible progress has been made in Serbia since then this remains highly problematic.

There are also some overarching issues which significantly weaken the corporate decision-making power of public enterprise boards. For instance, the government appoints the CEOs of public enterprises, leaving the board with no role in choosing CEOs. Normally, corporate boards responsible for monitoring their CEOs' activities should also have the power to appoint and dismiss them but in Serbia, the board of a public enterprise only has the authority to "monitor" the work of directors. Moreover, the Law on Public Enterprises means that several board responsibilities require the consent of the government.

On the positive side, it is worth noting that although there is no specific legal framework to enhance gender equality in SOE boards, the gender balance of the boards of the 10 largest listed companies in Serbia is among the best in the Western Balkans and Central Eastern European region. In total, 13 of the 63 board members were women in 2016 and the average female board representation within the largest listed companies was around 20% (EBRD, 2017[88]). Women accounted for 23% of top management positions in the country's largest employer Public Enterprise Electric Power Industry (EPS) in 2019. This statistics also stands out favourably when compared with the global average – according to Ernst & Young (2019[89]) only 15% of senior managers in power and utilities were women as of early 2019.

Sub-dimension 6.2: Transparency and accountability practices

Legislation establishes multiple **financial and non-financial reporting** requirements for SOEs, including the requirement to publish audited financial statements and business plans on their websites. By law, public enterprises are required to submit annual reports and financial statements to the Business Register Agency (BRA), which makes them publicly available. They are legally obliged to submit quarterly reports on the implementation of their annual and triennial business programmes to the Ministry of Economy and are required to report according to internationally recognised standards such as the International Financial Reporting Standards (IFRS). The Law on Public Enterprises also requires that SOEs publish quarterly reports on their websites. Nevertheless, according to stakeholders interviewed in the context of this assessment, in general, Serbia's SOEs are characterised by lack of transparency in their business and financial operations. The largest SOEs in Serbia do not necessarily implement good reporting practices that are not directly envisaged by the Law on Public Enterprises.[40] The law does not require them to publish sustainability reports, although some enterprises do it on their website within the framework of an internal act (i.e. enterprises which operate in energy sector).

Serbia appears to have established sound basic legislation to ensure high-quality **auditing practices** of SOEs. Their financial statements are audited by independent external providers and Serbia's SOE auditing standards compare favourably with the average OECD country (OECD, 2018[90]). SOEs with the status of "public-interest entities" are required to establish an audit committee, in line with the Law on Audit and other relevant legislation. This includes all SOEs that operate under the scope of the Law on Public Enterprises, as well as all SOEs that are considered "large" in accordance with criteria set forth in the Law on Accounting. SOE audit committees must be chaired by an independent member and include an audit professional or person with experience in the financial sector. The role of the audit committee includes proposing and controlling the implementation of accounting policies and standards in the preparation of financial reports, assessing the content of these reports and proposing candidates for auditors. SOEs are also obliged to establish internal audit and financial management control units.

Regarding the **protection of minority shareholders**, Serbia has established sound legislation to ensure the protection of basic minority shareholders' rights, which apply to the minority shareholders of SOEs. In practice, however, there are cases involving abuse of minority shareholders rights. For instance, the World Bank's 2020 *Doing Business* report gave Serbia a score of 5 out of 6 concerning the extent of shareholder rights (World Bank, 2020[11]). The 2018 *Competitiveness Outlook* found that some disputes between minority shareholders and the state had been brought to court, with minority shareholders claiming that their rights have not been respected (OECD, 2018[80]). Concerns have been also raised over the judicial system, which is sometimes biased in favour of SOEs, suggesting it is perhaps not fully equipped to protect minority rights in practice. The 2018 Company Law amendments strengthened minority shareholder rights, for instance reducing the ownership share required to request shareholder meetings and add agenda items. The protection of minority shareholders is a high-priority issue since 38 of Serbia's SOEs have non-state minority shareholders. Minority and state shareholders should both play an active role in shareholder decisions to ensure that SOEs create value for all shareholders.

Sub-dimension 6.3: Ensuring a level playing field

Serbia has the basic elements are in place to ensure that SOEs' **legal and regulatory treatment** is broadly in line with that of private companies. A large proportion of SOEs are subject to the same company law that applies to private companies and SOEs are generally not formally exempt from the market regulations (e.g. competition rules) applicable to private companies. However, the existence of a subset of SOEs incorporated as "public enterprises" gives rise to concerns over the operational differences that may arise owing to their different legal treatment. A commonly occurring example is that some SOEs are exempt from bankruptcy procedures, removing a key incentive to undertake corporate improvements to avoid liquidation. There is also some evidence that SOEs are often expected to undertake non-commercial activities (such as sponsoring sports teams), which, in the absence of adequate and transparent compensation from the state, can prevent a level playing field with private companies.

In some sectors (e.g. electricity and gas), independent regulators have been established, thus mitigating the problematic mixing of objectives that can arise when the state bodies responsible for ownership are also responsible for sectoral regulation or policy. Nevertheless, this is only the case for some sectors and line ministries still play a role in the operational activities of SOEs, while also being responsible for sectoral policy. This means Serbia has not ensured a full separation of ownership and regulatory functions. The steps taken to centralise monitoring of SOEs and place some ownership responsibilities under the Ministry of Economy should help to separate these functions, but since line ministries still reportedly play an important role in SOE operational decision making, the separation is not complete. Streamlining SOEs' legal status, and eliminating any significant legislative differences that could distort fair competition, will be crucial to optimising their position in the marketplace.

Concerning **access to finance**, most SOEs obtain some financing on the marketplace, but not on market consistent terms due to explicit or implicit state guarantees. Serbia has committed to reducing the extent of state guarantees to SOEs and improving transparency surrounding them, mainly in the context of commitments made to the IMF (US Department of State, 2018[91]). As an EU candidate country, Serbia is expected to comply with EU rules on competition, which include state aid rules intended to ensure that state equity financing is provided on market-consistent terms and does not distort competition. Serbia has implemented the EU state aid regulations and its law is largely aligned with the EU, however, there are still implementation gaps.

In October 2019, Serbia introduced a new Law on State Aid Control and established an independent authority in this field – the Commission for State Aid Control (CSAC). Its mandate encompasses issuing opinions on alignment of laws and regulations with the rules on state aid control, as well as raising awareness about the significance of state aid control. Explicit state guarantees on SOEs' commercial debt are allowed, although recently the government has limited them to situations where the SOE is making capital investments; guarantees cannot be given for loans simply to finance ongoing operations. Many SOEs benefit from preferential financing and/or leniency over payments to the government or other SOEs, distorting the level playing field and leading to an inefficient allocation of resources. Examples highlighted in external assessments include direct state subsidies to state-owned railways and coal mines, explicit state guarantees on bank loans, tax arrears, and unpaid debts to the state-owned electricity company.

In terms of COVID-19 support measures to the SOEs, one of the most important measures was directed towards AirSerbia, Serbia's national carrier. Another significant injection was to Telekom Serbia. The National Bank of Serbia bought 50% (EUR 100 million) of Telekom's issued corporate bonds.

Sub-dimension 6.4: Reforming and privatising state-owned enterprises

The privatisation process in Serbia is regulated by the Law on Privatisation which was adopted in 2014. The process is conducted by the Ministry of Economy. The legal framework defines three privatisation models 1) equity sales; 2) asset sales; and 3) strategic partnerships. Since the adoption of the law, the government has concluded 62 equity sales, 4 asset sales and 1 strategic partnership. Serbia continues to engage foreign investors in the privatisation process, inviting them to submit bids, participate in auctions, and purchase company shares. More than 310 enterprises, mostly with zero or a small number of employees have been put into bankruptcy since 2014. Other companies were privatised and non-EU investors acquired some of the largest firms in mining, metallurgy and agriculture (European Commission, 2019[14]). For instance, Chinese Hestil bought Serbia's steel plant in Smederevo. The copper mining complex RTB Bor was sold to China's Zijin Mining, and the agricultural corporation PKB to Al Dahra of the United Arab Emirates.

The government has also begun the process of restructuring of SOEs which is still ongoing, although at a slow pace. Restructuring of large SOEs, particularly in the sectors of mining, energy and transport, is supported by the IMF, World Bank and the EBRD. Among them are *Železnice Srbije* (Serbian Railways), *PE Srbijagas* (public enterprise activities for the transport, distribution and trade of natural gas), *PE*

Elektrprivreda Srbije (Public Enterprise Electric Power Industry; EPS) and *PE Putevi Srbijre* (Public Enterprise Roads of Serbia; PERS). The government has adopted the programmes for restructuring these enterprises, which include measures to improve the financial position of the enterprises (debt restructuring), and also improving organisational and management structure. The 2016 amendments to the Law on Public Enterprises aimed to strengthen the professionalism of SOEs' management, e.g. requiring directors to be appointed through public procedures. External assessments point to significant shortcomings in implementing the provisions of the law, including several cases where "acting directors" were still in place past the deadline for appointing directors according to the new procedures.

The way forward for state-owned enterprises

SOEs operate at the nexus of the public and private sectors and, as such, their operations are affected by both the quality of public governance and the prevailing corporate and boardroom culture. As is the case in most economies in the Western Balkans, ensuring that SOEs in Serbia operate efficiently, transparently and on a level playing field with private companies will require reforms in multiple policy areas that cannot be done all at once. Choosing the appropriate sequencing of reforms is just as important as their content and depends in large part on the national political climate and current reform priorities. In short, identifying the most appropriate SOE reform priorities can only be done by the Serbian authorities.

The OECD Guidelines on Corporate Governance of State-Owned Enterprises provide a guide for reforms that the Serbian authorities could use to inform their policy efforts in this domain (OECD, 2015[83]). Based on the state of play of SOE policy development in Serbia, the following priority reform areas – which are in line with the guidelines – could offer a basis for discussions with the authorities:

- **Further professionalise state ownership practices** by developing an ownership policy applicable to all SOEs, including those that undertake predominantly commercial activities. The ownership policy should clearly stipulate the rationales for state ownership, including for those SOEs that are not currently under the remit of the Ministry of Economy (see Box 25.9 for an overview of Lithuania's ownership co-ordination body). It should also clearly establish how the state expects SOEs to create value and detail the respective roles and responsibilities of state bodies responsible for exercising ownership rights in SOEs.
- **Strengthen the transparency and professionalism** of the SOE board nomination process. In line with OECD best practice, the board nomination process should be merit-based and fully transparent and it should result in boards with the requisite mix of experience, qualifications and independence to effectively oversee management decisions in the interest of corporate performance and value creation.
- **Improve SOE monitoring and disclosure practices**, including using the information that the Ministry of Economy already collects to produce a publicly available aggregate report on the activities and performance of SOEs or a selected portfolio of them. Making this information public (if indeed SOEs are complying with the reporting requirements) can be a good way to encourage ministries and SOEs to improve their management. Aggregate reports can also highlight weaknesses in SOEs' implementation of applicable reporting requirements, encouraging their improved compliance.
- **Streamline SOEs' legal forms**. The state should review the appropriateness of SOEs' legal forms, particularly for SOEs that are still incorporated as "public enterprises". Good practice calls for SOEs engaged in economic activities to be incorporated under the same legal form as privately owned companies.

Box 25.9. Lithuania's state ownership co-ordination body

Lithuania has primarily decentralised its state ownership arrangements. For most of the country's 66 SOEs, the line ministries that are also responsible for sectoral policy and/or regulation in the relevant markets primarily exercise state ownership rights.

In the context of this decentralised system, Lithuania has taken significant steps to harmonise state ownership practices across the public administration through the development of SOE governance and disclosure standards and the establishment of a Governance Co-ordination Centre tasked with monitoring and reporting to the public on their implementation. It produces a detailed annual report on SOEs. Its main tasks include the following

- preparing aggregate reports on SOEs, with information on their financial performance and efficiency
- supporting SOE goal setting, including by calculating return-on-equity targets and evaluating the content and implementation of strategic goals
- participating in SOE board nomination processes
- contributing to SOE policy formulation, including by making methodological recommendations and initiating legislative reforms
- advising and consulting with the government, responsible line ministries and SOEs on matters like SOE governance practices, ownership decisions and dividend pay-outs.

Source: (Lithuania Governance Co-ordination Centre, 2018[92]), Governance Co-ordination Centre; (OECD, 2018[93]), Corporate Governance in Lithuania, https://doi.org/10.1787/9789264302617-en.

Education policy (Dimension 7)

Introduction

Table 25.12 shows Serbia's scores for the four education policy sub-dimensions and the cross-cutting sub-dimension on system governance, and compares them to the WB6 average. Serbia has the highest score (along with Kosovo) of the WB6 economies for the early childhood and school sub-dimension, driven by its above-average ratings for the indicators on the instruction system and early school leaving prevention. Moreover, except for the sub-dimension on tertiary education, Serbia scored above the WB6 average in all sub-dimensions.

Table 25.12. Serbia's scores for education policy

Dimension	Sub-dimension	Score	WB6 average
Education policy dimension	Sub-dimension 7.1: Early childhood and school education	3.5	3.0
	Sub-dimension 7.2: Teachers	3.3	2.7
	Sub-dimension 7.3: Vocational education and training	3.3	3.1
	Sub-dimension 7.4: Tertiary education	2.5	2.8
	Cross-cutting sub-dimension: System governance	3.5	3.3
Serbia's overall score		**3.2**	**3.0**

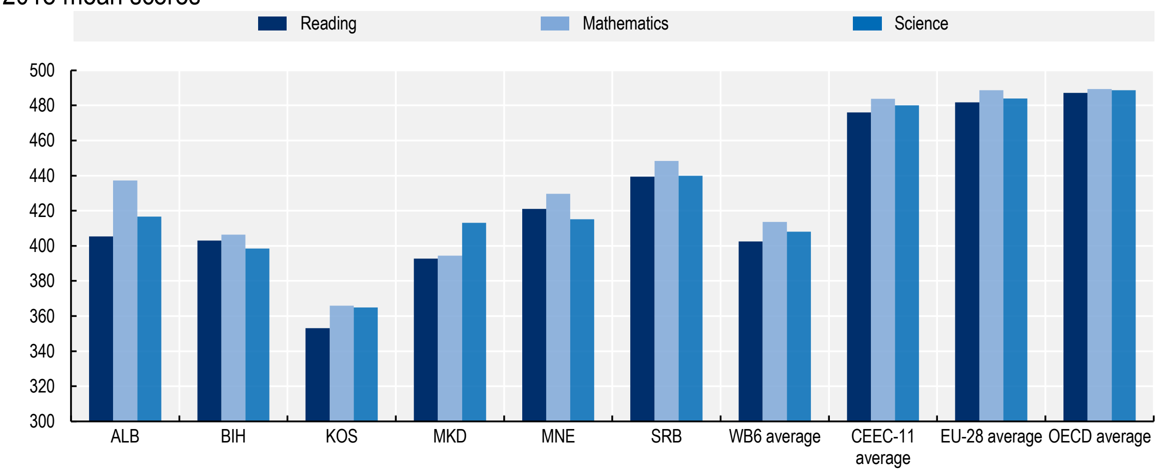
State of play and key developments

Since the last assessment, Serbia has introduced reforms to further improve the quality and equity of the education system, such as the roll-out of a competency-based curriculum and learning standards. As of 2019, net enrolment in Serbia was 98.2% for primary education and 97.9% for lower secondary, meaning that compulsory education is nearly universal. Enrolment in upper secondary education (87.7%) is also high for the region (UIS, 2020[94]).

In terms of learning outcomes, Serbia's average scores in the Programme for International Student Assessment (PISA) are close to those of some countries in the European Union, such as Bulgaria, Greece and Romania. While students in Serbia perform better than their peers in other parts of the Western Balkans (Figure 25.16), many still do not achieve baseline levels of proficiency in reading (nearly 38%) and maths (nearly 40%), much higher shares than the OECD averages of 23% for reading and 22% for maths (OECD, 2020[95]). There has been a slight increase (by around 2%) in Serbia's share of high performers in reading since 2009 but the share of low performers has also increased (by around 4.9%), signalling widening educational inequities.

Figure 25.16. Performance in reading, mathematics and science in Western Balkan education systems, 2018

PISA 2018 mean scores



Note: CEEC - Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia.
Source: (OECD, 2020[95]), PISA 2018 Database, https://www.oecd.org/pisa/data/.

StatLink https://doi.org/10.1787/888934256330

Similar to many countries around the world, Serbia closed its schools at the onset of the COVID-19 outbreak on 16 March 2020 (World Bank, 2020[96]). As part of the educational response to the pandemic, the government launched a Plan of Action for Inclusive Distance Learning that set out several recommendations for ensuring the continuity of education and providing support to children and families. For example, the plan called for the development of distance learning through television and other modalities, such as an online learning platform My School (*Moja škola*). It also emphasised communication among caregivers, teachers and school administers and the need for accountability at the school level to monitor the quality of distance learning and implications for equity (UNICEF, 2020[97]).

Primary schools in Serbia partially re-opened for the 2020/21 school year on 1 September 2020, with students in Grade 1 to Grade 4 returning to their classrooms. No more than 15 students were allowed in each classroom, lessons lasted 30 instead of the usual 45 minutes, and total number of students attending could not exceed 50% of total enrolment of the school. Students and teachers had to wear face masks and maintain a safe distance, and schools had to be disinfected after the first group of pupils finished their lessons. Students in Grades 5-8 attended schools either through a similar model, if their school has enough space and staff, or a combined model including both distance (through public TV) and in-school teaching (MPN, 2020[98]).

Sub-dimension 7.1: Early childhood and school education

Serbia's performance in the **early childhood education (ECE)** indicator is relatively low for the region, despite having established a strong strategic and legal framework. It introduced a new Preschool Curriculum Framework in 2018 that aims to support the well-being of young children and promote continuity between preschool and primary education. There have also been a series of rulebooks designed to improve the quality and evaluation of Serbia's ECE institutions and workforce. For example, minimum education requirements for ECE staff have been in place since 2010 but a 2018 rulebook now outlines the professional competencies expected of ECE staff. Funding for ECE is mainly the responsibility of local authorities, with parents and families covering around 20% of costs, a regressive model that leaves poor municipalities struggling to create sufficient places for young children (World Bank, 2019[99]). Broad public initiatives to improve the quality and equity of ECE are still largely project based and donor funded, jeopardising the financial sustainability of recent improvement efforts. Serbia has made progress in expanding access to ECE since the last assessment. Around 62% of children participated in pre-primary education in 2018 although, this share remains much lower than the EU average of 98% (UIS, 2020[94]). Despite good overall levels of participation, children from disadvantaged families and those who live in rural and remote areas continue to face barriers to educational access (Pešikan and Ivić, 2016[100]).

The Serbian **instruction system**[41] has one of the highest scores in the region for this indicator. The Strategy for Education Development in Serbia 2020 sets out a series of goals and targets to improve the quality and inclusiveness of teaching and learning, which the Ministry of Education, Science and Technological Development (MoESTD) evaluates in an annual report. Serbia also introduced a new competency-based curriculum in 2018 and is gradually updating learning standards for each grade and subject area, starting with the first year of each curriculum cycle (i.e. Grades 1, 5 and 9). This curriculum reforms aims to update classroom practices so that all young people develop the competencies needed to succeed in the 21st century. Serbia is working to align the new curriculum and learning standards with national examinations, which are used to certify the completion of basic education (in Grade 8) and upper secondary education (in Grades 11 and 12[42]). Serbia also plans to develop a new sample-based national assessment that will help measure the implementation of the curriculum and together with regular participation in international assessments, monitor the quality of learning outcomes to drive system improvement (Maghnouj et al., 2020[8]). Such information will be crucial to monitor student learning in light of school closures caused by the COVID-19 pandemic.

Serbia revised its school quality standards in 2017-18, to focus more on classroom instruction and ensure that all children and young people receive a good quality education by identifying schools where additional resources and support are needed. These standards are supported by a strong school evaluation framework that includes both self-evaluation and external evaluations modelled after inspection systems in other European countries. However, policies to provide additional support to low-performing schools (e.g. through expert assistance or small grants) remain in the pilot phase because of resource limitations. To further strengthen instruction in Serbian schools, principals participate in mandatory training and certification processes that aim to support them in becoming pedagogical leaders.

The **early school leaving** rate in Serbia has declined slightly over the last decade and, at 6.6% in 2019, is lower than the EU average of 10.2% (Eurostat, 2020[101]). While these rates are the same for young men and women, there are higher proportions of early leavers in rural areas (9.3%) compared to towns and suburbs (7.3%) and cities (3.2%) (Eurostat, 2020[101]). Despite this remaining challenge, Serbia has adopted several policies to help prevent early school leaving. For example, it has instruments to recognise students at risk of early leaving and individualised educational plans are used to retain young people in education and training. Moreover, Serbian schools are required to incorporate measures to prevent students dropping out into their development plans. Donor agencies continue to play an important role in reducing early school leaving in Serbia and have developed several programmes to help reduce it.[43] There are also been targeted policies to support Roma students and those with disabilities, for example Serbia's affirmative action programme for entry into secondary and tertiary education for Roma students.

Sub-dimension 7.2: Teachers

Serbia's score in this sub-dimension is above the WB6 average. Compared to most European countries, teachers' salaries are relatively low (EC/EACEA/Eurydice, 2019[102]). While Serbian teachers have benefitted from salary increases since 2017, earnings continue to be lower than those of other tertiary-educated workers, partly because of the large share of teachers who work part time (MoSALSG, 2015[103]). The government has several policies and mechanisms to increase the attractiveness of the teaching profession and encourage teachers to develop their competencies. For example, there is a merit-based career structure that includes increasing levels of responsibility and a set of professional standards help to inform initial teacher education and professional development activities. Serbia now requires all primary and secondary school teachers to complete a postgraduate degree (ISCED 7); however, national data suggests that only 85% of teachers had attained this level of education as of 2019.

There are no programme-specific accreditation criteria for **initial teacher education (ITE)** in Serbia; however, revisions to national accreditation standards in 2019 established a minimum duration for the initial practicum component.[44] This is an important development since the quality of ITE programmes and minimum entry requirements vary across the individual institutions. Serbia has some policies to attract and support students who wish to enter the teaching profession, such as offering scholarships to students in their second year of ITE and a mentoring programme for novice teachers. However, a general oversupply of teachers combined with a recent hiring freeze mean that many ITE graduates are not able to find employment (Maghnouj et al., 2020[8]). The number of teachers hired on part-time contracts in Serbia has also grown steadily in the last decade, from 28 380 teachers in 2010 to over 35 000 in 2019. This trend may discourage talented young people who are looking for more stable employment opportunities.

Serbia has a clear regulatory framework around the **professional development and management** of teachers. There is a specific institution, the Institute for Improvement of Education, responsible for accrediting professional development providers and a range of sources help determine professional development needs, namely self-assessment surveys, appraisals conducted by schools and external experts, and reports from schools. When the government identifies a teacher training priority area, this is paid for directly by the ministry but other activities are financed by local authorities, schools and donor agencies. While Serbia has a clear external appraisal process for promoting teachers, advancement is mainly based on years of experience, not performance or level of responsibility. Moreover, there is no progressive salary scale to reward teachers for moving to higher levels of the career structure. However, the ministry plans to develop such a scale, which will provide a powerful incentive for teachers to continue to develop their competencies.

Sub-dimension 7.3: Vocational education and training

Serbia's score in the VET sub-dimension is similar to the Western Balkan average. Professionally oriented education starts at the upper secondary level, when students are allocated into either general, vocational or art programmes based on their academic performance in lower secondary school, results in a national exam and individual preferences. The majority of upper secondary students in Serbia (74% as of 2018) enrol in vocational upper secondary schools, much higher than the EU (48%) and OECD average (32%) (World Bank, 2020[104]).

However, evidence from PISA finds that learning outcomes across VET and general education tracks are not equal, as vocational students tend to have weaker literacy and numeracy skills than their peers in general education. While many education systems struggle with this challenge, Serbia has the widest gap in reading performance (85 score points) between vocational and general students (OECD, 2020[105]). Moreover, socio-economically disadvantaged students in Serbia are more than five times as likely to attend a vocational upper secondary school, suggesting that current sorting mechanisms may reflect students' background more than their capability (OECD, 2020[105]). These inequalities may limit Serbia's long-term competitiveness.

The **governance of VET** in Serbia is determined by a legal framework and strategic documents that regulate the sector and work-based learning (WBL). Several government agencies share responsibility for managing VET, with policy coherence ensured by MoESTD. To develop VET programmes and determine the number of study and/or training places, Serbia engages stakeholders through Sector Councils, whose main function is to determine the demand for qualifications through dialogue with representatives of labour unions and education sectors.

The Serbian government recently passed a set of by-laws to better plan and co-ordinate career guidance activities across the education system. It introduced a set of standards for career guidance practitioners in 2019 and Career Guidance and Counselling Teams were extended to vocational schools offering dual-education (Government of Serbia, 2019[106]; EC, n.d.[107]). This is a positive development considering that data from the Ministry of Youth and Sports found that some 50% of youth report having never taken part in career guidance and counselling activities (CeSID, 2019[108]).

To inform career pathways and policy development, Serbia collects and disseminates data about the VET system, such as enrolment and completion rates. There is also some information about labour market outcomes. For example, at around 53.6%, the employment rate of VET graduates (20-34 year-olds) in Serbia is lower than the EU average of 76.8% (EC, 2020[36]). While this type of information can be useful, other labour market information about the WBL system is limited. For example, there is no information on the number of learners who are hired after completing an apprenticeship or WBL opportunity, nor are there any earnings data. Serbia plans to start collecting these data once its new education management information system (EMIS) is fully developed (see the Cross-cutting sub-dimension: System governance) but such mechanisms are not yet in place.

Serbia has started to move away from its previous theoretical model of vocational education towards more **work-based learning** (ETF, 2018[109]). The government started implementing a dual model for vocational education in 2019, whereby students attend regular classes in school and take part in work-based learning experiences outside of the classroom. The Law on Dual Education clearly defines all aspects of WBL and requires that curricula include a set of compulsory general, vocational and elective subjects. This could help ensure that all students develop the core literacy and numeracy skills needed to succeed in the workplace and adjust to changes in the labour market.

Sub-dimension 7.4: Tertiary education

Serbia's score in this sub-dimension is lower than the WB6 average. While the EU has set a goal of having 15% of the population aged 25-64 participate in lifelong learning and adult education by 2020, Serbia's strategic commitment is to reach at least 7% (MoESTD, 2018[110]). The Serbian tertiary education sector is mostly public (66% in 2018), with a stable share of private institutions (Serbia Excel, n.d.[111]). The sector has expanded over the past decade and national data show that nearly 22% of adults (aged 25 and over) have attained some form of tertiary education (Serbia Excel, n.d.[111]). However, this is still behind the OECD average of 45% (OECD, 2020[112]) and access to tertiary education in Serbia remains a challenge for individuals from vulnerable social groups, especially Roma (MoESTD, 2018[110]).

To **improve equity in access to tertiary education**, the Serbian government has taken steps such as introducing affirmative action measures to increase the coverage of students from under-represented groups. Serbia is also acting to improve access by replacing university-led entrance exams with results from the new central Matura exam.[45] While this reform stands to improve the fairness and transparency of university admissions, Serbia's limited financial and human resources risk hindering the new Matura's implementation (Maghnouj et al., 2020[8]). A positive feature of Serbia's higher education system is the availability of financial aid for students, some of which specifically targets vulnerable groups (e.g. Roma and people with disabilities). However, the distribution of financial aid is mainly based on academic performance and only 10% of student loans and scholarships are granted to vulnerable students (MoESTD, 2019[113]). As a result, the cost of higher education remains a barrier to participation for many students.

The Serbian government collects some data to monitor equity in tertiary education, such as enrolment and completion rates by gender and minority background. However, no research has been conducted to better understand and address the individual factors that may hinder participation in higher education.

Serbia has taken several steps to improve the **labour market relevance of higher education** in recent years and this topic is expected to be a priority in the next education strategy. For example, the 2017 Law on Higher Education now requires higher education institutions to have a Council of Employers to help strengthen links between the labour market and education system. There have also been efforts to promote the internationalisation of education, namely through Serbia's full participation in the European Union Erasmus+ Programme (European Commission, 2021[114]).

Several government agencies collect data to monitor the quality and labour market relevance of the tertiary sector, including employer surveys. The government also established a Qualifications Agency in 2019 that will be responsible for collecting data on labour market outcomes for each higher education institution and programme. Other measures to increase labour market relevance have included establishing a National Council for Higher Education to harmonise the higher education system's quality assurance and accreditation mechanisms with European and international standards.

Despite these efforts, there is evidence that skill shortages extend across most sectors of the economy (Reyes, Javier and Nguyen, 2020[115]) and Serbia's share of 15-24 year-olds who are not in employment, education or training is higher than the OECD and EU averages . Overall, Serbia's unemployment rate remains high – see Employment policy (Dimension 8) – especially among young adults and recent tertiary graduates (Eurostat, 2020[101]). This contributes to outgoing migration as skilled young people search for better opportunities abroad and when combined with Serbia's decreasing population, presents a risk to economic competitiveness.

Cross-cutting sub-dimension: System governance

Serbia has several governance features that align with practices found in European and OECD education systems and economies; however, the score for this cross-cutting dimension is similar to the WB6 average. The National Qualifications Framework of Serbia (NQFS), for example, is harmonised with ISCED and has been linked to the European Qualifications Framework, which establishes the recognition of learning outcomes and qualifications within the economy and internationally. The Strategy for Education Development in Serbia 2020 sets out broad long-term objectives for the entire education system. The present education strategy was developed in consultation with a range of stakeholders and informed by an analytical review of the system. It is also accompanied by a set of action plans to support implementation. The ministry has written a draft for the new education strategy, which will outline Serbia's vision for education for 2021-30, as well as the corresponding action plan for 2021-23. Public consultations are currently underway.

The Serbian government evaluates its education strategy and action plans through annual progress reports using a variety of indicators. While system inputs and outputs are regularly monitored, indicators related to outcomes are relatively limited since Serbia does not have a regular national assessment of student learning. However, the government plans to develop a new national assessment building on a pilot instrument[46] that was conducted in 2018. This will address an important system governance gap, as the majority of EU and OECD countries already use some sort of national assessment to monitor student learning (OECD, 2013[116]). At present, Serbia must rely on international assessments (which are not specific to the Serbian context) and national examinations (which do not provide information on learning during the earlier years of schooling) in order to have comparable information about student learning. Such information is crucial to support system monitoring and inform education policy decisions.

In recent years, there have been some efforts to modernise Serbia's data collection and system evaluation efforts to help improve system governance. For example, the EMIS was connected to a new interface in 2016, called the *Dositej* platform, to collect school-level data more efficiently. However, the functionality of this platform is limited and does not link with Serbia's labour market data. While the government does not aggregate relevant and available data to produce a comprehensive report on the state of the education system, there are a range of thematic reports prepared by technical education agencies and donors.

The way forward for education policy

In today's increasingly global and fast-changing world, achieving inclusive and quality education in Serbia could increase its regional competitiveness and create opportunities for more individuals to develop the competencies needed for sustainable development and social cohesion. Serbian officials will need to reflect on the economy's political, social and fiscal environment to determine how best to achieve their education goals. While the OECD review on evaluation and assessment in Serbia's education system (Maghnouj et al., 2020[8]) provides detailed recommendations on how to strengthen the equity and quality of the education sector, the following considerations in particular can provide insights for discussions on the way forward to enhancing education in Serbia:

- **Ensure the new education strategy has a clear set of priorities and a strong monitoring framework**. Serbia's next education strategy will cover a critical period for its national development and potential accession to the EU, highlighting the importance of directing the education sector towards supporting more students to achieve good and excellent outcomes. It will therefore be important to focus on clear and measurable priorities to help mobilise stakeholders across the system. Considering the low rate of enrolment in ECE, increasing coverage at this level of education should be considered a priority. This and other national priorities should be translated into action plans that are financially viable and can be measured through a monitoring framework. Box 25.10 shows the how Ireland included specific indicators in its Action Plan for Education 2018 to measure progress towards its national goals.
- **Provide teachers with stronger incentives to develop their practice**. Serbia has a merit-based career structure and has recently raised teacher salaries; however, the professional management system does not effectively reward performance or provide teachers with incentives to update their skills, knowledge and practice. Serbia should strengthen the link between teachers' performance and rewards. Current plans to introduce a salary increase for different levels of teaching careers will be an important step in this direction. However, it will also be important that the procedures for appraising and promoting teachers is fair and transparent.
- **Implement plans to strengthen the collection and management of data**. Serbia has already taken several significant steps towards modernising the collection and management of education data in recent years. However, it is important that current plans to link education and labour market databases are implemented so the system can more effectively analyse education inputs, processes and outcomes.

Box 25.10. Ireland's indicator framework for the Action Plan for Education 2018

Ireland's Action Plan for Education 2018 accompanies the country's national education strategy for 2016-19, setting out priorities and actions that the Department of Education and Skills and its technical agencies should undertake during the year. The action plan clearly aligns each action and sub-action to the country's five main goals for improving the quality of its education system. Each goal is associated with a list of actions and a set of indicators that are used to measure progress. For example, the first goal, "improve the learning experience and the success of learners", identifies six objectives, followed by indicators, as in the table below:

Table 25.13. Objectives and indicators

Objectives	Indicators
1.2 Deliver a "step change" in the development of critical skills, knowledge and competencies to provide the foundations for participation in work and society	Increase the percentage of students taking higher-level maths at the end of Junior Cycle: 60% by 2020
	Increase the proportion of students performing at Level 5 or above for reading in PISA: 12% by 2020
	Decrease the proportion of students performing below Level 2 for science in PISA: < 10 by 2025
	Increase the proportion of students performing at Level 5 or above for mathematics in PISA: 13% by 2020
1.6 Enable learners to communicate effectively and improve their standards of competency in languages	Percentage of candidates presenting a foreign language at the Junior Certificate/ Cycle Examination: 100% by 2026, 92% by 2022
	Students studying a foreign language as part of their HE course: Support 20% of all HE students to study a foreign language as part of their course (2026)
	Students doing Erasmus +: 4 100 HE students (2018/19)

Extracted from: (Maghnouj et al., 2020[8]) *OECD Reviews of Evaluation and Assessment in Education: Serbia,* https://www.oecd-ilibrary.org/education/oecd-reviews-of-evaluation-and-assessment-in-education-serbia_d8a85cfe-en

Source: Government of Ireland (2018[117]), *Action Plan for Education 2018*, www.gov.ie/en/collection/d3b2f1-action-plan-for-education-2018/.

Employment policy (Dimension 8)

Introduction

Serbia has strengthened its regulatory framework for the labour market since the last assessment but when it comes to implementing these regulations, improvements have been more limited. It has made no progress in strengthening the role of collective bargaining in the private sector, nor of Economic Social Councils. There have been some improvements in processes to detect informal employment and efforts have been made to reduce it. Some improvements have been made to skills matching, with a framework for improving training contents for initial VET training laid down, but few improvements to support continuing learning, and in particular to increase the skills of low-skilled adults. Although advances have been made in improving the capacity of the public employment service, caseloads remain too high and budgets for active labour market policies too low.

Table 25.14 shows Serbia's employment policy dimension scores, detailing them for each of the four employment sub-dimensions. Serbia scores above average for all sub-dimensions except for job quality. This is due to a lower score on the policies to promote female employment indicator, the second lowest in the region. However, Serbia's overall score remains above the WB6 average.

Table 25.14. Serbia's scores for employment policy

Dimension	Sub-dimension	Score	WB6 average
Employment policy dimension	Sub-dimension 8.1: Labour market governance	2.9	2.6
	Sub-dimension 8.2: Skills	2.8	2.2
	Sub-dimension 8.3: Job quality	2.3	2.4
	Sub-dimension 8.4: Activation policies	3.0	2.9
Serbia's overall score		**2.8**	**2.6**

State of play and key developments

Table 25.15. Key labour market indicators for Serbia (2015 and 2019)

	Serbia		WB6 average	EU average
	2015	2019	2019	2019
Activity rate (15-64)	63.7%	68.1%	61.0%	74.1%
Employment rate (15-64)	52.1%	60.7%	51.5%	69.3%
Unemployment rate (15-64)	18.2%	10.9%	16.3%	6.4%

Note: WB6 average rates are based on author's own calculations using simple averages.
Source: (Eurostat, n.d.[118]), Labour Force Survey data base, https://ec.europa.eu/eurostat/web/main/data/database.

As Table 25.15 shows, the activity rate of the population aged 15-64 increased by 4.4 percentage points from 2015 to 2019 reaching 68.1%, above the WB6 average, but still well below the EU average and also below the five EU countries that may serve as peer countries (Bulgaria, Croatia, Hungary, Romania and Slovenia), which average 71.2% (Eurostat, 2019[119]). A favourable economic climate has led to employment growth over this whole period. The number of people in employment increased by 10.6% between 2015 and 2019. The employment rate among 15-64 year-olds increased by 8.6 percentage points over the same period, reaching 60.7% in 2019, compared to the EU average of 69.3%. The unemployment rate for the same age group decreased steadily from 2015 to 2019 reaching 10.9%, which is one of the lowest rates in the region, but markedly above the EU unemployment rate and the average of the five peer countries mentioned above (4.1%).

The COVID-19 pandemic has had only a limited effect on the labour market so far. The main change has been an increase in inactivity rates and a slowing of the improving labour performance trend. Those in informal employment have been hit by the crisis and informal employment fell. Since they were unable to search for a new job during the lockdown and COVID-19 outbreak they were classified as inactive (ILO, 2020[120]). An increase in unemployment among those formally employed was avoided, due to the introduction of a job preservation scheme by the Ministry of Finance. This took the form of a wage subsidy scheme (at the level of minimum wages from March to May, and half the minimum wage thereafter) for micro-enterprises and SMEs affected by the pandemic (CEVES, 2020[121]; Government of Serbia, 2020[122]).[47] Take up of this measure was very high, covering roughly half of those in employment. However, the most vulnerable workers – those in temporary or seasonal work contracts, service contracts, agency contracts, vocational training and advanced training contracts, and supplementary work contracts – are not covered by these measures (CEVES, 2020[121]; United Nations, 2020[123]). The labour market impact has been comparable to that in EU countries which introduced similar schemes (Duell, 2020[124]).

Sub-dimension 8.1: Labour market governance

Most parts of the legislative **regulatory framework** for governing the labour market have been aligned with the EU *acquis* (EC, 2020[36]).[48] As a rule, draft labour laws are submitted to the European Commission for comments and alignment. The Law on Safety and Health at Work is, for the most part, harmonised with the relevant EU directive. By-laws in this area have transposed 24 individual EU directives to the greatest possible extent. A proposal of the Law on Safety and Health at Work was prepared, which will bring further harmonisation with the Framework Directive. Changes to the law on Temporary Work Agencies made in December 2019 will come into force in 2021. In line with EU legislation, this mainly concerns the principles of equal pay and equal working conditions. Recent changes in the legal framework also include the Law on Employment of Foreigners (further simplifying of the procedure for issuing work permits for foreigners) and the Law on Conditions for Sending Employees to Temporary Work Abroad (abolishing the legal obligation of employers to submit a notice and the Central Registry of Compulsory Social Insurance Certificate to the Ministry of Labour, Employment, Veterans and Social Affairs (MoLEVSA) with regards to the employees who shall be sent to work abroad). Other recent amendments to labour laws aim to promote formal employment by reducing the administrative burden (see the Cross-cutting sub-dimension: Informality below).

Serbia plans to harmonise its labour law with another 14 EU directives. The first step will be an analysis of the current gaps in the law. The areas being reviewed relate to collective redundancies, the protection of young and pregnant workers, employment conditions of workers with service contracts and non-standard contracts, and working hours. The labour law recognises certain non-standard contracts but it does not regulate in detail the labour and legal status of persons engaged via those contracts. Serbia adopted an action plan for aligning with the EU *acquis* in social policy and employment in May 2020.

The labour law does not regulate the term “self-employed” and their status, nor does it regulate temporary work contracts, or platform[49] and gig workers. In 2019Q2, about 23% of workers were self-employed (a slight increase on 2015 but a decrease since 2017), in line with the WB6 average, and well above the EU average of nearly 14% (WIIW and World Bank, 2020[125]; Eurostat, n.d.[126]). There were also 137 000 contributing family workers (usually unpaid workers, with no social benefits and labour rights), equivalent to 4.7% of total employment in 2019 .

In Serbia, a significant share of the self-employed are own-account workers,[50] nearly half of whom work in the informal sector. Generally, self-employment is linked to poor employment conditions (SORS, 2020[127]). Informal employment is particularly widespread in the agricultural sector.

The Strategy for Safety and Health at Work in the Republic of Serbia (2018-22) and its related action plan set the objectives of reducing injuries at work by 5%, making progress on the prevention of workplace injuries and occupational diseases, and improving the monitoring of injuries at work.[51] Advances are being made in monitoring; the authorities intend to start public procurement for the register of injuries at work, in order to establish an IT system and a database on key indicators related to injuries at work in line with the

European Statistics on Accidents at Work methodology (Eurostat, 2013[128]).[52] The introduction of this register should align the existing different monitoring systems, which are run by the Administration for Safety and Health at Work, the Labour Inspectorate, and the Republic Fund for Health Insurance.

Reducing and preventing accidents at work and improving working conditions requires that a strong implementation mechanism is in place. In 2015, around 38% of employers had elected representatives for safety and health at work (EU-OSHA, 2016[129]). More efforts could be made to encourage the establishment of representatives and support their work. A study on improvements since 2015 and the remaining challenges should be conducted.

The Strategy for Safety and Health at Work in the Republic of Serbia 2018-22, aims to strengthen the capacity of the **labour inspectorate** and a budget was allocated to this task. In particular, the Labour Inspectorate is expected to focus more of its work on preventive measures, in line with OECD good practice, by the end of 2022. The labour inspectors currently focus on controlling compliance with the regulatory framework in the field of safety and health at work and labour standards, detecting informal employment, and controlling temporary agency employment. Labour inspectors can impose fines and, in case of severe misconduct, file criminal charges. The effective implementation of preventive measures would require a substantial increase in capacity. Labour inspection lacks technical and human resources, and is not audited.[53] The number of inspectors fell by one-third between 2009 and 2019, leaving 243 inspectors operating in 2019. This means there are nearly 12 000 workers for every labour inspector, nearly 50% higher than the ratio in Montenegro and North Macedonia, and higher than that recommended by the International Labour Organization.[54]

The Labour Inspectorate plans inspections of employers in certain sectors and in certain territories on the basis of risks that are assessed according to previously completed inspections. It uses data from the Central Registry of Compulsory Social Insurance and the Agency for Business Registers, which it receives upon written request. It has also access to certain data entered into the unified IT system “eInspector” from other inspections. However, this system does not yet offer reporting and it has not been set up to meet the needs of labour inspectors. The inspectorate conducts unscheduled inspections, often applying the principle of “rotation” of inspectors. It is important that labour inspectorates are able to carry out on-the-spot visits right across Serbia.

