Serbia Policy Notes 2024

00

ORLD BANK

BRD

4

0.0.0

Ī

Public Disclosure Authorized

Public Disclosure Authorized

Public Disclosure Authorized



© 2024 International Bank for Reconstruction and Development/ The World Bank Office, Serbia Bulevar Kralja Aleksandra 8 11000 Beograd Telephone: +381 11 30 23 700; Internet: <u>https://www.worldbank.org/en/country/serbia</u>

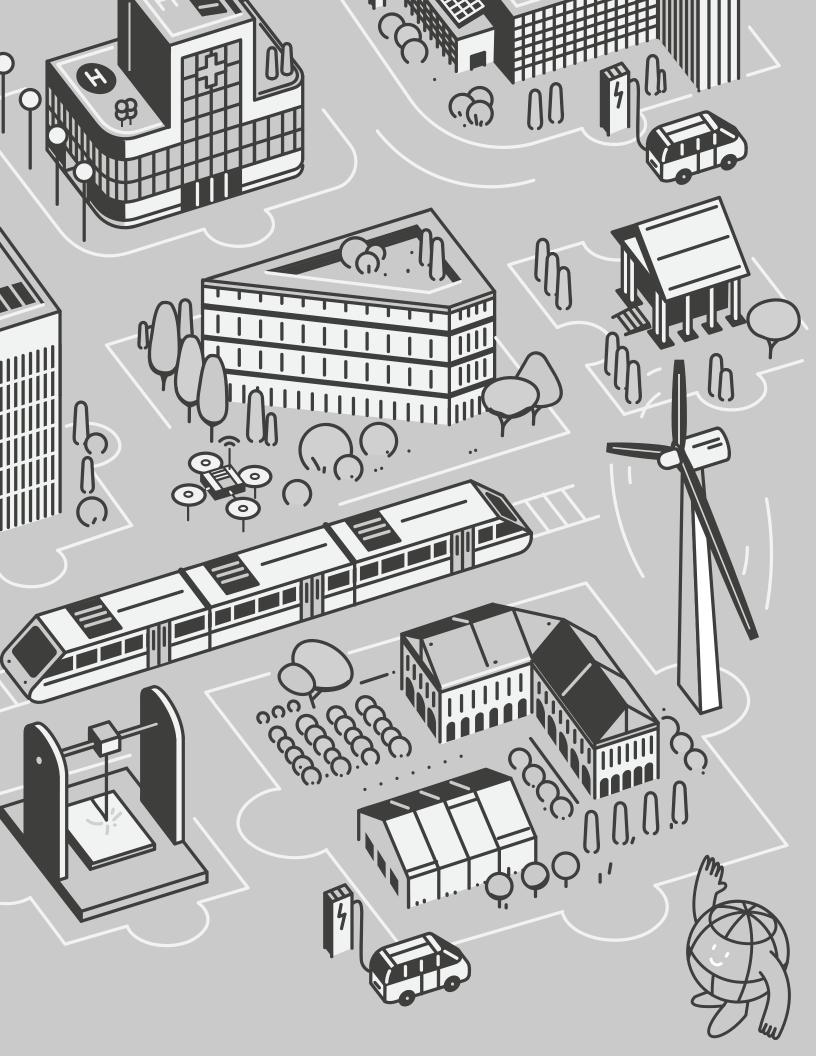
This report is a product of the staff of the World Bank Group with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank Group, its Board of Executive Directors, or the governments they represent.

The World Bank Group does not guarantee the accuracy of the data included in this work, which is drawn from multiple external sources. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgement on the part of the World Bank Group concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Nothing herein shall constitute, or considered to be, a limitation upon or waiver of the privileges and immunities of The World Bank Group, all of which are specifically reserved.

Rights and Permissions

The material in this work is subject to copyright. Because The World Bank encourages dissemination of this knowledge, this work may be reproduced, in whole or in part for noncommercial purposes as long as full attribution to this work is given. Any queries on rights and licenses, including subsidiary rights, should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2625; e-mail: pubrights@worldbank.org.



Serbia Policy Notes 2024

World Bank Group

June 2024

Table of Contents

_ist of Tables, Figures and Boxes	
Key Messages	iv
1. Macroeconomic Policies for Growth	1
2. Financial Sector	4
3. Governance	7
4. Business Environment and Innovation	10
5. Private Sector Participation in Public Infrastructure	13
6. Energy and Mining	16
7. Environment and Green Transition	19
8. Poverty and Inclusion	22
9. Health Systems	25
10. Education	28
11. Social Protection and Employment	31
12. Urban Development and DRM	34
13. Transport	37
14. Agriculture	40
15. Gender	43
Key References	46