Efforts have recently begun to increase the technical capacity of labour inspectors to tackle child labour and human trafficking through participation in the 'Engagement and Support at the National Level to Reduce Appearance of Child Labour'' project which started in 2016, and the 'Prevention and Fight against Human Trafficking in Serbia project which started in 2017.[55] These projects have developed special protocols and guidelines for detecting child labour and human trafficking, and trained inspectors in issues related to child labour. A total of 70% of inspectors have been trained in this area.

Despite some improvements in key labour market indicators, the main labour market challenges that remain are the low employment rates of older people and youth unemployment, long-term unemployment, the high inactivity rates, labour market integration of vulnerable groups, and wide regional disparities (WIIW and World Bank, 2020[125]; Government of Serbia, n.d.[130]),. Efforts have been made to base the **employment policy framework** on labour market analysis and on assessments of policies already in place. The National Employment Strategy 2021-26, which forms the basic employment policy document, is being developed on the basis of an *ex ante* evaluation, an *ex post* evaluation of the previous plan, a feasibility study into introducing a youth guarantee, and the barriers facing hard-to-employ groups in accessing jobs and active labour market programmes (ALMPs). However, these reports are not publicly available, which is against good practice for transparent policy making. The new strategy was adopted in February 2021.[56]

Employment policies are developed by a working group consisting of several ministries, the Standing Conference of Towns and Municipalities, the public employment service (PES), chambers of commerce and social partners. Specific objectives are encouraging employment in less developed regions and the development of regional and local employment policies, the improvement of labour force skills and competencies with emphasis on hard-to-employ categories, strengthening the capacities of labour market institutions, and decreasing duality in the labour market.[57] With the support of the Project Youth Employment Promotion, an updated guidebook on drafting local employment action plans was developed, and an analysis of Roma integration conducted. More efforts need to be made to develop integrated approaches and to allocate suitable budgets to improve the labour market integration of vulnerable groups, including Roma and people with disabilities (see also Sub-dimension 8.4: Activation policies).

In 2016, the government adopted the Strategy for Social Inclusion of Roma in the Republic of Serbia 2016-25. According to the most recent 2017 Regional Roma Survey data, only 21% of Roma are employed compared to 40% of non-Roma living in close vicinity with them, and 55% nationally. At the same time 71% Roma are engaged in undeclared work, compared to only 17% non-Roma and the national average of 22% (RCC, 2019[131]). The strategy has specific objectives to increase the labour market participation rate and combat discrimination against Roma in the labour market, increasing the number of Roma employed in public authority bodies, and formalising the work of informally employed Roma men and women, (especially introducing individual collectors of secondary raw materials into the waste management system at local self-government level, without any results so far). The action plan for employment and social inclusion of Roma expired in 2018. Implementation has been followed up with less intensity than planned, planned actions were not fully implemented and there have been delays in the preparation of the new action plan (EC, 2020[36]).[58]

A framework for **social dialogue** is in place, but it lacks practicable procedures, mechanisms, rights and obligations for collective bargaining partners. Improvements have included the adoption and amendments of the Law on Peaceful Resolution of Labour Disputes[59]. Data from 2011 suggested that the unionisation rate in the private sector was around 20% (Arandarenko, 2012[132]; Ladjevac, 2017[133]). This would be comparatively high for the region, but it is not known whether the rate has increased or decreased since then. Major companies in the metal industry, banking sector and retail are not members of the Union of Serbian Employers (UPS) (Ladjevac, 2017[133]). Collective bargaining is conducted at sector level (mainly in the public sector) and company level in the private sector. While sector agreements are monitored by MoLEVSA, company level agreements do not need to be reported. It is estimated that only 30% of employees, probably largely in the public sector, fall within the scope of collective agreements in Serbia, compared with an EU average of 60% (Ladjevac, 2017[133]). Information on collective bargaining at all levels would need to be collected to assess collective bargaining coverage and monitor the level of wages agreed. The labour law stipulates that employees working for an employer with over 50 employees may establish a works council, but it is not known how many companies have a works council.

The Social and Economic Council (SEC) is a tripartite body composed of the representatives of the government, employer organisations and trade unions. There are also 21 local SECs. The SEC is consulted on draft labour regulations and is the main actor setting the minimum wage. In 2019, the SEC held 8 sessions, down from 11 sessions in 2018. The permanent SEC working groups held 23 meetings in 2019. However, the operations of SEC are not underpinned by the state budget and the secretariat is not in a position to pursue analytical activities from its own resource (Ladjevac, 2017[133]).

Sub-dimension 8.2: Skills

Labour market outcomes are significantly determined by level of education. Low educational attainment is associated with a higher risk of being in informal employment. Employment growth has been driven by a rise in employment among both low and highly educated workers (WIIW and World Bank, 2020[125]). [60] The unemployment rates fell for workers with all levels of education each year between 2015 and 2018 (and 2019 Q2); among low-educated workers they fell from 15% in 2015 to 12.1% in 2018 (and 9.2% in Q2 2019), among medium-educated workers from 19.4% to 13.7% (11.4% in Q2 2019) and among highly-educate workers from 15.3% to 10.8% (8.5% in Q2 2019). The strongest percentage-point reduction in unemployment was among the medium educated, followed by the highly educated (WIIW and World Bank, 2020[125]). The proportion of young people not in employment, education or training (NEET) stood at 15.3% in 2019, down from 19.9% in 2015 (SORS, 2020[127]).

Despite improvements in labour market outcomes, **skills mismatches** continue to be a major challenge. The employment rate among recent graduates (20-34 year-olds) was 56.9% in 2017, well below the EU average of around 80% (European Commission, 2019[134]). Employers name lack of work experience as one barrier to recruitment, and generally indicate they face shortages of candidates with the skills they need, according to a survey conducted by the National Employment Service (NES), Serbia's public employment service. Over-education is another pressing issue (ETF, 2019[135]). Over-education may result from an oversupply of university graduates and/or from skills gaps among young graduates if they are not acquiring the technical and soft skills employers need, and weaknesses in the education-to-work transition. Graduates' first work experience may thus be in jobs requiring a much lower formal education level.

The NES has set up a new programme, My First Salary, which started in the second half of 2020. The programme works with employers in the private or public sector, but prioritises private sector employers, especially those from disadvantaged municipalities in accordance with the Decree of the Government of the Republic of Serbia on the level of development of local self-government units. During the programme, the NES pays a monthly cash benefit to young people being employed through this scheme: RSD 20 000 dinars to those with secondary education, and RSD 24 000 to those with higher education, and it also pays a contribution in the case of injuries at work and occupational diseases for people included in this programme. The programme is expected to benefit 10 000 young people during 2020 and 2021 (Government of the Republic of Serbia, 2020[136]). Its implementation and outcomes should be closely monitored, including the types of private companies taking part and the employment outcomes for the participants after 6 and 12 months.

Research on graduates' transition to the labour market has so far been limited to periodic school-to-work transition studies. Efforts are needed to develop a regular monitoring system for education outcomes that would include information on graduate employment, use of skills in the workplace, and the difficulties encountered while searching for work and their strategies to find employment. A pilot graduate tracking study was implemented in 2018 with the aim to make this practice mainstream in future (ETF, 2019[135]). Difficult transitions from higher education to work may act as an additional push for young people to emigrate, aggravating skills shortages.

Further improvements have been made to the skills anticipation system. A survey on the skills needs of employers is used for one-year forecasting at occupational level. The results are used in the design and implementation of ALMPs as well as in the context of the National Qualification Framework. In 2020/21, with the support of the IPA 2014 (Project for the Development of an Integrated System of National Qualifications), MoESTD has been developing a methodology to establish sector profiles, for collecting and forecasting key indicators such as the number of employed/unemployed persons in the sector, relevant vocations, the qualifications structure, the supply of programmes for gaining relevant qualifications, economic parameters and strategic directions for sector development. These data should support the work of sector councils on required competencies, and the mapping of qualifications and updating of the existing list of vocations in line with the National Classification of Vocations.

Serbia has taken major steps towards improving its skills framework. It adopted the National Qualification Framework for Serbia in 2018, and established a link to the European Qualification Framework. The Council for the National Qualifications Framework is an advisory body appointed by the government, which makes recommendations on the process of planning and development of human potential in accordance with public policies in the area of lifelong learning, employment, career guidance and counselling. The council includes decision makers in the education, employment, youth, economy, local self-government and health sectors as well as representatives from social partners, the Chamber of Commerce and Industry of Serbia, the NES, associations of secondary schools and higher education institutions, and civil society organisations. The council has the power to propose qualification standards for all levels of the NQFS. The government has decided to form 12 sector councils. It has also established the Qualifications Agency, which is in charge of developing qualifications standards, recognising foreign school and higher education documents, and accrediting adult education providers. Serbia therefore has a modern structure for skills governance to co-ordinate and take into account the different views and skills needs of employers, which in principle is the right way to reduce skills mismatches.

Efforts have been undertaken since 2016 to introduce work-based learning elements into VET and the corresponding legislative provisions were completed in 2018 – see Education policy (Dimension 7) for more information. The system is still in its pilot stage and the first evaluation results will become available in 2021 (European Commission, 2019[134]). Efforts should then be undertaken to introduce a quality assurance mechanisms.

Career guidance is being improved as part of the National Employment Action Plan. More efforts are needed to make career guidance gender sensitive in order to reduce gender imbalances in some professions, as well as to develop career guidance for adults.

Participation in **adult learning** is low (European Commission, 2019[134]). According to data from the Adult Education Survey of 2016, 19.8% of adults participated in some type of formal or non-formal education or training in 2016, an increase on 2011, but still well below the EU average of 45.1% (SORS, 2018[137]). Participation in Serbia was higher than in other economies in the region for which information is available (Albania, Bosnia and Herzegovina, and North Macedonia). The participation rate was highest among young adults (25-34), particularly among highly educated urban women. For the most part, training was work-related and performed at work, during working hours and paid for by employers.[61] Almost half of respondents (47%) wanted to participate in adult learning but could not due to the costs of education/ training, family reasons, scheduling (i.e. overlapping with working hours) and lack of suitable training. The Strategy for Education Development in Serbia, adopted in 2012, aimed to increasing the education offer for adults by 2020 (Government of Serbia, n.d.[138]). More efforts are needed to increase participation in continuing training of prime age and older workers, as well as among those who are medium and low-educated, vulnerable groups, and the self-employed. Adult education and lifelong learning opportunities and second chance education for adults are not enough to improve the labour market integration of vulnerable groups. There is little co-ordination between public and private institutions involved in implementing education and training policies for labour market integration and social inclusion (European Commission, 2019[134]).

Sub-dimension 8.3: Job quality

To improve the **quality of earnings**, the Social and Economic Council regularly fixes the minimum wage for workers with standard working hours. Only when the SEC cannot come to an agreement on the level of the minimum wage does the government step in. This has happened in 2018, 2019 and 2020 and has led to an increase in the minimum wage (of 28% over the whole period). The minimum wage is decided on the basis of the social parameters, the minimum consumer basket, the unemployment rate, GDP, retail prices, productivity levels, and average salary trends. In 2019, Albania and Serbia had the highest minimum wage to average wage ratio in the region (WIIW, 2020[139]).[62] Based on information from the MoF and the tax administration, about 12.5% of workers receive the minimum wage. There are clear difference in wages between companies covered by collective agreements and those not covered, according to the government, but there is no statistical analysis or collection of data in this area. Efforts need to be undertaken to make a thorough analysis of wage structure and development and to make the results public. This would also require systematically collecting data on collectively agreed wages from sector- and company-level agreements.

The in-work poverty rate among the self-employed stood at 35.1% in 2017, lower than in 2015, but 12.9 percentage points above the EU average. The self-employed were at a significantly risk of poverty than employees (6.8% in 2017). This gap may be over-reported, as around 38% of the self-employed worked in the informal sector (in 2016), but nevertheless it is substantially higher than the EU average and points to low earnings in the informal sector. The in-work poverty rate of workers with temporary contracts was 11.2% in 2017, nearly double the rate for those with a permanent contract (5.9%). (Pejin Stokić and Bajec, 2019[140]) (B92, 2018[141]).

There is no co-ordination between the MoF and MoLEVSA over policies on non-wage labour costs, in particular for social security contributions. However, these can have a significant impact on the quality of jobs (e.g. social protection of formal self-employed) and the promotion of formal employment among low earners (e.g. through a lower social security contribution rate). There is apparently also no co-ordination over addressing the tax wedge of low wage earners.[63]

On the **promotion of female employment**, in Serbia, as in Albania, the employment and activity rate gender gap is smaller than in other WB6 economies, but still higher than in EU peer countries (WIIW and World Bank, 2020[125]). Women's employment rates have grown faster than men's, increasing by 9.4 percentage points between 2015 and 2019 for women compared to 7.9 percentage points for men. Informal employment has also declined more among women than men, linked to a decline in employment in the agricultural sector. The employment rate among women aged 15-64 stood at 54.3% in 2019, well above the WB6 average of 42.5%, but still below the EU average of 63.3% (Eurostat, n.d.[118]). Young rural women, in particular from Roma communities, are the most disadvantaged groups in the area of education and access to decent work (World Bank, 2016[142]).

Young women are more likely to enrol in higher education than young men, but the subjects they choose tend to be segregated by gender. Men dominate the fields of informatics and communication technologies (74%) and engineering, manufacturing and civil engineering (63%). Nevertheless, women made up 43% of science, technology, engineering and mathematics (STEM) graduates in 2015 which is higher than the EU average of 33% for that year (Risteska, Memeti and Samardzic Jankova, 2020[143]). Women are over-represented in mathematics, often connected to the objective of becoming a teacher. Access to dual VET in technical fields among female students is promoted in a wide range of technical and mechanical professions but there is no breakdown of enrolment by gender for these courses. Middle-aged, and especially older women are more likely to have low educational attainment than their male peers, so on average women are still more likely not to have completed upper secondary education (35% of women and 23% of men in 2015) (European Commission, 2019[134]).[64]

Gender segregation also characterises the Serbian labour market with women over-represented in some occupational groups, particularly service and sales workers, clerical support workers, professionals and associated professionals, and elementary occupations. Men are significantly more likely than women to work in skilled blue collar jobs, as plant and machine operators and assemblers, as craft workers, and as managers. According to a study conducted by the Centre for Advanced Economic Studies, in Serbia women earn about 11% less than men working in jobs with the same characteristics (education, work experience, profession, industry sector, etc.) (CEVES, 2018[144]). In 2018 the gender gap in monthly average gross earnings was wider for working women with a university degree (19%) than the average for all workers (10%) (SORS, 2018[145]).[65]

Women are still greatly under-represented among entrepreneurs and managers (NALED, 2019[146]). Progress is being made to promote female entrepreneurship. In 2019, a Programme for Supporting and Promoting of Female Innovative Entrepreneurship was established. The programme awards grants, conducts mentoring, offers training in entrepreneurial knowledge and skills, organises lectures, and publicly promotes the experiences of successful female entrepreneurs. In 2019, another entrepreneurship programme was launched with the theme "Economic empowerment of women who have experienced violence in the process of self-employment", targeting vulnerable women.

Women are one of the target groups for Serbia's active labour market programmes and they tend to participate more often then men. However, no assessment has been made to determine which ALMPs work particularly well to address the employment barriers women face.

There was a National Strategy for Gender Equality 2016-20 with an action plan for 2016-18. The evaluation of the plan by UN Women found it had limited success. Based on the lessons from this evaluation, more efforts are needed to deliver gender sensitive formal education, increase public awareness of the significance of gender equality, ensure men and women play more equal roles in parenting and the economy of care and in the area of gender studies (UN Women, n.d.[147]). Childcare services are in short supply, and the number of preschool institutions should be increased (World Bank, 2016[142]).

The Gender Equality Administration was removed in 2014. The situation improved with the establishment of the Department for Antidiscrimination Policy and Promotion of Gender Equality in MoLEVSA on 1 July 2017, with immediate responsibility for monitoring the application of the Law on Equality of Sexes. Employers with more than 50 permanent employees are obliged by law to adopt a plan to remove or mitigate unbalanced gender representation and report on its implementation. These reports form the basis of the ministry's annual report.

While it is important to gather information on companies' activities and to monitor progress, it will also be important to conduct permanent awareness-raising campaigns aimed at reducing discrimination and to have a strategy of gender mainstreaming in all policy fields. MoLEVSA's budget does not allocate any funds to awareness-raising media campaigns, and nor were any donor funds secured for this purpose. However, UNICEF are implementing a project to address gender discrimination in kindergarten and schools. This also includes training of teachers.

Sub-dimension 8.4: Activation policies

Efforts have recently been made to increase the capacity of Serbia's **public employment service,** the NES, by expanding the number of public employment agencies (20 of the 129 offices were established in 2019). However, the number of staff is still too low to effectively implement activation policies. Although most staff are certified employment advisors, in line with the World Bank methodology, each employment counsellor's average caseload was 827, which is well above OECD good practice guidelines and high for the WB6 region. A small caseload is particularly important when finding jobs for hard-to-place jobseekers. In France and Germany for example, employment counsellors have caseloads of around 70 hard-to-place jobseekers each, while caseloads of regular jobseekers may vary between 100 and 350, depending on how much individual guidance they need and how autonomous they are at using self-help tools (OECD, 2015[148]; Manoudi et al., 2014[149]; Pôle emploi, n.d.[150]).

A reform process for the NES was launched in 2015, starting with a feasibility analysis conducted in January 2015 . This recommended expanding the role of employment counsellors, and setting up an integrated IT system. The World Bank also performed a functional analysis of the NES and made a number of recommendations (World Bank, 2017[151]). Based on these assessments, an Action Plan for Optimization in Provision of Public Social Services was set up, including the NES. Its objectives include increasing the placement of unemployed workers in the formal sector, benchmarking and peer learning among employment service offices, and taking contextual factors into account when assessing employment outcomes. Improving the quality of services offered to employers has also been an integral part of NES reform. The amended Law on Employment and Insurance in Case of Unemployment of 2019 extends the coverage of activities of the PES to include employee training programmes.

In its work, the National Employment Service uses documents of the Integrated Management System which determine in detail the individual interviews with job seekers who are registered as unemployed. Individual interviews last between 20 and 60 minutes. An employability assessment is conducted and employability plans established. It is, however, not clear who benefits from a 60-minute interview given the very high caseload and the high incidence of long-term unemployment among registered jobseekers. The yearly National Employment Action Plan determines the categories of hard-to-employ persons who have priority for participating in ALMPs. A new functional analysis of the NES is planned to prepare the new employment policy strategic framework for 2021-26.

Progress has been made in strengthening the analytical and planning capacities of the NES, particularly for planning training measures. As well as carrying out the skills needs survey (see Sub-dimension 8.2: Skills), the NES also communicates with local governments and uses their investment plans to determine which future skills will be needed. The NES also analyses unfilled vacancies, to understand the circumstances when it was not able to provide a suitable candidate for the job, and the education profiles included in the individual employment plans of the unemployed. Cross-referencing all this information, helps to define a catalogue of training for the unemployed to meet labour market needs.

Serbia has a **mutual obligation framework**. To be eligible for unemployment benefits, a worker must have paid insurance for a minimum of 12 months either continuously or intermittently during the last 18 months. Unemployment benefits are based on previous income and not a fixed amount, as in other WB6 economies. This aligns Serbia with EU good practice. The law prescribes the minimum and maximum amount per month. The payment period ranges from 3 to 12 months, and exceptionally 24 months for people who are less than 2 years from retirement although in principle unemployment benefit schemes should not be used as pre-retirement schemes. Unemployment benefit recipients need to register with the NES. They need to report in person, in accordance with their individual employment plan, at least once every three months and, if necessary, submit a job search diary to their employment counsellor. Unemployment benefit recipients are removed from the unemployment register if they do not comply with the job-search requirement. Monitoring job-search activities every three months is not frequent enough; in the United Kingdom and Australia, for example, fortnightly reporting is required. There seems to be no instrument for soft sanctioning, as implemented in a number of OECD countries.

The existing minimum income scheme does not provide sufficient coverage. Around 3-4% of the population receive social assistance of the equivalent of EUR 69 per month for adults, less for children. The vast majority of recipients are very poor (European Commission, 2019[134]). Recent reforms have strengthened the mutual obligation principle but have not changed benefit levels. Social assistance recipients are referred by Centres of Social Work (CSW) to the NES where the first interview is within 10 days. The CSW may conclude agreements with the beneficiaries of cash social assistance to take active steps to overcome their situation. These impose activities and obligations on the beneficiaries, and their right to social assistance can be reduced or revoked if they do not abide by these obligations without just cause.

Co-operation between the CSW and the NES has improved in recent years, including electronic co-operation and joint thematic meetings, during which all relevant information related to the treatment of people from this category are exchanged. According to the Report on NES Performance Agreement, during the period January-December 2019, 11 565 cash social assistance beneficiaries took part in some type of ALMP or NES activity. Of these, 549 were included in public works measures. In 2017, 105 051 families (257 354 people) received monetary social aid, (Government of Serbia, n.d.[152]). More progress is needed in fostering co-operation at the local level.

A significant number of local self-government units have formed local employment councils (LECs), which jointly, or with technical support provided by NES, implement ALMP measures. Their activities include the activation of social assistance recipients, reducing informal employment and combating discrimination so co-operation with the CSW and NES may become necessary. As LECs play a potentially important role for the labour market integration of vulnerable groups, an assessment of their functioning is recommended.

The number of registered unemployed has been well above the number of unemployed recorded in the Labour Force Survey (LFS).[66] This indicates that people have an incentive to be registered as unemployed or need to register as unemployed, although they may have small jobs (and thus are underemployed), are not searching for work, or have difficulty being available for work (e.g. due to care responsibilities or health issues). Another incentive may be to be covered by health insurance through registration with the NES. It is therefore important to increase efforts to place vulnerable job seekers into formal employment and ALMPs, implement in-work benefits that would create incentives to move into formal employment, and to offer comprehensive and integrated social and employment services.

Funding for **active labour market programmes** is very low: in 2019 it amounted to 0.07% of GDP, compared to the OECD average of 0.37%, or 0.51% if PES administration and services are included, and thus also counselling (OECD, n.d.[153]; Government of Serbia, 2020, pp. 58, Table 30[154]), despite a significantly lower average unemployment rate. The budgets and number of participants of Serbia's ALMPs are very low, especially, given the high share of those facing severe employment barriers among the registered unemployed. About 28% of the unemployed registered with the NES benefitted from any type of support (EC, 2020[36]). Nearly one-third of the registered unemployed are aged 50 and over, one-third have no formal qualifications, and many have health problems (Government of Serbia, n.d.[130]). About 60% of those unemployed according to LFS data were long-term unemployed in 2019 Q2, below the WB6 average of 66%, but well above the share of long-term unemployment in peer countries such as Austria (26.4%) (WIIW and World Bank, 2020[125]).

The measures provided under the yearly National Action Plan on Employment are mostly one-day services such as job fairs and job-search training, covering around 120 000 participants per year. These measures may be useful but have limited impact on the job prospects for unemployed people. Only around 3% of registered unemployed people have been included in measures such as training, employment and self-employment subsidies or public works. Training measures are mostly for medium and highly educated jobseekers and there are no specific training measures for low-educated adults (European Commission, 2019[134]). A small training programme for low-educated jobseekers was planned for 2020, which would have included 200 participants, but could not be implemented due to the pandemic.

As a result of improved labour market conditions, the number of both registered and LFS unemployed fell by 30% between 2015 and 2019. Although the unemployment rate (10.9% in 2019) was below the regional average of 16.3%, it is nearly double the EU average (6.4%) and the incidence of long-term unemployment is 2.5 times the EU average (Eurostat, n.d.[118]).[67] The past reforms and activities of the NES are unlikely to have had a major impact on reducing unemployment, given counsellors' very high caseloads and the extremely low budget for ALMPs. However, around 32% of those who participated in any type of measure, including very short ones, were in employment six months after completing them, with variations regarding the level of employment barriers they face.

Cross-cutting sub-dimension: Informality

In 2019, 18.2% of Serbia's workers were informally employed. Informal employment is especially pronounced in agriculture (64% of all informally employed).[68] Informally employed women mostly work as unpaid family members while informally employed men are predominantly self-employed. Within the private sector excluding agriculture, the share of informal employed is estimated to be 12%.[69] In recent years, there has been an increase in registered employment in Serbia (+6% between 2016 and 2018). The number of entrepreneurs and their employees and self-employed persons has also increased (12.7%), while the number of registered individual farmers fell by 11.9% (Government of Serbia, n.d.[130]).

Serbia has adopted a National Programme for Countering Grey Economy with an action plan for its implementation covering 2019-20. The objective was to decrease informal employment by 2 percentage points between 2018 and 2020, and to improve the monitoring of the informal economy. The other objectives include improving tax collection, reducing the administrative burden of formal employment, and raising awareness (Box 25.11).

Box 25.11. Activities to combat informal employment in Serbia

The Law on Simplified Work Engagement for Seasonal Jobs in Certain Areas implemented since 2019 to simplify the employment of seasonal workers in certain activities (e.g. agriculture) introduces a new type of contract, which made it easier to register these workers for social insurance and tax payments. The objective is to reduce informal employment and first results from the labour inspectorates seem promising: Between 2017 and 2019, even though the number of inspections increased, the numbers of undeclared workers they detected decreased.

A “name and shame” approach has been used to raise awareness among employers. Two lists are published and updated weekly on MoLEVSA’s website, of employers which have employed informal workers and of workers who have engaged in informal activity.

Source: Information received from the Government of Serbia.

Improvements have been made in the co-operation among agencies to detect informal employment. The Director of the Labour Inspectorate is the president of a working group for combating informal employment, involving a wide range of relevant actors. The working group meets regularly and conducts joint inspections. In 2019, 895 joint and co-ordinated inspections were conducted, mainly in co-operation with the tourist inspection, the tax administration and the Ministry of Interior. Co-operation with the Ministry of Interior over the administration for foreigners is necessary to tackle informal employment among foreigners. These joint inspections detected about 291 undeclared workers and 10 unregistered businesses. An external assessment of the performance of labour inspectorates is recommended. The labour inspectorate has also started a free helpline for citizens who wish to report informal work.

Cross-cutting sub-dimension: Brain drain

Emigration from Serbia has been high, although not as high as in some other WB6 economies. About 400 000 people (about 5.5% of the 2016 population) emigrated from Serbia to OECD countries between 2008 and 2016 (IMF, 2019[155]). This trend has continued and in 2018, an estimated 50-70 000 people left the country (WIIW and World Bank, 2020[125]; Bjelotomic, 2019[156]).

The working-age population (15-64 year-olds) has fallen by 10.3% since 2012, driven by population ageing and emigration; while the activity rate increased by 7 percentage points. Labour shortages in some sectors due to continued migration also put pressure on wages (WIIW and World Bank, 2020[125]). The share of young people wanting to emigrate is still high and has been increasing (Lavric, 2021[157]). Employment opportunities and higher earnings are by a long way the main reasons young people emigrate.

An estimation of the costs to the economy of the emigration of young people shows that directly and indirectly, the lost employment has generated an annual loss of gross value added of EUR 897.3 million, which was about 2.1% of Serbia's GDP in 2018 (Government of Serbia, n.d.[130]).

The World Bank LinkedIn Digital Data for Development show that in Serbia, skill losses due to brain drain have mainly affected Internet services, financial services, higher education, research, and international affairs. The five main skills that were lost were dentistry, genetic engineering, development tools, medicine and rehabilitation, and web development (World Bank Group & LinkedIn Corporation, n.d.[158]). In addition Serbia has lost management and cross-cutting skills such as problem solving, time management and oral communication, although less so than in Albania, Bosnia and Herzegovina and North Macedonia (WIIW and World Bank, 2020[125]). Skills shortages also affect a number of crafts and low-skilled activities.[70]

The NES has mediated finding employment abroad for some unemployed people (mainly to Croatia, Germany and Slovenia).[71] It has a bilateral agreement with the German PES. Serbian citizens were predominantly employed in construction, medicine, hospitality and manufacturing. Private employment services also provide mediation abroad. Individual networks and other job search channels play a major role. In order to protect migrant workers, bilateral agreements on temporary employment have been concluded with a number of countries, including Belarus, Bosnia and Herzegovina, Hungary, Malta, the Russian Federation, and Slovakia.

Recently, the government has adopted a strategy to reduce brain drain. On 27 February 2020, it adopted the Strategy on Economic Migration of the Republic of Serbia 2021-27. The overall objectives are to create an economic and social environment that will slow down the departure of the working-age population, strengthening ties with the diaspora, encouraging returning and circular migration, and attracting foreigners with a variety of education profiles. A public debate on the related draft action plan 2021-23 was conducted in February 2021 (Government of Serbia, n.d.[159]). This strategy looks highly relevant but its impact may take some time to be felt.

The way forward for employment policy

The main efforts needed to advance employment policy relate to strengthening the capacities of government and other actors at national and local level to effectively implement regulations, increase transparency in monitoring working conditions and wages, and deepening labour market analysis. In particular:

- **Increase the capacity of the labour inspectorate to detect informal employment,** including enhancing staff capacities. More efforts are needed to strengthen the role of inspectors to provide health and safety advice in order to prevent injuries and improve working conditions. An efficient monitoring system of the activities of the labour inspectorate is still under construction and it will be essential to implement and use it. The co-operation between various actors should continue to be fostered in order to detect informal employment.
- **Strengthen collective bargaining capacity at sector and company levels, and strengthen worker representation in companies.** The Social and Economic Council should be equipped with basic resources to conduct labour market and sector analysis, as in France (Arkwright et al., 2020[160]) and a number of other European countries. The council should evaluate the impact of minimum wage on poverty reduction and informal employment. A good example is the work of the minimum wage commission in Germany (Box 25.12).

Box 25.12. Germany's Minimum Wage Commission

The Minimum Wage Commission in Germany includes members from the scientific community in a consultative role. It has a mandate to constantly evaluate the impact of the minimum wage on the protection of workers, conditions of competition, employment in certain industries and regions, and productivity. The commission presents the results of its evaluation to the Federal Government in a report together with its resolution on adjusting the minimum wage every other year.

Source: (Minimum Wage Commission, n.d.[161]), website, www.mindestlohn-kommission.de/EN/Commission/Commission_node.html.

- **Foster links between universities and employers to ease the transition from universities to work**. Internships should be included in university curricula, in order to improve the employability of young people. Promoting a smooth school-to-work transition may also help to reduce the emigration of young skilled adults. Recent efforts to place young graduates into quality jobs should be continued. Skills development and reducing skill mismatches are also key strategies for reducing informal employment.

- **Promote adult education, especially for low-skilled adults**. This would include providing remedial education as well as linking upskilling measures to the recognition of prior learning (Box 25.13).

Box 25.13. Adult learning in Portugal

Portugal has developed standards to recognise the skills acquired by adults outside of formal education that are equivalent to those required to obtain an upper secondary diploma. It has hundreds of adult-learning centres across the country with staff dedicated to helping adults undergo such a process. The 303 Qualifica Centres specialise in the provision of adult-learning services. They are operated by various types of institutions, public and private. Qualifica Centres offer information, vocational guidance, and the recognition, validation and certification of skills free of charge. The Qualifica programme promotes participation in training alongside the completion of prior learning and recognition processes.

Source: (OECD, 2019[162]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://doi.org/10.1787/9789264313835-en.

- **Encourage employers to promote continuing training at company level, particularly among middle-skilled employees, to adapt to technological change**. Other countries have provided subsidies to employers, financed study leave, and offered tax credits and individual learning accounts (OECD, 2019[163]). The strategy for adult learning should also include counselling activities for employees and employers, in particular for SMEs (e.g. as done in Portugal through the Qualifica Centres (OECD, 2019[162]). In France, every individual has the right to information, advice and career guidance support. To put this into practice, the Advice for Professional Evolution was launched in 2014, offering free and personalised services (OECD, 2019[162]).
- **Assess and expand the availability of affordable and quality childcare in order to enhance female employment**. More efforts are needed to adapt vocational guidance accordingly and to reduce gender discrimination in companies in order to attract women in non traditional career paths.
- Continue to strengthen the capacities of the NES:
    - **Significantly reduce the caseload of NES staff**, enhance the number of employment counsellors and increase the budget for active labour market programmes.
    - **Continue to strengthen the co-ordination and monitoring of local employment councils**. An assessment of their functioning should be carried out. More efforts should be made to develop integrated approaches and allocate relevant budgets to improve the labour market integration of the most vulnerable groups (e.g. Roma communities, women in rural areas). This would require close co-operation with other key stakeholders at national and local levels. More efforts will be needed beyond job fairs to develop services for employers and to proactively collate vacancies.
    - **Systematically differentiate outcomes (employment) by degree of disadvantage**. Thorough evaluations of ALMPs and their impact on different target groups should be conducted by an external evaluator.

Science, technology and innovation (Dimension 9)

Introduction

Serbia has made continuous progress in developing its science, technology and innovation (STI) policies, and continues to set the pace for the region. With an overall score of 3.1, it is outperforming its WB6 peers in all three sub-dimensions (Table 25.16) and has continued to improve in all areas, particularly its overall STI system and business-academia linkages.

Table 25.16. Serbia's scores for science, technology and innovation

Dimension	Sub-dimension	Serbia	WB6 average
Science, technology and innovation dimension	Sub-dimension 9.1: STI system	3.4	2.4
	Sub-dimension 9.2: Public research system	2.9	2.0
	Sub-dimension 9.3: Business-academia collaboration	3.0	1.6
Serbia's overall score		**3.1**	**2.1**

State of play and key developments

According to the 2020 European Innovation Scoreboard, Serbia continues to be categorised as a moderate innovator, despite significant improvements compared to 2019 (EIS, 2020[164]). The government recognises the development of STI as a key policy priority, and investment in R&D, albeit from low levels, has increased almost consistently in recent years to 0.89% of GDP in 2019 (RZS, 2021[165]). Since the previous assessment, several policy changes favourable to STI have been implemented. While the impact of the measures developed and implemented is not yet fully evident, they are expected to boost STI activity in the medium to long term.

Sub-dimension 9.1: STI system

Serbia has an **STI strategy** in the form of the Scientific and Technological Development of the Republic of Serbia – Research for Innovation strategy, adopted in 2016, and the Smart Specialisation Strategy Serbia (4S), adopted in 2020. The preparation of the 4S was aligned with the methodological guidance provided within the S3 Framework for the EU Enlargement and Neighbourhood Region, with the support of the Joint Research Centre. It was based on the identification of economic, innovation and scientific potential, and included the Entrepreneurial Discovery Process which brought together key stakeholders to jointly identify strategic priorities and measures. In 2019, Serbia also adopted a Strategy for the Development of Artificial Intelligence, following comprehensive analysis and stakeholder consultation.

The **institutional framework** for implementing STI policy is overseen by the Ministry of Education, Science and Technological Development, which is responsible for designing policies to support STI and in charge of budget allocations within this area. However, the lack of a fully adopted action plan to implement the strategic framework has somewhat hindered its full and comprehensive execution. MoESTD is supported by the National Council for Science and Technological Development, which provides assistance in inter-ministerial co-ordination and monitoring. Emphasising its commitment and strong focus on developing STI, the government further established a Ministerial Council on IT and innovative entrepreneurship, as well as a minister without portfolio for Innovation and Technological Development. Whilst these measures ensure that STI development remains a priority, overlapping mandates and unclear objectives of the various co-ordination mechanisms somewhat weaken the institutional framework.

The Serbian Innovation Fund remains the key vehicle for implementing the STI policy framework. Established in 2011, the fund now runs several programmes in support of innovation, entrepreneurship, technology transfer and business-academia collaboration, with a budget of EUR 5.5 million in 2019. In response to the unfolding COVID-19 pandemic, the Innovation Fund introduced a new programme aimed at supporting innovative products and services to fight the pandemic (Box 25.14). The fund's activities are currently funded through both the state budget and donor support, further underlining the government's strong commitment to the innovation agenda.

Box 25.14. The Innovation Fund at the forefront of Serbia's response to COVID-19

Amid the unfolding COVID-19 pandemic in March 2020, the Innovation Fund launched its own response to counter the crisis. In an ad hoc call for projects, it aimed to identify and support innovative ideas addressing the health and well-being of the population, which had the potential to be scalable and developed quickly and would contribute to combatting the pandemic.

Nearly 300 proposals were received. Given the urgency, the fund's independent panel of experts prioritised those solutions they assessed would be able to produce the most influential, rapid and strategically important response to specific problems. Overall, the fund identified 12 innovative projects, awarding a total amount of approximately EUR 500 000 in support.

Within one month, all 12 proposed solutions were developed and made available for use and the final products and services were donated to organisations and institutions of strategic importance throughout Serbia. These included the first Serbian ventilator, a new type of protective mask with a removable high efficiency particulate air (HEPA) filter for multiple and long-term use, disinfection booths intended for use in public places and locations of interest, a mobile counter for contactless use, temperature measurement and manual disinfection, and portable ozonisers for the fast and safe disinfection of critical objects.

Source: (Serbian Innovation Fund, 2020[166]), Results of the public call for suppression of the effects of the COVID-19 pandemic presented, http://www.inovacionifond.rs/news/results-of-the-public-call-for-suppression-of-the-effects-of-the-covid-19-pandemic-presented0; (Government of the Republic of Serbia, 2020[167]), Support for innovative projects for suppressing effects of COVID-19, https://www.srbija.gov.rs/vest/en/152532/support-for-innovative-projects-for-suppressing-effects-of-covid-19.php.

A key achievement since the last assessment in 2018 has been the establishment of a Science Fund in early 2019 to serve as a technology agency to scientific research. Within its first year of operation, the fund launched five programmes, providing both financing and technical assistance to the research community. These programmes include support to young researchers, artificial intelligence and better leverage of the Serbian diaspora to advance domestic scientific research activities.

The new Science Fund is regulated through the new Law on Science and Research and the Law on the Science Fund, which were both adopted in 2019 and complete Serbia's STI **regulatory framework**. The Patent Law has also been amended twice since the last assessment, in 2018 and 2019, in order to align with the EU *acquis* on intellectual property. The law now also reflects a more balanced approach between the interest of an employer and those of employees who may have created a patent during the course of their employment. This reform of the IPR legal framework is welcome but, amid weak law enforcement, further efforts are needed to protect intellectual property and incentivise the commercialisation of scientific research in line with the European Commission's most recent recommendations (EC, 2020[36]).

Serbia has expanded its engagement in international research activities as **international collaboration** is a key component of its STI policy framework. The new Science Fund is expected to be a key tool to reaching Serbia's diaspora, and Serbia has actively participated in the EU's Horizon2020 framework[72], with over 500 Serbian entities having benefitted, receiving over EUR 144 million in grants to date (EC, n.d.[168]). Equally, Serbia participates in Eureka,[73] and has been a main beneficiary of the Western Balkans Enterprise Development and Innovation Facility (WB EDIF), which has invested in 13 Serbian companies since its inauguration in 2012.

Serbia has continued its **alignment with European STI policies**: the priorities of the European Research Area[74] are reflected in the STI framework and the economy adopted the European Research Infrastructure roadmap in 2018. Serbia is a member of key European research networks and has also adopted EURAXESS's European Charter & Code for Researchers.[75] It facilitates open access initiatives, such as the Open Science Platform to promote science and enhanced access to publications and research data. Serbia has been participating in the EU Innovation Scoreboard since 2012.

Sub-dimension 9.2: Public research system

The new Law on Science and Research establishes excellence in research as a key objective of Serbia's STI framework, while higher education institutes (HEIs) are governed through the Law on Higher Education. HEIs and research and development institutes (RDIs) across Serbia operate relatively autonomously, setting their own research priorities and requiring minimal co-ordination with MoESTD, resulting in a somewhat scattered **institutional structure of the public research system.** RDIs and HEIs undergo regular internal evaluations and some external ones to monitor their performance. However, there is no strategic approach to assessing the performance of public research institutes and it remains unclear whether the results affect public funding availability.

Overall, investment into research in Serbia remains very low at 0.92% of GDP, with only one-third provided by the private sector. Serbia is currently in the process of defining and establishing a new model of financing of research activities. Until recently, **public research funding** has mainly been project-based, but the allocation of funds has not always been transparent or implemented in line with a clear methodology. The Law on Science and Research has a strong focus on reforming the funding model for scientific research, envisaging a clear shift towards performance-based institutional funding in combination with highly competitive project-based financing through the Science Fund. As a result, the Science Fund has a transparent methodology for evaluating projects and follows a two-step review process including the National Council for Science and Technological Development, in line with best practice. However, as it is a relatively new institution, this methodology is yet to be fully tested and evaluated.

The Science Fund is expected to become a key instrument for project-based research funding, with a budget of EUR 4.2 million in 2019, rising to over EUR 7.5 million in 2020, to implement financial support programmes for research. It has already launched a number of programmes, including instruments incentivising closer collaboration between academia and industry (the IDEAS Programme and the Programme to Support the Development of Artificial Intelligence).

A further objective of Serbia's STI strategy is to strengthen **human resources for research and innovation**, amid low capacity of scientific research personnel. The number of full-time researchers has remained relatively constant in recent years (UIS, 2021[169]), while more encouragingly, the number of young people entering research has increased in recent years.

In line with the strategic goal to strengthen human resource capacity in the STI sector, the Science Fund has developed the PROMIS Programme which provides young researchers with financial support to initiate research programmes early in their careers, which has triggered high interest. A second programme is the Collaboration Programme with the Serbian Scientific Diaspora, which aims to foster mobility among researches and provides vouchers to facilitate short-term study visits and collaboration between Serbian research institutes and the diaspora. In addition to these programmes, MoESTD makes scholarships available for doctoral research, co-finances researchers to participate in conferences or professional training, and offers incentives to Serbian researchers returning to Serbia to continue their careers.

Sub-dimension 9.3: Business-academia collaboration

Serbia's STI policies have identified the need for increased integration of scientific research with the private sector, and have put a number of mechanisms in place. The **collaboration promotion framework** envisaged under the Science and Innovation Strategy encourages the commercialisation of IP, the introduction of technology transfer services, and an extended support infrastructure and financing programmes to encourage collaboration between businesses and academia. However, there is no evidence of a clear roadmap to implement a comprehensive framework. The measures predominately focus on building an STI-conducive infrastructure, awareness raising and visibility, and providing financial support to encourage more engagement of the private sector with RDIs through the Innovation Fund and Science Fund. Although support is extensive and covers a wide range of areas, there are currently no measures in place to encourage technology extension. As the new Law on Science and Research begins to address wide-ranging reform in the governance and funding of public research, more concrete steps to enhance public-private sector research may be expected. The revised intellectual property legislation also favours academia-industry collaboration, covering both research in RDIs, universities and in-company research, and guaranteeing an equal split of proceeds from commercialised IP between the organisation holding the IP and its creator. In 2019, the fees for patents or trademarks were also significantly reduced.

The Innovation Fund remains Serbia's key instrument offering **financial incentives for business-academia collaboration**. In 2016, the fund introduced a collaborative grant scheme, a dedicated finance programme to encourage businesses and RDIs to engage in joint technological projects with a promising business model and commercialisation strategy. Since 2017, the fund has also been offering innovation voucher to SMEs, financing up to 80% of technical research services provided by RDIs that they may need in order to develop or improve their products and services. The fund also runs a technology transfer facility, providing support to RDIs for commercialisation. Companies that evidently support research and development or hire qualified researchers are also eligible for tax relief.

While the focus on financial support has been strong, less attention has been paid to date to developing **non-financial incentives** for business-academia collaboration. To enhance exchanges between researchers and the private sector, the government actively encourages exchanges, sabbaticals or research leave, though there is no evidence of a systematic approach to facilitate these measures. Researchers continue to be primarily evaluated against publication in scientific journals, citations and patents. However, factors such as engagement with the private sector or the impact of research are increasingly being considered, thereby encouraging researchers to engage with businesses. The number of Serbian researchers' successfully participating in the Marie Skłodowska-Curie Actions[76] has increased steadily over recent years, reaching a total of 246 since 2014.

Lastly, Serbia has invested greatly in expanding its **institutional support for collaboration.** Serbia now has four science and technology parks, most notably the one in Belgrade, which has attracted a large number of start-ups since it started in 2016 and also hosts the Innovation Fund. Further efforts need to be made to boost the parks beyond their capacity as incubators. The number of Centres of Excellence has also increased in recent years. There are currently 21 centres, as well as a number of largely self-sufficient technology institutes operating out of Serbia's more urban areas. All major universities have established technology transfer offices, although, these remain largely under-resourced.

The way forward for science, technology and innovation

Serbia continues to make good progress in developing its science, technology and innovation. It has built the momentum to introduce several key measures, in line with international best practice and often adequately funded. However, several challenges remain in building capacity of the public scientific research system and increasing overall investment in research and development, particularly through the private sector. Such challenges may be addressed by implementing the following measures:

- **Further strengthen the Science Fund**. Following its successful launch in 2019, the momentum should be maintained to further strengthen the agency's capacity and outreach. Political commitment will be needed to fully implement the reformed scientific research funding model. Close monitoring of the its activities and impact will help to optimise operations, where applicable.

- **Implement the action plan of the Smart Specialisation strategy**. Empowering the National Council for Science and Technological Development with a clear mandate to lead and oversee its implementation, in combination with the Strategy on Artificial Intelligence, will ensure comprehensive and well-timed execution.
- **Increase investment in R&D** .The continuing allocation of state budget to the Innovation Fund is an important signal of the government's commitment to the STI agenda. However, further investments are needed to strengthen capacity of the public scientific research sector and attract private sector participation.
- **Build capacity for better enforcement of intellectual property protection**. Building on initial efforts, Serbia should continue raising awareness about the importance and benefits of IP protection and strengthen the capacity of the IP Office to provide support in patent application. Judicial expertise in IP should be strengthened.
- **Stimulate more intense co-operation between industry and academia**, by transforming the existing institutional innovation ecosystem to become a genuine interlocutor for academic research and private sector needs.

Digital society (Dimension 10)

Introduction

Table 25.17 shows Serbia's scores for five digital society sub-dimensions and compares them to the Western Balkan average. The economy scores above average across all sub-dimensions and ranks first among the WB6 in use, jobs, society and trust. It, however, scores close to average for access, which mainly reflects the need for further efforts in improving the ICT regulatory policy framework. Digitalisation has been recognised as a powerful enabler of economic growth and, together with education, is a key priorities of the Serbian government. Serbia has adopted a strategy that promotes artificial intelligence as one of the areas with the greatest potential to contribute to these priorities. In the last three years, it has intensified its public administration reform efforts and digitalisation of government services, which is already reflected in increasing users' satisfaction. Serbia is ranked 59th out of 193 economies in the United Nations e-Government Survey 2020 (United Nations, 2020[170]). It has also made progress in aligning its education system with labour market needs, with special emphasis on digital skills development.

Serbia is the strongest of the WB6 economies in supporting the fastest growing sector in its economy, ICT. Information and communication technologies accounted for 4.9% of GDP in 2019 and generates international visibility for the Serbian economy (SORS, 2019[171]). During 2019, exports of ICT services grew by over 20% for the fifth consecutive year (Government of the Republic of Serbia, 2020[172]). Serbia also ranks 13th among 129 economies in the 2019 Global Innovation Index for the ICT services exports sub-index (Cornell University, INSEAD and WIPO, 2019[173]). However, although the government is readily adopting new digital society policies, regulatory impact assessments (RIAs) are not sufficiently systematised and the policy design process is not always informed by regular policy and programme reviews.

Table 25.17. Serbia's scores for digital society

Dimension	Sub-dimension	Score	WB6 average
Digital society dimension	Sub-dimension 10.1: Access	3.0	2.9
	Sub-dimension 10.2: Use	3.5	2.4
	Sub-dimension 10.3: Jobs	3.0	2.3
	Sub-dimension 10.4: Society	3.5	2.1
	Sub-dimension 10.5: Trust	2.7	2.2
Serbia's overall score		**3.0**	**2.4**

State of play and key developments

Sub-dimension 10.1: Access

During 2018, the Serbian government adopted the Strategy for the Development of New Generation Networks by 2023, as its economy-wide **broadband infrastructure** development framework, but a budgeted action plan was never adopted. The strategy is aligned with the overall digital strategy and prioritises the development of cloud computing, the "Internet of Things" and 5G mobile systems, but the lack of dedicated funding has limited its implementation. The Law on Broadband Development that would provide an effective ICT-sector investment framework is still being prepared. The existing framework provides weak incentives for private sector broadband infrastructure investments. Continuing obstacles include unregulated issues and the pending reform of the Law on Planning and Construction which would improve the investment environment for joint construction projects and reduce the costs of developing broadband network infrastructure. Although a Broadband Competence Office has been part of the Ministry of Trade, Tourism and Telecommunications since 2017, its direct effect on the co-ordination of different levels of the government is not yet evident.

Broadband connectivity and penetration are steadily rising. Fixed broadband penetration (i.e. number of subscriptions per 100 inhabitants) was 18.5% in 2019, up from 17.4% in 2018, but still lagging behind European countries and also some of neighbouring economies, like Montenegro (28.5%) and Bosnia and Herzegovina (23.6%) (ITU, 2019[174]). According to 2020 statistics, 81% of households in Serbia have some type of connection to the Internet, compared to 91% in the EU (Eurostat, 2021[175]). Revenues from electronic communications continue to rise, reaching 3.8% of GDP in 2019 (RATEL, 2020[176]). Despite market growth, new generation network (NGN) coverage in rural and remote areas has not been expanding.

In June 2020, the government announced the launch of a new programme for rural broadband development, promising to deliver high-speed affordable communications to more than half a million households in rural areas. The programme aims to use loans provided by the EBRD to support private sector investments in scarcely populated areas, where investment interest in the development of NGNs is limited. During the first phase of the project, in spring 2021, broadband infrastructure development will gradually enable access to high-speed Internet of 100 Mbps for 90 000 households in rural settlements. The project will support the deployment of mid-mile fibre broadband, connecting the existing fibre backbone to 600 schools in white zones[77] in rural areas (EBRD, 2020[177]). The project is part of a larger initiative; the second phase, targeting around 900 schools, is planned as a separate project for 2021/22.

Significant progress has also been made in completing Serbia's broadband mapping exercise. The national regulatory agency, the Regulatory Agency for Electronic Communications and Postal Services (RATEL) has implemented a structured, geo-referenced broadband infrastructure mapping application and database that includes cables, antennas and other electronic communications equipment. Its future plans include extending this map to reference all electronic communications infrastructure and to integrate information about infrastructure from other sectors, such as the power distribution network.

Serbia has made limited progress since 2018 in completing the alignment of its ICT **regulatory policy framework** with the EU *acquis*. The new Law on Electronic Communications, expected to partially align with the EU Directive 2018/1972 on Electronic Communications Code and to remove any remaining misalignments with the EU 2009 regulatory framework, has been under preparation since the previous assessment and is expected to be adopted by the end of 2021. RATEL is well staffed and performs regular monitoring of the market and reviews of regulatory policy outcomes.[78] However, the regulator's financial and operational independence has been challenged by concerns about insufficient transparency in enforcing regulations to secure competitive safeguards in favour of the state-owned operator, Telekom Srbija. Despite relevant European Commission's recommendations, no action has been taken to improve this situation so far (EC, 2020[36]).

Regulatory impact assessments are implemented on new regulatory proposals, but their outcomes are not publicly accessible on line. EU Directive 2014/61/EU on measures to reduce the cost of deploying high-speed electronic communications networks, which would boost network infrastructure investment, hasn't yet been transposed. With no major regulations adopted since 2018, the regulator's market overview report for 2019 indicates that although all three mobile network operators have around 97% population LTE coverage, territorial coverage still ranges between 72% and 78% (RATEL, 2020[176]). In April 2019, Serbia signed the Western Balkan Regional Roaming Agreement, paving the way towards eliminating roaming charges within the region.

The framework for **data accessibility** has advanced significantly since 2018 through newly adopted or updated legislation on the accessibility, transparency and openness of data. This included the Law on e-Government that obliges government bodies to ensure reuse of their data, acting as an initial adjustment of national legislation to meet the EU Public Sector Information (PSI) Directive.[79] A by-law on the detailed conditions for creating and maintaining a web presentation of government bodies, which was adopted in 2018, defines the standards for publishing data and information in machine readable format. During 2018, Serbia adopted a series of other by-laws and regulations, such as the regulation on the operation of the

Open Data Portal and the by-law on the manner of keeping the Metaregister. The Open Data Portal,[80] launched in 2017, contained 273 open data sets published by 58 governmental and non-governmental organizations by the middle of 2020. The Office for IT and e-Government (ITE) co-ordinates the implementation of the data accessibility framework among government bodies and public institutions and monitors their compliance with e-accessibility standards and web presentation.

Sub-dimension 10.2: Use

Serbia has made notable progress in **digital government** development in the last two years, with the adoption of important e-government legislation and programmes demonstrating that digitalisation is a top priority. The new digital government framework includes the Law on e-Government, adopted in April 2018, the Program for e-Government Development 2020-22, adopted in June 2020, and relevant secondary legislation that promotes the digitalisation of public administration and the development of electronic services on the e-government portal. The framework stipulates continuous improvement of legal and regulatory aspects of public administration and it is also in line with the economy's commitments under the Open Government Partnership[81] (OGP) action plan. Serbia also adopted the Artificial Intelligence (AI) Strategy in 2019, and the action plan for its implementation in June 2020, aiming to investigate the integration of AI technologies into e-government services, making it a front runner in this area in the Western Balkans region.

Given the cross-sectoral nature of digital government, the framework prescribes the creation of horizontal co-ordination mechanisms, including the ITE and the e-Government Coordination Council. The ITE is a key body in the policy governance structure, and is specifically engaged in the design, planning and implementation of related ICT systems. The ITE is also in charge of the Government Data Centre and the use of cloud technologies in e-government. The e-Government Coordination Council monitors and reports on the implementation of the Program for e-Government Development. In an effort to demonstrate progress and increase public access to programme outputs, the Ministry of Public Administration and Local Self-Government has created an online tool for monitoring the progress of the Public Administration Reform Strategy process, which provides data, statistics and reports regarding the implementation of the strategy's 2018-22 action plan.[82] By the end of 2020, the platform reported that 47% of planned activities had been implemented. The ministry has also leveraged donor co-financing to support the reforms through several projects outlined on its website.[83]

Over 1 million of Serbia's 7 million citizens have used the e-government portal[84] so far. Although citizen engagement is not yet as high as desired, the Program for e-Government Development aims to strengthen users' trust and improve their experience in using digital government services. Serbia is currently designing a more modern e-government portal and developing an e-participation module. The portal currently offers services provided by 20 state and 6 local authorities, including in areas of health, education and employment. "My First Salary" programme, subsidizing the first work experience of young graduates, is also accessible on the portal and implemented in a fully digital process, supported by an AI recommendation algorithm to match candidates and vacancies (OECD, 2020[178]). During the COVID-19 pandemic, the ITE and the Health Insurance Fund developed a service on the e-government portal that allows citizens to receive email and text notifications, when their COVID-19 test result is ready. In other cases, however, the services on offer only allow applications to be submitted or appointments scheduled, rather than entire administrative procedures to be completed on line.

Serbia has actively supported **private sector ICT adoption** since 2018, integrating relevant measures into a number of digital society policy documents. Leveraging e-commerce to boost the adoption of ICT, the government adopted the Programme for e-Commerce Development 2019-20 with an action plan, which includes incentives for e-traders (e.g. tax relief), awareness-raising activities promoting e-commerce development and consumers' trust, and measures to improve e-commerce legislation, logistics and financial infrastructure for e-commerce. The programme targets SMEs in all sectors, particularly focusing on companies with limited IT capacities and those making unregistered (informal) online sales through social media or other channels. It provides training, mentoring and guidelines for e-traders[85] and supports those who wish to start registered online sales, contributing to the reduction of the online grey economy.

The use of ICT to modernise business operations in all branches of the economy is also an integral part of the action plan for the implementation of the Strategy for the Development of Information Technology (IT) Industry 2017-20. This strategy provides schemes to support companies, including consulting services to help them incorporate ICT solutions into their business practices and financial support for purchasing the necessary software or hardware equipment.

The government has not always fully budgeted awareness raising and training activities linked to these policies, but they have been supported by donors and the Chamber of Commerce and Industry in Serbia. The chamber continues to play a pivotal role in activities promoting private sector ICT adoption. Its key initiative, in collaboration with the MTTT, was establishing the Centre for Digital Transformation (CDT) in 2018, as a service unit that provides SMEs with hands-on support and information sharing on technical and funding issues, consulting, and training on digitalisation. The CDT is also focused on promoting the use of technological innovation across industries, providing qualitative analysis, and recording the current state of affairs regarding digitalisation in Serbian enterprises.

The CDT and the Development Agency of Serbia were supported by the German Organization for International Cooperation (GIZ) to implement the MSMEs 2019-2020 Digital Transformation Support Programme[86] for business digitalisation. Their efforts were continued and intensified during 2020 to address the adverse effect of the COVID-19 pandemic on micro, small and medium-sized enterprises (MSMEs), through two emergency support programs, SPEED 1.0 and SPEED 2.0, offering cost-free support to companies and helping them improve their business in line with digital trends and switch to remote work and online operations with customers and suppliers (WB6 CIF, 2020[179]). The MSME digitalisation programme has supported more than 700 companies so far in Serbia and Republika Srpska in Bosnia and Herzegovina.

Sub-dimension 10.3: Jobs

Serbia has strengthened its policy framework on the development of **digital skills for students** since the last assessment in 2018. In 2020, it adopted the Strategy for Digital Skills Development 2020-24,[87] but without a budgeted action plan so far. The strategy and with the Law on the Education System Foundations from 2017, create positive conditions and align the policy framework with international standards for the development of basic and more advanced digital skills for students at all levels of the education system. Although there is no common digital competence framework for students, a certain level of digital skills is obligatory in pre-university education and is assessed according to the national rulebook. Computer information systems was introduced as a mandatory course for all students starting from Grade 5 of primary school, and the curricula are designed in consultation with the IT industry stakeholders. The number of specialised IT classes was also increased in the gymnasiums (secondary schools), while teachers working with specialised IT classes attend additional training. At the request of industry and parents, new digital skills profiles have been introduced for students at VET secondary schools, according to a dual VET system. Box 25.15 gives an example of the use of innovative methods to promote digital skills among students in Serbia.

Box 25.15. Innovative teaching and learning to develop students' digital skills

In 2018, in order to improve teaching at tertiary education faculties in Serbia and to promote digital skills for students with innovative courses and teaching methods, a public call for ideas was held. Professors were invited to submit ideas for innovative programmes, and 166 teams of professors responded, of which 66 were selected to implement their ideas. The teams received funding ranging from RSD 250 000 to RSD 1 million (around EUR 8 500). When selecting projects, particular emphasis was placed on the degree to which they increase the use of information technology in the teaching and learning process, as well as how far they followed market needs and developed students' entrepreneurship skills and co-operation with other stakeholders in the local community.

Source: (Council for Innovative Entrepreneurship and Information Technologies, 2019[180]), Priority Measures and Activities of the Government Bodies for Enhancement of the IT Sector in Serbia in 2019, with Report for 2018, https://www.srbija.gov.rs/tekst/en/137375/plan-for-the-it-sector-improvement.php.

During the COVID-19 pandemic, MoESTD, in collaboration with ITE (which provided technical support and hosting), set-up a Moodle learning management system called My School. MoESTD manages the My School portal, but from the very beginning of the use of distance learning during the pandemic, the rich digital content on the portal has been contributed by primary and secondary teachers of all subjects on a voluntary basis. MoESTD is planning to make My School the national platform for e-learning management.

Although 95% of schools are reported to have the computer equipment needed to implement computer science teaching, digital skills' development in the education system is hampered by outdated computers and ICT equipment, low computer-to-student ratio (0.3 in 2018, compared to 0.81 in the EU) and limited connectivity speeds outside the main urban centres (OECD, 2020[181]). In efforts to improve the digitalisation of teaching, 10 000 laptops have been delivered to school classrooms since 2018. The MTTT also launched the Connected Schools project in 2019 to provide Internet access in primary and secondary schools. So far, around 1 600 schools have been connected to the Academic Network of Serbia (AMRES) and another 400 schools were provided with wireless connectivity. The project aimed to deliver wireless local area network (WLAN) connectivity to an additional 500 schools by the end of 2020 and connect all remaining schools (over 4 000 main and remote facilities) by the end of 2021, provided that technical requirements for WLAN rollout are fulfilled, as part of the rural broadband rollout project supported by the EBRD (see Sub-dimension 10.1: Access). According to the MTTT, approximately 92% of primary and secondary schools had a broadband connection of 10 Mbps or more by mid-2020.

Serbia is developing a strong framework for **digital skills for adults** to address the needs of the labour market through the Digital Skills Development Strategy 2020-24. The strategy was informed by a variety of stakeholders, and particularly the ICT industry, due to their growing demand for highly skilled ICT professionals. The strategy prioritises basic digital skills development for all citizens, including marginalised groups, and digital skills for the workplace, as well as training programmes for the unemployed. However, its implementation has not yet started[88] and the expected co-ordination mechanisms, like the local coalitions for the development of digital skills that ensure participation of various stakeholders in curriculum development for IT training programmes, are yet to be established.

The establishment of the Agency for Qualifications and the Sector Skills Councils in 2018 were steps towards bridging the identified skills' gaps. During 2019, the councils started to provide information about the needs of users and the labour market and to propose the list of qualifications by levels and types. MoESTD also published a revised Digital Competence Framework – Teacher for a Digital Age 2019 to help teachers integrate digital content into their practice. However, the European Commission has flagged the lack of systematic teacher training to support the implementation of new curricula and the development of students' key competencies, and outdated VET qualifications (EC, 2020[36]).

The conditions for non-formal adult learning in Serbia are outlined in the Law on Adult Education and the Law on the National Qualifications Framework. The Centre for Accrediting Publicly Recognised Adult Education Providers, part of the Agency for Qualifications, enables the accreditation of training programmes. The by-law on accreditation makes specific reference to digital skills for adults and requires all ICT-related non-formal adult education programmes to align with European Computing Driving Licence (ECDL) standards. Vocational qualifications are recognised from a lifelong learning perspective and trainees are certified according to the Law on Adult Education. The Centre for Vocational and Adult Education, part of the Institute for the Improvement of Education, is the body focused on the development of adult education programmes.

The action plan of the National Employment Service for 2018 also includes IT training within the government's IT requalification programme. During 2018, the NES organised specialist IT training for 778 participants in various cities in Serbia that covered programming and web applications (250-400 hours each) and internships with companies. The government also adopted the Programme for Enhancing Women in ICT for the period 2019-20 to increase digital literacy and competencies among women in rural areas to help them start their own business on line.

ICT sector promotion is supported by a number of sectoral and cross-cutting policies that promote the growth and internationalisation of Serbian ICT companies. ICT sector exports have grown constantly over the last decade and the average salary in the sector is more than twice as high as in other industries, while Each ICT sector job is claimed to create an additional 4-5 jobs in other sectors (Council for Innovative Entrepreneurship and Information Technologies, 2019[180]). The advanced implementation of the Strategy for Development of Information Technology Industry 2017-20 underpins these positive trends. The strategy reached the end of its term and an impact assessment is expected, but a new strategy is currently being developed. The government devoted resources and high-level co-ordination to its implementation, demonstrating clear recognition of the sector's contribution to the economy. For instance, the Office of the Prime Minister provides a strategical overview and initiates policy changes for the ICT sector. The Prime Minister is also the president of the Council for Innovative Entrepreneurship and Information Technology, where ministers, academia representatives, and the Governor of the National Bank of Serbia participate as council members.

Most major global IT companies have established development centres in Serbia or outsourced services to local IT companies. The 2019 Global Innovation Index report ranked Serbia on 21st out of 129 economies, in mobile applications development (Cornell University, INSEAD and WIPO, 2019[173]). However, the IT industry is interested in rebranding Serbia from an outsourcing destination to a world-class centre for innovation. The majority of financial instruments and policy programme measures for ICT Sector promotion focus on innovation support and exports of products and services. UNDP Serbia funded a programme for improving business capacity in the IT sector in co-operation with the Office of the Prime Minister and the ITE. The programme supported the transfer of business knowledge for innovative product development and better positioning of the domestic IT industry and its products in the global market.[89] The ICT industry can also use financial instruments and programmes, not specific to ICT, including tax incentives for R&D and start-ups, funding for innovation activities (e.g. provided by the Innovation Fund), and support for internationalisation provided by the Development Agency of Serbia.

Sub-dimension 10.4: Society

Serbia has made positive progress in improving its **digital inclusion policy** framework through the digitalisation of public administration, while plans to empower citizens through digital skills and rural broadband development should help reduce the digital divide in the immediate future. Digital inclusion measures have been included in a number of policy documents on e-government development, broadband infrastructure development and education reform since 2018, but in some cases the relevant activities are not prioritised in action plans or resources are insufficient. The Ministry of Labour, Employment, Veterans and Social Affairs has adopted strategies for people with disabilities and protecting children from violence that include measures for digital inclusion through access to information and safety on line, starting implementation in 2020. The Social Inclusion and Poverty Reduction Unit (SIPRU) provides strong co-ordination of the implementation of the digital inclusion framework at the highest level of government and across public institutions. The SIPRU publishes a report on digital inclusion every four years, but despite these efforts, the monitoring of indicators is insufficiently systematised and dispersed among the government bodies implementing the various programmes (Government of Serbia, 2019[182]). E-accessibility guidelines in line with international standards are applied to public sector websites, as discussed in Sub-dimension 10.1: Access.

The single electronic register of Serbian citizens and the eZUP information system (i.e. the Government Service Bus) delivers government-to-government (G2G) services. This eliminates the need for citizens to engage in gathering documents from different public services, advancing inclusion through digital technologies. Its effect is particularly evident in remote and underdeveloped areas, saving citizens time and resources when accessing public services. The recently launched rural broadband development programme and the ongoing implementation of the NGN strategy (see Sub-dimension 10.1: AccessSub-dimension 10.1: Access) aim to bridge the digital divide by providing free access to the Internet in public places in remote areas and ensuring that affordable services are available to all citizens throughout Serbia.

Significant regulatory changes are also planned for digital inclusion in education, including the Regulation for the Activity of Resource Centres for Assistive Technologies (supporting schools to provide inclusive education), and the Regulation for Distance Learning and the rigorous application of the instructions for the development of teaching materials in line with the universal design principle. The MTTT has supported numerous projects, co-financed through international co-operation programmes and civil society initiatives, in online safety, protection from digital violence and support for increasing digital literacy among vulnerable groups. The Programme for Enhancing Women in ICT for the period 2019-20, raising the digital competencies of women in rural areas is one successful example.

Sub-dimension 10.5: Trust

Serbia has taken steps to improve the framework for **privacy protections** through the new Law on Personal Data Protection (PDP) in August 2019, which partly transposes the EU General Data Protection Regulation (GDPR) 2016/679 and the Police Directive[90] (EU) 2016/680 into national law. Eight by-laws aligned with the new PDP Law were adopted in 2019, but the framework requires further attention for full alignment with the GDPR (e.g. on restrictions imposed on data subjects' rights), as well as in harmonising outdated sectoral laws. The Ministry of Justice had planned relevant activity for the last quarter of 2020.

However, enforcement of the framework and capacity among public officials is rather weak. A new Commissioner for Information of Public Importance and Personal Data Protection was appointed in July 2019, after seven months of temporary governance, but obstacles to exercising the rights of the commissioner and enforcing decisions persist, especially with regards to the Law on Free Access to Information of Public Importance, which is provides a weak legal framework.[91] On a positive note, in January 2021, the Ministry of State Administration and Local Self-Government has formed a working group to amend this law, including the commissioner as a member. The National Assembly also considered the commissioner's annual report for 2018[92] (for the first time since 2014) and adopted certain conclusions to strengthen the enforcement of the framework; however most of these have not been implemented (Commissioner for Information of Public Importance and Personal Data Protection, 2020[183]).

Neither digital and online privacy protections, nor public information disclosure and transparency, are yet embedded in public sector mindsets in Serbia. Even the final text of the new PDP Law regarding data subjects' rights includes an article listing limitations to these rights, omitting the original text that stated they could only be restricted by law. This would mean that state institutions or private companies processing citizens' personal data could arbitrarily restrict their rights as data subjects. The law also fails to cover video surveillance, a particularly important aspect of personal data processing. The installation of smart video surveillance in Belgrade is indicative of this climate. The installation includes thousands of cameras and face-recognition software that raised public concern, and analysis by civil society organisations found it was breaching the new PDP law. The commissioner has also ruled that the assessment of the impact of processing on personal data protection using video surveillance system submitted by the Ministry of Interior was not done in accordance with the PDP Law (Commissioner for Information of Public Importance and Personal Data Protection, 2019[184]).

Serbia has demonstrated its intention to improve **consumer protection in e-commerce** and to align the framework to international practices and standards**.** The government adopted a new Strategy for Consumer Protection for 2019-24 and an action plan for 2019-22. It also amended the Law on e-Commerce and adopted a new Law on Trade in 2019. A specialised donor-funded Programme for e-Commerce Development was launched in 2019 to address obstacles to e-commerce development. The first positive achievement was the publication of a Guide to e-Commerce, and relevant web services for consumers,[93] delivered by the Department for Digital Agenda Development in the MTTT. The MTTT's Consumer Protection Department enforces the law and maintains the National Register of Consumer Complaints. The ministry also conducted a public awareness campaign to boost consumers' trust in e-commerce, and to promote the safety of e-banking and card payments. It also implemented the EU-funded Twinning project[94] (2017-19), to improve public sector capacity to protect consumers using e-commerce.

The improved framework for **digital security risk management** is also gradually increasing levels of trust in electronic services and information systems in Serbia. The recent adoption of the new Strategy for the Fight Against Cybercrime 2019-23 complements the implementation of the Information Security Strategy 2017-20, which has led to significant improvements in the relevant legislation since 2017. The government has sufficient resources and capacity to implement these strategies and continues capacity building in methods and tools for combating cybercrime. The Body for Coordination of Information Security Affairs provides horizontal co-ordination among public bodies involved in digital security risk management.

The national computer emergency response team (CERT) operates as a unit of RATEL and has been accredited according to international standards since 2019. Its human resources remain very low, due to continuing restrictions on creating new posts in the public sector, despite the amended Law on Information Security from 2019 that specifically stipulates increasing human resources for the national CERT. Co-operation with other domestic, public and private sector CERTs is ongoing and capacity building programmes are being implemented for public authorities and businesses. The Serbian competent authorities and the national CERT are actively engaging in international co-operation in the fight against cybercrime. However, although some information security data are being collected through surveys, no regular monitoring of digital risk management indicators is in place.

The way forward for digital society

Despite taking some significant steps to improve its digital society policy framework, the government should pay more attention to the following aspects:

- **Accelerate the adoption of new laws and regulations to ensure an enabling ICT investment framework**, including the new Law on Electronic Communications and the Law on Broadband Development. An improved legal and regulatory framework that aligns with the EU and reduces the cost of developing and sharing broadband network infrastructure will be vital for reaping the benefits of the "gigabit society". The government will need to transpose EU Directive 2018/1972 on Electronic Communications Code and Directive 2014/61/EU on measures to reduce the cost of deploying high-speed electronic communications networks, especially with the launch of its ambitious rural broadband development project in 2021.
- **Strengthen the demand for open data innovation through inclusive co-creation processes to enable re-use of public sector data by the private sector to deliver e-services and**

applications to citizens. Although the legal and regulatory framework is advanced, few datasets have been published so far. The general public have not been widely engaged and the level of informed public debate on data-driven issues remains low. The government will need to raise public awareness, build the capacities of public officials and develop public-private partnerships on open data innovation.

- **Systematise the monitoring of digital government indicators to support informed policy making**. Despite making some progress in implementing the digital government framework, and individual external evaluations of the public administration reform process, there is not yet a database of digital government indicators. No public authority is publishing consistent reports on specific measurable indicators.
- **Accelerate the implementation of the Strategy for Digital Skills Development 2020-24** with the development of an action plan and sufficient budget allocation. Although the adoption of the strategy undoubtedly constitutes a positive step forward, specific resources need to be allocated to implementing the measures and activities it includes. Serbia has a realistic opportunity to respond to the need for highly skilled ICT professionals among its IT industry and to effectively rebrand Serbia from an outsourcing destination to a world-class centre for innovation. A regularly updated database of digital skills indicators will also be needed to monitor policy impact.
- **Empower citizens to reap the benefits of digitalisation and monitor progress in digital inclusion**. As digitalisation of government and public services accelerates, it will be important to strengthen digital literacy and digital competency programmes for underprivileged groups of the population, to avoid deepening the digital divide. The SIPRU has developed a set of indicators for e-inclusion, pending implementation within the Unique Register of institutions, specifically referring to information accessibility. This could be augmented with digital inclusion indicators drawn from the fields of electronic communications, education, social protection and online safety and privacy, in collaboration with competent bodies. A systematic, cross-cutting, approach to monitoring digital inclusion indicators would enable regular policy impact assessments and better policy design.
- **Complete the alignment of the framework for personal data protection with the EU and ensure its stronger enforcement**. The government should complete its alignment with the GDPR Directive (EU) 2016/679, update the law on access to information and update or adopt necessary relevant secondary legislation. Combined with public sector capacity building, the ultimate goal of these reforms should be to remove obstacles that reduce the executive power of the Commissioner for Information of Public Importance and Personal Data Protection, improve the voluntary disclosure of information by public institutions, and impose greater transparency and accountability of public authorities without exceptions.

Transport policy (Dimension 11)

Introduction

Since the last Competitiveness Outlook assessment in 2018, the main improvements Serbia has made have been in procurement and implementation, followed by transport project selection, combined transport and environmental sustainability. It has made moderate progress in rail regulation sector and progress in asset management has stalled. Serbia's performance in the transport policy dimension is the highest in the region and significantly above the WB6 average (Table 25.18) but further efforts are still needed to achieve the EU average level. Serbia scores above the WB6 regional average in all three sub-dimensions of the transport dimension. Serbia shares the lead with Albania for the planning sub-dimension while for the governance and regulation and sustainability, it scores the highest in the WB6 region.

Table 25.18. Serbia's scores for transport policy

Dimension	Sub-dimension	Score	WB6 average
Transport policy dimension	Sub-dimension 11.1: Planning	3.3	2.3
	Sub-dimension 11.2: Governance and regulation	3.8	2.6
	Sub-dimension 11.3: Sustainability	2.2	1.3
Serbia's overall score		**3.0**	**2.0**

State of play and key developments

Sub-dimension 11.1: Planning

In the area of **transport vision**, Serbia has continued to follow the Plan of Rail, Road, Inland Waterway, Air and Intermodal Transport Development 2015-20 as the draft National Transport Strategy (NTS) for the period 2016-25 has not yet been approved. The measures needed to improve the transport sector have also been based on the General Transport Master Plan (GTMP) for 2009-27. The GTMP has a clear vision and measurable objectives, including a timeline for implementing the proposed measures. It uses a transport model to prioritise and rank the recommended measured across all transport modes, including intermodal transport, and has defined budgets for both implementation and maintenance. The priority projects presented in the strategy have been adopted for development after wide-ranging consultation with the relevant stakeholders. Multimodality has been considered in all these documents.

The NTS is outdated and the updated version should take into consideration the GTMP and the individual strategies that have since been developed for each transport mode. It should also take into consideration the fact that some municipalities and regions have made significant economic progress, directly influencing transport demand and infrastructure needs. The adoption of the strategic transport documents has not gone smoothly, with some of the documents remaining as drafts and a national strategy still not in place. Serbia's transport-related strategic documents have been aligned with the commission staff working document on EU Enlargement Policy up to 2019.[95] The European Commission issued a new working document in October 2020 (EC, 2020[36]) and, as required in the terms of reference (ToR) for the development of the NTS, it is expected that the new NTS will be fully aligned too.

The development of a new NTS for the period 2022-30[96] is currently under tender, which should include analysis and alignment with the remaining requirements of the EU accession Chapters 14 (Transport policy) and 21 (Trans-European networks). It will therefore directly generate a set of actions and measures that will bring the transport sector closer to European standards and improve regional trade and transport integration.

The existing transport strategies are aligned with the tourism policy to a certain extent as the Master Plan for Marking Touristic Objects in Serbia (Public Enterprise Roads of Serbia, n.d.[185]), and the Rulebook for

Cycle Path Design (Public Enterprise Roads of Serbia, 2012[186]) have been developed and adopted, showing a holistic policy-making approach. A new governance tool[97] from 2020 is expected to facilitate inter-ministerial communication as all ministries can use the same procedure to identify capital projects, and their pre-selection, financing, implementation, monitoring and impact assessment. They will all be co-ordinated through the same procedure by the Ministry of Finance. The degree to which the policy has been implemented is not entirely known as there are no monitoring reports of implemented strategies available. The Republic Commission for Capital Investment was established in 2020, and will be in charge of confirming the pre-selected investments, selecting capital projects based on their relevance, and doing the justification and compliance checks of the funding sources. Some legislation has been adopted (see the individual transport modes below) as a result of the transport strategy but the level of harmonisation with the Transport Community Treaty (TCT) is not available.

The last Competitiveness Outlook recommended co-operation with other WB6 economies to exchange experience on a common approach to transport planning. This has taken place, particularly through the cross-border co-operation programmes (EC, n.d.[187]), projects related to transport facilitation at border crossing points (BCPs) with Montenegro and North Macedonia, and co-operation over the realisation of Bar-Boljare highway along Route 4 (EC, 2015[188]). Co-operation also takes place through participation in EU regional strategies such as the EU Strategy for the Development of the Danube Region (EUSDR, n.d.[189]) and the EU Strategy for the Adriatic and Ionian Region (EUSAIR, n.d.[190]). Such regional co-operation, and exchange of good practices, needs to take place on a regular basis and be intensified, as the proper development of a transport vision and planning can only happen through regular regional discussion, leading to a single and competitive regional transport market.

Since the last assessment, Serbia made excellent progress in developing legislation for **transport project selection** and implementation. The Rulebook on the Management of Capital Projects (Ministry of Finance, 2019[191]) was adopted in 2019 and the Law on Special Procedures for the Implementation of the Project of Construction and Reconstruction of Line Infrastructure Structures of Particular Importance to the Republic of Serbia[98] in 2020. The procedure by which projects are identified, analysed for relevance, pre-selected, funded, implemented, monitored (during and after implementation), and their impact assessed is clear and publicly available (Government of Serbia, n.d.[192]), and co-ordinated by the MoF. The prioritisation process, which is applied to all capital projects, uses, among other criteria, cost-benefit analysis (CBA), environmental and social impact, and safety assessment.

A pre-selection tool has been developed and access to the Public Investment Management Information System is under development, which should improve the efficiency of the monitoring of capital projects. *Ex post* monitoring and impact assessment is to be conducted for all third category projects[99] three years after the completion of works, which is a significant advance on the existing legislation. Serbia also needs carry out regular *ex post* monitoring and impact assessment of its prioritisation and implementation processes (on an annual basis) based on which the prioritisation and implementation framework could be regularly adjusted. The first single project pipeline has been developed but it is neither publicly available nor regularly updated, according to information provided by the government.

There are national guidelines for road transport CBAs, but they are outdated and require either updating or the development of new ones. Up to now, the EU's 2014 CBA guide has been used (EC, 2014[193]). National CBA guidelines should be developed as soon as possible and regularly updated, which will help to prioritise and control funds. The prioritisation framework does not take affordability into account, so the project selection framework should be updated to incorporate affordability, directly assessing whether the projects under consideration are affordable for wider population but also for the economy. The government has the human and financial capacities it needs to carry out the transport project selection process.

In the area of **implementation and procurement**, the new Law on Public Procurement (2019) allows alternative procurement processes for specific groups of projects defined by the implementation strategy (projects funded based on the contracts as a result of international co-operation for which Serbia has to inform the European Commission, projects funded by international organisations, etc.). The roles and responsibilities of the government bodies involved are defined, including those with oversight of the procurement and monitoring of public-private partnerships. The public enterprises (Public Enterprise Roads of Serbia, Serbian Railways Infrastructure, Serbia Cargo, etc.) with jurisdiction over individual transport modes have adequate human and financial capacity to execute their procurement and implementation tasks.

Horizontal co-operation with other WB6 economies over implementation and procurement is well established and good practice shared and applied where possible, for instance the development of one-stop-shops (OSSs)[100] at the road and railway border crossing points with North Macedonia. Procurement procedures have only been consistently monitored though the regular annual audits conducted by the State Audit Institution (State Audit Institution, n.d.[194]). No exchanges of good practice have taken place related to the lessons learnt from the implementation and procurement of PPP projects in the region.

Serbia is making moderate progress in the development of its **asset management system.**[101] An asset management system is not required by the national legal framework but each public entity needs to have the list of the inventory under its jurisdiction. The key objective of a well-developed asset management system is to provide justification for the maintenance budget and to help to direct limited funds towards those areas where the return on investment will be greatest. A soundly developed system should be considered an integral component of the transport planning, identification, prioritisation, implementation, monitoring and impact assessment processes.

Some efforts have been made in the last few decades to establish an asset management system as presented in the Preparation of Maintenance Plans 2018-2022 for Road/Rail TEN-T indicative extensions to WB6 (CONNECTA, 2018[195])[102] but these have not been successful, although some partial actions have been undertaken since the last assessment. The road sector uses the highway development and management (HDM-4)[103] tool for road maintenance and planning and there are various databases for structures. The data are surveyed occasionally but not regularly updated, mainly due to lack of funds and capacity. The same applies in the railway sector; a railway infrastructure asset management system was tested by Serbian Railways during 2010-13, but no regular monitoring of the condition of railway infrastructure assets has been performed since then. A project to determine the condition of the state road network is in the final stage, while a contract to install 54 road meteorological stations, including software and training on the Road Weather Information System, was signed at the end of 2019. There are ongoing performance-based maintenance contracts (PMBCs) for the maintenance of 3 000 km of roads, while the remaining 12 000 km are maintained though ongoing contracts. If PBMCs were implemented for all roads, this could lead to roads being maintained to predefined conditions at relatively low cost. In 2020, the Serbian Railways Infrastructure adopted a programme for the construction, reconstruction and maintenance of railway infrastructure and organisation and management of rail traffic for 2021-24.

The government will need to make more efforts to follow and implement regional asset management plans. The road asset management system needs to be integrated into the policy framework, becoming the basis for the assessment, operation and maintenance of transport assets in the economy. One very good example, recently established in the region, is Albania's financial management system, which also includes asset values. Other good examples can be found in North Macedonia (road asset database, bridge asset databases, etc.). Co-operation with the Albanian authorities to exchange good practice could be worthwhile in this area.

Sub-dimension 11.2: Governance and regulation

Since the last assessment, reforms have progressed in the field of **aviation regulation**. Serbia has fully transposed the Single European Sky (SES) I package into national law, along with a large number of SES II regulations. In the field of air traffic, Serbia has fully completed the transposition and local implementation of SES I and SES II. Serbia is not a member of any functional airspace block (FAB), which could help it avoid national fragmentation which in turn affects safety, limits capacity, and above all, adds to costs. On a positive note, Serbia has a similar arrangement to a FAB with Montenegro through the Serbia and Montenegro Air Traffic Services (SMATSA), and has established a free route airspace with Austria, Bosnia and Herzegovina, Croatia, Montenegro, and Slovenia, which reduces fuel consumption and emissions, and improves flight efficiency. The Civil Aviation Directorate (CAD) is Serbia's national supervisory authority[104] and is adequately staffed to fulfil its obligations.

The EU Airport Charges Directive has been transposed.[105] The market is monitored regularly by the CAD as required by the EU Air Service Regulation, which provides the economic framework for air transport on the granting and oversight of operating licences of Community air carriers, market access, airport registration and leasing, public service obligations, traffic distribution between airports, and pricing. An air traffic management plan has been developed and is monitored regularly through the Local Single Sky Implementation Monitoring (EUROCONTROL, 2019[196]). A safety culture, covering safety risk assessment and safety assurance, is being fostered through a State Safety Programme, designed as an integrated set of regulations and activities aiming to improve safety (e.g. safety risk management, safety assurance). The programme adopted by the government is being implemented through the State Safety Plan published by the CAD.

Air traffic is growing in Serbia. The total number of passengers transported from all airports by approximately 13.4% between 2017 and 2019 to 6.4 million passengers, compared with global growth of 4% (IATA, 2020[197]) and EU average growth of 4% (Eurostat, n.d.[198]) over the same period. Given the significant growth of this transport mode and projected importance for the economy, it will be important for Serbia to continue its regulatory reforms and bring the governance of the aviation sector closer to European standards and international good practice.