Acknowledgments

These Policy Notes were prepared by a joint World Bank and IFC Team led by Nicola Pontara (Country Manager, World Bank), Nicolas Marquier (Country Manager, IFC), Jasna Vukoje (Portfolio Analyst), Hermina Vukovic Tasic (Senior Operations Assistant), Ana Relic (Consultant), Gordana Filipovic (Senior External Affairs Officer), Richard Record (Lead Economist), Simon Ellis (Consultant), Indhira Vanessa Santos (Lead Economist) and Nathalie Lahire (Program Leader), with overall guidance from Xiaoqing Yu (Country Director for the Western Balkans). Authors and contributors to the notes include: Sameer Akbar, Ruvejda Aliefendic, Maja Andjelkovic, Zoran Anusic, Axel E. N. Baeumler, Gunhild Berg, Henrike Brecht, Damian Brett, Chiara Broccolini, Bodin Bulatovic, Alberto Criscuolo, Aleksandar Crnomarkovic, Predrag Djukic, Kornel Drazilov, Ferhat Esen, Anna Fruttero, Augusto Garcia, Katharina Gassner, James Gresham, Gonzalo Javier Reyes Hartley, Siddharth Hari, Jane C. Hwang, Marijana Jasarevic, Erik Caldwell Johnson, Olivera Jordanovic, Klaudia Koxha, Aleksandra Krstic, Milan Lakicevic, Xueling Li, Elena Merle-Beral, Tamara Mihaljcic, Jovan Miljkovic, Valerie Morrica, Megha Mukim, Ramon Munoz-Raskin, Maja Murisic, Bojana Naceva, Ha Thi Hong Nguyen, Trang Van Nguyen, Ivana Novakovic, Tiago Peixoto, Claudio Protano, Dimitrios Psaltopoulos, Anuradha Ray, Zurab Sajaia, Lazar Sestovic, Guillermo Siercke, Luiz Gabriel Simoes, Zoran Skopljak, Milica Sredanovic, Michael Stanley, Srdjan Svircev, Dusko Vasiljevic, Svetlana Vukanovic, and Fang Zhang.

List of Tables, Figures and Boxes

Tables

Table 1.	Selected Policy Reforms	vii
Table 2.	World Bank Portfolio in Serbia	viii

Figures

-		
Figure 1.	Cumulative GDP growth over selected periods, EU27, CEE, WB5, Serbia	2
Figure 2.	Convergence with EU GDP per capita: alternative scenarios	2
Figure 3.	Serbia fiscal transparency	7
Figure 4.	Share of children aged 36-59 months attending early childhood education	22
Figure 5.	Youth unemployment and NEET rates in 2022	22
Figure 6.	Level of economic development and life expectancy (2021)	25
Figure 7.	Out-of-pocket health expenditures as percent of total health expenditure (2020)	25
Figure 8.	Cancer incidence and death rate per 100,000 population (2022)	26
Figure 9.	Amendable mortality rate per 100,000 population (2011 and 2020)	26
Figure 10.	In-patient average length of stay in days (2021)	27
Figure 11.	Low birth weight across districts, percent (2018)	27
Figure 12.	Grade 4 mathematics performance (TIMSS 2019)	29
Figure 13.	Student performance by proficiency levels for PISA 2012-2022	29
Figure 14.	Spending on labor market policies (EU [2022] and Serbia [2018-2022])	32
Figure 15.	Overlapping vulnerabilities in Serbian municipalities	34
Figure 16.	Serbia agricultural value added and GDP growth, (annual % growth)	40
Figure 17.	Convergence of Serbia's agriculture sector with the EU, 1991–2021.	40
Figure 18.	Gender parity index for gross enrollment rates by education level (2000-2021)	44
Figure 19.	Gross enrollment rates in tertiary education (2000-2021)	44
Figure 20.	LFP rate (population %, 15-64 years) (2000-2021)	44
Figure 21.	Reasons for economic inactivity (population 15-64 percent) (2021)	44

Boxes

Box 1.	Cost of Reaching Net-Zero by 2050 Mitigation	16
Box 2.	Cost of Reaching Net-Zero by 2050 Adaptation	19

Key Messages

Serbia has achieved remarkable macroeconomic stability, sustained economic growth, and improved living standards. The country has built robust fiscal buffers that allowed policy makers to effectively manage the recent COVID-19 and energy crises. Economic growth, while not stellar, has been steady, averaging 3.2% over the last 5 years. Living standards have markedly improved, with poverty (income under USD 6.85/day in 2017 PPP) falling from 28.3% in 2013 to an estimated 7.1% in 2023 and unemployment levels at record lows. Investments aimed at closing the existing infrastructure gap have surged and are expected to further accelerate under the ambitious "Leap into the Future – Serbia 2027" development plan.

Despite progress, Serbia is still not converging quickly enough with the EU. Serbia would converge with the average per capita income of the EU only in 2074 if it continues to grow at an average annual rate of 3%. The country's price competitiveness, traditionally driven by low-cost energy and labor in lower value-added sectors, is eroding. Disparities related to gender, location, ethnicity, and income persist. An ageing population and declining workforce require efforts to boost productivity, which has stagnated, and an investment shift towards higher value-added sectors. Additionally, Serbia is highly energy intensive and suffers from considerable levels of environmental pollution and the increasing frequency of extreme weather events.