Serbia has made substantial progress in **rail regulation** since the last assessment. The Third Railway Package (EC, n.d.[199]) of 2007 has been fully transposed while the Fourth Railway Package (EC, n.d.[200]) of 2016 is expected to be transposed by 2022. The Law Amending the Law on Railways is expected to be adopted by the end of 2021. However, the degree of active policy implementation and the implementation of the regional Rail Action Plan (Transport Community, 2020[201]) is not currently available. A Network Statement (NS) is issued only for infrastructure, but includes some data related to service facilities. National legislation[106] has been aligned with the EU Regulation on Access to Service Facilities and Rail-Related Services 2017/2177 since 2019, and therefore the NS will be published as of 2021. EU Interoperability Directive 2016/797 has been transposed and implemented, helping to reach an optimal level of technical harmonisation to facilitate, improve and develop international rail transport services within the EU and with third countries.

The Directorate for Railways is the regulatory body and safety authority, including supervising the implementation of legislation, and has had enough capacity so far. However, the amended Law on Railways (2020) has expanded its remit (cableways, passenger rights, licensing, market regulation, metro, etc.) so it is estimated that it will need additional staff. The market is open to local companies while the opening of the market for foreign companies depends on bilateral agreements and the compliance of the origin country with the EU's Transport Community Treaty (TCT). There are currently two state-owned operators and ten private operators, of which two are responsible for maintenance. This is the largest number of private operators in the region and could serve as a regional good practice example of an open rail market. The National Register of Railway Vehicles has existed since 2013 although the new National Vehicle Register will be transformed in line with EU Commission Implementing Decision 2018/1614 into a centralised registry for European Vehicle Register vehicles. The EU Rail Freight Corridor Regulation has been transposed and the first freight corridor developed: the Alpine-Western Balkan Rail Freight Corridor (going through Austria, Bulgaria, Croatia, Serbia and Slovenia),[107] which will increase the competitiveness of rail against other modes.

Serbia has advanced bilateral co-operation in the railway sector, by signing border crossing agreements with North Macedonia and Montenegro. Since the last assessment, the Ministry of Construction, Transport and Infrastructure has initiated a process to sign or renew border crossing facilitation agreements with all other neighbouring economies (Bulgaria, Croatia, Hungary, Romania, etc.) but this is only in progress with the Government of Croatia, with agreement expected during 2021, while the other economies have been either slow or reluctant to respond.

Table 25.19. Trends in rail transport of passengers and goods in Serbia (2017 and 2019)

Rail network utilisation	Change over 2017-19 (%)	2019 (million)	share of the EU average (2017) (%)
Passengers (passengers*km/km of track)	-14	0.085	3.9%
Freight (tonnes*km/km of track)	-1	0.861	44.4%
Rail network utilisation (train*km/ km of track)	-24	0.005	22.4%
Rail fleet utilisation	**Change over 2017-19 (%)**	**2019**	**share of the EU average (2017) (%)**
Passengers (passengers*km/train*km)	+39	32	23.7%
Freight (tonnes*km/ train*km)	-22	516	90.8%

Source: Inputs provided by the government as part of the quantitative questionnaire (CO2021); (European Commission, 2019[202]); (Statistical Office of the Republic of Serbia, 2021[203])

Road freight transport's mode share is 70%, significantly higher than that of rail, at 24%, and similar to the EU average of 75.3% for road, 18.7% for rail, and 6% for inland waterways in 2018 (Eurostat, n.d.[204]). Rail transport has shown a slight decline (Table 25.19). There is still much to be done[108] to achieve the numbers which will make the rail network cost-effective and achieve rail utilisation levels close to the EU average. Increasing rail's mode share could also have direct positive effects on air pollution and climate change.

In the context of **road market regulation**, good progress has been made, with significant efforts undertaken to harmonise legislation with the TCT. Legislation on the transport of dangerous goods, training of professional drivers, certificates of professional competence, driver's qualification cards, and working times of vehicle crew engaged in road transport and tachographs has been further aligned with TCT requirements.

Serbia continues to participate in the European Conference of Ministers of Transport (OECD-ITF, 2014[205]) multilateral quota system, which enables hauliers to undertake an unlimited number of multilateral freight operations in 43 European countries participating in the system. Its regulations comply with the road haulage qualifications standards for companies, managers and drivers under the Quality Charter for Road Haulage (OECD-ITF, 2015[206]).

Road network performance[109] is regularly measured for some indicators and occasionally for others. There is still space to improve the list of indicators[110] to assess the performance of the road network better. The average age of passenger cars in 2019 was 15.6 years, which is almost 50% higher than the EU average (10.6 years) in 2018 (ACEA, 2019[207]). Such old vehicles can endanger the environment, and the policy instruments controlling vehicle pollution needs to be stricter.

On a positive note, incentives for purchasing new electric vehicles (EVs) have already been implemented, in 2020 (Ministry of Construction, Transport and Infrastructure, n.d.[208]; Paragraf, n.d.[209]; Paragraf, n.d.[210]). The first chargers for electric vehicles on a motorway in Serbia were installed by Public Enterprise Roads of Serbia (PERS) in July 2017 and the list of charging points grows. Serbia still lacks a specific legislative framework for the development of the EV sector, but the policy framework is expected to be drafted when the project A Pathway for Electric Mobility for Belgrade, funded by the World Bank Group, is finalised in June 2021.

The total number of passenger cars that entered Serbia increased by approximately 22% over the period 2017-19 while the total number of freight vehicles crossing the border (including export, import and transit) fell by 3.3% in the same period. Recent trends show an increase in the utilisation of the road network, particularly for the transport of goods (Table 25.20).

Table 25.20. Trends in road transport of passengers and goods in Serbia (2017 and 2019)

Road network utilisation	Change over 2017-19 (%)	2019 (million)	share of the EU28 (2017) (%)
Passengers (passengers*km/km of road)	+4	0.328	32.8%
Freight (tonnes*km/km of road)	+28	0.291	15%

Source: Inputs provided by the government as part of the quantitative questionnaire (CO2021); (European Commission, 2019[202]); (Statistical Office of the Republic of Serbia, 2021[203])

Having in mind a high road freight share, which is 70% as mentioned above, the negative effects on air pollution and climate change are obvious, therefore, incentives for shifting freight from road to rail could have a positive impact on reducing air pollution and climate change impact.

The COVID-19 outbreak is affecting the entire transport and mobility market across the world, and the WB6 economies are no exception. In the second quarter of 2020 Serbia introduced measures at border and customs control to enable the provision of essential goods and medical equipment. These consist of "green lane" measures on its major corridors for transporting emergency goods. Passing through these green lane border crossings should not exceed 15 minutes (including any checks and screenings), and so procedures should be minimised and streamlined, etc. In the first quarter of 2020, as part of a joint assignment with four economies along Corridor X (Croatia, Greece, Hungary and North Macedonia), Serbia also started developing technical documentation for the implementation of the pilot electronic border queuing management system (e-QMS), inspired the system in the Baltic countries.[111] It is expected to finalise the documentation during 2021. The system will support the Connectivity Reforms Measure, which aims to create a more competitive, safe and reliable transport system and network, to decrease waiting times at border areas and transfer physical queues to virtual queuing (Transport Community / CEFTA, 2020[211]; Transport Community, 2020[212]; Government of Serbia, 2019[213]). The implementation of these measures could have a direct impact on how the border crossing is treated in the future.

In the area of **inland waterways** (IWWs) Serbia's market regulation legislation has achieved a high level of alignment with the TCT and EU *acquis*, and has been permanently updated with the latest updates since the last assessment. The market access framework is established through the aligned legislation. The national framework on market access to port services and the financial transparency of ports was developed before the adoption of EU Regulation 2017/352, but was already in line with the later regulation. The relevant strategy is the Strategy on the Development of Water Transport (2015-25). This defines clear and measurable objectives, including timelines and budgets for the recommended measures and actions.

A lot of effort has been made to increase IWW transport in recent years, including the privatisation of river ports and incentives for combined transport. The impact is apparent in the current results, with a further increase expected if the measures defined in the strategy are implemented. The total weight of freight transported on IWWs in Serbia increased by 17% in the period 2017-19, to reach 1.7 million tonnes, while the total tonnes*km remained the same at 0.7 million tonnes*km. This represents 6% of total land transport in Serbia (SORS, 2020[214]), the same as the EU average in 2018, while transport on EU inland waterways fell by 10% during 2016-18 (Eurostat, n.d.[215]).

Monitoring indicators to assess the performance of all transport modes are either non-existent, not properly established, or not fully updated. The missing indicators include average user costs, travel time satisfaction levels, value of assets, market research and customer feedback, quality of user information, audit programmes). Data surveys are either not soundly planned (e.g. the purpose, and the level of data needed have not been planned, or budgets allocated), as they have not yet been planned by the government or not conducted regularly but only for specific projects rather than regular transport infrastructure assessment and planning. Therefore, Serbia lacks the basis for a quality assessment of its transport network performance.

Sub-dimension 11.3: Sustainability

Further efforts are required to improve **road safety** in Serbia even though some progress has been made.[112] There is a Road Traffic Safety Strategy (RTSS) for the period 2015-20 (MCTI, 2015[216]). The Road Traffic Safety Agency has been tasked with preparing a new one for the next decade which will be adopted by the government. The RTSS was not fully aligned with the TCT and EU *acquis* as both the treaty (European Union, 2017[165]) and the new EU policy orientation (European Commission, 2019[217]) were adopted after the RTSS, but the new strategy is expected to be harmonised with both. The development process of the RTSS included consultations with a wide range of stakeholders, some of which were also members of the working group developing the strategy. However, implementation of the road safety framework and corresponding measures remains a concern. The implementation plan contains measurable indicators and the bodies responsible for implementation. The budget for each measure is not provided, but clear information was provided under which budget it is expected to be financed. One important area which has not been well developed is the monitoring of the strategy's implementation, and the process for updating the strategy and legislation based on the resulting monitoring report.

Data on road safety are collected by a government body, the Ministry of the Interior. Road accident data are developed in line with the Common Accident Data Set (CADAS) (EC, 2017[218]). The data are regularly collected and publicly available on the Road Safety Traffic Agency website, under various road safety data categories (e.g. tunnels, bridges, intelligent transport systems equipment, etc.), and on the government's open data portal (Government of Serbia, 2019[219]).

The ongoing EU-funded project Improving Road Safety in Serbia has the goals of improving local communities' traffic safety management capacities, establishing the MAIS3+ (Safety Cube, 2016[220]) scale of injury classification system, and improving road infrastructure management at national and local level. Introducing an improved traffic accident injury classification system will improve the ability of national and local government officials to apply proven road safety tools and to identify and improve the most dangerous sections of state and local roads. There is a need to further strengthen institutional capacities in the field of road safety, particularly enforcement. The human and financial resources of the relevant institutions (Road Safety Traffic Agency, PERS, Transport Ministry, local road traffic safety bodies, etc.) are not adequate for executing their responsibilities, according to information provided by the government.

Serbia has been a member of the International Safety Data and Analysis Group (OECD - ITF, n.d.[221]) since 2016, and could contribute to international co-operation on road accident data and their analysis. The level of implementation of the Regional Road Safety Action Plan (Transport Community, 2020[222]) which has been endorsed by the Ministerial Council of the Transport Community Permanent Secretariat (TCPS) in October 2020, is already on a high level compared to other WB6 economies[113] although slightly more efforts are needed to align local legislation with the Road Safety Action Plan. The number of fatalities per million inhabitants is higher than the average risk from fatalities in EU countries and it is clearly necessary to continue efforts to improve traffic safety in Serbia (Table 25.21).

Table 25.21. Road safety trends in Serbia (2010-19)

Road safety trends	2010-2019 (%)	2017-2019 (%)	2019
Change in the number of fatalities (Serbia)	-19	-7.8	534
Change in the number of fatalities (EU)	-23	-2.5	-
Number of fatalities per million inhabitants (Serbia)	-	-	79.1
Number of fatalities per million inhabitants (EU)	-	-	51

Source: EC (2020[223]), *2019 road safety statistics: What is behind the figures?*, https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_1004. (Road Safety Agency, 2020[224]), *Statistical Report on the Status of Road Safety in the Republic of Serbia for 2019*, https://www.abs.gov.rs/admin/upload/documents/20200813084936--izvestaj-o-stanju-bezbednosti-saobracaja-u-republici-srbiji-u-2019.-godini.pdf. (Government of Serbia, 2019[219]), *Open Data Portal - Data on traffic accidents by police administration and municipality*, *https://data.gov.rs/sr/datasets/podatsi-o-saobratshajnim-nezgodama-po-politsijskim-upravama-i-opshtinama/*.

The RTSS is aligned with the European Policy Orientation on Road Safety 2011-20 (EC, 2010[225]), which has the goal of reducing road fatalities by 50% between 2010 and 2020 in line with Decade of Action for Road Safety 2011-20, officially proclaimed by the UN General Assembly in March 2010. This goal would have been difficult to achieve considering Serbia only managed an average 3% annual reduction in fatalities during 2010-19 (Table 25.18). It will need to make significant additional efforts to secure a newly defined goal aligned with the European Vision Zero strategy for 2050 (European Commission, 2019[217]), which also set an intermediate goal of a 50% reduction in road fatalities during 2021-30. As no strategy for the new decade has yet been developed, expectations should not be high.

Serbia has addressed some of the **environmental sustainability** goals related to the transport sector across multiple strategies, making them difficult to monitor.[114] Having a section explicitly dealing with sustainability in all transport modes in the national transport strategy or transport sector strategies for each specific mode, will be needed.

There is no evidence that the government is preparing an environmental sustainability strategy. The National Strategy for Sustainable Development obliges the government to calculate the emissions of pollutants into the atmosphere from traffic on state roads and PERS often performs these assessments (so far they have been conducted for the periods 1990-2012, 2013-15 and 2015-19). PERS has also developed studies related to climate resilience.[115] The Strategy of Railway, Road, Inland Waterway, Air, and Intermodal Transport Development 2008-15 promoted the “polluter pays” principle which has been introduced in road transport so that the vehicles which pollute the environment more pay more to use the roads. It is expected the same approach and more will be implemented in the transport strategy as of 2022.

The SORS recently published its Eco-Bulletin (SORS, 2020[226]), presenting trends related to environment in the economy. In the period 2010-19 the total use of liquid fuels increased by 64%, while in road transport (which accounts for 48% of the total consumption of liquid fuel in the economy) it increased by 143% over the same period. At the same time, electricity consumption fell by 38% in total. Further efforts are needed to shift transport from road to other more sustainable modes.

Combined transport[116] is the transport mode that has the best cost efficiency, decreases environmental pollution, and increases co-operation between the freight forwarding network companies. The legal and regulatory framework in Serbia is covered in several existing strategic documents[117] related to the development of logistics and multimodal transport. The new multimodal transport strategy, the Five-year Action Roll-on Plan, is under development and expected to be finalised in 2021. Since the last assessment several regulations have been developed to strengthen multimodal transport legislation and partially align with the Combined Transport Directive. Full transposition of the Council Directive 92/106/EEC will not be carried out at this stage of the harmonisation due to the announcement that new EU regulations are to be adopted that will replace the existing ones.

The Department for Railways and Intermodal Transport of the Ministry of Construction, Transport and Infrastructure is the main institution responsible for combined transport in Serbia. There is no monitoring body, except for representatives on the Technical Committee for the Transport Facilitation of the TCPS, which is yet to follow implementation of the regional Transport Facilitation Action Plan endorsed by the Ministerial Council of the TCPS in October 2020.

Currently, a construction contract for the multimodal terminal Batajnica near Belgrade has been signed. Construction is expected to commence in the second quarter of 2021 and it is expected to be completed in the first quarter of 2023. Depending on the readiness of local governments and the state of infrastructure capacity, future intermodal terminals could be planned in Pirot, Apatin, Smederevo, Bačka Palanka, Šabac, Novi Sad, and Vršac. These proposals need to be tested against transport demand modelling, and align with plans in the new logistics and transport strategies.

he World Bank's Logistics Performance Index (LPI) (World Bank, 2020[227]), is a multi-dimensional assessment and international benchmarking tool focused on trade facilitation. In the last index in 2018, Serbia was ranked 65th out of 160 economies, with an LPI score of 2.84 which is around the world average of 2.85 but well below the EU average of 3.52. Serbia ranked best for international shipment[118] (57th) and worst for logistic competence (ranked as 80).

Data collection, which is currently moderate to weak, needs to be one of the key areas of focus. Serbia needs to establish a strategy for data as a basis for the assessment of the transport sector, as it will directly influence prioritisation processes within transport policy in general.

The way forward for transport policy

Serbia has taken some important steps in the development of a competitive transport sector, as presented above, but special attention should be paid to the following areas:

- **Enhance the implementation, monitoring and readjustment of the existing policy framework.** The transport policy framework is not regularly revised based on the monitoring reports and available information. Doing so will be key to keeping it up to date, relevant and effective. Monitoring reports need to be developed for each strategy and other strategic documents, and also be publicly available. Based on these monitoring reports, the policy framework then needs to be regularly adjusted.
- **Update or renew outdated national cost-benefit analysis guidelines, covering all transport modes.** Economies need to regularly update their own CBA guidelines with accompanying national technical instructions needed for a proper CBA, at least every two years. A good example is the United Kingdom's Transport Analysis Guidance (UK Government, 2019[228]), which provides all the information on the role of transport modelling and transport project appraisal tailored to the UK market. To ensure consistency in the discount rates used for similar projects economies need to develop their own benchmark for all technical and economic parameters, including the financial and economic discount rate in the national guidance documents, and then apply it consistently in project appraisal at the national level. The empirical researches needs to be conducted on the national level to generate input data for the calculation of externalities.
- **Ensure road safety remains a key priority.** Further efforts are required to align national legislation with the TCT and EU *acquis*, with the aim of removing black spots and dangerous locations, placing the safety of vehicles at the top of the agenda, and enforcing the implementation of legislation (e.g. proper spending of funds allocated from fines on road safety improvements, transport of dangerous goods, speed enforcement, and licensing of road safety auditors and inspectors). Box 25.16 is an example of an innovative approach in Montenegro.
- **Keep transport facilitation as a key priority.** Serbia needs to implement more OSSs, and other measures in line with the newly endorsed regional Action Plan for Transport Facilitation (Transport Community, 2020[212]), which includes: electronic queuing management systems, upgrades of existing ICT infrastructure, construction or modernisation of infrastructure to remove physical and

technical barriers and increase existing capacities, and capacity building to improve performance efficiency.

- **Establish the basics of a transport asset management system in line with the national inventory system.** Sound asset management practices[119] enable economies to collect data and manage and analyse conditions across all transport modes, in order to optimise transport maintenance strategies and justify maintenance budgets by directing funds to those areas where the return on investment will be the greatest. Performance-based maintenance contracts (PBMC) are already implemented in WB6 economies, including Serbia (CONNECTA, 2018[195]), and are an essential component of the road asset management system. The quality of transport infrastructure affects an economy's investment attractiveness, making it seen as a good market for foreign direct investment.
- **Develop an integrated environmental and transport action plan.** This plan needs to integrate existing indicators and to include any missing ones in a framework for environmental sustainability in the transport sector. Measures and indicators should then be applied in the strategies where they belong, including the new transport strategy. A good example was developed by the European Environment Agency in the form of Transport and Environment Reporting Mechanism (EEA, 2000[229]), which prescribes indicators for tracking transport and environmental performance in the EU.

Box 25.16. Innovative ideas in road safety: Road safety social impact bonds in Montenegro

In 2018, the UNDP in Montenegro, in co-operation with the key national players in road safety, developed the new idea related to road safety social impact bonds. These are an innovative alternative performance-based public financial instrument, which shifts the policy framework from inputs and outputs to outcomes and value for money. The idea is to involve the private sector in investing in road safety improvements with the main aim of strengthening sustainability jointly with the public sector. The public partner commits to paying outcome payments to the investor if and only if the predefined and measurable social goals are met. This idea has great potential for other economies in the region (and beyond) to replicate and scale up the model.

Source: (UNDP[230]), Rethinking road safety in Montenegro, https://www.me.undp.org/content/montenegro/en/home/projects/RoadSafety.html.

Energy policy (Dimension 12)

Introduction

Serbia has made significant strides in introducing more advanced policy and legislation in the energy sector. As a result, Serbia achieved an overall score of 3.0 for energy in this assessment compared to 2.3 in the last Competitiveness Outlook (Figure 25.1). The improvement has been driven by the increased transposition of EU's Third Energy Package into national legislation and policy.

However, while there has been progress in the development of policy and legislation, there are gaps in their implementation across all sub-dimensions. This is reflected in the assessment of the Energy Community Secretariat (2020[231]) which gave Serbia a score of 67% for transposition of the Third Energy Package – with the remaining 33% being only partially transposed – while it scored 30-70% for implementation across the different sub-dimensions, averaging 56%. In particular, Serbia's implementation of unbundling and third-party access falls short when compared to other WB6 economies with the second lowest score of 2.5, ahead of only Bosnia and Herzegovina. Nonetheless, as can be seen in Table 25.22, Serbia performed fairly well in other sub-dimensions, especially in the governance and regulation sub-dimension, so that despite its low performance in unbundling and third party access, Serbia's overall scoring is in line with WB6 average.

Table 25.22. Serbia's scores for energy policy

Dimension	Sub-dimension	Serbia	WB6 average
Energy policy dimension	Sub-dimension 12.1: Governance and regulation	3.3	3.1
	Sub-dimension 12.2: Security of energy supply	2.9	2.9
	Sub-dimension 12.3: Energy markets	2.8	3.0
Serbia's overall score		**3.0**	**3.0**

State of play and key developments

Sub-dimension 12.1: Governance and regulation

Overall, Serbia's **energy policy, legal and institutional framework** is comprised of an extensive array of legislations, action plans, and strategies that govern the energy sector. Serbia has transposed a significant share of the EU's Third Energy Package.

Both the natural gas and electricity markets are liberalised, and price are deregulated, although the markets remain dominated by key players (see Sub-dimension 12.3: Energy markets). Moreover, policy is informed by an extensive array of indicators and monitoring systems and *ex post* assessments are used to analyse and inform adjustments to policy. A large number of the EU's Network Codes have been fully or partially transposed, but the full transposition of all codes is not possible without amending the primary legislation – something that is currently being tackled.[120]

Beside the need to adopt and transpose the remaining EU legislation, there are some key areas of concern. First and foremost – and a theme throughout this dimension – Serbia lacks in implementation of the framework. For example, unbundling and third-party access are key pillars of EU's Third Energy Package, but the Energy Community Secretariat concluded that it "has not yet been finalised in compliance with the Third Energy Package" (Energy Community Secretariat, 2020[232]). Progress in the implementation of unbundling and third-party access has been slow over the years partly due to the strong position of the incumbent firms (see Sub-dimension 12.3: Energy markets). Moreover, key policy documents are absent, including a new National Energy Efficiency Action Plan, which has been drafted but not yet adopted, and the National Energy and Climate Plan, which is in the early stages of drafting. And finally, Serbia continues to expand its fossil fuel generation, in part as greenhouse gas pricing is not currently factored in.[121]

Box 25.17. The EU's Third Energy Package

In 2007, the European Commission proposed a new legislative package, the Third Energy Package, in an effort to further enhance and harmonise the EU's Energy Union and internal energy market. This package entered into force in September 2009 and consisted of several important directives and regulations.[1]

The Third Energy Package largely rests on four pillars: 1) transparency; 2) non-discrimination; 3) a strong, independent national regulator; and 4) sustainability. Together, these pillars represent EU best practice and aim to establish a fair and level-playing field for competitive energy markets that seek to optimise scarce resources. For example, the first two pillars drive the need for unbundling the transmission and distribution system, combined with guaranteed, non-discriminatory and open access to those networks to all users backed by transparent rules and prices. Without such unbundling requirements and third-party access, it is very possible that the system operators, which are natural monopolies, could prohibit market entry and lead to sub-economic market outcomes.

In addition to these pillars, the Third Energy Package also seeks to enhance international co-operation within the EU by establishing an international regulatory agency (the Agency for the Cooperation of Energy Regulators – ACER) and promoting regional integration. Regulation (EC) No 714/2009 contains clauses that open and allow for further regulation to be drafted to enhance harmonisation in the form of network codes.

In 2019, the EU introduced the Clean Energy Package which supplements and in part replaces the Third Energy Package. That is, while the Clean Energy Package retains the key legislative aspects of the Third Energy Package, it expands measures for sustainability and green energy growth, as well as consumer rights and protections. Despite this, the Third Energy Package remains a good starting point for all of WB economies as many of its key pillars have so far not been introduced or implemented in their entirety in the region. Aligning with it is also a requirement for the WB economies as members of the Energy Community, whose *acquis* reflects most of the Third Energy Package. Moreover, with many WB6 economies aspiring to become EU members, the transposition and implementation of the Third Energy Package and subsequent Clean Energy Package are accession requirements. To conclude, the Third Energy Package provides for the implementation of international best practice on competitive markets, and is also a firm requirement for the Western Balkan economies.

1: Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC; Directive 2009/73/EC concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC; Regulation (EC) No 714/2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003; Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005; Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators.

The theme of the policy being in place but the implementation lacking is also apparent when it comes to the regulatory framework, or more precisely the **energy regulator**. The legislative framework for the regulator conforms with the EU's Third Energy Package and clearly intends to establish a competent and independent regulator. This independence is partly reflected by the reporting requirements and oversight of the Energy Agency of the Republic of Serbia (AERS), which is in line with the EU Third Energy Package. Moreover, AERS's revenues are separate and independent with AERS being financed through revenue from regulated activities, fees for issued energy licences, as well as from other revenue from activities within its jurisdiction.

However, there are several issues when it comes to implementation. First and foremost, AERS lacks the human resources it needs to fulfil the role as prescribed by the Third Energy Package.[122] While plans are in place to hire more staff over the next few years, it is not quite clear how successful it will be at hiring new staff and retaining existing staff.[123] This is particularly challenging as the financial budget is subject to approval by Parliament.[124]

Another issue with AERS's independence is with its Statute. That is, according to Article 47 of the Energy Law, the Statute is subject to approval by the Parliament. This limits the regulator's independence as it limits its ability to structure itself according to the task and roles it faces. Moreover, it creates another avenue through which political influence can be asserted and lead to interference of the operation of the regulator, particularly when combined with the requirement for parliamentary approval of its budget.

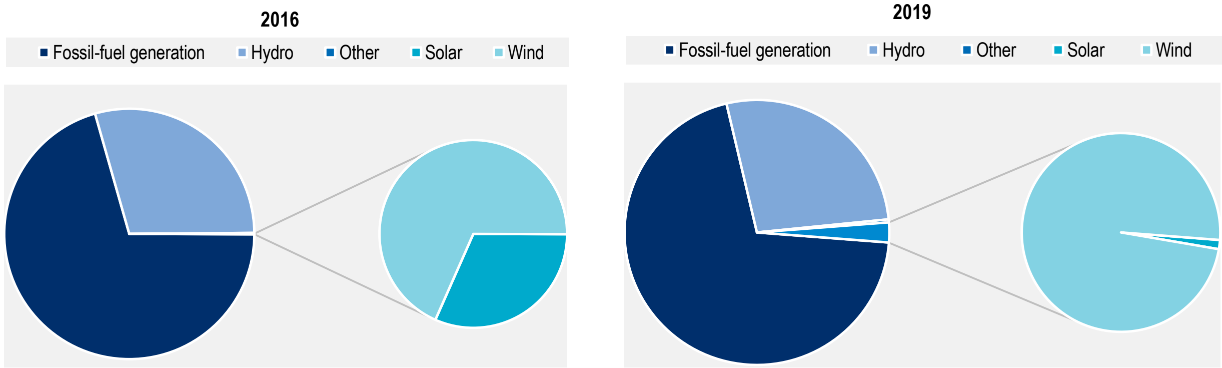
Finally, in a minor point that largely does not affect the score, AERS does not have the authority to impose fines. According to Article 58 of the Energy Law, it cannot impose fines but can initiate proceedings at the appropriate court. While this approach is permitted by the Third Energy Package, it does weaken AERS' ability to act as a credible market enforcer as it partly transfers this role to the judicial system, and also slows the enforcement process.[125] In part, as this becomes more of a judicial issue, it raises the danger that when the matter becomes "[…] overly legalistic in the application of rules and imposition of fines, […] business people would tend to respond by scaling down their efforts to comply with the intent of the law; instead, they would aim to achieve only the minimal level of compliance which the rules required" (OECD, 2000, p. 16[233]).

The theme continues with the **management of energy infrastructure**. Serbia has strategies and action plans that guide the infrastructure development and management.[126] At their core, these strategies provide guidance on the rehabilitation, modernisation and expansion of infrastructure with the aim of increasing the efficiency and reliability of energy supply to consumers. However, several factors reduce Serbia's score when it comes to implementation. First, although there has been significant progress in finalising the transposition of EU regulations, some existing transposition needs to be improved and the final implementation remains outstanding. This is most clearly seen in the lack of the adoption of the network development plans from the transmission system operator (TSO) and distribution system operator (DSO) within the natural gas sector, which creates uncertainty about the path of infrastructure development. Another problem is high distribution losses (see Sub-dimension 12.2: Security of energy supply), although the policy plans to tackle this issue.

Sub-dimension 12.2: Security of energy supply

When considering energy supply, there is a wide gap between the natural gas and the electricity sector. Considering the **natural gas supply framework**, while an extensive policy and legal framework is in place, the market is dominated by one player, *Srbijagas*.[127] Such centralisation exposes the market to the risk of a dominant player abusing their market position to achieve certain outcomes, which could include behaviour that raises barriers to competition and market entry. This risk is aggravated by the lack of third-party access which means that the nature and extent of competition is limited, giving more opportunities to abuse market position. Moreover, it should be noted that Serbia is currently completely reliant on oil-indexed natural gas sources[128] exclusively from a single source, Russia, which further increases energy security risks due to the lack of alternative natural gas supply sources.

Figure 25.17. Serbia's gross electricity generation mix (2016 and 2019)



Source: Eurostat (2021[234]), Gross and net production of electricity and derived heat by type of plant and operator, https://ec.europa.eu/eurostat/web/energy/data/database.

StatLink https://doi.org/10.1787/888934256349

Serbia's **electricity supply framework**, while still not optimal, is more advanced than is the case for natural gas. The power mix is more diversified, but still dominated by coal power generation, which accounted for around 70% of power generation or between 27 and 26 TWh in between 2016 and 2019 (Eurostat, 2021[234]) – see Figure 25.17. Meanwhile, Serbia's energy strategy suggests that it plans to continue its reliance on coal as it seeks to build new coal-based power generation capacity (MRE, 2016, pp. 81-85[235]). While its stated goal is to replace old and less efficient plants, it is not clear to what extent the climate impact, especially compared to renewable energy, was or is a factor in these decisions.

Another issue facing the electricity supply framework in Serbia is the aspect of network losses. Although the Western Balkans, including Serbia, are in line with European average with regard to transmission losses, Serbia and the Western Balkans as a whole are still lagging behind with regard to distribution losses (Table 25.23),[129] and urgent action is needed to upgrade infrastructure to avoid wasting energy.

Table 25.23. Serbia's distribution losses as % of final electricity consumption (2014-18)

GEO/TIME	2014	2015	2016	2017	2018
European Union	10.7%	8.0%	7.8%	7.6%	6.7%
Serbia	14.4%	14.4%	13.0%	13.0%	12.2%
CEEC	5.9%	5.8%	5.5%	5.3%	5.2%

Note: CEEC: Central and Eastern European countries. Both the EU and CEEC exclude Bulgaria and Romania.
Source: (CEER, 2020[236]). 2nd CEER Report on power losses https://www.ceer.eu/documents/104400/-/-/fd4178b4-ed00-6d06-5f4b-8b87d630b060.

Table 25.24. Serbia's renewable energy generation as a share of gross inland consumption (2014-19)

	2014	2015	2016	2017	2018	2019
EU	13.6%	13.8%	14.0%	14.1%	14.7%	15.5%
Serbia	15.5%	13.4%	13.3%	12.1%	13.4%	13.6%
Western Balkans	18%	17%	17%	14%	19%	--

Source: (Eurostat, 2021[234]), Gross and net production of electricity and derived heat by type of plant and operator, https://ec.europa.eu/eurostat/web/energy/data/database.

Meanwhile, although coal remains dominant, **renewable energy** is on the rise, with wind generation rising from 26 GWh in 2016 to 898 GWh in 2019 and solar rising from 12 GWh to 13 GWh (Eurostat, 2021[234]). However, although Serbia has various legislation and action plans governing and guiding renewable energy generation,[130] it does not appear that it will meet its 2020 target. Renewable energy accounted for just 13.6% of gross inland consumption in 2019, compared to the target share of 27% by 2020 and an EU average share of 15% and WB6 share of 19% (Table 25.24). Moreover, in 2018 nearly all (approximately 98%) of Serbia's renewable energy generation comes from hydropower (Eurostat, 2020[237]). In 2018, just 0.4% of Serbia's generated power came from non-hydro renewable energy sources. This is below the WB6 average and significantly less than the EU average of 15% (Eurostat, 2020[237]). The key issue facing Serbia is therefore the promotion of renewable generation other than hydropower. Serbia recently amended key laws and adopted new legislation to promote the use of non-hydro renewable energy sources. These laws introduce promising elements such as a new funding scheme and auctions for renewable energy projects, which should further promote the use of non-hydro renewables.

When looking at the legislative and policy environment and the actual renewable energy market, Serbia faces several issues. The first is that despite having made significant strides in transposing and implementing the EU renewable energy *acquis*, including the adoption of secondary legislation for biofuels in 2019, it still has not fully transposed all of it and more remains to be implemented. The second is promoting the share of renewable energy in Serbia's primary energy mix. This could be supported by streamlining the approval process for new renewable energy projects at every stage (permits, construction, licensing, etc.).

Another challenge has been the suspension of feed-in tariff payments under the previous scheme for existing renewable energy generators as a consequence of the COVID-19 pandemic, with some sources suggesting that payments to generators were completely suspended and other sources suggesting payments were limited to one-third of the feed-in-tariff. This suspension risks undermining investor confidence and, consequently, the sustainability of renewable energy financing in Serbia.

Serbia's old tariff system used feed-in-tariffs combined with purchasing power agreements. As Serbia has a wholesale market with an organised day-ahead market,[131] it is encouraging that the new Law on renewable energy adopted in April 2021 introduced feed-in-premiums, which represent a more modern and efficient approach to subsidising renewable generation (Box 25.18).[132]

Box 25.18. A new approach to subsidising renewable energy

Feed-in tariffs were the dominant form of financial support for renewables within the EU at the beginning of the 21st century. In this system, power plant operators receive a fixed payment for each unit of electricity generated independent of the electricity market price (Banja et al., 2017, p. 15[238]).

Feed-in tariff schemes offer several advantages, but mainly they insulate new market entrants from market price risks, which lowers their capital costs and enables private investment. The simplicity of feed-in tariffs makes them suitable for markets with a large number of non-commercial participants such as households or local community-based initiatives (CEER, 2018, p. 12[239]).

However, feed-in tariff schemes exclude producers from actively participating in the market, which hinders efforts to develop large, flexible and liquid electricity markets as the share of renewable energy grows. This limits growth to certain technologies and sizes of installations, and creates difficulties in setting and adjusting appropriate tariff levels (EC, 2013, pp. 12-13[240]). The latter has been a problem especially as costs of renewable generators have fallen rapidly in recent years.

The European Commission suggests switching from feed-in tariff to feed-in premium schemes (EC, 2013[240]). In these, plant operators sell the electricity generated directly on the electricity market and earn an additional payment on top of the electricity market price. This is received as a fixed payment or one adapted to changing market prices, thereby limiting price risks for plant operators, as well as the risks of providing windfall profits (Banja et al. 2018). Feed-in premium schemes are beneficial because they force renewable energy producers to find a seller on the market. They also ensure that renewable energy operators are exposed to market signals. A well-designed premium scheme can limit costs and drive innovation by using a competitive process to allocate support. Such schemes also include automatic and predictable adjustments to cost calculations, which give investors the information and confidence necessary to invest (EC, 2013, p. 8[240]).

The European Commission suggests using a feed-in premium scheme in combination with the following good practice recommendations (EC, 2013[240]):

- Do not pay premiums for production in hours where the system price is negative or above the level of remuneration deemed necessary.
- Assign renewable project and associated premiums using competitive allocation mechanisms such as auctions.
- Make planned volume-based premium reductions for new installations dependent on when they are approved, connected or commissioned.
- Conduct regular, planned and inclusive reviews of premiums for new installations.

However, the Council of European Energy Regulators reports that in 2016/17, 17 of the 27 European Union member countries still used some form of feed-in tariff, although mainly for small projects, while around 16 used feed-in premiums, including to complement feed-in tariffs (EC, 2014[241]).

For further and more detailed exploration of renewable energy subsidies and best practice please see the sources below. Meanwhile, for more information on the different renewable support schemes employed across Europe please see http://www.res-legal.eu/home/ and for an overview of auctions and outcomes (including databases on auctions) see http://aures2project.eu/.

Source: (Banja et al., 2017[242]), *Renewables in the EU", doi:10.2760/521847*; (CEER, 2018[239]), *Status Review of Renewable Support Schemes in Europe for 2016 and 2017*, https://www.ceer.eu/documents/104400/-/-/80ff3127-8328-52c3-4d01-0acbdb2d3bed; (EC, 2013[240]), *Guidance for the design of renewable support schemes*, https://ec.europa.eu/energy/sites/ener/files/com_2013_public_intervention_swd04_en.pdf; (EC, 2014[241]), *Guidelines on State Aid for Environmental Protection and Energy 2014-2020*, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52014XC0628%2801%29.

Besides using supply-side policies to promote security, Serbia needs to improve its demand-side management through **energy efficiency policies**. The Energy Community has extensively reported that Serbia's legislative framework does not fully transpose and thus is not fully compliant with EU's Third Energy Package (Energy Community Secretariat, 2021[243]), (2020[231]), (2020[232]). Issues range from the energy performance of buildings to energy labelling. That said, Serbia has adopted a new Law on energy efficiency and the rational use of energy in April 2021 that expands Serbia's energy efficiency approach. Among other measures, the law expands the transparency and data collection for measuring energy efficiency, provides a detailed legislative framework for highly efficient cogeneration, the public energy efficiency supply framework, energy labelling and eco-design standards.

Meanwhile, much like the legislation, policies needs to be enhanced. The Ministry of Mining and Energy's Third National Energy Efficiency Action Plan has been adopted, but only provides guidance for energy efficiency in Serbia up to 2018. Meanwhile, the fourth National Energy Efficiency Action Plan is still being drafted.

Serbia has implemented energy efficiency funding of some sort since 2014. The new Law on energy efficiency expands the availability of funding for energy efficiency projects (i.e. renovations of buildings, replacing of heating systems), to cover private initiatives. This is a welcome change, as previously funding was only allocated to public projects.

Most state entities involved in the energy efficiency sector lack human resources, which limits their ability to implement and monitor government policy objectives.[133] The monitoring of developments in energy efficiency is neither comprehensive nor regular but is limited to the collection of indicators on a project basis.[134] Furthermore, it is not clear which entity collects which data/indicator. However, the introduction of the changes mentioned above through the new law might present improvements to data collection.

Sub-dimension 12.3: Energy markets

In the area of **market operations**, Serbia may be the most advanced economy in the region both from legislative and implementation perspective. Serbia allows for free selection of suppliers and has switching rules in place. Moreover, markets are liberalised, and prices deregulated, although households and small consumers can opt to be supplied by the regulated supplier of last resort/universal supplier. Serbia's electricity market also has an active power exchange with an organised day-ahead market in addition to bilateral trading. For natural gas, only the latter exists. Also, it should be noted that wholesale traders do not have a seat requirement,[135] although they are required to obtain a licence in Serbia much as for all other activities.

Despite its advanced progress, some shortcomings remain in Serbia. The EU market model has only partially been implemented. Moreover, despite market liberalisation in both natural gas and electricity, the incumbents have the largest market share. In the case of electricity, the Energy Community Secretariat also asserts that "the regulated price of guaranteed supply, to which households and small customers are entitled, is still below a competitive and economically justifiable price" which discourages the switching of consumers to non-regulated retail suppliers (Energy Community Secretariat, 2020[232]). In the natural gas market, there is no organised market or trading point—although *Srbijagas* aims to deploy a virtual trading point at some point in the future. Finally, balancing services and ancillary services remain in part regulated due to low competition. That is, due to limited liquidity and service providers, price formation is not likely to be indicative of efficient market equilibrium meaning prices remain regulated. In the long run, it would be advisable to establish and implement a strategy to promote competition in order to have market forces drive prices for balancing services and ancillary services down.

Despite these issues, the area which has the greatest need for improvement is **unbundling and third-party access,** particularly in the natural gas sector. While Serbia's legislation, action plans and strategies conform with the EU's Third Energy Package, the implementation of unbundling is far from complete.

In the case of electricity, the Energy Community Secretariat (2020[232]) notes that the unbundling of both the TSO and the DSO are not in compliance with the Third Energy Package requirements. Although some efforts have been expended, the Energy Community Secretariat has so far not confirmed the unbundling with a positive opinion.[136] More precisely, while the TSO, Elektromreža Srbije (EMS), was certified by AERS as unbundled, for technical reasons[137] the Energy Community has not given a positive opinion. Meanwhile, the DSO, Elektrodistribucija Srbije, has been legally unbundled and has a compliance officer in place. Moreover, although progress has been made in functional unbundling through the adoption of a new foundation act in January 2021, and AERS has issued a licence to operate as a distribution system operator in April 2021, the Energy Community affirmation is still outstanding.

The situation is not much different for the three TSOs within the natural gas sector. Although the legislation is in place, Srbijagas still continues to effectively operate both as a supplier and TSO. Srbijagas has established a company for the purpose, Transportgas Srbija, but it is not equipped to handle the operational tasks of a TSO and nor have the transfer of assets taken place. In other words, it is not functionally unbundled and accordingly has not been certified by AERS as such. In the case of the other TSO, Yugorosgaz JSC Belgrade, the independent system operator model applied is not compliant with the Third Energy Package. The third, Gastrans, was certified in February 2020 by AERS (AERS, 2020[244]) as an independent TSO despite Energy Community objections (Energy Community Secretariat, 2019[245]). Both Yugorosgaz and Gastrans have implemented compliance officers.[138]

The situation for non-discriminated third-party access is also mixed. While the legislative requirement is in line with the Third Energy Package for the electricity sector, there are concerns over its implementation. For instance, most of the cross-border interconnectors are allocated based on bilateral agreed auctions. Only the interconnector capacity on the border with Bulgaria and Croatia are being assigned using the international standard for joint capacity auction through the Joint Allocation Office.[139]

Another concern is with regard to use of congestion revenue to subsidise domestic transmission tariffs. While this use of revenue to reduce transmission tariffs is not prohibited by EU regulations (see EU Regulation 714/2009 Article 16 Paragraph 6), the regulation does encourage using such income to guarantee the availability of capacity, or to maintain or increase interconnection capacity in order to further interconnection, rather than to lower domestic transmission costs..

Much as in the electricity sector, the legislation for unbiased third-party access, including entry-exit tariff system, is also in place for the natural gas market but implementation is lacking. For instance, the Srbijagas run interconnector at Horgoš on the Hungary-Serbia border is foreclosed to third-party access. The new interconnector through the Gastrans project, which started commercial operations on 1 January 2021, offers some volume to third party. However, an exemption was granted that permits Gastrans to limit the volume open to third parties to 10% of the entry and exit capacities based on short-term capacity auctions (AERS, 2019[246]). This means third parties can supply approximately 15% of the domestic market via Gastrans pipeline's Serbian exit points. The Energy Community Secretariat have stated that confining access to just 10% of capacity is detrimental to the development of competition in the natural gas market (Energy Community Secretariat, 2019[245]).

Finally, although **regional market integration** is not completely lacking it still has potential for improvement. Currently there are two natural gas interconnectors which are significant from a supply perspective. As discussed above, one is for closed completely to third party access, while the second restricts access to 10% of its capacity, limiting the competitive nature of international integration. Meanwhile, market coupling is absent, partly due to Serbia lacking an organised market/trading point. Although Srbijagas has codified a virtual trading point in its network codes, in practice it has failed to implement it so far. Gastrans also included in their Network Code provisions for a virtual trading point although it is unclear to what extent this has been implemented.

Regional integration is a bit more advanced in the electricity sector. On the positive side, the Connection Network Codes and the Grid Code are partially implemented. Moreover, the outlines of regional co-operation are in place.[140] However, for the most part, regional co-operation for interconnection allocation is done on a bilateral basis, except for with Croatia and Bulgaria, where it is done via joint auction through the Joint Allocation Office, and (manually) balancing reserves.

Serbia also has been and is part of various project to couple markets, but these have failed to result in actual market coupling and integration.[141]

Cross-cutting sub-dimension: Energy incentives – direct and indirect subsidies in the energy sector

While no information was provided on the topic of cross subsidisation, our understanding is that substantial subsidisation is taking place, particularly in the coal sector, which has a cascading effect on power. More precisely, a study by (Miljević, Mumović and Kopač, 2019[247]) estimated that, between 2015 and 2017, the Serbian government provided on average direct subsidies to coal producers of around EUR 99.78 million per year. They estimate that this amounted to an indirect subsidisation of electricity generated from coal of about 4 EUR/MWh. In other words, subsidising coal producers has a pass-through effect that results in coal-fired generation being around EUR 4 cheaper per MWh than it would have been without it.

Moreover, information provided by the government seems to suggest that state entities do not settle their bills with the power sector in full and promptly, which is another form of subsidy. This is supported by Srbijagas writing off of EUR 1.2 billion in debt in 2019.[142] However, the extent of this is unclear at this stage.

The way forward for energy policy

Given the various points raised above, Serbia should:

- **Finalise the transposition of EU Third Energy Package** across all sub-dimensions but especially with regard to the EU Network Code, EU target model and renewable energy. This should complete the framework for a competitive market that can harness competitive economic forces to drive the optimisation of consumed energy and enhance the value added of energy for the entire economy.
- **Improve implementation across all sub-dimensions**, in particular:
    - **Fully unbundle TSOs and DSOs**. These roles have an essential natural monopolistic role in any energy market and so, to maximise social gain, it is best if they do not operate in the interest of certain suppliers or generators. To this end, the unbundling and the national certification should conform with Chapter IV, V and VI of EU Directive 2009/72/EC and be confirmed by the Energy Community to that effect that the TSOs and DSOs have been unbundled pursuant to those requirements.[143]
    - **Implement non-discriminated and transparent third-party access to transmission and distribution systems**. This is essential for more competitive market forces to be brought to bear. To this end, third-party access on a national level should conform with Chapter VIII of EU Directive 2009/72/EC and this should be confirmed by the Energy Community.
- **Improve regional integration and market coupling**. Market integration and coupling is essential to help keep price variances in check through the use of regional forces. While some projects are ongoing, the authorities need to step up their efforts and finalise projects successfully. Regional trade and integration is also are important tool to help bolster the national energy sector subject to rising integration of variable renewable energy capacity.
- **Implement a new approach to support and subsidies renewable energy**. Serbia's support for renewable energy faces a variety of issues and so it should take the opportunity to overhaul its approach. This should also be combined with new approach to energy diversification by reducing the reliance on coal and a single natural gas supply. In part, with the adoption of the new laws, the opportunities lie in their implementation including with regard to switch from a Feed-in-Tariff model to Feed-in-Premiums.
- **Increase the share of renewable energy by streamlining the approval process at every stage** (permits, construction, licensing, etc.) for new renewable energy projects—with focus on none-hydro renewable energy sources.

Environment policy (Dimension 13)

Introduction

With an overall score of 2.2 in environmental policy, Serbia is third among the WB6 economies and performs slightly above the regional average (Table 25.25). It has significantly improved its performance in resource productivity and achieved further increases in environmental quality of life since the previous assessment. However, its results for the natural asset base sub-dimension are below the regional average, reflecting a decrease in performance in this regard since 2018.

Table 25.25. Serbia's scores for environment policy

Dimension	Sub-dimension	Score	WB6 average
Environment policy dimension	Sub-dimension 13.1: Resource productivity	2.2	2.0
	Sub-dimension 13.2: Natural asset base	1.8	2.1
	Sub-dimension 13.3: Environmental quality of life	2.5	2.3
Serbia's overall score		**2.2**	**2.1**

State of play and key developments

Sub-dimension 13.1: Resource productivity

As a Non-Annex-I signatory to the UN Framework Convention on Climate Change (UNFCCC) and its Paris Agreement and party to the Kyoto Protocol,[144] Serbia has joined the international effort to combat climate change. It has committed to reducing greenhouse gas (GHG) emissions by 9.8% by 2030 compared to 1990 levels with the goal of limiting global warming to a maximum of 2°C by the end of this century. Despite some efforts in this area, Serbia's carbon productivity has not improved since the last assessment. Almost 70% of total GHG emissions come from the energy sector, followed by transport which accounts for slightly over 15% (World Bank, 2020[248]).

Serbia's **climate change mitigation and adaptation** policies are at an early stage of development. Promisingly, in March 2021, it adopted the climate law it had prepared in 2018. However, it still lacks a long-term climate change mitigation strategy that would encompass energy and climate targets. The draft Low Carbon Development Strategy, submitted for public consultation until the end of January 2020, has not yet been adopted, while the Ministry of Mining and Energy was developing the integrated National Energy and Climate Plan (NECP) at the time of drafting.[145] Given the dominance of the energy sector in total GHG emissions, the adoption and implementation of the NECP, which is consistent with the EU 2030 framework for climate and energy policies, will be crucial for Serbia's future low carbon development. The government will also need to make sure that the NECP is integrated into all other relevant sectoral policies and strategies, such as transport, industry and agriculture. Other positive developments have been the improvement of GHG inventories and updating of the Nationally Determined Contributions (2021-30), mostly as a result of the establishment of a new Department on Climate Change in the Ministry of Environmental Protection (MoEP).

The National Programme for Disaster Risk Management (2014-20) and its draft action plan for implementation addresses climate change related issues but does not contain sufficient climate change adaptation measures and policies. The government therefore asked for support from the international community to develop its National Adaptation Plan (NAP) to increase its capacity to address its vulnerability to climate change[146] and integrate climate change adaptation considerations into its development planning and budgeting, particularly in the agriculture-water management nexus, and transport infrastructure and construction. Serbia was one of the first economies to request Green Climate Fund (GCF) readiness financing for this purpose (UNDP, 2019[249]). As part of these efforts, a stocktaking report was produced in 2017 and served as a basis for Serbia's NAP Readiness Proposal, Advancing Medium and Long-Term

Adaptation Planning in the Republic of Serbia. This was approved by the GCF in July 2019 (UNDP, 2019[249]).

Serbia was the first WB6 economy to put a **circular economy framework** in place. The key institutions involved in the policy framework are the MoEP, and the Serbian Environmental Protection Agency (SEPA).[147] In October 2018 the MoEP established a Special Working Group for Circular Economy, which works on the transition process and acts as the main co-ordinator of stakeholders in the circular economy. In 2020, Serbia prepared its Roadmap for Circular Economy, an important document that sets the guidelines for the transition towards a circular economy (Box 25.19).

Box 25.19. A roadmap for a circular economy in Serbia

A Special Working Group for Circular Economy within the Ministry of Environmental Protection (MoEP) developed a roadmap for the circular economy in April 2020, important guidance that outlines the actions Serbia needs to take to make the transition from a linear economy. It is modelled on the same type of document developed in EU countries such as Finland, France, the Netherlands, Slovenia and Spain. This initial document will be harmonised with EU recommendations to align it with newly adopted EU documents (the Green New Deal and the new Circular Economy Action Plan). The working group will undertake a range of activities to this end, including developing a Circular Economy Roadmap 2.0.

The aim of the roadmap is to initiate a dialogue between decision makers and representatives of industry, academia and civil society, in order to encourage industry to innovate, increase market opportunities for production through circular business models, create new jobs and improve business, while preserving the environment. The intention is to encourage the whole of society to adopt radical changes in attitude towards limited resources. The roadmap is accompanied by a communication plan that contains measures to raise public awareness about the circular economy. Its main goal is to inform and involve as many actors as possible and thus achieve a broader social consensus for the implementation of the roadmap.

The key drivers behind the roadmap can be grouped into four main areas:

- **Economic**: boosting competitiveness, market development, (horizontal) economic diversification, and development and application of new business models and new technologies.
- **Political:** regional positioning, creating a national political consensus, EU accession process and implementation of international obligations in the field of environmental protection and combating climate change.
- **Environmental**: waste reduction, GHG emission reduction, conservation of natural resources and improving energy independence and the use of renewable energy sources.
- **Social**: improving social welfare, improving consumer rights, savings in household budgets, improvement in people's health and green jobs.

Source: (Government of Serbia, 2020[250]), Roadmap for a Circular Economy, https://www.ekologija.gov.rs/wp-content/uploads/razno/2020/FINAL_202004020_roadmap%20SRBIJA.pdf.

Serbia generates 319 kg of municipal waste per capita. This is lower than the EU average (492 kg per capita in 2018) but has been steadily, albeit slowly, increasing over the last five years. Waste collection is provided for 87% of the population (in 2018), but the waste is primarily deposited untreated at disposal sites that do not comply with any sanitary standards (Eurostat, 2020[251]; SORS, 2017[252]). Only 3% of waste was recycled in Serbia in 2018, with the rest ending up in landfill (SORS, 2017[252]).There are only 10 operating sanitary landfills, and no composting centres or incinerator facilities. Local stakeholders also reported an estimated 3 000 wild dumpsites (CEVES, 2018[144]). There is no systematically organised collection, sorting and recycling of separated municipal waste, although primary waste selection in Serbia is defined by law. Hazardous waste is also often mixed with municipal waste or piled up in temporary storage facilities.[148]

Serbia's **municipal solid waste management framework** is relatively well developed. There have been no major changes since the last assessment except for the adoption of a new regulation on the reduction of packaging waste for the period 2020-24, which contains objectives for recycling and reuse of packaging waste and all packaging waste streams. The Law on Waste Management (2016) is the legal basis for waste management in Serbia. At the time of writing, this was being used to prepare the new Waste Management Strategy (2020-25) and National Waste Management Plan.[149] The new strategy will mark a shift from the model of regional sanitary landfills to regional waste management centres which will include waste sorting, separation and recycling, as well as non-recyclable waste treatment.

No systematic monitoring is taking place. The State of the Environment Report, one of Serbia's fundamental environmental reports which SEPA produces each year, provides a comprehensive assessment of the state of the environment and trends, and thus indirectly on waste management and progress towards a circular economy. SEPA also prepares the annual Report on Economic Activities of Importance to the Environment in the Republic of Serbia, which covers industry, energy, agriculture, forestry, tourism, and resource efficient and circular economy. These two reports also describe the funds for subsidies and other incentive measures, which include incentives for waste re-use and recovery, i.e. for the recycling industry.

In addition to SEPA and MoEP, a number of bodies[150] are involved in municipal solid waste management. Vertical (national and local) institutional co-ordination is ensured through special working groups and commissions for drafting national regulations. Opportunities for capacity building in local governments are regularly offered through various projects in Serbia, implemented by the donor community.

As in other WB6 economies, waste collection and treatment infrastructure in Serbia is financed through waste collection fees, budgets and donor funds, while services are funded from waste collection fees. Some investments into new waste treatment facilities have been made since the last assessment[151] and measures have been taken to combat unregulated burning and illegal dumping of waste by the Sector for Environmental Monitoring and Precaution within the MoEP. Nevertheless, stakeholders report the existence of a large number of illegal landfills and the lack of systematic approach in prevention and sanction of illegal dumping and burning of waste. The undertaken measures proved ineffective as many institutions are involved in their realisation and the responsibility is often taken away from one body to another, making the introduction of changes difficult.

Sub-dimension 13.2: Natural asset base

With 24 443 m³ of water per year per capita, Serbia is a water-rich country, with far larger quantities of renewable internal fresh water resources per inhabitant than its WB6 peers (which averaged 11 560 m^3 of water per year in 2017) (World Bank, 2017[253]). In 2017, around 75% of water was used in the industry sector, mainly for cooling in electric power generation (SORS, 2017[252]), followed by agriculture (13%) and municipal use (14%)[152] (Worldometers, 2016[254]).

The freshwater management framework in Serbia is relatively well developed. The Law on Water (2012) and the Water Management Strategy (2017-34) regulate this area, but the level of alignment with the EU *acquis* on water quality remains moderate (EC, 2020[36]). While the first steps towards development of the Water Management Plan for the Territory of the Republic of Serbia (2021–27) were taken at the end of 2019, its progress has been rather slow (Coalition 27, 2020[255]).

The provisions of the Law on Water apply to all surface and groundwater, prevention of pollution at source, emissions control and water quality standards, and prevention and protection against flood risks. In 2019, Serbia adopted a Regulation on Establishing a General Flood Protection Plan which covers a six-year period and stipulates measures to be undertaken in periods of high water, as well as institutional responsibilities, the interpretation of data, forecasting and flood alerts. However, the Flood Risk Management Plan has not yet been adopted. The development of the plan is required by the Law on Water, as well as the EU directive on assessment and management of flood risks (Coalition 27, 2020[255]). Mapping of flood hazards and risks is still at an initial stage, mainly due to the lack of human and financial resources and data availability (EC, 2020[36]).

The law also regulates licences for the construction of hydropower plants. These require a detailed environmental impact assessment (EIA) and strategic impact assessment to be conducted. Yet, this procedure seems to be widely circumvented: there are cases in which hydropower licences were issued before the EIA report or which did not take the EIA report into account when issuing a licence. The most recent violation of this sort was in 2019, when the MoEP banned an investor in a mini hydropower plant from performing any work in the village of Rakita in Eastern Serbia, in the Stara Planina national park – although the municipality had issued a permit for it – and ordered the investor to restore the location to its original state.[153]

Approximately 90% of the Serbian territory lies in the Danube River Basin, the second largest in Europe, and Serbia is part of other transboundary basins, the Sava, Tisa and Drina. Work on the river basin management plan is progressing slowly, as such a plan has yet to be prepared and adopted (EC, 2020[36]).

Numerous bodies are responsible for freshwater management in Serbia. The Ministry of Agriculture, Forestry and Water Management is the main body but its administrative capacities remain limited, in particular for monitoring, enforcement and inter-institutional co-ordination. SEPA conducts annual water status monitoring and as part of this work it plans the development and supervises the functioning of the state network of stations for water quality monitoring.

As in the previous assessment, no data or projections of water demand from agriculture, industry (including energy) and households are collected, so cannot guide decisions about handling competing uses now or in the future. Data on water risk management – meteorological data (including data on rainfall) and historical data on water disasters – are available, but not all are publicly available or communicated to citizens to increase awareness of water-related risks.

The **biodiversity and forest management frameworks** have been slightly improved. The Nature Conservation Programme (2020-22) was being prepared at the time of drafting. Although the scope of the draft Nature Protection Programme (2021-23) is harmonised with the Law on the Planning System, the period it covers is significantly shorter than that stipulated by the Law on Nature Protection. The previous Biodiversity Strategy of the Republic of Serbia (2011-18) is currently being revised.

Numerous bodies[154] are responsible for biodiversity and forestry in Serbia, but institutional and human resource capacities at national and local level remain weak, particularly regarding enforcement (EC, 2020[36]). Capacity building and training are being conducted, mostly as part of various regional or national projects or through the National Academy for Public Service.

SEPA develops biodiversity, forestry, hunting and fishing indicators, as well as on sustainable use of natural resources, and prepares national reports. However, a fully operational system for monitoring biodiversity is still being developed. SEPA co-ordinated and prepared the Sixth National Report of the UN Convention on Biological Diversity. Serbia had not attained Aichi Target 11[155] at the time of drafting; its terrestrial protected area stood at 7.6% of its total landmass in 2019 (instead of the 17% target by 2020 set in the Aichi Target 11) (Ministry of Environmental Protection of the Republic of Serbia, 2019[256]).

Forests make up a smaller share of Serbia's total land area (31%) than the WB6 average (42%). It has made some changes to the legislative framework since 2017, such as the amendments to the Law on Forests, adopted in 2018. The Second National Forest Inventory[156] (the first was in 2009) and the National Forestry Programme were being developed at the time of drafting. There are no reports on the implementation of the Forestry Development Strategy of Serbia, which was adopted in 2006 and formally expired in 2018 when the Law on the Planning System came into force, even though the law stipulated that the revised policy document needs to include *ex post* analysis of the implementation of the previous one. There is no systematic monitoring in place but instead monitoring takes place indirectly through the monitoring of the health of forests within the Monitoring and Assessment of Air Pollution Impacts and its Effects on Forest Ecosystems in Serbia.

Although the preparation of the Law on Trade in Timber and Timber Products has been announced, there has been no action to adopt new strategic or legislative documents to transpose EU legislation in this area.[157] The Law on Forests prescribes penalties for illegal logging and timber trading but they are rather mild, or poorly enforced in practice. Out of 1 519 misdemeanour charges filed in 2017, 433 people were fined an average of EUR 70 each for illegal logging (Forest Directorate of Serbia, 2017[257]). Although national statistics and official reports show extremely low levels of illegal forestry activities, by combining data with other sectors, primarily energy, it is possible to conclude that illegal logging levels in Serbian forests are several times higher than reported by the Directorate of Forests and the Statistical Office of Serbia. Over one million households in Serbia use wood as the main energy source for heat and cooking in a very inefficient way.[158] Moreover, according to local stakeholders, the lack of appropriate planning and control of the use of privately owned forests remains a significant issue in Serbian forestry. They report that data about privately owned forests, needed for appropriate forest management, are often of poor quality or unavailable.

The **land-use management** policy framework in Serbia was being developed at the time of drafting. The legal framework is well established through the Law on Soil Protection (2015), on the basis of which Serbia is in process of establishing a national soil monitoring programme. Serbia was also preparing a new Spatial Plan for the period 2021-35 at the time of drafting.

SEPA, as an administrative body within the MoEP, carries out state administration tasks related to the development, harmonisation and management of the national environmental information system within the land information system. It has a legal obligation to report on the state of the environment in Serbia, which it does through the Change in Land Use indicator.[159] The SORS covers agricultural land and publishes key indicators on the land usage and cover of agricultural and farm structures. The data are updated through several surveys run approximately every five years, with the last one being conducted in 2018 (SORS, 2018[258]). However, little information can be found about other key indicators related to land-use management including whether they are georeferenced and harmonised with government bodies like property tax and forest management, or if the data are publicly available.

Sub-dimension 13.3: Environmental quality of life

Air quality in Serbia remains a concern. The population is exposed to air pollutants like fine particulate matter ($PM_{2.5}$) levels that are more than twice those guidelines set by the WHO[160] (25 μg/m^3 as compared to 10 μg/m^3) (World Bank, 2017[259]). The main sources of outdoor air pollution include the energy sector (thermal power plants,[161] district heating plants and individual household heating), the transport sector (due to an ageing vehicle fleet), waste dump sites and industrial activities (oil refineries, the chemical industry, mining and metal processing and the construction industry) (WHO, 2019[260]). Air pollution has become of even greater concern during the COVID-19 pandemic as it is known that exposure to ambient and indoor air pollution increases the risk of cardiovascular, respiratory and developmental diseases, as well as premature death, thus making individuals even more vulnerable to COVID-19 (OECD, 2020[261]). Air pollution also contributes significantly to the overall burden of disease and premature death in Serbia, which has higher estimated premature deaths due to air pollution than most countries in the EU (World Health Organisation, 2019[262]).

Serbia recognises the seriousness of the health risk from air pollution and it is managed through a relatively well-developed legislative and policy **air quality framework**. No major changes in the legislative framework have been recorded since the last assessment, but the policy framework has seen the adoption of the National Plan for Reducing Emissions of Major Pollutants from Old Large Combustion Plants (NERP) was adopted in January 2020. This plan aims to reduce total annual emissions of sulphur dioxide, nitrogen oxides and particulate matter from the combustion plants it covers, to meet limit values prescribed in the plan by 1 January 2028 the latest. Supported by an EU-funded project,[162] Serbia was also developing the Air Protection Programme with an action plan at the time of drafting (to be finalised in 2021). This Program is expected to provide a basis for further development and adoption of by-laws and continued implementation of the EU legislation in the field of air protection.

Air quality plans have also been developed at the local level. Since 2013, 6 out of 13 local governments have obtained the ministry's approval for their plans, including 4 since the last assessment. However, Serbia's annual air quality report for 2018 lists 11 urban agglomerations with air pollution above the limits,[163] 5 of which do not have air quality management plans in place (EC, 2020[36]). Also worrying is the lack of funding for environmental protection and investment in climate change by the largest air polluters in Serbia. The pollution caused by the Kostolac B thermal power plant needs to be addressed as a priority (EC, 2020[36]).

Numerous bodies are responsible for air quality, but the lack of human resources and insufficient funding at all three levels (national, provincial and local) are a continuing problem, with clear consequences for operational monitoring and reliable assessment of air quality in zones and agglomerations. Capacity building is regularly offered, mostly though the support from the international community. Horizontal and vertical co-ordination have been functioning well.

SEPA regularly monitors air quality, conducting automatic air quality monitoring at the national level. It maintains the air quality information system (as a subsystem of the environmental protection information system), conducts laboratory analyses of air samples, carries out regular calibration of equipment and produces annual and periodic reports on the state of air quality, thus enabling decision makers to take measures to reduce air pollution. SEPA publishes monthly reports on the state of air quality, based on data obtained from the state and local air quality monitoring networks. It also prepares and publishes an annual report on the state of air quality.

No mitigation measures have been specified for when air pollution thresholds are exceeded, which means that there is often no immediate response, especially from local governments. According to the Law on Air Protection and the accompanying by-laws, SEPA is obliged to inform the public about the exceedance, which is done exclusively through the website in real time. According to data obtained by SEPA, around 2.5 million people, or one-third of the Serbian population, have been exposed to excessively polluted air. At the same time, local stakeholders report incomplete data about air pollution, due to insufficient monitoring infrastructure (in particular in rural areas) and the number of pollutants monitored. Local stakeholders confirm that the data provided should be interpreted with caution, due to limited availability of valid hourly data provided by the state air quality monitoring network. Only 48% of stations provided valid data in 2019 (Coalition 27, 2020[255]). Local stakeholders also noted that the air quality monitoring framework does not stipulate clear obligations for polluters, thus impeding the efficiency of responses.

Another element that strengthens public health by reducing health risks is a high-quality **water supply and sanitation (WSS) system**. Although traditionally Serbia has good access to drinking water with proven water service continuity, the quality of the water is rather low, especially in rural areas and the Autonomous Province of Vojvodina, in the latter due to high concentration of arsenic in the groundwater (Serbian Environmental Protection Agency, 2020[263]). Untreated sewage and waste water are still the main source of water pollution (EC, 2020[36]). Around 58% of the population is connected to public sewerage systems, but only 10.5% are connected to public sewerage served by a wastewater treatment plant. This is higher than the WB6 average of 6.5%, but lower than the EU average of 86% (Eurostat, 2020[264]). In 2018, 42 municipal wastewater treatment plants were operational in Serbia, but worked at lower efficiency level and 18 are still under construction or being rebuilt (Serbian Environmental Protection Agency, 2019[265]).

Serbia has made no major changes to its WSS legislative and policy frameworks since the last assessment (2018). It still needs to make significant efforts to align its legislation further with the EU *acquis*, and to strengthen administrative capacity, in particular for monitoring, enforcement and inter-institutional co-ordination (EC, 2020[36]). As mentioned in the section on freshwater management, the government failed to adopt the action plan for the Water Management Strategy (2017-34), which impeded appropriate implementation in the field.

The Ministry of Agriculture, Forestry and Water Management, and the Ministry of Construction, Transport and Infrastructure, as well as local enterprises established by municipalities, are the key bodies responsible for wastewater management in Serbia. However, the administration is of the view that they do not have the financial and human resources to undertake their assigned responsibilities and nor are there any regular activities aimed at building their capacity. No horizontal or vertical co-ordination tools exist in this area, which impedes effective implementation of the envisaged measures.

The water supply network in Serbia is very old (approximately 35 years) and that is one of the main reasons for the large water losses in the system, around 33% in 2019 (State Audit Institution, 2019[266]). Despite these statistics, the government has not taken any action to reduce these losses. Additional investments in wastewater treatment plants are planned, but they remain largely dependent on donor funding. Current water service fees have proved too low to cover or even supplement investment in WSS infrastructure; indeed they aren’t even covering the operational costs of the system.

At the time of drafting, the strategic **industrial waste management** framework (the Waste Management Strategy 2020-25 and the National Waste Management Plan) was being updated, together with the establishment of the National Soil Monitoring Programme. Alignment with most of the EU *acquis*, including the Industrial Emissions Directive, is at an early stage. Serbia adopted its long-awaited national emission reduction plan in 2020 and established a database strengthening the monitoring of Seveso III operators[164] (EC, 2020[36]). Serbia has a high level of alignment with the EU *acquis* on chemicals; in 2019, it opened an online platform for registering biocidal products (EC, 2020[36]).

Urban soils are being monitored locally in order to determine contamination levels and potential risks to population health, with SEPA collecting data from local authorities. The monitoring includes the concentration of hazardous and harmful substances in soils in industrial zones, zones situated near the roads, drinking water supply zones, recreational and residential zones, agricultural areas, and zones near landfills.

Reporting on contaminated sites was established in 2020 through the Cadastre of Contaminated Sites information system, which is part of the environmental information system. SEPA maintains the cadastre,[165] which includes data on contaminated, endangered and degraded land, and is an integral part of the Land Information System.

The way forward for environment policy

Despite taking some important steps to improve the overall environment, especially in the areas of waste and freshwater management, biodiversity, and forestry, the authorities should still consider the following steps:

- **Step up efforts to combat air pollution and climate change, primarily by reforming power generation**. Serbia would need to phase out coal subsidies and start implementing renewable support schemes that are fully aligned with the EC’s guidelines on state aid for environmental protection and energy 2014-20. In particular, the share of incentives dedicated to renewables continues to be modest in Serbia compared to coal subsidies and almost half of them were dedicated to support the expansion of small hydropower plants, which continue to be more privileged than other sources (CEE Bankwatch Network, 2019[267]). Permanently closing two of its thermal power plants (Kolubara A and Morava) and installing the best-available modern filters for the Kostolac plant are highly recommended. Subisidies for renewable energy should prioritise solar and wind over hydropower to address the current support imbalance and negative practices that have harmed biodiversity. High levels of pollution are also linked to socio-economic conditions, as most citizens depend on coal as a low-cost source of energy. Subsidies could therefore be considered for other forms of heating, such as solar space heating.

- **Invest in improving the water supply and sanitation system and treating more waste water**. Despite its abundant freshwater, Serbia faces increasing water pollution, mostly as a result of continuing discharges of municipal and industrial wastewater into the rivers, a large number of illegal dumpsites, uncontrolled waste deposits, and pollution from agriculture sources. Inadequate sewage infrastructure is a significant cause of surface and underground water pollution due to the inadequate collection and treatment of waste water. Serbia's ageing infrastructure is also at the root of high levels of water losses. This is why it is important to conduct a thorough investigation of the situation and identify key investment priorities. The government should try to finance these projects as much as possible from the domestic budget and water tariffs (taking into account the needs of poor and vulnerable groups in the population). If it does reaching out for support from donor funds, it will need to make sure such funding flows regularly to ensure sustainable maintenance of the water supply and sanitation system.

Agriculture policy (Dimension 14)

Introduction

Serbia has significantly improved its performance in this dimension. Its score has increased from 2.8 since the 2018 *Competitiveness Outlook* to 3.1 in this assessment (Figure 25.1), with notable progress in enhancing its agricultural support systems.

Table 25.26. Serbia's scores for agriculture policy

Dimension	Sub-dimensions	Score	WB6 average
Agriculture policy dimension	Sub-dimension 14.1: Agro-food system capacity	2.5	2.8
	Sub-dimension 14.2: Agro-food system regulation	3.3	2.9
	Sub-dimension 14.3: Agricultural support system	3.3	2.7
	Sub-dimension 14.4: Agricultural innovation system	3.0	2.6
Serbia's overall score		**3.1**	**2.7**

State of play and key developments

Agriculture is an important sector for Serbia, accounting for 6.2% of total GDP in 2019 (SORS, 2020[127]). The importance of the agricultural sector is also evident in in its contribution to employment: it accounted for 15.1% of total employment in 2020 (SORS, 2020[127]). However, only 51.6% of the total agricultural workforce are formally employed, and around 19% are already aged over 65. Agricultural land takes up 39.3% of the total land area, with arable land accounting for 29.6%. In 2018, arable made up 74.1% of land under agricultural use, while 5.3% was plantations/orchards, 0.6% vineyards, 10.1% permanent grasslands and 9.3% pastures. Cereals accounted for 66.3% of arable land, industrial crops 19%,[166] vegetables 1.9% and fodder crops 8.9%.

Agriculture is one of Serbia's top five export sectors: (SORS, 2020[127]) food and livestock accounted for 13.2% of total exports in 2019; maize and raspberries (frozen, no sugar) were among the top ten exported goods. Serbia is the world's largest exporter of frozen berries (raspberries, blackberries, mulberries and loganberries). In 2019, it exported 148 000 tonnes of frozen berries valued at more than USD 250 million, 30.5% of the world's exports.

Serbia is among the top five global producers of raspberries and plums, cultivating 127 011 tonnes of raspberries and 430 199 tones of plums in 2018. After fruit, grain is the dominant crop: it produced 6.2 million tonnes of maize (corn) and 2.1 million tonnes of wheat in 2018, making Serbia among the 30 largest producers of these crops in the world. In 2020, compared to 2018, maize production has increased by 9.6% and plums by 4.2%. Over the last decade, production of wheat (17.8%), maize (29.4%), sunflower (26.3%) and soya (60.3%) have all increased.

In 2019, crops accounted for 66.3% of total agricultural production, while livestock accounted for 33.7%. The net index of the volume of agricultural output increased by 14.3% over 2018. The value of livestock production also increased by 1.3% over the previous year while the production of raspberries increased by 7.4% and sour cherries by 70.9% (SORS, 2020[268]).

The COVID-19 crisis has affected all sectors of the Serbian economy, with most of the impact felt in services and tourism, resulting in reduced incomes, significant financial losses, increased unemployment, and the closing down of a number of small and medium-sized service providers. The agriculture sector also faced difficulties that have broken value chain linkages. Movement restrictions (lockdown) closed the traditional open green markets and prevented visitors coming to farms providing agro-tourism services (especially during the weekends). Lockdown, uncertainty and widespread fear of the virus created significant gaps into provision of seasonal labour, especially in March-June 2020. Complications with the transport of goods (both domestic and export) has slowed down the performance of the agriculture sector overall. Some of Serbia's traditional agriculture export markets saw significantly decreased demand for some products (mostly fruits, lamb meat). On the other hand, the demand for wheat (flour) has increased.

In September 2020, the SORS noted an overall increase in the agriculture sector of 2.5% overall compared to 2019% (SORS, 2020[269]). The buy-out prices of most of the crops have remained the same as in 2019, or slightly increased. The most significant fall in prices has been in the livestock sector where broilers fell by 5.46%, pigs by 4.04% and calves (veal) by 8.68%. Comparing August 2020 with August 2019, prices rose for industrial crops (13.3%) and fruits (30.3%). Salaries in the agriculture, hunting and forestry sector fell by 10.2% compared to 2019, while employment in the sector fell by 1.8%. Exports of agriculture products (January-August 2020) increased by 7.8%, while imports decreased by 0.9%. The government adopted a few measures to support agricultural producers, including financial support measures (per ha/per head) to agricultural producers to mitigate the negative consequences to agriculture in April 2020. It also granted all types of agricultural producers preferential access to financial products (credit lines, leasing), prolonged grace periods, lower interest rates, paid insurance on financial products, etc. In September 2020 it introduced financial support measures (per head) to veal producers and slaughterhouses to mitigate the reduction in market demand caused by COVID-19.

At this stage, the government appears to have successfully mitigated the immediate and medium-term impact of COVID-19 on the agriculture sector. The support measures have been welcomed and widely used by producers. At the time of writing, even though the infection rate is increasing strongly in Serbia and the region, the government has completely changed its strategy compared to April 2020. Borders are open for the whole region (Albania, Kosovo, North Macedonia) without PCR tests and there is free movement for both people and goods, which should protect the economy from the harmful effects of COVID-19. This will not have any significant impact on agriculture during the winter period, when activity levels are very low.

Sub-dimension 14.1: Agro-food system capacity

Serbia has significantly enhanced its **rural infrastructure policy framework** over the last decade, with large projects investing in greater connectivity and faster expansion of broadband access in rural areas. Serbia's national rural infrastructure policy predominately falls under the remit of the Ministry of Agriculture, Forestry and Water Management (MAFWM)[167] while provincial secretariats[168] handle regional rural infrastructure. While these secretariats are independent and have their own budgets, their measures and activities are consistent with the policies of national ministries.

Serbia's investment in infrastructure, particularly in road construction and the railway network, reached close to EUR 3.5 billion in the period 2016-20. The E-80 corridor from Nis to the Bulgarian border was completed in 2016, enabling faster movement of goods and people from Bulgaria and Turkey to the EU. The E-75 road corridor was completed in 2019, enabling faster movement from the border with North Macedonia to the borders with Croatia and Hungary. The highway Milos Veliki from Belgrade to Cacak towards Montenegro, connecting the Ibar Valley to Belgrade, was completed the same year. Sizeable investments were also made in the E-70 corridor linking Serbia with Romania and Croatia which was completed in 2011.

Apart from these large-scale projects, there have been a number of ongoing investments in the rehabilitation of local roads, bridges and river banks. In August 2019, Serbia announced a EUR 12.4 billion investment plan for 2020-25, of which EUR 3 billion of which was allocated to improving sewage systems in rural areas while an additional EUR 1.3 billion was allocated to improving local and regional speed railways.

The MAFWM has implemented the Rural Development Strategy for the protection, development and use of agricultural land including land consolidation and the restoration of field roads. In 2019, the rulebook on subsidies for investments in physical assets of agricultural holdings for field electrification was adopted, defining support for investments related to electrification of fields. The goal is to accredit this measure as part of rural infrastructure in the Instrument for Pre-Accession Assistance in Rural Development (IPARD) programme and to provide users with support for the realization of investments.

As of November 2020, the Ministry of Trade, Tourism and Telecommunications has begun implementing the Last-Mile Broadband to Households in White Zones in Rural Areas project, aimed at households that are not targeted for network expansion by any commercial operator in the next three years – see Digital society (Dimension 10).

In addition to the national budget, funding is provided through the World Bank, the EBRD, the EIB, and the European Agency for Reconstruction (EAR), as well as the China Investment Fund[169] and Abu Dhabi Fund[170] with an investment plan of EUR 300 million in agriculture infrastructure for the period 2013-21.

When it comes to Serbia's **irrigation policy framework**, the new irrigation strategy for 2020-30, which is under preparation, should include measures to use water more efficiently, considering Serbia's overall low water productivity. The current irrigation infrastructure is underused and in need of rehabilitation while drainage systems remain limited.

In 2018, a total of 159 587 ha was covered by irrigation systems, which is 6.18% of arable land in Serbia (which totals 2.58 million ha). Only 46 863 ha of agricultural land was actually irrigated in 2018, which represents 29.3% of the total area covered by irrigation systems.[171] In 2018, 33% of all Serbia's farms could use some form of irrigation system (564,540 ha). The commonest form of irrigation system is through sprinklers. Of the total irrigated area in 2018, 92.3% was irrigated by sprinklers (down 1.6% on the previous year), 7.6% by drip irrigation (up 1.6%) and 0.1% by surface irrigation.

At the end of 2019, the government announced the EUR 14 billion Serbia 2025 investment programme for economic development, with EUR 300 million earmarked for investments in agriculture. A sizeable amount of this investment (EUR 86 million) has been allocated to developing irrigation and drainage systems that will double the arable land under irrigation and drainage. The National Programme for Rural Development 2018-20 also provides support for three types of irrigation measures. Farmers and water users' organisations can apply for support to buy new irrigation equipment (50% support) or new irrigation systems (100% support). Water supply/irrigation public companies can apply for 100% support for preparing technical documents for new irrigation systems. IPARD also provides support for the use of groundwater (from springs and wells) and surface water (from rivers, lakes and reservoirs), and the construction of irrigation systems, including pumps, pipes, valves and sprinklers, which replace old inefficient systems and contribute to reducing the amount of water used.

In 2019, the Government of Serbia signed a memorandum of understanding (MoU) with the EBRD to implement joint programmes and investment activities aimed at strengthening Serbia's agri-food sector. One of the priority areas of co-operation set out in the MoU is upgrading, expanding and modernising irrigation infrastructure and water management systems to reduce farmers' vulnerability to climate change. The programme describes on the financing, construction and rehabilitation of critical irrigation infrastructure in three regions of Serbia: Negotin (Eastern Serbia), Svilajnac (Central Serbia), and Vojvodina (Northern Serbia) with a total of EUR 30 million. It also continues policy dialogues with the MAFWM by assisting in the preparation of Serbia's first Irrigation Strategy and a five-year action plan.

As part of the co-operation between Serbia and the United Arab Emirates, the current Abu Dhabi Fund for Serbia, envisages EUR 300 million support, with more than 30% for investment in irrigation. As of 2017, the fund had supported 12 irrigation projects, and planned to finalise an additional 10 by the end of 2020. The projects cover investment in small to medium-sized irrigation/drainage systems, each covering around 1 000-3 000 ha.

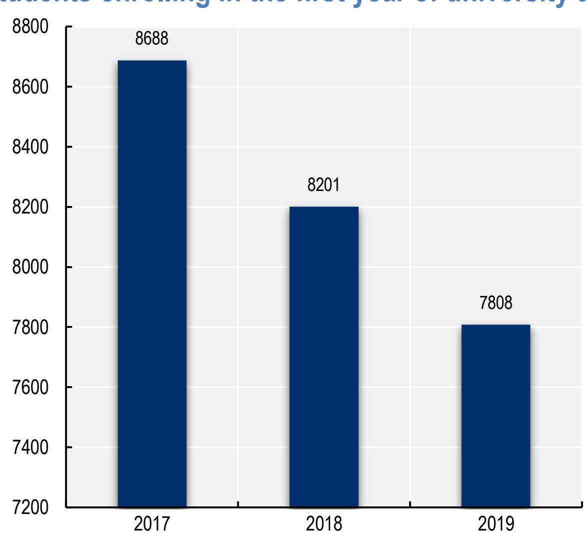
Serbia has made progress in updating the legislation on qualifications and establishing monitoring and evaluation of **agricultural education**. The educational system in agriculture is regulated and organised by MoESTD while the Institute for Improvement of Education is responsible for preparing the initiatives and reforms introduced by MoESTD. In 2020, Serbia adopted the By-law on Special Educational

Programmes which defines the implementation of teaching and learning in case of a state of emergency or unpredictable circumstances, in particular, the ongoing COVID-19 measures.

Agricultural education in Serbia is covered by 4 universities and 26 secondary schools, which are supported by 16 specialised research institutes predominantly focused on technologically advanced production. The four universities are the faculties of agriculture at the University of Belgrade, the University of Novi Sad, the University of Kragujevac and the Faculty of Bio Farming at the Megatrend University in Belgrade.[172]

The share of students enrolled in agriculture, forestry, fisheries and veterinary tertiary programmes in Serbia increased from 2.45% in 2018 to 3.39% in 2019 (Trading Economics, 2021[270]). While the number of students graduating from high school agriculture programmes has slightly increased, the number enrolling in the first year of university agriculture programmes fell from 9 147 in 2017 to 8 201 in 2019 (Figure 25.18). In secondary vocational schools, the share of students enrolling in agriculture, food production and processing increased from 6.5% of total high school students in 2017 to 6.7% in 2018. In 2018, 49% of farmers had completed primary education, 45% had completed secondary education and 6% completed tertiary education. Only 0.7% of all employees in Serbia are skilled agricultural, forestry and fishery workers.

Figure 25.18. Number of students enrolling in the first year of university agriculture programmes



Source: (SORS, 2020[214]), *Statistical Yearbook 2020*, https://publikacije.stat.gov.rs/G2020/Pdf/G20202053.pdf.

The Strategy for Education Development in Serbia 2012-20 aims to improve the quality of education, increase the share of the population covered at all educational levels, maintain the relevance of public education, and increase the efficiency and use of all education resources. A new strategy to follow on from this is currently being prepared. In line with the strategy's action plan, MoESTD established the Qualifications Agency and 12 sectoral councils in 2018, one of which is the Council for Agriculture, Food Production, Forestry, Fishery and Veterinary Sectors which is responsible for updating the skills, qualifications, education and training required to practise in these fields.[173]

Serbia has also begun implementing an evaluation mechanism for the agricultural education system. In March 2020, the national system for assessment of the education and its outcomes was established as an education management information system, on the basis of the education strategy. The system is connected to the SORS, which is in charge of gathering and managing education data in the fields of economy, agriculture, finance and regional policy, as well as the Institute for Education Quality and Evaluation. The first results from the systems are expected next year and the information gathered will serve for planning and implementation of education programmes in agriculture.

Sub-dimension 14.2: Agro-food system regulation

Serbia has made progress regarding **regulations on natural resources** through an enhanced land consolidation process and the Land Parcel Identification System (LPIS), but inter-institutional co-operation is lacking. Natural resources in Serbia are the remit of the MAFWM and MoEP but inter-sectorial co-operation between the two ministries is limited, and there is no committee or administrative body where they could formally share information regarding the activities and challenges. Several regulations cover this field including the Law on Land Protection,[174] the Law on Environmental Protection,[175] the Law on Planning and Utilisation of Natural Resources, the Law on Nature Protection, and the Water Law,[176] which is harmonised with EU directives.

Recently, Serbia has emphasised land consolidation as a way to increase agricultural production. A new draft Law on Land Consolidation is being prepared, which will define the reasons and conditions for initiating land consolidation; land consolidation procedures; competent bodies, organisations and other bodies to implement land consolidation; sources of land consolidation; and other issues of importance for land consolidation, as well as the procedure for voluntary grouping of land. The Strategy for Rural Development 2014-24 also prioritises land consolidation to improve agriculture competitiveness, while the Serbia 2025 programme allocates an additional EUR 70 million to land consolidation processes.

The National Strategy for Sustainable Use of Natural Resources and Goods[177] also aims to further protect land and minimise damage and loss of agricultural land due to natural resource extraction. However, there has been no significant progress in the implementation of this strategy in relation to agriculture (World Bank, 2020[271]) Efforts to increase investment and productivity in agriculture continue to be hampered by land tenure uncertainty, the fragmentation of farms, and the incentive structure of agricultural subsidies. Large tracts of arable land continue to be owned by the state, including in zones with high production potential. The MAFWM has been offering state-owned land on multi-year leases (5-40 years), especially after 2018. There are now multi-year lease agreements covering 161 212 ha of state agricultural land. The ministry has also granted approvals for investments in agricultural infrastructure on 10 259 ha of leased agricultural land.

The LPIS[178] is an important tool for planning, implementing and monitoring support in agriculture. The main reasons for the establishment of both it and the Integrated Administration and Control System (IACS) are transparent and fair distribution of subsidies, easy identification and declaration of the land cultivated by farmer(s), easy control of declarations by the administration, reliable and accurate sources of information for policy and statistics on crops and area cultivated, and the assessment of policy impacts. As of November 2019, an EU project[179] has assisted in developing the technical software specification for the LPIS and land cover, developing a methodology, and training employees in the Directorate for Agrarian Payments and representatives of local self-government in the establishment of the LPIS. An analysis of the advantages and disadvantages of the four types of reference parcels has been done to select the most suitable type of reference parcel for Serbia. The LPIS pilot project (phase II) will include updating the LPIS methodology, developing an action plan to implement it across the whole of Serbia, and training on the new software.

When it comes to **regulations on products,** the regulations for seeds are comprehensive and regularly updated and thorough impact assessments and evaluations are conducted on an annual basis. The MAFWM is responsible for regulations on seed products which are based in the Law for Agricultural Plant Species, the Law on Seeds, the Law on Plant Health, and several rulebooks based on these laws. The Law on Plant Nutrition Products and Soil Improvers was updated in 2019 and regulates the classification, quality, designation, phytosanitary control and sampling for the sale, import and use of seeds and planting material. In adopting new laws and rulebooks for product regulations, impact assessments are conducted at least once a year. Officials of the Plant Protection Directorate are responsible for seeds and fertilisers.

The MAFWM established a Public Register of Plant Nutrition Products and Soil Improvers, available on its official website. The register contains over 2 500 plant nutrition products and soil improvers and is updated on daily basis. Entry in the register is enabled by the manufacturer, distributor or importer with approval of the ministry. Plant nutrition material, planting material and plant protection products are subject to documentation checks to identify shipments upon import. Sampling and testing are carried out to verify the product quality as mandated by the decision of entry in the Register of Plant Nutrition Products and Soil Improvers. Registrations are valid for a maximum of 10 years and can be extended by the ministry. If there is a suspicion that the plant protection product does not meet the conditions for registration, the ministry may initiate the procedure of reviewing the decision on registration. The register of agricultural plant varieties contains nearly 5 000 registered varieties and it is also regularly amended with new varieties.

Sub-dimension 14.3: Agricultural support system

The **agricultural policy framework** in Serbia is partially harmonised with the EU and there are multiple stakeholder consultation processes for the adoption of new policies. The creation and implementation of agricultural and rural development policies falls under the auspices of the MAFWM while at the local level, all municipalities have bodies responsible for local agricultural and rural development policies in their territories. Additionally, the Ministry for European Integration is responsible for monitoring and reporting on the harmonization of the national policies with Chapters 11, 12 and 13 of the EU *acquis*. Serbia's plan for the development of agriculture and rural areas is set out in the National Agriculture and Rural Development Strategy (NARDS) of Serbia 2014-24,[180] developed with the participation of over 200 stakeholders from universities, the food industry, producers' associations, individual producers, relevant ministries and other government bodies. The procedure for adopting agriculture policies in Serbia includes public debate during which multiple stakeholders have the possibility to send their suggestions regarding policy content.

Based on the NARDS, the National Agriculture Programme (NAP) 2018-20 aims to support the development of agriculture, in particular the implementation of the agricultural policy and its harmonisation with the EU and Common Agricultural Policy (CAP) requirements. Besides the NAP, there is also National Programme for Rural Development in the period 2018-20 that sets the medium-term courses for the development of rural areas and describes the methods of implementing rural development measures for 2018-20. As of March 2020, the preparations for drafting the next national programmes for agriculture and rural development for 2021-24 had been started, with six agriculture sectoral analyses completed.

The 2018-23 action plan for the transposition, implementation and enforcement of the EU *acquis* in agriculture and rural development covers agricultural policy reforms, legislation changes and the strengthening of administrative capacities in the period before the EU accession. The action plan provides an assessment of necessary resources and capacity development measures required to strengthen and implement programmes and control bodies, as well as establishing the Paying Agency and the IACS.

The National Programme for the Adoption of the Acquis 2018-21 is a detailed, multi-year plan for harmonising domestic regulations with EU regulations. It is designed to link European legislation and domestic legislation in order to monitor the pace, scope and quality of that harmonisation. EU law is divided according to the responsibilities of state bodies, which enables regular planning and monitoring of their legislative activities. However, the agriculture policy framework in Serbia is still only partially harmonised.

Serbia's **domestic support instruments for producers** in agriculture are comprehensive and numerous. Income support measures improve farmers' income by reducing variable costs and increasing gross margins. The milk premium is the only scheme based on price support, i.e. payment per output. Basic subsidies for plant and livestock production contribute to farmers' income by paying them a fixed amount per hectare/head. All subsidies are available to farmers registered in Farm Register but basic subsidies for plant production are limited to 20 ha per beneficiary while there are also limits on livestock subsidies, depending on the animal.

Support is provided for rural development investments that contribute to increasing competitiveness and reaching quality standards. The support rate for such rural development measures is a minimum of 30% of the measure value; for farms in areas with difficult working conditions in agriculture the minimum rate is 45%, rising to 70% for some districts. The rural development programme supports 15 measures, including investment in agricultural households' physical assets; investments in the processing and marketing of agricultural, food and fishery products; subsidies for the preservation and improvement of the environment and natural resources; support for organic production; and the conservation of plant and animal genetic resources. Rural development measures also focus on economic activities and income diversification in rural areas, as well as improving the transfer of knowledge and innovative projects in agriculture.

Support is provided through national measures to support rural development and through the IPARD programme. As part of the IPARD programme, two public calls have been made for investments in the physical assets of agricultural holdings. Users can receive up to 60% of the value of the investment and young farmers can up to 65%, up to a maximum of EUR 1 million per person. The same programme has issued three public calls for investments in physical assets related to the processing and marketing of agricultural and fishery products. Beneficiaries can receive support of up to 50% of the value of the investment, up to a maximum of EUR 2 million per person. Despite significant EU resources being allocated to agriculture in Serbia, the available investment funds are underused because of the limited uptake of development grants by small and medium-sized producers (World Bank, 2019[272]).

To help with risk management, farmers can receive support to cover 40% of their insurance premiums for crops, permanent crops, nurseries and animals (45% in areas with difficult agricultural conditions), to encourage them to insure their crops and animals and avoid losses in the event of natural disasters.

The MAFWM lacks the administrative capacity to deal with policy creation and implementation. Budgetary funding for agricultural subsidies and rural development are monitored and are used to plan funding for following years. The MAFWM publishes the Green Book (by 30 June each year), which contains a review of all budgetary spending on subsidies in the previous year, as well as an overview of production in the agricultural sector. It is available on the MAFWM's official website.

Monitoring and evaluation of implementation of the IPARD II programme is carried out on a monthly, bi-monthly, semi-annual and annual basis, as well as on request. During the preparation of the IPARD II programme, an *ex ante* evaluation was conducted, and evaluation has been ongoing during its implementation. An impact assessment will be conducted after implementation and will include the impact of the programme on innovation adoption, structural change and sustainability.

The current agriculture support system is funded by direct payments, rural development measures plus specific subsidies and credit support, and IPARD. All schemes are financed out of the MAFWM's annual budget, while the IPARD measures are co-financed by the EU fund. The annual regulation on allocation subsidies in agriculture and rural development defines the level of support for each scheme in that year. The current subsidies have been in force since 2013 and have since been harmonised, in terms of categorisation, with the CAP.

As almost all the schemes defined by the Law on Subsidies in Agriculture and Rural Development have been implemented, the entire budget for subsidies in agriculture and rural development is spent every year. There are no significant differences in the use of the national budget and IPARD fund, as the application procedures are similar, but IPARD applications are subject to several controls and are therefore more time-consuming than the national measures.

Although **agricultural trade policy** in Serbia is mostly harmonised with World Trade Organization (WTO) and EU standards, its customs regulations are unorganised and ambiguous. Agricultural trade policy is based on the Law on Foreign Trade which requires that measures affecting foreign trade, including in agriculture, are applied in accordance with WTO rules, EU legislation and commitments undertaken under international agreements. The law envisages the possibility of introducing quantitative restrictions in the case of a critical shortage of basic products, or to alleviate the effects of such a shortage. Tariff quotas are implemented through the Customs Administration within the Ministry of Finance. The use of quotas is registered and deducted after the goods have gone through customs, and an automatically updated overview of the use of quotas is available on the Customs Administration website.

Serbia has begun the process of negotiating its membership of the WTO[181] and begun consolidating the form and level of customs protection of agriculture. The liberalisation of trade in the region has continued through bilateral free trade agreements, under which significant agricultural concessions were agreed and later integrated into the Central European Free Trade Agreement (CEFTA). Tariff quotas are defined in the Stabilization and Association Agreement (SAA) with the EU, the free trade agreement with Turkey and the European Free Trade Association (EFTA) Agreement. Serbia does not apply export quotas except for sugar and some other products exported to the EU market, based on the SAA double-checking model.

There have been no export duties for agricultural products since 2013. Customs for the agriculture sector are regulated by the Law on Customs Tariffs, the Law on Specific Duties for Import of Certain Agricultural and Food products, and the Customs Law which includes the Decision on Seasonal Tariff Rates for products such as flowers, vegetables and fruits with *ad valorem* rates of 20%. As tariff protection for agricultural products is subject to decisions by the government, agricultural trade policy is unpredictable and not transparent. Serbia's accession to the WTO will consolidate customs regulations into a single piece of legislation and establish a binding maximum level of tariffs.

In terms of its **agricultural tax regime**, Serbia applies reduced taxes on agriculture products. The taxation system distinguishes between agricultural holdings and individual agriculture. Agricultural legal entities enjoy the same tax treatment as all other legal entities, and are included in the corporate income tax system. Individual farmers are natural persons, and are included in the personal income tax system. A natural person who generates income from agriculture, and does not have the status of entrepreneur, is not obliged to keep business and financial records.

In principle, farmers in the Republic of Serbia are not VAT payers, even when their total turnover is more than RSD 8 million. They can voluntarily choose to pay VAT by submitting a registration application, in which case the obligation to pay VAT lasts for at least two years (Article 34, paragraphs 5-7 of the Law on Value Added Tax). After two years, their status as VAT payers does not cease automatically, but they must submit the appropriate request. The situation is different for farmers who have entrepreneur status and who keep books. They become VAT payers once their total turnover exceeds RSD 8 million. However, since they choose freely whether or not to have the status of an entrepreneur, entering the VAT system can also be seen as a choice. When they enter into the VAT system, farmers are subject to the same treatment as other VAT payers.

The standard VAT rate in Serbia 20%, and the reduced rate for agricultural products is 10%. In most cases, VAT on agriculture products is at the reduced rate. VAT for agricultural inputs that are not produced in Serbia are updated every year based on a proposal by the MAFWM to the Ministry of Finance, most of which are technical production machinery and equipment. Personal income tax is 10% but increases for those whose income is three times the average salary, by an additional 10% on the difference between their net earnings and the average salary.

Although Serbia's annual programmes for plant health are aligned with the EU, the organisation and monitoring of its **sanitary and phytosanitary (SPS) measures** are still being developed. The veterinary and food policies need further improvement in the process of alignment with EU legislation. The authorities responsible for SPS measures are the Veterinary Directorate, the Plant Protection Directorate and the Sector for Agriculture inspection under the MAFWM, and the Sanitary Inspection Sector under the Ministry of Health. SPS regulations are based in the Food Safety Law which covers the organisation, implementation and monitoring of SPS measures as well as the division of responsibilities, and the Law on Inspection Control.

The annual programmes for plant health measures have been adopted and the list of approved active substances in pesticides is aligned with the EU. While duplication may occur over composite products, due to their complex structure, this is rare and the responsibilities for inspection are clearly divided in the Law on Food Safety. This law was amended in 2019, adopting the rulebook on the division of competencies regarding food safety and listing composite foods. Risk analysis for SPS measures and plant products uses the International Plant Protection Convention methodology, and phytosanitary inspections and financing are based on a risk approach.

Serbia lacks the capacity to introduce SPS initiatives as it has no written processes for the systematic evaluation of the quality of services and the capacity requirements of the organisations involved, and the overall system. However, the management hierarchy is clearly defined, as are the working plans and objectives. There is system for evaluating employees and in-house procedures, all of which could be a good basis for establishing written processes for the systematic evaluation of the quality of services. Due to a permanent shortage of staff to carry out phytosanitary inspections, 16 new inspectors were hired in 2020.

In 2019, Serbia adopted annual programmes for veterinary policies consisting of animal health protection measures. The further delegation of inspection duties from Phytosanitary in the Veterinary Inspectorate led to the employment of 39 new veterinary inspectors in 2020. Serbia has a large network of accredited reference laboratories with well-established data and information exchange between laboratories and inspections. Accreditation of the national reference laboratories directorate was extended for milk (additional methods), food and seeds for between 3 and 10 years, depending on the product. Although animal welfare legislation is mostly harmonised with EU regulations, some legislation remains to be amended, such as the regulation on official controls for slaughter. Serbia is also not fully harmonised with EU legislation over maximum residue levels of related substances, as the permitted level of aflatoxins in milk remains five times that permitted by the EU *acquis*.

Sub-dimension 14.4: Agricultural innovation system

Serbia has made substantial progress in improving its **agricultural research and development framework**. Research regulations are fully harmonised with the EU and the key EU research goals are incorporated into the policy on scientific and technical advancement. Serbia has continued its involvement in the EU research framework and international co-operation, through Horizon 2020 and Eureka.

The scientific work at the faculty level in Serbia is realised through basic, applied and developmental research. The aims are to raise the quality of teaching, improve the skills of scientific and teaching staff, introduce students to scientific work, create material conditions for work and development of the faculty, and develop new technologies and products, new species, breeds, varieties, etc. Research in the field of agriculture and food has always been in the most direct connection with the development of agriculture and the food industry of Serbia. Teachers, researchers and associates of the faculty participate in a large number of national and international projects.

Work has begun on the implementation of a new research and innovation plan for the next seven years and the Science, Technology and Innovation Roadmap, focused on the Smart Specialisation Plan. Some progress has been made with the new Science and Research Act and the introduction of the first Smart Specialisation Strategy, but no action plan for the strategy has yet been implemented.

Extension services in Serbia are comprehensive, widely available and commonly used by farmers. The **agriculture extension services framework** is based in the Law on Agricultural Advisory and Extension Services and several by-laws.[182] The key action plan is the Multiannual Programme for the Creation of Agricultural Advisory Services, along with seven statutory and administrative provisions.

The farm advisory system has 36 agricultural advisory and extension services (AAES), 31 of which are public and 5 of which are private, employing a total of 273 advisors. The work of the AAES is managed by the MAFWM (Sector for Rural Development, Advisory Group) and the Provincial Secretariat for Agriculture, Water Management and Forestry (PSAWMF), for the territory of the Autonomous Province of Vojvodina. Since 2016, the MAFWM and PSAWMF have authorised two organisations to educate and train advisors, monitor them and report on their work for a 10-year period, the Institute for Agricultural Science Application (IPN) and the (Poljoprivredna Stanica) (PSS) Novi Sad Education Centre. These approved entities assess the effects of the advisors' work and the advisory activities carried out by them in accordance with the Monitoring and Assessment Programme of the Work Effects of the Advisors.

Extension services are widely used by agricultural producers. The advisory work of the MAFWM is entirely financed in conjunction with the annual programme for the production of agricultural advisory services. Some groups of farmers are targeted for individual work with consultants and facilities and educational programmes are often offered free of charge. A training programme for advisory services is also available and is implemented periodically in conjunction with the annual training plan prepared by the approved organisation. There are also one-off initiatives to encourage creativity, environmentally sustainable practices and transfer of knowledge on farms.

The current rural development support mechanisms include subsidies for improving knowledge creation and transfer and the development of technical-technological, applied, developmental and creative projects in agriculture and rural development. Since 2006, the MAFWM has funded subsidies for the implementation of science, growth and innovation projects in agriculture with agricultural faculties in Belgrade, Novi Sad, Čačak and Lesak. Projects are carried out in close collaboration between research institutions and extension services. Impact evaluations are performed by the MAFWM and are updated based on the previous annual review of the operations of the extension offices.

The way forward for agriculture policy

For the further improvement of the agriculture policy, Serbia needs to:

- **Continue investment in irrigation infrastructure**. Irrigation and drainage are crucial to Serbian agriculture and can double yields, or even triple them in some agricultural sub-sectors. The current plans and strategies for investment in irrigation need to be implemented as planned to improve the competitiveness of Serbia's agriculture products.
- **Enhance the agriculture land management policy**. Full establishment of a functional and operational LPIS is crucial. The LPIS is one of the preconditions for accreditation of new IPARD measures and represents a strong tool for planning, implementing and monitoring agricultural support policy.
- **The Common Market Organisation** law needs to be adopted through secondary legislation in areas including marketing standards, public and private storage, and producer organisations.
- **Improve the performance of the Directorate for Agrarian Payments**. Accelerate the processing of applications for the measures already entrusted under the IPARD II programme in order to prevent any shortage of EU funds and begin to entrust the execution of the budget to the remaining initiatives of the programme.
- **Improve food safety policies.** After a proper and inclusive public consultation, Serbia needs to prepare a strategy and action plan for completing its alignment with the EU *acquis*. Although the rules on monitoring systems for food of animal and plant origin have been introduced, along with those for animal feed, will be important to further develop its risk-based approach to imports, including products subject to sanitary checks, and ensure that audits are carried out by inspection workers.

Tourism policy (Dimension 15)

Introduction

Table 25.27 shows Serbia's scores for the five tourism sub-dimensions and compares them to the WB6 average. Serbia has the second highest score in the tourism dimension (after Montenegro). Serbia scores higher than the WB6 average in all sub-dimensions. Since the previous assessment, Serbia has made only limited progress (Figure 25.1). Its main progress has been in improving the accessibility and quality of its tourism infrastructure by supporting investments in public and private infrastructure and establishing a mandatory accommodation categorisation system. The adoption of the Law on Tourism and the Law on Hospitality in 2019 provided a good basis for improving its accommodation quality assurance framework and the establishment of the central information system (E-Tourist) which will enable more accurate statistical monitoring of domestic and foreign tourists. Nevertheless, underdeveloped tourist infrastructure and poor-quality tourist services remain important challenges.

Table 25.27. Serbia's scores for tourism policy

Dimension	Sub-dimension	Score	WB6 average
Tourism policy dimension	Sub-dimension 15.1: Governance and co-operation	3.0	2.3
	Sub-dimension 15.2: Destination accessibility and tourism infrastructure	2.7	2.2
	Sub-dimension 15.3: Availability of a qualified workforce	2.0	1.8
	Sub-dimension 15.4: Sustainable and competitive tourism	1.7	1.6
	Sub-dimension 15.5: Tourism branding and marketing	1.8	1.6
Serbia's overall score		**2.3**	**2.0**

State of play and key developments

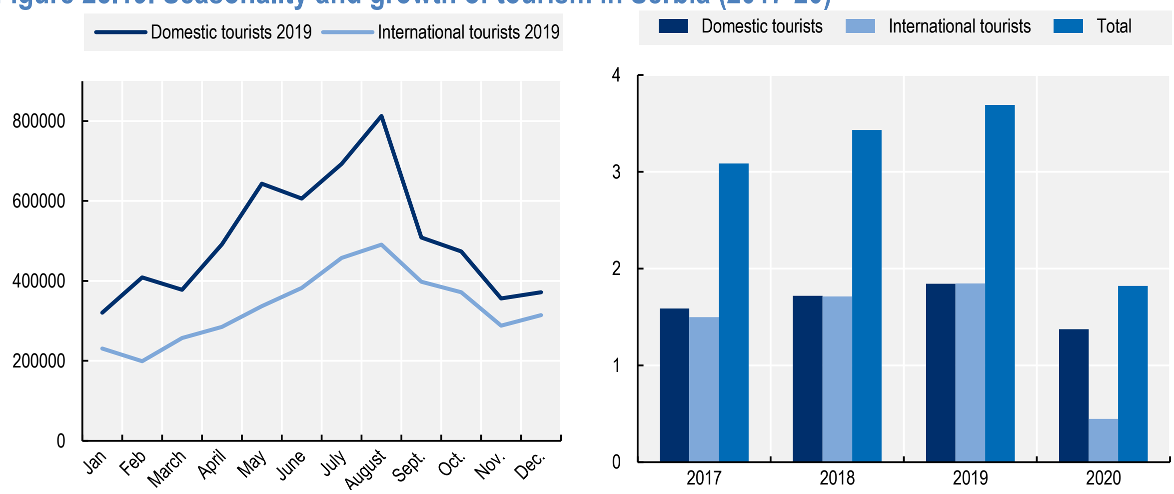
Tourism has not yet been recognised as an important sector of Serbia's economy. However, the rapid increase of tourist arrivals and overnight stays in the last ten years (11% average annual growth since 2010), and other positive trends indicate its growing economic importance. In 2019, tourism directly accounted for 2.4% of GDP (USD 2.99 billion) and 2.1% of employment, or 44 300 jobs. Overall, it was responsible for 6.2% of employment, or 134 800 jobs in tourism and tourism-related sectors (WEF, 2019[273]). In 2019, tourism accounted for 8.2% of Serbia's exports and tourism-related exports are growing faster than total exports (Radivojevic, 2020[274]). The industry attracted capital investment of RSD 33.8 billion, or 4.1% of total national investment. This is expected to rise by 2% per year to RSD 43.5 billion by 2028 (World Bank, n.d.[275]).

Serbia ranks second in the Western Balkan region, just behind Montenegro for average receipts per arrival. There were 3.7 million tourist arrivals in Serbia in 2019, an increase of 84.4% compared to the beginning of the decade (2010) (SORS, 2019[276]). Foreign tourism grew faster than domestic tourism, with foreign tourist arrivals growing by 170% to 1.8 million arrivals, and domestic tourists by 39.3% since 2010, which contributed to foreign tourist arrivals reaching 50% of total tourist arrivals in 2019 (Figure 25.17). This clearly shows the growing attractiveness of Serbia as a destination for foreign tourists.

This progress is a result of continuous improvement of Serbia's competitiveness in the global market. Serbia has made significant efforts to improve its standing in the World Economic Forum (WEF) 2019 Travel & Tourism Competitiveness Index by 12 places, ranking 83rd in 2019 (WEF, 2019[273]). This is, along with Albania, the fastest rise among the WB6 economies. The most prominent progress has been in improving the overall business environment. Serbia has improved its international openness (visa requirements reduction), construction permit procedures, human resources and labour market investment, and environmental sustainability. Nevertheless, key challenges remain; Serbia ranks 105th for the stringency of its environmental regulations and 116th for their enforcement in the index.

Serbia faces challenges in the sector, such as its relatively high seasonality (69% of tourist overnight stays are from April to October; Figure 25.19) and a high level of informality. This not only reduces the real impact of tourism on the economy but also hampers government efforts to improve its quality. Although there has been increased investment in public tourism infrastructure and transport (such as investments in new sections of highways or the new Morava Kraljevo airport), the quality of tourism services and infrastructure is still underdeveloped compared to other economies in the region. The lack of tourism marketing and branding (Serbia ranked 133rd in 2019; 6 places lower than 2017), and the lack of government prioritisation of the travel and tourism industry (137th place, 6 places lower than 2017) are also an issue (WEF, 2019[273]).

Figure 25.19. Seasonality and growth of tourism in Serbia (2017-20)



Source: (SORS, 2021[277]), *Tourism Statistics* provided in quantitative assessment questionnaire.

StatLink https://doi.org/10.1787/888934256368

In order to address these challenges, Serbia has already set up clear and measurable strategic goals, defined in the Tourism Development Strategy 2016-25. The strategy includes commitments to strengthen the sector's governance and co-operation with private tourism stakeholders in order to improve the quality and attractiveness of tourism products. This represents a solid basis for successful tourism development in a sustainable way and for the benefit of local communities.

In early March 2020, the Serbian government declared a national state of emergency and adopted containment measures to limit the spread of COVID-19. Borders were closed and public transport and leisure venues suspended. These measures had a strong impact on the tourism industry. In 2020, the number of domestic tourists fell by 25,4%, and the number foreign tourist arrivals by 75.9% compared to the year 2019 (SORS, 2021[277]). The Ministry of Construction, Transport and Infrastructure estimates the tourism industry lost over EUR 137 million in 2020.

To address the immediate economic impacts, the government delivered three waves of economic support, which also include support to tourism-related sectors. These focused on the deferment of labour taxes and social security contributions (RSD 100 billion), deferment of corporate income tax advance payment during the second quarter of 2020 (RSD 21 billion), wages subsidies (RSD 93 billion), approval of state guarantee scheme for bank loans to SMEs (RSD 240 billion) and approval of new loans to SMEs from the Development Fund (RSD 24 billion) to improve their liquidity and working capital during the crisis. The government set aside RSD 2.8 billion to distribute 560 000 tourist vouchers worth RSD 5 000 each in order to boost domestic tourism. In late August, the government announced a one-off fiscal support package to help hotels in cities, through a fixed subsidy per room and per bed, at a cost of about RSD 1.1 billion (WB6-CIF, 2020[278]). Moreover, the government has made sure to maintain regular contact and gather and exchange relevant data with all stakeholders in tourism and hospitality from the public and private sectors.

The crisis has emphasised the importance of a resilient tourism industry. COVID-19 will have the worst impact on city tourism, specifically tourism businesses and city hotels. Serbia should focus first on assessing its impact on the tourism industry, followed by designing a recovery plan with an emphasis on the development of sustainable tourism. The recovery plan should also focus on green tourism and further developing domestic tourism. Serbia should focus on moving away from further developing mass tourism and start developing new, high-quality and personalised tourist experiences around natural and cultural sites. A dedicated co-ordination framework would guarantee the efficient implementation of policy responses. Marketing and promotion strategies will also contribute to a prompt recovery.

Sub-dimension 15.1: Governance and co-operation

Serbia's national tourism **governance structure and institutional set up** was developed in the Tourism Development Strategy 2016-25. The Ministry of Trade, Tourism and Telecommunications (MTTT) is the government authority overseeing tourism in Serbia. It has jurisdiction over the National Tourism Organisation of Serbia (NTOS), the national agency for promoting tourism domestically and abroad. The Serbian Convention Bureau is a part of the NTOS, responsible for meetings, incentives, conferences and exhibitions (MICE) tourism development. The MTTT co-ordinates, monitors, analyses and reports on the implementation of the strategy, and proposes measures and carries out activities within its jurisdiction. Each year, the government analyses and proposes measures for the implementation of the strategy, especially in the context of inter-ministerial co-operation. Regular co-operation among public officials in the ministries has been formally established. Due to the cross-cutting nature of the tourism sector, it is included in other national strategies, such as the Strategy for Agriculture and Rural Development 2014-24, the Strategy of Sustainable Urban Development until 2030 and the Culture Development Strategy 2020-29.[183] However, stakeholders report that actual inter-ministerial co-operation is still weak and monitoring of implemented policy measures is still lacking, hindering adaptation and more realistic assessments.

Partnerships with stakeholders is mainly implemented through the National Council for Tourism Development, which was established in 2017.[184] The council is the main body for inter-ministerial and public-private co-operation. As well as establishing co-operation and dialogue with tourism sector stakeholders, it is responsible for publicising and developing Serbia as a tourist destination. It is in charge of improving the tourism business and investment climate. It also takes steps to improve competitiveness through promotion and marketing, construction of infrastructure, harmonisation of local and regional institutions and other actions. Besides the ministries, its members are representatives of the Tourism Organisation of Serbia (TOS), the National Association of Travel Agencies of Serbia (YUTA), the National Hotel and Catering Providers Association of Serbia (HORES), the Association of Tourist Guides, Spa Associations of Serbia, Air Serbia, and representatives from universities and Belgrade municipality. The Minister of Trade, Tourism and Telecommunications chairs the council. Although public-private co-operation and dialogue have been established, private sector stakeholders would like to be more involved in defining long-term decisions about tourism development (such as the development of new tourism products, digitalisation and improving the quality of the tourism offer). In contrast, the focus of discussion is mostly on short-term and direct incentives (such as grants, tax reductions and regulations).

Vertical co-operation in tourism development has been established. The aim is to implement the national tourism strategy measures and actions as well as any local or destination tourism strategies and formunicipalities and regional authorities to harmonise their strategic documents with the National Tourism Strategy. There are 3 regional and 116 local tourism organisations. Local and regional governments manage these with the support of the private sector. In 2019, Serbia started the comprehensive process of preparing strategic master plans for the municipalities and tourism development programmes for regional and provincial levels. The process for preparing these strategic documents is defined in the new Law on Tourism, adopted the same year, and the Rulebook on the Content and Manner of the Preparation of the Tourism Development Programmes, which was adopted in 2020.

Several municipalities and local tourist organisations have already started developing tourism development programmes with the assistance of local institutions and stakeholders, as well as with logistical assistance from the MTTT over harmonisation with the national tourism strategy and legislation. The main constraints on the more efficient development and implementation of master plans and development programmes are the lack of knowledge and skills among local public officials, weak public-private co-operation and the lack of financial resources. These could reduce the quality of newly prepared master plans, especially in the context of the new trends in tourism demand due to the COVID-19 pandemic.

The tourism **data collection and interpretation** framework is formally in place. The SORS is the main producer and distributor of official statistics, as well as the authorised professional agent, organiser and co-ordinator of the statistical system of Serbia. It performs statistical activities according to a five-year programme and annual plans. Although there is no established formal co-ordination body for tourism data collection, the SORS co-operates with the National Bank of Serbia, the City administration of Belgrade and the other authorised producers of official statistics, listed in the five-year statistical programme. Tourism statistics have a permanent repository in the form of an online portal. However, local stakeholders reported that the portal was not user friendly and that Tourism Satellite Accounts (TSAs) have still not been implemented.

Since the last assessment, the Law on Hospitality was adopted in 2019, introducing a central information system for hospitality and tourism (E-tourist). This system aims to consolidate all data on accommodation providers in order to enable more accurate statistical monitoring of domestic and foreign tourists. The rulebook regulating the central information system was adopted, and E-tourist started operating in October 2020. Nevertheless, further improvements in tourism data collection and sharing are needed, and they should include visitor satisfaction surveys and TSAs.

Sub-dimension 15.2: Destination accessibility and tourism infrastructure

Since 2017, Serbia has improved its **connectivity framework** for tourists by further reducing visa requirements. The number of countries whose citizens do not need a visa to visit Serbia as tourists has increased from 81 in 2017 to 93 in 2019. This has contributed to the increase of tourist arrivals from China (42% growth between 2018 and 2019, and 280.5% growth since 2017), giving China the highest market share, with 7.9% of total international arrivals.[185] There was also an increase of arrivals from Ukraine (34.6% compared to 2018, and 67.9% compared to 2017), and the Russian Federation (28.8% growth in 2019 compared to 2018) (UNWTO, 2020[279]).

Since 2017, Serbia has also improved its **accommodation capacity and quality assurance framework** by fostering greater availability and quality among all types of accommodation. The Law on Tourism and the Law on Hospitality both provide a good basis for improving the field of quality assurance of accommodation as well as other tourist services (catering, travel agencies, etc.). A consistent accommodation quality standard framework has been established, including the mandatory categorisation of accommodation facilities. The Tourism Inspectorate monitors the implementation of this categorisation. However, it needs more financial and human resources for more effective and efficient monitoring, which could in turn contribute towards reducing the high levels of informality in the tourism sector.

The MTTT is supporting tourism development through a programme of incentives and loans. Over the past two years, the ministry has been financing projects focusing on promoting, training, improving and developing the tourism supply chain, as well as projects that support the improvement of tourism infrastructure, including private accommodation. Loans at favourable interest rates (1%) are available to companies and entrepreneurs registered to perform activities in the field of tourism as well as agricultural holdings investing in tourist infrastructure, including building or renovating accommodation facilities. The budget for these loans is around EUR 1.5 million, funded by the Development Fund. Incentives for investments in rural tourism accommodation and development are available through IPARD. Investors have also access to funds aimed at supporting investments according to the Law and Decree on Investments. However, no evaluation of the implementation of these measures has yet been undertaken.

Reliable **information is available** through the tourist information system on tourist destinations, accommodation and attractions, and the services available at destinations. Information is provided via websites, road signs, in tourist information centres, etc. According to the Law on Tourism, the TOS is responsible for developing and managing the tourist information system, as well as for co-ordinating tourist information activities with regional and local tourist organisations. The TOS is also responsible for the definition of the standards of arrangement, equipment and services offered in tourist information centres. Information is available in multiple foreign languages and is regularly updated by the TOS and regional and local tourist organisations. The main room for improvement in this regard is the establishment of a tourist information system framework that will include regular monitoring and evaluation of the information provided. More intensive involvement of tourism stakeholders in the tourism information system is needed, and this could be accomplished through awareness-raising campaigns and capacity-building activities.

Sub-dimension 15.3: Availability of a qualified workforce

A qualified workforce is vital for further developing tourism. Between 2017 and 2019, Serbia improved its position in the WEF Competitiveness Index Human Resources and Labour market indicator by 24 places, ranking 58th. The largest improvements have been made in the ease of finding skilled employees (moving up 51 places to 70th), pay and productivity (up 46 places to 59th), and on the labour market indicator (up 30 places to 69th) (WEF, 2019[273]).

Despite these improvements, Serbia still needs to strengthen its human resources and labour market framework in the sector. Its competitiveness in these dimensions could quickly change due to the overall lack of qualified workers and increasing competition in the wider region to attract the few who exist. However, the development of human resources in tourism is poorly represented in the Tourism Development Strategy. There are no concrete policy measures for the goals targeting the improvement or sustainability of the **availability of qualified workforce** in the action plan. The assessment of skills gaps and training needs is yet to be implemented. The **skills supply framework** depends on the activities of private tourist associations such as HORES, which organises training programmes in the hotel and catering industry. These programs include seminars and courses for waiters, bartenders, cooks, confectioners, receptionists, hotel housekeepers and other occupations. YUTA also provides training for tourist animators and travel agencies.

Serbia has a **VET framework for tourism** in place. However only limited progress has been made since the last assessment due to the lack of financial resources and equipment in schools. Serbia has established quality assurance agencies, which involve private sector stakeholders in the elaboration of VET curricula. Mandatory practical training is part of the VET. However, in general, the monitoring and evaluation of VET framework still needs improvements to better assess the efficiency of VET in the economy, and the effectiveness of cooperation with private sector in this area.

Progress in the **higher education framework in tourism** since the last assessment has been rather limited. Tourism studies are included in higher education programmes at universities but Serbia does not have a specific two-year higher education framework dedicated to tourism. Serbia should consider establishing such a framework for tourism, which would include obligatory practical training.

Sub-dimension 15.4: Sustainable and competitive tourism

Serbia is developing a comprehensive **natural and cultural heritage enhancement framework** for tourism. The Culture Development Strategy 2020-29 has been adopted by the government but was yet to be ratified by Parliament at the time of drafting. The Tourism Development Strategy underlines the importance of natural and cultural heritage for tourism, and contains an analysis of the impact of tourism on cultural heritage and natural resources. It pays special attention to setting rules to protect cultural and natural heritage from the possible negative impacts of tourism. The project documentation for any public or private investment should include an assessment of its impact on the environment and cultural heritage. Each project should adhere to the protection regulations and practices of the institutions in charge of protecting natural and cultural heritage.

The Environment Report in the Republic of Serbia, prepared by the Environmental Protection Agency (Ministry of Environmental Protection) includes monitoring of the impact of tourism on the environment. Although there is co-operation among the responsible ministries to co-ordinate policy measures and activities in this area, the policy measures defined in different policy documents should be combined into one tourism specific policy. This policy should be more in line with the annual Tourism Action plan, which will allow regular monitoring and evaluation of implemented policy measures and especially their effectiveness and impact on tourism development.

The policy framework for the **promotion of sustainable development and operations within the tourism sector** is in place. The principles of sustainable tourism development are defined in the Law on Tourism and in the Tourism Development Strategy. The MTTT supports the development of sustainable tourism through a programme of incentives and loans, which includes energy efficiency and use of renewable energy as part of the selection criteria for approving loans and grants to private investors. It also provides capacity building in this area which it promotes to tourism businesses to enhance the sustainability of their projects and operations. The Environmental Education Foundation (FEE) or the National FEE Operators have been awarding Blue Flags since 2012 and Green Keys since 2014, which are both renewed annually.[186] However, the effectiveness of these policy measures could not be assessed as no monitoring and evaluation are in place. According to the best practice examples of some advanced tourism countries,[187] a more comprehensive policy framework for promoting sustainable tourism should be adopted in order to achieve sound improvements.

In the area of **tourism investment and innovation**, Serbia has established a comprehensive tourism investment policy framework but its tourism innovation policy framework is not yet in place. Investment policy is one of the most extensive parts of the Tourism Development Strategy. The action plan for the strategy includes measures to promote investment in tourism infrastructure, and to improve the quality of tourism products and services, training, and promotion. In 2018, the MTTT allocated RSD 679 million to support 57 tourist infrastructure projects, RSD 115 million to support promotion projects and RSD 179.8 million to the Development Fund to support investments in tourism with favourable loans. In 2019, it allocated RSD 875 million to 64 tourist infrastructure projects, and RSD 125 million to promotion projects, and supported 14 tourism projects with the credit funds. While a monitoring system is in place, no evaluation that would enable future policy measures to be adjusted has been implemented yet.

Sub-dimension 15.5: Tourism branding and marketing

The NTOS is responsible for **tourism branding and marketing** at the national level and has established co-operation with regional and local tourist organisations. Serbia adopted its Strategic Marketing Plan for Tourism until 2025 in 2021. The plan projects monitoring and evaluation of the brand image and marketing strategy framework. Monitoring should be done regularly to ensure information about the effectiveness of its marketing activities. Serbia co-operates with Montenegro and North Macedonia in some regional marketing activities in long-distance markets. The NTOS budget has increased from nearly EUR 4 million in 2016 to EUR 4.7 million in 2019, although staffing levels remain the same, at 52 employees. Although Serbia improved its ranking for the effectiveness of its marketing and branding in the WEF Travel & Tourism Competitiveness Index by 29 places in 2019 (from 107th in 2017 to 78th in 2019), its overall ranking is still low. It fell 6 places in the country brand strategy ranking, to 133rd in 2019.

The digital tourism marketing framework is at an early development stage. It should be included in the new Marketing Strategy and supported by the MTTT, and should be developed with the implementation of the Strategy. Private stakeholders are involved in implementing some digital marketing activities, but the main weakness is the lack of financial resources. The lack of knowledge about digital marketing in the overall sector could also be a constraint on the efficient use of digital marketing tools. Policy measures to build capacity among tourism stakeholders and provide incentives for them to implement their digital marketing strategies and tools could be helpful.

The way forward for tourism policy

To ensure the further successful development of tourism in Serbia, policy makers should:

- **Empower municipalities and local tourist organisations to manage tourism development** by providing co-ordinated expert support, designing tourism master plans, improving capacity building and allocating sufficient budget to implement policy measures at the destination level. This is important for the harmonised and efficient development of competitive tourism products in a sustainable way. Destinations should be prepared for the re-opening of tourism after COVID-19 with personalised bookable products aimed at domestic tourists and tourists from the region.
- **Strengthen dialogue and co-operation** with private sector stakeholders, educational institutions and NGOs from the national to the local level. Stakeholders should be included in discussions on the key challenges of tourism development, such as seasonality, the lack of new and high-quality tourist products, digitalisation, and sustainability.
- **Develop a sector-specific human resource policy for tourism** and strengthen co-operation and dialogue with the private sector to better address the specific needs of the tourism industry and tourism overall, and ensure that tourism education is more attractive for lecturers and students.
- **Upgrade the tourism investment policy framework with a focus on innovation**. Innovations do not necessarily require a huge amount of financial resources to implement but can help increase the attractiveness of the tourism offer by developing unique experiences with high added value.
- **Maintain and enhance local community prosperity and quality of life,** for example by encouraging the purchase of local goods and services, and the promotion of local culinary heritage, history and culture, handicrafts and folk art, small museums, and vineyards.
- **Establish regular monitoring and introduce independent evaluation of implemented policy measures** to assess the efficiency of such measures and make adjustments accordingly.
- **Further improve tourism data collection and sharing by introducing tourism satellite accounts**, to empower policy makers with reliable information for designing policy measures.
- **Tailor the marketing and branding strategy** to the new circumstances in the market and new trends in tourism demands. This should include a digital marketing strategy to improve Serbia's visibility as a tourist destination in the international market (Box 25.20).

Box 25.20. The digital tourism roadmap in Finland

In 2018, the Roadmap for Digitalisation of the Finnish Tourism Sector was developed to steer the sector towards greater digital competency, through digital platforms and data management. The goal is to create nation-wide digital ecosystems and to have Finnish travel products and services available in multiple digital channels locally and globally. The vision was to become a smart, pioneering destination providing the best customer experience.

The key steps to reach these are:

1. data management and collaboration to enable seamless purchases and real-time information for travellers

2. using platforms and programming interfaces to enable multi-channel online booking
3. starting with pilots and scaling up to nationwide ways of working
4. supporting the sustainable development of the Finnish travel industry with digital tools.

The roadmap was developed with a team of industry and digital experts and is updated annually to keep up with the fast changing industry. Pilot projects focusing on the digital customer experience and data were carried out in four travel destinations. The pilots enabled tailored and cost-effective development of digital know-how and services. They developed initiatives to help travellers find and get to hidden destinations like Turku and the archipelago, to handle scattered destination information (Lake Saimaa, Kuopio Tahko, North Karelia), to design the ideal digital customer journey (Visit Rovaniemi & Finnair) and to share and analyse data (Helsinki, House of Lapland, Finnair). In 2020, the focus was to scale up the work to the national level, improving data-driven tourism marketing and sales and deploying a national travel data hub. There is also e-learning and "Visit Finland" academy digital training available to the travel trade. Based on the work undertaken, a digital inventory of tourism assets is the main priority to be developed in future years.

Source: (OECD, 2020[280]), *Finland*, https://doi.org/10.1787/cb702fad-en.

Anti-corruption policy (Dimension 16)

Introduction

Table 25.28 shows Serbia's scores for the Anti-corruption policy dimension and compares them to the Western Balkan (WB) average. Serbia along with Montenegro and North Macedonia has some of the more elaborate systems for corruption risk assessment and proofing of legislation. Serbia has a generally advanced legal framework for the prevention of corruption. Since the previous competitiveness outlook assessment, Serbia has strengthened the legal grounds for corruption proofing of legislation and improved the capacity of its anti-corruption law enforcement and prosecutorial bodies. It has established a track record for the investigation and prosecution of high-level corruption, but its sustainability and effectiveness are yet to be demonstrated.

Table 25.28. Serbia's scores for anti-corruption policy

Dimension	Sub-dimension	Score	WB6 average
Anti-corruption policy dimension	Sub-dimension 16.1: Anti-corruption policy framework	2.8	2.1
	Sub-dimension 16.2: Prevention of corruption	3.0	3.3
	Sub-dimension 16.3: Independence of the judiciary	n.a.	n.a.
	Sub-dimension 16.4: Business integrity and corporate liability	n.a.	n.a.
	Sub-dimension 16.5: Investigation and prosecution	3.0	2.8
Serbia's overall score		**2.9**	**2.5**

Note: For comparability with the previous assessment, two sub-dimensions (16.3 and 16.4) have not been scored but are discussed in the text below.

State of play and key developments

Since the previous assessment, Serbia has undertaken noteworthy initiatives for the fight against corruption (Box 25.21).

Box 25.21. Recent initiatives in the fight against corruption in Serbia

- The launch of the Business Integrity Country Agenda (BICA) report for Serbia by Transparency Serbia in 2020. The Business Integrity Assessment is the first study of its kind conducted in Serbia. The research covered the following topics: bribery in public and private sector; money laundering; restrictive agreements; whistle-blower protection; accounting and auditing; conflict of interest, lobbying, and party financing; public procurement; taxes and customs; integrity mechanisms in the private sector; transparency of business entities; business sector anti-corruption initiatives; role of media and CSOs.
- Pištaljka is a civil society organisation that investigate abuses in government, public and private enterprises and other institutions and to advocate for whistleblowers' rights. Some of its activities include:
    - training for local self-governments and public utility companies
    - integrity and internal whistleblowing training for public prosecutors (December 17-18 2020), in cooperation with the Republic Prosecutor's Office and the Government Accountability Initiative (USAID project)
    - setting up a database of public procurement jobs and investigating abuse in public procurement (UNDP-funded), thru June 2021

- integrity and ethics training for judges (in 2021 and 2022), with the Judicial Academy and the Supreme Court of Cassation
- The signature of the International Treaty on Exchange of Data for the Verification of Asset Declarations in March 2021 in Belgrade, as part of a regional anti-corruption initiative. Serbia, North Macedonia and Montenegro are the first signatories of the Treaty that was prepared and negotiated with the support of the Austrian Development Cooperation.

Source: (OECD, 2021[281]), The OECD and South East Europe: Fair Market Conditions for Competitiveness in the Adriatic Region, https://www.oecd.org/south-east-europe/programme/fair-market-conditions-adriatic.htm; (Transparency Serbia, 2020[282]), *Business Integrity Country Agenda – BICA Assessment Report Serbia,* https://transparentnost.org.rs/index.php/en/110-english/naslovna/11820-business-integrity-country-agenda-bica-assessment-report-serbia; (Pistaljka, n.d.[283]), *Pištaljka.rs, https://www.pistaljka.rs/;* (Regional Anti-Corruption Initiative, 2021[284]), *Regional Data Exchange on Asset Disclosure and Conflict of Interest, https://www.rai-see.org/what-we-do/regional-data-exchange-on-asset-disclosure-and-conflict-of-interest/.*

Sub-dimension 16.1: Anti-corruption policy framework

Serbia has made progress in the development of its **anti-corruption policy documents, co-ordination and implementation.** The planning of its anti-corruption policy is integrated with its accession negotiations with the European Union. The main strategic document is the Action Plan for Negotiations of Chapter 23,[188] originally adopted in 2016 with a revised version approved in July 2020 (Negotiation Group for Chapter 23, 2020[285]). The action plan envisages the preparation and adoption of a new planning document – the Operational Plan for Prevention of Corruption – in areas of particular risk. According to the government response to the OECD questionnaire in mid-2020, more than 60% of activities envisaged in the Fight against Corruption sub-chapter of the Chapter 23 action plan had been implemented. The Anti-Corruption Agency published annual reports on the implementation of the National Anti-Corruption Strategy 2013-18 on its website,[189] but regular public reporting on the implementation of the action plan appears to have ceased in 2018.[190] The new Law on Prevention of Corruption changed the title of the ACA to the Agency for Prevention of Corruption (APC) as of September 2020. Further in the text the choice of the acronym (ACA or APC) reflects the time that is referred to.

As of mid-March 2020, 105 local self-government (LSG) units (70% of the total) had adopted local anti-corruption action plans, according to Transparency Serbia. The model local action plan envisages the identification of corruption risks and measures to eliminate them. Every local self-government unit should designate a person/body in charge of co-ordinating the activities and set up a body responsible for monitoring and informing the public and other concerned actors (ACA, 2017[286]). The effects of the local action plans on the transparency of LSGs are reportedly not yet apparent (Transparency Serbia, 2020[287]).

The authorities have actively co-operated with civil society. During the drafting of the Chapter 23 Action Plan in 2016 and its revised version in 2019/20, several working versions were discussed with civil society organisations (CSOs), notably through the participation platform National Convention for the EU (a body for structured debate on the accession of Serbia to the EU). After the consultations, the Ministry of Justice published feedback on its website.[191] However, at least some civil society stakeholders argue that they have been engaged late in the process after the final draft has already been developed, so there are only limited possibilities to introduce changes. In 2017, the ACA held public consultations on the model local action plan and published a report containing comments submitted by CSOs as well as feedback regarding each of the comments (ACA, 2017[288]). Another consultative arrangement – the Anti-Corruption Council[192], established in 2001, acts as an advisory body to the government, established in 2001. The Council has seven members – current and former public office holders and academics.

The ACA/APC has been providing grants to CSOs on a competitive basis. In 2017, the grants supported alternative reporting on the implementation of the action plan. In 2018, the ACA provided five grants to CSOs to directly assist local self-government units in drafting local action plans. Against this favourable background, it is notable that CSOs have not been routinely involved in the monitoring and evaluation of the implementation of the action plan since 2018. The revised plan aims to remedy this gap, and positive developments in this area will indicate significant progress in the implementation.

Corruption risk assessments are mandatory for all public sector institutions as a step towards the preparation of integrity plans (IPs). The Law on the Anti-corruption Agency obliged all public bodies – national and local – to adopt integrity plans. The new Law on Prevention of Corruption (in force from 1 September 2020) contains a similar obligation and explicitly defines risk assessments as part of an IP. The handbook on the preparation and implementation of the IP adopted by the ACA envisages the assessment of the state of affairs as a stage in the preparation of the plans. IPs shall contain, among other elements, an assessment of exposure to risks and measures to detect, prevent and diminish those risks (ACA, 2015[289]). An online IP template is available on the website of the APC. The process of developing, monitoring and reporting on the implementation of IPs takes place in electronic form. IPs are to be revised every three years, and in practice most public institutions are carrying out risk assessments and adopting IPs. During 2016-19, 2 716 out of 4 267 public authorities adopted IPs and the remaining authorities should do so in 2020. However, the ACA/APC supervises the development and implementation of IPs and has observed that IPs remain formal documents; organisations pay little attention to their content and meaning (ACA, 2020[290]). In the area of corruption risk assessment, there seems to be a gap between the volume of activity and its impact.

The **corruption proofing of legislation** has a firm legal ground in the Law on Prevention of Corruption. State administration bodies are obliged to submit draft laws in areas of high risk and areas affected by international agreements in the anti-corruption field to the APC to obtain its opinion. This means all relevant draft laws are potentially subject to corruption proofing. The assessment of legislation used to be a regular activity of the ACA. Since 2013, it has published more than 100 assessments, but the last published assessment is dated 27 February 2018 and this kind of activity appears somewhat diminished (ACA, n.d.[291]). In 2019, the ACA issued 18 opinions on proposals and draft regulations (ACA, 2020[290]). According to the government, most of the recommendations of the ACA have remained unimplemented, without any reasons provided.

Sub-dimension 16.2: Prevention of corruption

The main **corruption prevention body** is the APC, which has multiple preventative and oversight responsibilities. Operational since 2010, the APC has operated according to the Law on Corruption Prevention since 1 September 2020. The APC is an independent state body accountable to the National Assembly (NA). Several elements of the legal framework aim to safeguard its independence. These include collective management (the council, consisting of five members and the director) and transparent appointment procedures. The NA appoints the director and members of the council from among candidates who have gained at least 80 out of 100 points in a public competition conducted by the Judicial Academy (under the previous law the director was appointed by the non-political board of the ACA). The new law authorises the NA to dismiss the director on specific grounds before the expiry of his or her five-year term, which used to be a power of the board. The consent of the committee of the NA is required for the adoption of the rulebook on the internal organisation and systematisation of jobs in the APC.

The director of the APC proposes its budget and submits it to the Ministry of Finance. The law contains general guarantees of funding and financial independence: the funds shall be sufficient for efficient and independent operation; the APC has autonomy over the disposal of the funds; and the government shall not suspend, delay, or limit the funds without the consent of the director. In practice, the budget of the ACA/APC has been fluctuating: it was RSD 364 million in 2018, RSD 253 million in 2019, and RSD 283 million (approximately EUR 2.4 million) in 2020. The APC is bound by the general criteria that apply to civil servants on the remuneration of its employees, but the director may increase salaries by 30%. The APC has 71 specialists and 9 administrative staff members. According to the government, numerous in-service training opportunities have been available to staff.

The more direct role of the NA in the appointment and dismissal of the director, as well as the limited funding safeguards, warrant further monitoring to ensure political decision makers respect the independence of the APC in practice. The public regard for the ACA has been modest. In 2019, on a scale from 1 to 5, the average evaluation of the work of the ACA was 2.3; the same as for the police and marginally lower than for the government (USAID, 2019[292]).

The Law on Corruption Prevention provides a concise but generally comprehensive framework on **conflicts of interest** and applies to public officials – defined as any elected, appointed or nominated person in a position of public authority. Meanwhile the Law on Civil Servants envisages that conflicts of interest among civil servants who are not public officials be managed and resolved within their respective public bodies. The definition of conflict of interest covers actual, potential and apparent conflicts. The Law on Corruption Prevention provides few details of the ways conflicts of interest should be resolved. Generally, public officials should notify their superiors and the APC of any conflict and suspend the affected proceedings. The APC then proposes measures to eliminate the conflict of interest. Public officials must transfer the management rights of any company stakes or shares to another person but there is no explicit prohibition on officials giving instructions regarding the management or obtaining any information about the company, i.e. the transfer is not a blind trust (which could render officials unaware of their private interest in a company).

The law sets general principles and empowers the APC to assess situations where the holders of public office perform other work or activities outside their role on a case-by-case basis. Public officials who do another job or activity at the time of entering public office should inform the APC, and the APC then determines whether this activity could endanger their impartial performance of the public function. The somewhat inconclusive provisions of the law and the considerable discretion of the APC in applying them could raise questions regarding the sufficient clarity of the law. The Group of States Against Corruption (GRECO) has noted that the new Law on Corruption Prevention has some shortcomings; for example, the lack of criteria for allowing or restricting public officials from performing business activities (GRECO, 2020[293]). The capacity of the APC appears limited as it has only nine staff members handling conflicts of interest and lobbying matters.

As well as its powers to determine how to tackle individual cases of conflicts of interest and incompatibilities, the APC decides on violations of the Law on Corruption Prevention. It may issue a warning or a public recommendation of dismissal from public office (where officials are elected directly by citizens and former officials, it makes a public announcement of the decision on violation). The announcements should contain brief reasoning. According to the government, the ACA issued 83 recommendations of dismissal for violations of the Law on ACA between January 2017 and December 2019 (related to conflicts of interest and other areas). The bodies concerned complied with 11 recommendations, and in further 12 cases the official had already been dismissed.

When the APC identifies offences, it should submit a notification of a crime to the competent body and apply to start misdemeanour or disciplinary proceedings. According to the government, the ACA filed two crime notifications for acts associated with conflicts of interest, but the prosecutor's office did not find grounds for prosecution. The law clearly implements the GRECO recommendation to provide the ACA/APC with the right to act upon anonymous complaints.

The Law on Corruption Prevention also governs **asset and interest disclosure**. Under this law, as under the previous one, the obligation of regular disclosure applies to most public officials with a few exceptions such as members of local government councils (although the APC may still request declarations from them). According to the government, coverage does not extend to the staff of offices of political officials (such as advisors) and officials responsible for public procurement except the director of the Directorate for Public Procurement and his or her assistants. Declarations should also provide information regarding public officials' spouses or common-law partners, and minor children if living in the same household. By default, declarations should be submitted upon starting and leaving public office, with extraordinary declarations due only when significant changes of assets or income have occurred. The declaration leaves a few gaps in the comprehensive coverage of the economic and private interest of a declarant, such as gifts not covered under other categories of declarable income or assets, cash savings, and beneficial ownership of entities or assets when not based on formal ownership.

Declarations are filed through an online platform. Information subject to public disclosure is published by default and searchable by the name of the official. However, broad categories of data are exempt from public disclosure such as sources and amounts of income from non-public sources, amounts of savings, or the ownership of financial instruments. The publicly available information does not provide a comprehensive picture of an official's economic situation. Nevertheless, on several occasions, declarations have helped the public to detect possible illicit enrichment of high-level officials.

The APC verifies the declarations based on an annual verification plan, and extraordinary verifications are also permitted. Public authorities must provide the APC with direct access to their databases kept in electronic form upon written and reasoned request. The requirement of a reasoned request could turn out to be an obstacle for efficient routine verifications. The APC may also obtain data on the accounts of public officials from banks and other financial institutions (according to the government's response, in practice, banks rarely provide this type of data). To enable electronic data exchange between all competent institutions, multiple bodies, including the APC, have agreed to develop the National Criminal Intelligence System, but it is not yet decided what exact access the APC will have through the system.

If the APC suspects that officials have failed to report their assets or provided false data to conceal information about their assets, it should file a crime notification. Since 2013, it has referred 18-28 cases per year to law enforcement bodies based on the verification of declarations. If officials fail to submit their reports on time, the APC should request the initiation of misdemeanour proceedings with the court. In recent years, the number of sanctions imposed for non-submission of declarations has been falling, which could be a sign of improved overall compliance.

The Law on **Whistle-blower Protection** (adopted in 2014) is comprehensive and extends to both the private and public sectors. Whistleblowing may be carried out by internal or external reporting, or by public disclosure. However, the grounds for public disclosure are narrow: essentially, in cases of imminent danger, but not when there is a risk of retaliation or there is little chance of the breach being effectively addressed otherwise, as envisaged in EU Directive 2019/1937 on the protection of persons who report breaches of EU law. The law contains multiple provisions to protect whistle-blowers. These include obliging the recipient of information to protect the whistle-blower's personal data, an express prohibition on placing the whistle-blower in an unfavourable position, enabling courts to impose temporary protection measures, compensation for damages, reinstatement of employment, the protection of people associated with the whistle-blower, the right to protection due to mistaken identity, etc. In case of reprisal, protection also applies to anonymous whistle-blowers. The law expressly prohibits the hindering of whistleblowing.

Employers must inform employees about their rights stemming from the Law on Whistle-blower Protection and appoint an authorised person to receive information and administer procedures regarding whistleblowing. An employer with more than ten employees must have an internal whistleblowing procedure.

Serbia has had a high level of whistleblowing activity. The courts received 774 whistle-blower cases between June 2015 and December 2019 (Negotiation Group for Chapter 23, 2020[285]) and have a track record of decisions in favour of whistle-blowers. Whistle-blowers are entitled to seek protection from the court but the procedure to do so is relatively complicated. The Law on Free Legal Aid does not recognise whistle-blowers as a special group, and they are entitled to free legal aid only if they meet the general conditions. In view of lack of legally guaranteed external counselling support and lack of a centralised system to protect whistle-blowers, the need to apply to courts and sometimes seek professional legal assistance represent barriers to the more effective and consistent implementation of the law (Worth et al., 2018[294]). The whistle-blower protection system seems to fall short of providing all measures of support envisaged in EU Directive 2019/1937, such as comprehensive and independent information and advice, which is easily accessible and free of charge, effective assistance from competent authorities before any relevant authority involved in the protection against retaliation, financial assistance and other measures, including psychological support.

The government has continued to carry out **anti-corruption public awareness and education** activities although there is no evidence of broader campaigns since 2018. The ACA has been organising annual conferences on 9 December (International Anti-Corruption Day) and produced various tutorials and guidance materials: online tutorials for the development of integrity plans and monitoring and reporting on their implementation, a model local anti-corruption plan, the methodology for monitoring and reporting on the implementation of the local anti-corruption plan, online tutorials for officials regarding the declaration of income and assets, a manual on media co-operation, and educational videos on asset declaration and gifts. Meanwhile there is no evidence that the effectiveness of awareness-raising activities is being monitored, or corrective action taken based on such monitoring.

The ACA has been engaged in numerous training and education activities. In 2017-19, it held 51 educational/training programmes for public officials, 6 training sessions for trainers, online training on ethics and integrity in the public sector, and 9 training courses on ethics and integrity organised in co-operation with the Government Agency for Human Resources Management and the National Academy for Public. In 2019, the ACA held four training sessions attended by more than 1 000 high school pupils. Most of the training activities have been funded from the ACA budget. However, the amount of funding that for awareness raising and public education have been in decline since at least 2017.

Sub-dimension 16.3: Independence of the judiciary

Serbia has had serious discussions about constitutional reforms to strengthen the independence of judiciary, but they have not been adopted. According to the constitution (adopted in 2006), judicial appointments are permanent, but a probationary period of three years applies for first-time judges. The constitutionally established power of the NA to appoint judges remains a limitation on the independence of judiciary. The NA also directly or indirectly appoints members of the High Judicial Council (HJC) even though 7 out of 11 members are judges (Venice Commission, 2007[295]). A key task in the Judicial Development Strategy (2020-25) is to complete the amendment of the constitution with a view towards, further strengthening of independence of courts. Public comments by some government officials regarding court proceedings represent a form of pressure on the judiciary (EC, 2020[36]).

The HJC has adopted rulebooks defining criteria for candidates for judicial positions to be elected for the first time, the evaluation of candidates for permanent judicial positions at the second or higher court, the nomination of court presidents, modalities of examinations of candidate judges, etc. These rules strengthen the objectivity and transparency of proceedings at various stages of judges' careers. The HJC has strengthened the transparency of its work by establishing that all interested parties can attend interviews with candidates for the first election to a judicial function, and that interviews are recorded. Lists of candidates and the grades they achieve are made public on the website of the HJC (GRECO, 2019[296]). Nevertheless, the European Commission has recommended the thorough revision of the system for judicial appointments and the evaluation of the work of judges and prosecutors (EC, 2020[36]). The Judicial Development Strategy contains priorities and tasks clearly in line with these recommendations.

In 2019, the Disciplinary Commission of the HJC handled 31 cases. The commission issued public warnings, imposed salary reductions and initiated one dismissal procedure. The disciplinary and ethics rules have been being revised to improve the definitions of offences, among other things. One positive feature for upholding impartiality is the random distribution of cases among judges through an automatic case allocation system (European Commission, 2019[14]; EC, 2020[36]). However, random case assignment has not yet been established in all courts (Government of the Republic of Serbia, 2020[297]).

Sub-dimension 16.4: Business integrity and corporate liability

Serbian company law does not specifically address **business integrity** and the management of corruption risks. The law prescribes general principles of oversight, such as the duty of the supervisory board of a joint-stock company to supervise the management. More specific obligations apply to public joint-stock companies where at least one dedicated person shall be responsible for the internal supervision of operations. This person must meet the requirements prescribed for internal auditors, must be employed by the company and perform only internal supervision, and cannot be a director or a member of the supervisory board. This internal supervision should encompass, among other tasks, verification of the implementation of risk management policies.

According to the Law on the Central Records of Beneficial Owners (adopted in 2018), information on beneficial owners of legal entities has to be publicly disclosed in the Central Records of Beneficial Owners kept by the Serbian Business Registers Agency. The disclosed information is accessible free of charge and searchable by the registration number of a legal entity. The law complies with the 5th EU Anti-Money Laundering Directive (2018/843) as far as the requirement to provide access to any member of the general public is concerned, and the definition of a beneficial owner covers most types of beneficial owners defined in the anti-money laundering directives. The law envisages criminal liability as well as fines for non-compliance for legal entities and their responsible persons. However, no data are available about the enforcement of this liability.

There is no designated institution such as a business ombudsman responsible for receiving complaints from companies about corruption-related matters apart from the APC.

Serbia has established **liability of legal persons** for all criminal offences established in law. According to the Law on Liability of Legal Persons for Criminal Matters (adopted in 2008), a legal person shall be held accountable for criminal offences that have been committed for the benefit of the legal person by a responsible person within the scope of his or her authority. Lack of supervision by the management can also trigger corporate liability. Legal entities, which are entrusted by law with the exercise of public authority, are exempt from liability for criminal offences committed during the exercise of public authority.

The liability of legal persons is autonomous, i.e. a legal person shall be liable even though criminal proceedings against the responsible person have been suspended or the indictment has been rejected. If, due to certain reasons, it is not possible to initiate or conduct criminal proceedings against the responsible person, the proceedings may be initiated and conducted only against the legal entity.

The law envisages both fines and the termination of the legal entity as penalties, as well as security measures (prohibition of certain registered activities or tasks, confiscation, public announcement of the judgment) and other possible legal consequences, such as a ban on participation in public procurement. The upper limit of fines for corruption offences such as active bribery is approximately EUR 42 500, which is extremely low compared to the potential scale of large corrupt transactions. Active bribery also carries the maximum prison sentence of up to five years (Article 368 of the Criminal Law). Courts may impose suspended sentence, after taking into account any measures taken by the legal entity to prevent and detect the crime and against the responsible person after the crime. Thus, although the law does not explicitly envisage due diligence or compliance as defence or a mitigating circumstance, taking such preventive measures may serve a basis for suspended sentencing.

The legal framework for corporate liability would benefit from guidance on the anti-corruption compliance that responsible persons of legal entities should ensure. The effectiveness of the corporate liability framework for combatting corruption could not be assessed due to the absence of the relevant statistics.

Sub-dimension 16.5: Investigation and prosecution

Based on the Law on Organisation and Competences of State Bodies in the Suppression of Organised Crime, Terrorism and Corruption (adopted in 2016 and in force since 2018), the Prosecutor's Office for Organised Crime (POOC) and the Section for Suppressing High-Level Corruption within the Service for Combating Organised Crime (SCOC) of the Criminal Police Directorate have responsibility for the **investigation and prosecution of high-level corruption**. High-level corruption is not defined explicitly but the anti-corruption remit of these bodies comprises abuse of official authority, trading in influence, and passive and active bribery when the defendant or the person to whom a bribe is given is an official or responsible person performing a public function on the basis of election, appointment or appointment by the NA, the President of the Republic, the Government, the general session of the Supreme Court of Cassation, the HJC or the State Prosecutorial Council.

Available statistical data on convictions for high-level corruption vary slightly but generally reflect a similar decreasing trend. According to the government, 42 convictions for high-level corruption took place in the first instance in 2017, 41 convictions in 2018, and 25 convictions in 2019. According to the European Commission, based on indictments from the POOC, the courts rendered first instance judgements against 50 individuals for high-level corruption in 2017, 41 in 2018, and 30 in 2019 (EC, 2020[36]). For this assessment, the authorities stated that the majority of the defendants received prison sentences plus a prohibition on carrying out certain professions, activities or duties. In 2019, 10 out of 30 convictions were based on plea agreements, and confiscation of assets was imposed in 3 cases (EC, 2020[36]). This information suggests that the level of recovery of corruption proceeds remains modest. No data are available about final convictions for high-level corruption, and this gap makes it difficult to fully assess the track record. Although the SORS gathers data on prosecutions and convictions, the government has recognised that current record keeping is not suitable for measuring progress and the efficiency of the criminal justice system, and aims to establish a new information system (Negotiation Group for Chapter 23, 2020[285]).

According to the law, the Ministry of Interior (MoI) has at least two **specialised anti-corruption investigative bodies**: the unit responsible for the suppression of organised crime (the SCOC) and the unit responsible for the suppression of corruption (the Anti-Corruption Department of the Criminal Police Directorate, responsible for cases other than high-level corruption).

The police units generally do not have special guarantees of independence. The Minister of the Interior appoints and dismisses the head of the SCOC with the advice of the Prosecutor for Organised Crime. The minister also issues acts which further regulate the organisation and work of both specialised units. Otherwise the general procedures and conditions of the Ministry of the Interior apply to the selection, appointment and dismissal of officers as well as the determination of the budget and salaries. The units submit regular reports to superior officials, but these reports are not published.

Serbia has several **specialised anti-corruption prosecutorial and judicial bodies**. The relevant prosecutorial bodies are the POOC and special anti-corruption departments of four higher public prosecutor's offices. The Prosecutor for Organised Crime manages the work of the POOC. The law is rather general regarding the criteria for this office. When proposing candidates for prosecutor and selecting the deputy prosecutor, priority should be given to candidates who have the necessary professional knowledge and experience in the field of the fight against organised crime and corruption. The State Prosecutorial Council (SPC) holds a competition for the post and submits a list of suitable candidates to the government, which in turn submits a proposal to the NA. The NA appoints the prosecutor for a term of six years. The procedure for dismissal is similar; the SPC determines reasons for the dismissal and forwards the decision to the government, which proposes the dismissal to the NA. Unless otherwise provided by the law, the general rules governing the public prosecutor's office also apply to the POOC. Heads of higher public prosecutor's offices appoint and dismiss heads of the special anti-corruption departments who have no fixed term. Thus, the law provides stronger safeguards of independence and transparency for the POOC than for the anti-corruption departments.

Investments have been made in the capacity of the specialised prosecutorial bodies. Within the POOC, 21 prosecutors act as processors of economic crime and criminal offences related to corruption, supported by 27 administrative staff members. As of 2020, there were 45 deputy public prosecutors working in the anti-corruption departments. Six task forces have been established in the prosecutorial bodies, which include representatives of the police, the tax administration and the anti-money laundering administration. There are regular co-ordination meetings between the police and the prosecution, and liaison officers have been appointed (European Commission, 2019[14]; EC, 2020[36]). The law envisages the possibility of establishing financial forensics services in the specialised prosecutorial bodies, and, since 2018, the POOC has employed a financial forensic expert.

There is evidence of training on various relevant topics for the staff of the investigation and prosecution bodies: courses and education meetings on the detection, investigation and prosecution of high-level corruption and other related topics for representatives of the ministry and prosecutors, education activities through projects led by international organisations, and continuing education organised by the Centre for Police Training of the Ministry of the Interior and the Judicial Academy.

As well as the investigation and prosecutorial bodies, Serbia has established special departments for organised crime in the High Court and in the Court of Appeals in Belgrade as well as special anti-corruption departments in high courts.

The way forward for anti-corruption policy

To strengthen the anti-corruption policy framework and its implementation, policy makers should:

- **Create a mechanism to involve civil society in the monitoring of the implementation of the Action Plan for Chapter 23 negotiations**. Ensure that the monitoring is carried out in an inclusive and transparent way. The revised Action Plan foresees systematic, continuous and institutionalized inclusion of civil society organizations in the process of monitoring the implementation. This is a significant commitment considering the widely recognised crucial role of the civil society for the success of anti-corruption policies. The OECD Recommendation on Public Integrity envisages encouraging transparency and stakeholders' engagement at all stages of the political process and policy cycle to promote accountability and the public interest. This is all the more important regarding anti-corruption efforts, which often provoke attempts of obstruction by powerful beneficiaries of corruption.

Box 25.22. The Citizen Participation Space for monitoring the implementation of the anti-corruption strategy in Catalonia (Spain)

Catalonia has set up the Citizen Participation Space (CPS) for monitoring the execution of the Strategy for Fighting Corruption and Strengthening Public Integrity of the *Generalitat de Catalunya*. Three public authorities (the Anti-fraud Office, the Regional Audit Office, the Regional Ombudsman) and three civil-society organizations (the Ostrom Institute of Catalonia, the Citizen against Corruption Observatory, the College of Political Scientists and Sociologists of Catalonia) are key partners in the activity.

The CPS comprises ten people who act as an independent commission for auditing the implementation. Seven members have been chosen by lot from among people who participated in the development of the Strategy. Three are representatives of the organised civil society and have been chosen by the above-mentioned civil society organizations.

Members of the CPS receive constantly updated information regarding the state of actions carried out under the Strategy. In January 2021, the first annual report of the Strategy was published. The CPS evaluated the report and provided public feedback like they had already done in relation to earlier quarterly reports.

The CPS assessed positively the exhaustive work that had been performed for the elaboration of the report, recognized efforts made to address requests formulated in the previous evaluation by the CPS and the incorporation of the theory of change that would allow evaluating the impact of the Strategy.

On the other hand, the CPS emphasized the need to specify more clearly how the degree of execution is determined and assessed, incorporate methods used and specify the reason why certain actions or sub-actions remain uninitiated. The CPS also raised the need to set a timetable for the start and execution of all actions in order to impose proper monitoring and ensure compliance with the timeframe.

Source: Generalitat de Catalunya (2021), *L'Espai de participació ciutadana de seguiment de l'Estratègia de lluita contra la corrupció avalua l'Informe anual de seguiment de l'Estratègia*, http://governobert.gencat.cat/ca/detalls/noticia/noticia_espai-participacio-informe-estrategia
Open Government Partnership, *Create citizen Monitoring Space for anti-corruption strategy (ES0095)*, https://www.opengovpartnership.org/members/spain/commitments/ES0095/

- **Ensure that reports on property and income of public officials and the data subject to public disclosure are comprehensive**, reflecting their full economic position Continue steps to smooth the APC's access to the information it needs for verification. According to the Western Balkan Recommendation on Disclosure of Finances and Interests by Public Officials, income and asset declarations need to show the fullest picture possible of incoming and outgoing cash and asset flows during the time in office, and the oversight body needs to cross-check the data with a wide range of databases (ReSPA, 2014[298]). While it is necessary to exclude certain personal data from publication, the publicly available data should also provide as full as possible picture of an official's economic situation.
- **Monitor protection of whistleblowers to identify and mitigate practical obstacles that they face**. In particular, ensure that it is easy for any whistleblowers to find out where and how they can apply for protection. The relevant EU directive envisages mandatory and optional measures of support for whistle-blowers such as information and advice on procedures and remedies available, on protection against retaliation, and on the rights of the person concerned; effective assistance from competent authorities and legal aid, counselling or other legal assistance, etc. Serbia has taken some actions in these areas, but the efforts need to continue and strengthen. Serbia should also widen recognised grounds for public reporting by whistle-blowers.
- **Safeguard judicial independence** by continuing the debate over the relevant legal provisions and ultimately amend them to reduce the role of political bodies in judicial careers, among other things. Judicial independence is a fundamental principle enshrined in international standards such as the European Convention on Human Rights, according to which "everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law" (European Court of Human Rights, 2021[299]). Serbia should continue efforts to reach compliance with international standards, for example, to ensure that not less than half the members of councils for the judiciary are judges chosen by their peers (the Council of Europe Recommendation CM/Rec(2010)12 on judges: independence, efficiency and responsibilities).
- **Strengthen corporate liability for corruption offences** by significantly increasing the maximum applicable fines. International standards do not define the sufficiency of the sanctions in specific terms, but the OECD Working Group on Bribery in International Business Transactions has adhered to the standard that monetary sanctions should be sufficiently severe to impact large multinational corporations. In certain economies, statutory ceilings of sanctions even up to a few

million EUR have been found to be insufficient (OECD Anti-corruption Network, 2015[300]). Even though such levels of fines may appear beyond relevance relative to the limited size of many companies in Serbia, the law should provide the possibility to apply adequate sanctions also in a case of a large business player engaging in corruption.

- **Monitor the effectiveness of the investigation and prosecution of high-level corruption** by collecting, analysing, and publishing data on, inter alia, official position at the time of offence, indictments, final convictions, sentences, and recovered proceeds of corruption. Several kinds of factors affect investigations, prosecutions and convictions in corruption cases, for example, the qualification, number and independence of investigators, public prosecutors and judges, effectiveness of procedural and substantive law, efficiency of international legal co-operation, case management and prioritisation of work, etc. Comprehensive and detailed record keeping, collection and analysis of relevant statistical indicators, systematic review of case law are necessary conditions for fair assessment of challenges for the effective repression of high-level corruption.

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Notes

[1] The headcount ratio (HCR) is the proportion of a population that exists, or lives, below the poverty line.

[2] Staff from the Statistical Office of the Republic of Serbia who co-ordinated the statistical data collection.

[3] A person from the Ministry of Finance of the Republic of Serbia and from the Public Policy Secretariat of the Republic of Serbia who co-ordinate the whole assessment in Serbia.

[4] EU STAKEHOLDER CONSULTATION GUIDELINES 2014

[5] These reforms started in 2014 as part of the pre-accession discussions with the EU.

[6] The legal framework for IP rights includes: the Law on Copyright and Related Rights, the Patent Law, the Trademark Law, the Law on the Legal Protection of Industrial Design, the Law on Legal Protection of Topographies of Semiconductor Products and the Law on Indications of Geographical Origin.

[7] Dolovo Cibuk Wind Farm (USD 354 million), Kovacica Wind Farm (USD 225.2 million), Kosava Wind Farm Phase I (USD 138.8 million), and Alibunar Wind Farm (USD 100 million).

[8] Apart from the Ministry of Trade, other relevant government agencies include the Ministry of Finance, Ministry of Agriculture, Ministry of Economy, and the Customs Administration, while business community involvement in trade policy ranges from the Serbian, American and French Chambers of Commerce to the Foreign Investors Council and the National Alliance for Local Development.

[9] The NTFB holds meetings to address issues and regulations on agricultural, sanitary and phytosanitary measures, technical barriers to trade, customs procedures, and co-ordination of trade facilitation activities under international and regional trade agreements.

[10] According to the Law on the Chamber of Commerce, chambers of commerce play an active role in the preparation of legal acts important for the economy and business environment. They monitor all legislative amendments, conduct related analysis and submit initiatives for policy changes to the relevant ministries.

[11] https://euprava.gov.rs/.

[12]This issue has been raised in previous editions of the Competitiveness Outlook as an ongoing issue in Serbia. In 2017, 60% of laws relevant to business did not go through a public hearing, 90% were made by urgent procedure and half of all draft laws were not available on the relevant ministry websites. According to statistics from the Public Policy Secretariat (PPS), a consultation process in accordance with the Law on Planning System was conducted for 15 out of 42 relevant draft laws (35.71%) during 2020. However, these data should be viewed in the context of the COVID-19 pandemic.

[13] OECD member states and the following partner economies: Brazil, the People's Republic of China, Costa Rica, India, Indonesia, Kazakhstan, Malaysia, Peru, the Russian Federation, South Africa and Thailand.

[14] The full set of OECD STRI indices and comparison tools as well as policy simulators for OECD member states and partners states that have undertaken the OECD STRI are available on the dedicated OECD website https://www.oecd.org/trade/topics/services-trade.

[15] The complete list of measures sector by sector is available on the OECD STRI website http://www.oecd.org/trade/topics/services-trade.

[16] According to the Law on Agricultural Land, the prohibition on the sale of agricultural land to foreigners was removed in 2017, however restrictions remain: residency in Serbia for at least 10 years in the local self-government unit in which they want to buy land; a history of cultivation for at least 3 years; and possession of registered agricultural farm machinery and equipment.

[17] According to Article 7 (“Principle of ensuring competition and prohibition of discrimination”) Paragraph 3 of the Law on Public Procurement, the contracting authority/entity shall not impose conditions that would constitute national, territorial, or personal discrimination among economic operators, directly or indirectly.

[18] According to Article 27 and Article 49. Paragraph 2 of the Law on Public Procurement, “Contracting authority/entity shall regulate in a special act in greater detail the manner of planning, conducting public procurement procedures and monitoring of the execution of the public procurement contract, (the manner of communication, the rules, duties and responsibilities of persons and organisational units), the manner of planning and conducting procurements exempted from the law and procurements of social and other specific services”.

Also, according to Article 18, the contracting authority/entity shall record data on values and types of public procurements referred to in Article 11 - 21 of this Law, for each exemption ground separately, as well as the public procurements referred to in Article 27, paragraph 1 of this law. Contracting authorities/entities shall aggregately publish data referred to in paragraph 3 of this article on the Public Procurement Portal, no later than 31 January of the current year for the previous year, pursuant to the instruction published by the Public Procurement Office on the Public Procurement Portal.

[19] In order to facilitate comparison with OECD member states that have undergone the STRI exercise, the paragraphs below have been drafted in accordance with the methodology of the STRI project publications. Country Notes for the OECD members, as well as Sector Notes, are available on the STRI web page: https://www.oecd.org/trade/topics/services-trade/.

[20] Access to the railway infrastructure and the ability to do business on its territory is provided to all companies registered in Serbia (Article 32, paragraph 1 of the Law on Rail Services; https://www.paragraf.rs/propisi/zakon_o_zeleznici.html). In accordance with the provisions of the Agreement on the Establishing the Transport Community, there are plans to further liberalise the market, i.e. opening the market at the regional level (the Western Balkans signatories to the agreement) and, later, at the EU level (Transport Community Treaty, Art 11).

[21] Srbija Kargo is main railway freight operator but the rail market has been open to all interested stakeholders since 2016. Serbia now has 10 railway freight transport operators and Srbija Kargo's share of market has decreased relative to other operators, from about 95% in 2016 to about 80% in 2020.

[22] The National Bank of Serbia adopted a set of regulations implementing Basel III standards, that apply from June 30, 2017. The set of regulations consisted of the following decisions: Decision on Capital Adequacy of Banks, Decision on Disclosure of Data and Information by Banks, Decision on Reporting on Capital Adequacy of Banks, Decision Amending the Decision on Reporting Requirements for Banks, Decision on Liquidity Risk Management by Banks, and Decision Amending the Decision on Risk Management by Banks.

[23] Some evidence for this lies in the fact that the market is largely dominated by foreign-owned insurance companies. According to the Serbian authorities, out of the total of 20 insurance undertakings, 15 were majority foreign owned in 2020.

[24] In 2019, 34% of the population purchased goods on line at least once. E-commerce revenue in the e-commerce market is projected to reach EUR 395 million in 2020. The market's largest segment is toys, hobbies and DIY. User penetration is expected to reach 48.1% in 2020 and prior to COVID-19 it had been estimated it would reach 60% by 2024.

[25] The project's target groups are: e-commerce traders, primarily small and medium-sized enterprises, women working in the field of e-commerce, companies providing postal services, consumers and inspection bodies.

[26] Decision Amending the Decision on Capital Adequacy of Banks and Decision Amending the Decision on Risk Management by Banks.

[27] Decision on Capital Adequacy of Banks and Decision on the Classification of Bank Balance Sheet Assets and Off-balance Sheet Items.

[28] MONEYVAL is a permanent monitoring body of the Council of Europe which is assessing compliance with the principal international standards to counter money laundering and the financing of terrorism and the effectiveness of their implementation, as well as with the task of making recommendations to national authorities in respect of necessary improvements to their systems.

[29] A passenger car is a road motor vehicle, other than a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons (including the driver). (OECD, 2013[414])

[30] The Decision on Management of Risks Arising from Introduction Of New Products/Services By Lessor (RS Official Gazette, No. 149/2020).

[31] Startup Genome is the research and policy advisory organisation for public and private agencies committed to accelerating the success of their start-up ecosystem. For more information see https://startupgenome.com/.

[32] Concrete PPP examples include: the renovation and expansion of existing optical telecommunication network in Novi Sad; the construction, financing and operation of the internal ports and roads on the Danube in Apatin; the acquisition of necessities of public transport services in Loznica; the design, construction, financing and operation of public car parks in Sabac; the construction of factories for the processing of biomass in Zrenjanin; the acquisition of necessities of public transport services in Topola; and the acquisition of necessities of public transport services in Srbobran.

[33] Belgrade Stock Exchange has two indices: BELEXline, the general benchmark index of the Belgrade Stock Exchange, and BELEX15, representing the 12 most liquid stocks.

[33] A newly established company that performs so-called “innovative activities” is a company established for less than three years and which mainly performs innovation activity in terms of the law governing innovation activity (activities undertaken to create new products, technology, processes and services or significant changes to existing ones, in accordance with the needs of the market). A series of criteria define what a company performing innovative activity: R&D costs should account for at least 15% of total expenditure, highly qualified employees should make up more than 80% of all employees and no dividends should be distributed within a three-year period.

[34] The maximum monthly base for contributions is five times the statutory average monthly salary in Serbia (RSD 368 590 in 2020, or around EUR 3 130).

[35] Under the destination principle, tax is ultimately levied only on the final consumption that occurs within the taxing jurisdiction.

[36] The OECD Database on General Competition Statistics (OECD CompStats) is a database with general statistics about competition agencies, including data on enforcement and information on advocacy initiatives. In 2020, it included data from competition agencies in 56 jurisdictions, including 37 OECD countries (36 OECD countries and the European Union), i.e. Argentina, Canada, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Mexico, Peru, United States (Americas): Australia, Brazil, Chinese Taipei, India, Indonesia, Japan, Korea, New Zealand (Asia-Pacific); Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, European Union, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Romania, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, the United Kingdom (Europe); Egypt, Israel, Kazakhstan, Russian Federation, South Africa, Turkey, Ukraine (Other) (OECD, 2020[417]).

[37] According to the Serbian authorities, there is not a fixed number of SOEs that fall under the scope of the Law on Public Enterprises, but rather fixed criteria for determining which enterprises fall under its scope.

[38] Calculations based on data provided by the authorities of Serbia and the number of employed persons in Serbia (2 938 200) as reported in the national Labour Force Survey Quarter IV 2019 (SORS, 2019[85]).

[39] According to the Serbian authorities, public-interest activities are those defined as such by the relevant laws applicable to the following fields of activity: mining and energy; transportation; electronic communications; publishing the official gazette and publishing textbooks; nuclear facilities, armaments and military equipment; the use, management, protection, development and promotion of goods of general interest and goods in general use (water, roads, forests, navigable rivers, lakes, banks, spas, game, protected areas, etc.); waste management; and other fields.

[40] Good practices include making publicly available: audit reports for the past 3-5 years; information about discounts and benefits; information about SOE debts and loans; information about SOE financial claims; policy on collecting financial claims; minutes of governing, supervisory and audit body meetings, and inventories (or information on major assets – real estates/properties, vehicles). Transparency Serbia has published comprehensive report regarding reporting practices of Serbia's SOEs (Transparency International, 2019[418]).

[41] For the purpose of this profile, the instruction system refers to teaching and learning processes that takes place in school education. It generally consists of curricula, standards for schools and student learning, assessment and evaluation frameworks, and other elements that support instruction.

[42] Students may take this exam in Grade 12 (for general education and four-year VET upper secondary schools) or in Grade 11 (for three-year VET schools).

[43] Examples include Peace-Building and Inclusive Local Development (PBILD), Youth Employment and Migration (YEM), Career Development and Youth Entrepreneurship in Serbia (US Embassy), The Sustainable Local Development Project (USAID), the Economic Security Enhancement Project (USAID), TEMPUS projects (EU), IPA projects (EU), and many others. The regional and national programmes related to the topic of professional orientation and entrepreneurship were also recognized - Balkan Community Initiatives Fund (BCIF), European Movement in Serbia (EPuS), SMART Kolektiv, Group 484, Initiative for Development and Cooperation - Serbia (IDC). etc.

[44] Under the 2019 revised accreditation standards, the teacher practicum must be at least 90 hours per year in the 2nd,3rd and 4th year of the programme. In the 5th year of the programme, the teaching practicum is at least 180 hours and 6 European Credit Transfer and Accumulation System (ECTS) credits.

[45] Starting in 2021/22, students in Serbia will take the state Matura examination to certify their completion of upper secondary school and inform student selection into tertiary education.

[46] In 2017-18, Serbia piloted a new national assessment for students in Grades 7 (basic education) and 11 (the third year of upper secondary). The results will inform discussions about how to establish a new national assessment system (Maghnouj et al., 2020[8]).

[47] The only criteria was that companies did not cut employment by more than 10%.

[48] In the field of labour law, the law of 2014 is only partially aligned with the EU *acquis*. A new law on the right to strike has yet to be adopted.

[49] Platform workers are individuals who use an app (such as Uber) or a website (such as Amazon Turk) to match themselves with customers, in order to provide a service in return for money. They offer a diverse range of services including transport, coding and writing product descriptions (OECD, 2019[407]).

[50] Self-employed persons without employees

[51] During 2019, 59 fatalities in the workplace were recorded – a record number. Most were in the construction sector.

[52] The procurement was planned for the third quarter of 2020.

[53] Government response to the questionnaire

[54] The ILO consider that the ratio of labour inspectors to workers should be approximately 1:10 000 in industrial market economies.

[55] These programmes are supported by the European Union and Council of Europe for Western Balkans and Turkey.

[56] Published in the Official Gazette of RS, No. 18/21 on 1 March 2021.

[57] Duality is the division of the labour market into two separate submarkets or segments, distinguished by different characteristics and behavioural rules. Segmentation may arise from the particularities of labour market institutions, such as governing contractual arrangements (segmentation along permanent/temporary nature of employment contracts), lack of enforcement (segmentation along formal/informal line), as well as types of workers concerned (such as migrant and non-migrant workers).

[58] In particular the European Commission notes that the co-ordination body for monitoring the strategy's implementation, chaired by a Deputy Prime Minister, met three times during the reporting period, not six times a year as previously agreed in the 2017 Roma Seminar conclusions. The Expert Group involving civil society organisations, mandated to support the co-ordination body, never met. The fifth Roma Seminar was held in October 2019. The operational conclusions were finalised but their adoption has yet to be formalised nor their implementation closely monitored and reported on. The institutional structure dealing with Roma integration remains ineffective and complicated, without a clear distribution of tasks. Co-ordination between the national and local authorities, and Roma-sensitive budgeting, still need to be strengthened. There has been a serious delay in establishing the legal basis for local Roma co-ordinators and pedagogical assistants.

[59] Official Gazette of RS, No. 125/04, 104/09 and 50/18.

[60] Based on the International Standard Classification of Education (ISCED 2011), the term low-educated refers to people with less than primary, primary and lower secondary education (levels 0-2), medium educated refers to people with upper secondary and post-secondary non-tertiary education (levels 3-4) and highly educated refers to people with tertiary education (levels 5-8).

[61] Data received from the government.

[62] Jobs Gateway Database, based on data provided by national statistical offices and Eurostat, WIIW' own calculations).

[63] Reducing personal income taxes or employee social security contributions has the potential to stimulate labour supply and create work incentives, in particular for low-income and second earners, who are especially responsive to changes in after-tax wages (European Commission, 2020[464]).

[64] Overall, the share of the population with lower educational level was higher than the EU Member States that joined in 2004 and later (18%).

[65] Note that this does not refer to hourly gross wages.

[66] Registered unemployed refer to data provided by the registers of the PES, according to different national definitions and rules, while LFS unemployed refer to harmonised data which are figures provided by the Labour Force Survey, according to the ILO definition of unemployment.

[67] Note that the average of the unemployment rate of the five peer EU countries (Bulgaria, Croatia, Hungary, Romania and Slovenia) was 4.1%.

[68] Informal employment includes employment in unregistered companies, employment in registered companies but without a formal contract and without paying social and pension contributions, and unpaid family workers (SORS, 2020[127]).

[69] There were 191 000 people informally employed outside the agricultural sector. It is assumed that there is no informal employment in the public sector (SORS, n.d.[419]; SORS, n.d.[420]).

[70] Information from government (policy roundtable).

[71] Around 1 000 mediated through NES each year, and another 5 000 to 7 000 workers mediated through private agencies in the past. The numbers have been lower in 2020, due to the COVID-19 pandemic.

[72] Horizon 2020 is the biggest European Union's framework programme for research and innovation. It provides funding for multi-national collaboration projects as well as for individual researchers, and supports SMEs with a special funding instrument. (https://ec.europa.eu/programmes/horizon2020//en/what-horizon-2020 ; https://www.euneighbours.eu/en/east/stay-informed/projects/horizon-2020)

[73] Eureka is the largest intergovernmental network for cooperation in R&D and innovation in the world. It is present in over 45 economies, where it provides access to public funding, promotes collaboration and innovation or offers advice, through various programmes (such as Eureka Clusters, Globalstars, InvestHorizon). (https://www.eurekanetwork.org/)

[74] European Research Area (ERA) is the ambition to create a unified research area open to the world, based on the EU Internal Market, that enables free circulation of researchers, scientific knowledge and technology. (https://ec.europa.eu/info/research-and-innovation/strategy/era_en).

[75] EURAXESS - Researchers in Motion is a pan-European initiative delivering information and support services to professional researchers, backed by the EU, member states and associated countries. It supports researcher mobility and career development and enhances scientific collaboration. (https://euraxess.ec.europa.eu/).

[76] Marie Skłodowska-Curie Actions (MSCA) are an EU programme, which provides grants to support research careers and encourages transnational, intersectoral and interdisciplinary mobility. (https://ec.europa.eu/programmes/horizon2020/en/h2020-section/marie-sklodowska-curie-actions; https://ec.europa.eu/research/mariecurieactions/msca-actions_en).

[77] White zones are areas which have no broadband infrastructure (based on the availability of Internet access speeds higher than 30Mbps) and where it is unlikely to be developed in the near future.

[78] Until the new Law on Electronic Communications is adopted, RATEL continues to conduct the analysis of relevant markets. In cases where there is no effective competition in a relevant market, the regulator designates the operator who, individually or jointly with other operators, has significant market power and its regulatory obligations.

[79] Directive 2013/37/EU of the European Parliament and of the Council of 26 June 2013 amending Directive 2003/98/EC on the reuse of public sector information.

[80] The Open Data Portal (https://data.gov.rs/sr/), as accessed in October 2020.

[81] The OGP is an international agreement aiming to increase transparency, civic participation and the use of new technologies in achieving a more open, effective and accountable government. Currently, 78 governments are members of the partnership (www.opengovpartnership.org/about/approach/).

[82] The data displayed on the platform are automatically downloaded from the Unified Information System for Planning, Implementation Monitoring, Policy Coordination and Reporting, maintained by the government through the state administration body responsible for policy co-ordination (Republic Secretariat for Public Policies) in accordance with Article 47 of the Law on Planning System of RS. The platform is co-financed by the European Union, (https://monitoring.mduls.gov.rs/), as accessed on 12 February 2021.

[83] Ministry of Public Administration and Local Self-Government, Projects and Programmes (http://mduls.gov.rs/en/category/projects-and-programmes/), as accessed on 12 February 2021.

[84] The e-Government Portal (https://euprava.gov.rs/) had been used by 1 026 347 people, according to data on the website, as accessed on 10 October 2020.

[85] For instance, the MTTT's Smart and Safe platform: Tips and Guides for Traders (https://pametnoibezbedno.gov.rs/saveti-za-trgovce/).

[86] GIZ-funded "Digital transformation support program for MSMEs" by the Development Agency of Serbia in cooperation with the Center for Digital Transformation (https://ras.gov.rs/javni-poziv-za-ucesce-u-programu-podrske-digitalnoj-transformaciji-mmsp).

[87] UNICEF in Serbia and USAID Cooperation for Growth Project (CFG) supported the preparation of the Digital Skills Development Strategy for the period 2020-24, through surveys and analysis performed under the framework of co-funded programmes like "Digital transformation of the labour market" by USAID CFG and "kids online" by UNICEF.

[88] At the time of writing (Q3 2020), the implementation of the Digital Skills Development Strategy had not yet started; the strategy action plan for the period 2020-21 was still being prepared and budget planning was under development.

[89] The programme is part of the Serbia at Your Fingertips - Digital Transformation for Development project, implemented by UNDP Serbia in co-operation with the Office of the Prime Minister of the Republic of Serbia and the ITE.

[90] The Police Directive (EU) 2016/680 deals with processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties and on the free movement of such data.

[91] The Annual Report of the former Commissioner for Information of Public Importance and Personal Data Protection for 2018 vividly describes the refusal of controlled public authorities to co-operate, submit data and fulfil their legal obligations according to the Law on Access to Information. It also outlines the reduced level of transparency of the new draft law through provisions excluding state-owned enterprises from its jurisdiction, which has also been signalled as contrary to the principles of openness and transparency by the Support for Improvement in Governance and Management, Joint Initiative of the European Union and the Organization for Economic Cooperation and Development (Commissioner for Information of Public Importance and Personal Data Protection, 2019[406]).

[92] Annual Report of the Commissioner for Information of Public Importance and Personal Data Protection for 2018 (Commissioner for Information of Public Importance and Personal Data Protection, 2019[406]).

[93] Smart and Safe Platform: Guide for Consumers in e-Commerce, Tips for e-Traders (https://pametnoibezbedno.gov.rs/elektronska-trgovina) and the eShop Fast, Easy and Simple video campaign (https://pametnoibezbedno.gov.rs/video/4).

[94] The twinning project "Further Development of Consumer Protection in Serbia" [SR 13 IPA OT 01 16], jointly funded by the European Union and the Republic of Serbia in the total amount of 1.425 million EUR, is implemented by the Ministry of National Development of the Republic of Hungary and the Regional Development Agency Pezinok from the Slovak Republic in cooperation with the Ministry of Trade, Tourism and Telecommunications of the Republic of Serbia (user organisation). Project duration is August 2017 - August 2019, (https://zastitapotrosaca.gov.rs/o-nama#S4).

[95] The working document elaborates in detail the steps taken so far and initiatives involving WB6 economies in the following areas: closer ties with the EU and enhancing regional co-operation, people-to-people contacts, familiarising people with the EU, civil society development and dialogue, good governance, parliamentary co-operation, trade integration, investment and economic and social development, community financial support, and donor co-ordination.

[96] The NTS should cover the following fields: 1) non-physical bottlenecks; 2) reform path for the transport sector including objectives and the key performance indicators; 3) the national transport model and demand forecast; 4) a strategic policy options paper covering road transport and infrastructure, urban transport, rail infrastructure and railway transport, intermodal transport, ports and inland waterways, air transport, e-mobility, active mobility, and technology uptake; 5) a draft national transport strategy with

detailed action plan; and 6) a strategic framework for the sustainable implementation of intelligent transport solutions (ITS), defining the ITS vision and priority interventions, development of the ITS architecture and institutional arrangements and roadmap for adopting ITS standards and the relevant EU Directives, and finally an ITS strategy and action plan with prioritised interventions.

97 For more information, please see: https://mfin.gov.rs/dokumenti2/saobracaj.

98 Its purpose is to regulate the determination of the public interest for complete and incomplete expropriation and temporary occupation of immovable property for the construction of those structures, then to determine specific expropriation procedures if needed permits, approvals, etc.

99 The Rulebook on the Management of Capital Projects has three categories of projects: 1) less than EUR 5 million; 2) EUR 5-25 million; and 3) over EUR 25 million.

100 A one-stop-shop is a business or office where multiple services are offered so that customers can get all they need in just "one stop." The term originated in the United States in the late 1920s or early 1930s to describe a business model offering customers the convenience of having multiple needs met in one location, instead of having to drive all over town to attain related services at different stores. One-stop-shops are a way of facilitating trade.

101 An appropriate definition of "asset management" for the roads sector is the one proposed by the OECD in 2001: "A systematic process of maintaining, upgrading and operating assets, combining engineering principles with sound business practice and economic rationale, and providing tools to facilitate a more organised and flexible approach to making the decisions necessary to achieve the public's expectations." (OECD, 2001[380]).

102 The assignment covered the preparation of detailed needs assessments, guidelines, maintenance plans and recommendation for performance-based maintenance contracts. Regional action plans for transport facilitation, rail, road and road safety (https://www.transport-community.org/library/meetings/ministerial-council/) have been endorsed by the Council of Minister of the Transport Community Permanent Secretariat (TCPS) in October 2020 and economies need to align their own plans to achieve the goals set within these ones.

103 HDM-4 is a powerful tool for road management, economic analysis, programming road works, estimating funding requirements, predicting road network performance, project appraisal, and policy impact studies.

104 According to Article 234 of the Air Transport Law, the CAD is the national supervisory authority of the Republic of Serbia in air navigation, in accordance with the regulations of the European Union, issuing the certificate of competence for air navigation services provision and assessing whether air navigation services providers fulfil the requirements for the provision of services.

105 Regulation on Airport Charges.

106 Regulation on the details of the procedure and the criteria applied for access to services provided in service facilities and Rulebook on the elements of service facility description.

107 Alpine-Western Balkan rail freight corridor, https://www.rfc-awb.eu/.

108 Full opening of the market, more incentives for shifting, development of multimodal facilities, etc.

109 The indicators include: traffic flows (transparent per vehicle categories in the last 15 years, currently 407 counters in operation constantly measuring the traffic intensity, conducted by PERS), detailed road accident database (transparent road safety indicators through the Road Traffic Safety Agency), for road network – IRI coefficient, databases on bridges and tunnels, a database of landslides. Regional maintenance centres supervise the state of all roads.

110 Additional indicators that could be monitored include average user costs, travel time satisfaction levels i.e. reliability, value of assets, market research and customer feedback, forecasted value of assets, audit programme, quality of user information, allocation of resources, long term programmes for investment, maintenance and operations, lowering of overhead percentage, etc.

111 See the example of the border queue management system in Estonia (Estonia Border, n.d.[452]).

112 Since the last CO2018 assessment, road safety legislation has been updated: adopted amendments of Law on road traffic safety; adopted new Law on roads and its corresponding by-laws which introduce a system of licensing of professional drivers and introduce tools for infrastructure safety management; updated new Rulebook on roadworthiness test. A survey of performance safety indicators is conducted every year using a methodology revised in 2017. Annual road traffic safety statistical reports have been published. A lot of road safety campaigns were conducted for all road users especially for children and young drivers. Seminars refreshing the knowledge of traffic police and traffic inspectors have been conducted. Most local communities (110 out of 161) have established Road Safety Councils and adopted their own road safety strategies.

113 Established and operated the Road Safety Coordination Body; established and operated Road Traffic Safety Agency from 2010; Data collection according to CADAS started from January 1, 2016; established integrated road safety database from 2015, with data publicly available on the website of the Road Traffic Safety Agency; measured key performance indicators on a yearly basis from 2013 (publicly available on the website of the Road Traffic Safety Agency) based on the methodology according to Safety Net project; developed specific programmes for vulnerable road users (safety training for bicyclists, moped drivers since 2018 and motorcycle drivers since 2017).

114 The goals include: modal shift from road, standards for energy efficiency, standards for noise emission, reduction of greenhouse gas emissions, vehicle labelling for emissions and fuel efficiency, introduction of carbon footprint calculators, eco-driving and speed limits, ITS applications, co-modality in transport, and urban mobility solutions.

The following environmental sustainability measures have been proposed: 1) to prepare sustainable urban mobility plans for Belgrade and major cities by 2020 (Belgrade's was completed in 2020); 2) to reduce dependence on conventionally fuelled cars in the five biggest Serbian cities by 25% by 2025 (several legal acts were adopted in 2019 and 2020 to provide incentives to promote electric vehicles); 3) to prepare strategies and define concepts of city logistics for Belgrade and bigger cities by 2020 (the city logistic strategy for Belgrade is in the procurement plan for 2020 but has not yet been tendered out); 4) shifting freight and transport to more environmentally friendly modes (such as rail and water); and 5) more intensive promotion of intermodal transport (see section on combined transport for more details).

These measures are included in the National Sustainable Development Strategy, National Environmental Approximation Strategy for the Republic of Serbia and the National Environmental Protection Programme, but also in the Serbian Strategy of Energy Sector Development; the overall Strategy of Railway, Road, Inland Waterway, Air and Intermodal Transport Development in the Republic of Serbia; and many other existing strategic documents as spatial plans, sector strategies and action plans.

[115] Study of snow deposits on state roads, study of endangerment of the state roads from the occurrence of floods (Kolubara river basin, Sava river basin, South Morava River Basin, West Morava basin without Ibar river, etc.). PERS also implements the Technical Assistance to Mainstream Climate Resilience in the Road Transport Management in Serbia.

[116] Combined transport refers to the transport of goods between Member States where the lorry, trailer, semi-trailer (with or without tractor unit, swap body or container of 20 feet or more) uses the road on the initial or final leg of the journey and rail or inland waterway or maritime services on the other leg, where this section exceeds 100 km as the crow flies (Combined Transport Directive 92/106EC, amended by the Directive 2013/22/EU).

[117] The General Transport Master Plan for Serbia for the period 2009-20027; Plan for Railway, Road, Water, Air and Intermodal Transport Development in the RS 2015-2020; Railway Master Plan for years 2012-2021; National Program of Public Railway Infrastructure from 2017 to 2021; and The Law on Spatial Plan of the Republic of Serbia from 2010 to 2020 defines potential locations of intermodal terminals and logistics centres.

[118] Ease of arranging competitively priced shipments.

[119] Periodical and regular measurements to monitor infrastructure assets' conditions, assessment of the value of assets and costs for non-maintained assets, adoption of the asset management strategies, consistent approach in the identification of the mix and timing of asset operation and construction strategies, etc.

[120] Network Codes were established under Article 6 of EU Regulation 714/2009 and are secondary acts, in many cases of technical nature, to overcome legislative gaps and barriers to a non-discriminated, open internal EU energy market by establishing uniform regulation. In essence they overcome barriers and friction in order to promote competition. In some sense, they represent lessons learned over time that aim to perfect the legislative framework for the EU internal energy market and represents EU best practices and standards. While not an exhaustive list, the interested reader can find more information about Network Codes under (Eurostat, 2021[465]; ENTSOE, 2021[449]; Florence School of Regulation, 2021[388]).

[121] More precisely, Serbia does not currently have a legal binding documents (policy, regulation or legislation) that govern or require the pricing or taxation of greenhouse gases. However, it is understood that Serbia is currently working on legislation that would implement some type of pricing mechanism akin to the EU emission certification market, with similar monitoring verification and reporting requirements and mechanisms. Moreover, the Energy Community, of which Serbia is a member, plans to adopt relevant legislation into its *acquis* that would require the establishment of national or even regional greenhouse gas market that would eventually be integrated into the European Union Emission Trading Scheme. For more information, please see Capros (2020[434]), Energy Community Secretariat (2020[387]), Kantor (2020[393]; 2021[392]).

[122] This conclusion is supported by the European Commission (2020[301]) which notes that “staff levels are still insufficient to allow the agency implement all regulatory responsibilities under the Third Energy Package and the new acquis upfront” (page 89).

[123] More precisely, according to AERS (2020[423]) it had 45 staff members in 2018 and planned to expand that to 51 at the end of 2019. However, at the end of 2019, AERS had 43 staff members. Based on conversation with AERS, it plans to hire additional 9 staff members, in part to support its work on the full transposition and implementation of the network codes.

[124] Parliamentary approval of the budget is not a necessarily a prohibitive procedure, but it does increase the risk of delays in adopting a budget and makes it more susceptible to political influence. Both factors could lead to delays or interruptions to hiring and retaining staff as well as interrupting the general function of the regulator.

[125] Although related to matters of security please see IOSCO (2015[390]) for further elaboration.

[126] The framework includes the Energy Development Strategy of the Republic of Serbia until 2025 - with projections until 2030, the Electricity Transmission System Development Plan of the Republic of Serbia for 2020-29, the Electricity Transmission System Investment Plans for 2020-22, and the Natural Gas Transport Transmission System Development Plan for 2020-29 – see AERS (n.d.[424]).

[127] Although another significant player is Gazprom as the dominant exporter of natural gas to Serbia and part owner of the Serbian transmission system operators, Yugorosgaz and Gastrans. Moreover, Gazprom is the majority owner of NIS j.s.c. which is actively engaged in the development of the 200 MW thermal power plant in Pancev where construction started in 2019. Additionally, Gazprom Germania, a subsidiary of Gazprom, is part owner of the natural gas underground storage facility Banatski Dvor, LLC.

[128] Oil indexation was once the dominant pricing format for natural gas in Europe. This largely reflected the fact that natural gas spot markets were not liquid enough at the time to provide good price signals. Moreover, when natural gas was competing with oil for power generation and heating, oil indexation was a good approach for assuring that natural gas was competitive with the main alternative fuel. Oil indexation is often also justified by natural gas being produced as a by-product from oil exploration or because natural gas competes with oil for capital investment. However, in the current market situation, oil indexation means that price of natural gas price does not reflect the supply and demand realities which are largely now disconnected from oil, both in terms of alternative demand and on the production side. Furthermore, Europe has a variety of liquid natural gas spot markets that offer good pricing and indexation points, especially considering the interconnected natural gas markets, including those based on the European natural gas pipeline network. However, it should be stressed that there is an extensive literature discussing benefit and drawbacks of the oil indexation of natural gas pricing and this endnote only scratches the surface of the debate. Some examples of the literature are: Dubreuil et al. (2020[439]), European Commission (2015[458])—with regard to legality of oil indexation, Melling (2010[394]), IEA (2020[389]) --for the current split in pricing approach in Europe, see Stern (2007[396]).

[129] For a more detailed exposition of the issue of losses in the transmission and distribution of electricity please see CEER (CEER, 2020[236]).

[130] Please see Ministry of Mining and Energy's website (https://mre.gov.rs/dokumenta-efikasnost-izvori.php) or Energy Community website (https://www.energy-community.org/implementation/Serbia/secondary.html) for a comprehensive list of the regulations and legislation that govern the renewable energy sector in Serbia.

[131] A day-ahead market is an organised market space in which interested parties can buy and/or sell energy for the next day in the form of putting in bids/offers that are algorithmically matched. For more detailed explanations please see, for example, NordPool (2021[395]) or ISO-NE (2021[391]).

[132] A feed-in tariff (FIT) refers to a renewable support scheme in which "[…] power plant operators receive a fixed payment for each unit of electricity-generated independent of the electricity market price" (Banja et al., 2017, p. 15[238]). A feed-in-premium is a renewable support scheme in which "[…] plant operators have to market the electricity generated directly at the electricity market and receive an additional payment on top of the electricity market price either as a fixed payment or adapted to changing market prices in

order to limit both the price risks for plant operators and the risks of providing windfall profits at the same time" (Banja et al., 2017, p. 16[238]). Contract-for-difference is a renewable support scheme in which variable premiums are paid to plant operators for delivered electricity where the "[…] variable premium [is] calculated as the difference payment between an administratively prefixed price (the strike price) and a measure of the market price for electricity (the reference price)" (Eurostat, n.d., p. 5[198]). For a brief but comprehensive non-technical overview of the different renewable financial subsidy schemes please see Aures (2021[425]). For an overview of the different support schemes applied across Europe please see http://www.res-legal.eu/.

[133] This conclusion is based on the government input, indicating that the current human resources are not sufficient. This is also support by Energy Community Secretariat (Energy Community Secretariat, 2020[232]) which reports that "the Ministries [Ministry of Mining and Energy and the Ministry of Construction, Transport and Infrastructure] reported about the needs and plans to strengthen the currently weak human capacities for implementation of the energy efficiency directives. Human resource capacities for energy efficiency in the Ministry of Mining and Energy were slightly increased but still remain insufficient to effectively implement the required reforms."

[134] The government response indicated that "The collected indicators are not collected systematically. It is done on the project base."

[135] A seat requirement is "a provision of national law under which an undertaking established in another Member State must create a permanent establishment in the Member State in which it seeks to" be active (Energy Community Secretariat, 2018, p. 13[448]).

[136] As Serbia is a member of the Energy Community, the Energy Community Secretariat publishes opinions that the network operator(s) is(are) unbundled in line with EU Directive 2009/72/EC and 2009/73/EC. To this end, the absence of a positive opinion could indicate that the network operator is not unbundled in line with the Directives and thus do not conform with international best practices.

[137] Following the publication of the original opinion of Energy Community Secretariat, the relevant aspect of the Law on Ministries was amended. However, without a re-opening of the certification procedure by AERS, the Energy Community is not in a position to submit a new, positive opinion on the matter.

[138] The requirement for a compliance officer in the transmission system operator originates in Article 21 of the EU Directive 2009/72/EC. It establishes the role of compliance officer as an independent position to monitor that the TSO complies with transparency and non-discriminatory behaviour requirements and that it operates independently from any other influence when part of a vertically integrated undertaking. This is a vital role as it assures that the TSO behaves equally and adequately towards all market participants and thus, does not use its natural monopoly position to hamper the competitive nature of the market.

[139] The Joint Allocation Office (JAO) is a service company that facilitates the electricity market by organising auctions for cross border transmission capacity jointly for both TSO. The Joint Allocation Office is the single allocation platform (SAP) for all European TSOs that operate in accordance and compliance with EU legislation. For more details, please see www.jao.eu/aboutus/aboutus/overview.

[140] This spirit of regional co-operation is best exemplified by AERS's participation in the Energy Community as well as in:

1) Energy Regulators Regional Association which is an association of regulators aiming at the improvement of co-operation, exchange of experience and capacity building in member states.

2) Council of European Energy Regulators (CEER), a platform for co-operation, information exchange and assistance between Europe's national energy regulators and their interface at EU and international level, aiming to facilitate the creation of a single, competitive, efficient and sustainable EU internal energy market.
3) Balkan Advisory Forum, a national regulatory agency platform for exchange of experience on regulatory issues falling within the scope of the electricity, gas and water and sewerage markets in the region.

141 Please see (Energy Community Secretariat, n.d.[446]).

142 See (BIZLife, 2019[466]).

143 Please see (Energy Community Secretariat, 2021[467]) for the current state of TSO certification and thus state of unbundling.

144 The Paris Agreement was signed in 2016 and ratified in 2017, while the Kyoto protocol was ratified in 2007. Serbia submitted two National Communications on climate change in 2010 and 2017 (UNFCCC, 2020[307]). The Ministry of Environmental Protection, together with the UNDP, drafted the Second Biennial Update Report and initiated drafting of the Third National Communication under the UNFCCC. Both are expected to be submitted in 2021.

145 The NECP will define targets in the field of renewable energy sources, energy efficiency and reduction emissions of GHG for 2030 with long-term vision until 2050. The NECP is prepared through the IPA 2017 "Further Development of Energy Planning Capacity" project, which started in February 2021.

146 In the period from 2006 to 2019, Serbia suffered 10 natural disasters, 8 of which were floods. It suffered flooding once in 2007 and in 2009, twice in 2010 and in 2013, and then once in 2014 and in 2019. The floods in May 2014 were particularly severe, affecting 22% of the population (1.6 million people) and two-thirds of Serbia's municipalities (mostly located in Central and Western Serbia). The damage amounted to EUR 1.5 billion (EC/UN/World Bank, 2014[456]).

147 SEPA performs public administration tasks relating to the development and management of the national information system for environmental protection, collection and compilation of environmental data and preparation of reports on the state of the environment. It also ensures the right of access to relevant environmental data and information at national and international levels, and improves communication and dissemination of information to decision makers and the public.

148 In 2019, the Ministry of Environmental Protection revoked the waste management licences of one of the largest hazardous waste management operators. The inability of hazardous waste producers to transfer waste to an appropriate operator resulted in hazardous waste accumulating in temporary storage, creating an additional hazard for the environment and human health. The Draft Law on the Amendments to the Law on Waste Management amends Article 36 paragraph 4 to allow waste to remain in temporary storage for 24 months instead of 12 months, which will result in large amounts of hazardous waste piling up in temporary storage facilities.

149 The National Waste Management Plan should include: estimates of expected quantities of municipal waste, as well as other relevant waste streams (e.g. "special waste streams" in accordance with definitions from Articles 47 to 58 of the Law on Waste Management), a review of existing waste collection systems and networks of waste recovery and disposal facilities, assessment of the need for new collection systems and additional waste management infrastructure, criteria for identifying the location and required capacity of additional waste management facilities, an implementation plan for reducing the amount of

biodegradable waste in landfills, and the estimation of waste management costs, measures, guidelines and deadlines for the implementation of the plan.

[150] The Ministry of Construction, Transport and Infrastructure; Provincial Secretariat for Sustainable Development and Environmental Protection; local self-government units; public and private utility companies, the Serbian Chamber of Commerce / boards of utility companies; the Standing Conference of Towns and Municipalities; and the non-governmental organisation (NGO) sector.

[151] The capital city of Belgrade is working on the construction of a new landfill Vinca, with the construction of a municipal waste incinerator planned for the second phase, as well as plants for biodegradable waste treatment (anaerobic digestion). Both plants will convert waste to energy, which is in accordance with the Law on Waste Management and related by-laws. Communal infrastructure is being built, in accordance with the regional waste management principle, such as the construction of regional waste management centres. One of these is the construction of the regional landfill Kalenic for 11 municipalities in the Kolubara region with accompanying infrastructure. Infrastructural development plans have also focused on the construction of such centres in Novi Sad, Zaječar, Niš, Priboj and Nova Varoš, Kraljevo, Kruševac and other regions that were not built by 2020.

[152] Data for agriculture and municipal use are from 2016.

[153] In its decision of January 2019 the MoEP ordered the investor to remove 300-350m of pipes from the riverbed because the works had been carried out in violation of the conditions issued by the Institute for Nature Conservation of Serbia in September 2018. Inspectors have also determined that a landslide has been activated at the water intake level on the right bank of the river, and that the flora on the left bank has been destroyed. The investor’s appeal against the ministry’s decision was rejected in April 2019. However, not only did the investor fail to comply with the decision, but also continued with construction works, and the mini hydropower plant recently obtained a use permit from the municipality of Babušnica where the village of Rakita is situated. This ignited anger in the local population, who as part of the protest held during summer 2020, removed some of the pipes to implement the ministry’s decision (Balkan Green Energy News, 2020[428]).

[154] The MoEP; SEPA; Institute for Nature Conservation of Serbia; Provincial Secretariat for Urbanism and Environmental Protection; Institute for Nature Conservation of Vojvodina Province; the city of Belgrade; local self-governments; and the Directorate of Forests, situated in the Ministry of Agriculture, Forestry and Water Management. Operational and field activities are covered by the activities of public forest enterprises, Srbijašume and Vojvodinašume, while the management in national parks are the responsibility of five national parks (Kopaonik, Tara, Fruška Gora, Đerdap and Šar Planina).

[155] Aichi Target 11 states: “By 2020, at least 17% of terrestrial and inland water, and 10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes”.

[156] The Implementation of an Innovative Forest Management Planning Considering Economic, Ecological and Social Aspects in Serbia project was being implemented at the time of drafting, to help establish the basic outlines of the Serbian national forestry programme.

[157] The Forest Law Enforcement, Governance and Trade (FLEGT) regulation governing the import of timber products into the EU, and the EU Timber Regulation, governing the trade in timber and timber products, are two key elements of the EU *acquis* regarding forestry.

[158] According to interviews with government representatives.

[159] This indicator shows trends in the change in use of agricultural, forest and other semi-natural and natural land into urban land and other artificial areas. It shows surfaces occupied by construction and urban infrastructure, as well as urban green, sports and recreational areas. The indicator shows changes in the use of agricultural land, land used for different types of human activities, the origin of urban land expressed through the share of different categories to which the change was made. The indicator is calculated by analysing maps based on Landsat satellite images from the CLC database for 1990, 2000, 2006, 2012 and 2018, i.e. based on the increasing trend of areas use of which has changed in a certain period of time and based on CLC databases of changes.

[160] The most recent data (2017) indicate the economy's annual mean concentration of particulate matter ($PM_{2.5}$) is 25 μg/m^3, exceeding the recommended maximum of 10 μg/m3. This is equal to the WB6 average of 25.77 μg/m^3 in 2017 . PM concentrations in the winter months regularly reach ten times the limit in the majority of municipalities of Serbia.

[161] Several of the most polluting coal power plants in Europe are located in Serbia: Kostolac B is the most notorious sulphur dioxide polluter in Europe with 128 000 tonnes of emissions of SO_2 in 2016, followed by Kostolac A (109 000 tonnes of SO_2) and Nikola Tesla B (57 100 tonnes of SO_2), Kolubara A (3 255 tonnes of PM_{10}) and Nikola Tesla A (2 680 tonnes of PM_{10}) (Health and Environment Alliance. Climate Action Network, 2017).

[162] "Further implementation of the Approximation Strategy in the field of environment - Implementation framework for full compliance with legislation in the field of air, chemicals and horizontal legislation".

[163] Belgrade, Subotica, Pančevo, Užice, Smederevo, Kosjeric, Valjevo, Kraljevo, Sremska Mitrovica, Kragujevac and Niš.

[164] The Seveso-III Directive (Directive 2012/18/EU) is a European Union directive aimed at controlling major chemical accident hazards.

[165] SEPA was developing its capacity to maintain the Cadastre of Contaminated Sites at the time of drafting. Co-operation between different UN Agencies and ministries over projects related to contaminated sites in Serbia has included improving the reporting system for the cadastre, developing capacity to carry out investigations and improving the management of contaminated sites overall.

[166] Industrial crops include both annuals (flax, **potatoes**, sunflower, caraway) and perennials (olive, essential-oil rose, hevea, hops, ginseng). They belong to many botanical families, including Solanaceae (**potatoes**, tobacco), Compositae (sunflower, safflower), Cruciferae (rape, mustard), and Rosaceae (essential-oil rose).

[167] Other relevant ministries are the Ministry of Economy; the Ministry of State Administration and Local Self-Government; the Ministry of Labour, Employment, Veterans and Social Affairs; and the Ministry of Environmental Protection as well other government agencies or departments with specific mandates for certain projects

[168] As a province, Vojvodina has its own institutions supporting rural infrastructure. These include the Provincial Secretariat for Agriculture, Forestry and Water Management; the Provincial Secretariat for Interregional Cooperation and Local Self-Government; the Provincial Secretariat for Economy, Employment and Gender Equality; and the Provincial Secretariat for Urban Planning, Construction and Environmental Protection.

[169] Serbia was the first economy in the region to enter the Chinese Belt and Road Initiative. Due to the particular bilateral relations with China, its investments in infrastructure in Serbia are much larger than in neighbouring economies.

[170] In 2014, the UAE-based Arabtec Holding, which is 21% owned by the Abu Dhabi investment fund Aabar, opened its regional headquarters in Belgrade to drive its expansion into the Balkan region.

[171] The area under irrigation is less than 1.5% of Serbia's arable land, significantly lower than in Bulgaria (3.0%), Hungary (5.0%), and Italy and Greece (around 30%).

[172] These faculties offer a wide range of programmes including agricultural economics, agriculture engineering, veterinary medicine, water management, animal husbandry, field and vegetable crops, fruit growing and viticulture, environment protection, organic agriculture, agricultural technological equipment, agritourism, rural development, forestry, and horticulture.

[173] The council is also responsible for identifying any required qualifications in the sector that need to be updated or no longer reflect the sectoral requirements; provide opinions about expected outcomes of knowledge and skills within the sector; promote opportunities for education, training and employment within the sector; propose lists of qualifications per levels and types, that may be acquired by the recognition of prior learning, etc.

[174] Regulates the planning, protection, arrangement and use of agricultural land.

[175] Regulates the protection and preservation of nature, biological, geological and landscape diversity as part of the environment as well as the integral system of environmental protection to ensure a healthy environment.

[176] Regulates the legal status of waters, integral water management, water land management, sources and methods of financing water activities.

[177] The National Strategy for Sustainable Use of Natural Resources and Goods was adopted in May 2012, based on the Law on Environment. The main, basic goals set to be achieved by this National Strategy are: directing and providing conditions for sustainable use of natural resources and goods, reducing the negative impact of resource use on the economy and the environment, contribution to directing development towards sustainable production

[178] The LPIS serves to identify land use for a given area. It uses orthophotos – basically aerial photographs and high precision satellite images that are digitally rendered to extract as much meaningful spatial information as possible. A unique number is given to each land parcel to provide a unique identification in space and time. This information is then updated regularly to monitor the evolution of the land cover and the management of the crops.

[179] Technical Assistance for the IPA2018: Action "Introducing and maintenance of functioning Land Parcel Identification System in pilot municipalities in Republic of Serbia" FWC SIEA 2018 – LOT 1. The value of entire project is EUR 300 000.

[180] The goals of NARDS are: 1) increased production growth and stability of producers' incomes; 2) improved competitiveness by adjustments to the requirements of the domestic and international markets and through the technological and technical improvement of the sector; 3) sustainable resources management and environmental protection; 4) improvement of the quality of life in rural areas and poverty reduction; and 5) efficient public policy management and institutional framework improvement for agricultural and rural areas development.

[181] As regards common commercial policy, no progress has been made on Serbia's accession to the WTO. The possibility of Serbia becoming a member of the WTO depends on the adoption of a modified law on the trade in genetically modified organisms, and the completion of market access negotiations with a small number of WTO members.

[182] Regulation on the performance of agricultural advisory services; Regulation on the issuance of licences and ID cards; Regulations on the maintenance of the register of agricultural extension agents

[183] The Culture Development Strategy was adopted by the government, but still needs to be ratified by the parliament.

[184] Through the Decree on the Formation of the National Council for Tourism Development of the Republic of Serbia.

[185] Bosnia and Herzegovina had the second highest market share, at 7.38% of total international tourist arrivals in 2019.

[186] The Blue Flag is one of the world's most recognised voluntary awards for beaches, marinas, and sustainable boating tourism operators. In order to qualify for the Blue Flag, a series of stringent environmental, educational, safety, and accessibility criteria must be met and maintained. Central to the ideals of the Blue Flag programme is the aim of connecting the public with their surroundings and encouraging them to learn more about their environment. As such, environmental education activities must be offered and promoted in addition to a permanent display of information relevant to the site in terms of biodiversity, ecosystems and environmental phenomena (Blue Flag, n.d.[431]).

The Green Key is a voluntary eco-label awarded to more than 3 200 hotels and other establishments in 65 countries. It is the leading standard for excellence in the field of environmental responsibility and sustainable operation within the tourism industry. This prestigious eco-label represents a commitment by businesses that their premises adhere to the strict criteria set by the Foundation for Environmental Education. A Green Key stands for the promise to its guests that by opting to stay with the Green Key establishment, they are helping to make a difference on an environmental level. The high environmental standards expected of these establishments are maintained through rigorous documentation and frequent audits. Hotels, hostels, small accommodation providers, campsites, holiday parks, conference centres, restaurants and attractions are all eligible for Green Keys (Green Key, n.d.[405]).

[187] For example, the Green Scheme of Slovenian Tourism https://www.slovenia.info/en/business/green-scheme-of-slovenian-tourism.

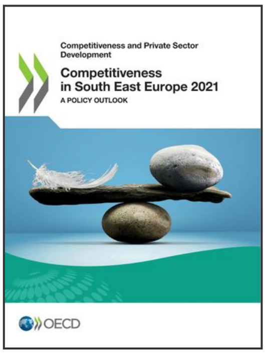
[188] The chapter of the *acquis* on the judiciary and fundamental rights.

[189] See the Agency for Prevention of Corruption website www.acas.rs.

[190] See the implementation reports the Ministry of Justice website: https://mpravde.gov.rs/tekst/26470/izvestaji-o-sprovodjenju-akcionog-plana-za-poglavlje-23.php.

[191] See the website of the Ministry of Justice: https://www.mpravde.gov.rs/tekst/26437/nacrt-revidiranog-akcionog-plana-za-poglavlje-23.php.

[192] www.antikorupcija-savet.gov.rs/.



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