The Growth Plan for the Western Balkans offers an unprecedented opportunity for Serbia to implement key reforms and switch gear. In May 2024, European authorities approved the setting up of the Reform and Growth Facility in support of the Plan, under which Serbia could receive up to EUR 1.7bn until 2027. Besides providing financial support, the Plan can accelerate integration into the Single Market before Serbia achieves full EU membership. It also aims at completing the Common Regional Market. In support of the Plan, Serbia has formulated a comprehensive agenda, articulated around reforms focusing on the business environment, the green and digital transitions, human capital, and growth fundamentals – including governance, justice sector, and the rule of law.

From the analysis presented in these Policy Notes, four key messages emerge for supporting economic growth that is faster, more resilient and sustainable in Serbia: (1) Maintain hard-won macroeconomic stability; (2) Implement key structural reforms; (3) Seize the opportunities offered by the green and digital transitions; and (4) Focus on sectors and cross-cutting issues that are key for growth. We examine them in turn.

1. Maintain hard won macroeconomic stability

Serbia has achieved macroeconomic stability thanks to a prudent policy mix. After weathering a series of external shocks, the fiscal deficit was reduced from 8% to 2.2% of GDP between 2020-2023, while public sector debt, during the same period, declined from 57.8% to 52.6% of GDP. Lower regional energy prices and resilient exports supported a sharp narrowing of the fiscal deficit to 2.6% of GDP in 2023, from 3% in 2022. The current account deficit also shrank from 6.9% in 2022 to 2.6% in 2023. Thanks to continuous strong FDI inflows, foreign exchange reserves now exceed EUR 25bn, an all-time high. Inflation is expected to fall within the National Bank of Serbia's target range by the summer of 2024. Financial stability has been broadly maintained.

Going forward, policies should remain geared toward supporting external and fiscal sustainability and ensuring adequate buffers for future shocks. On fiscal risks, the priorities are to alleviate the need for state financial support to SOEs while promoting their operational efficiency, market orientation and corporate governance. On the investment front, it would be desirable to limit the number of projects managed through exceptional rather than regular public investment management procedures. The big infrastructure investments planned under the "Leap into the Future – Serbia 2027" should be prioritized based on being climate-smart and generating robust economic rates of return. Other focus areas include enhancing revenue mobilization, planning and budgeting, and strengthening fiscal oversight, transparency, and accountability.

2. Implement key structural reforms to accelerate economic growth

Serbia's annual GDP growth rate could as much as double, reaching as much as 7%, if ambitious structural reforms could be implemented. In this respect, we highlight the following four key areas:

Conduct "second generation reforms." These reforms would help to complete the transition to a full-fledged market economy. They include boosting domestic private investment; attracting quality FDI in higher value-add-ed sectors; promoting competition and ensuring a conducive and predictable business environment; improving efficiency in product markets; promoting diversification and deeper integration of financial markets; reducing the role of large SOEs in the economy and putting them on a financially sustainable path; strengthening the economy's decarbonization; upskilling workers; and making the labor market more flexible and inclusive.

Boost human capital. More and better investments in human development would help boost productivity – which has stagnated. A good place to start would be to focus on raising the labor force participation rate of women, young adults, and ethnic minorities. It would be also important to safeguard and increase human development public spending, with special attention to the inclusion of the poor and vulnerable through better poverty-targeted programs that are responsive to shocks. The health system needs to provide affordable care options and evolve in line with ageing. The skill set of the labor force should be strengthened during the lifecycle.

Strengthen institutions and governance. The mobilization of private (domestic) investment could significantly benefit from reforms aimed at strengthening institutions and the creation of a level playing field for all businesses. A host of interventions could help further unlock Serbia's economic potential and foster a more dynamic and competitive economy, including deepening PFM and SOE reforms, and simplifying and digitalizing services for citizens and businesses. Enhancing the capacity of the justice sector, notably that of commercial courts, could facilitate the mobilization of private sector investment while increasing citizens' trust in government systems.

Accelerate trade and integration with the EU and the region. The implementation of 'green lanes' at EU borders can reduce logistical bottlenecks and foster the development and resilience of international supply chains, particularly in manufacturing sectors where Serbia has comparative advantage. Complementary reforms, such as the establishment of the National Single Window, should be implemented without further delay. The completion of the Common Regional Market, supported by CEFTA and a revamped Berlin Process, can further increase trade volumes. Financial integration, through participation in the SEPA, can reduce the cost of doing business, increase the efficiency of financial services and attractiveness of Serbia for investors.

3. Seize opportunities arising from the green and digital transitions

Serbia's heavy reliance on fossil fuels jeopardizes both the quality of its environment and the country's fiscal sustainability. Despite commitments to decarbonize and some early wins towards clean energy transition, such as the first renewable energy capacity auctions launched in 2023, the EU-mandated National Energy and Climate Plan still needs to be adopted. Pollution levels are substantial: Serbia has one of the highest death rates from pollution in Europe and is ranked 9th globally. The carbon intensity of the economy is also significantly higher than the EU average. The introduction of the EU Carbon Border Adjustment Mechanism (CBAM), which started in October 2023, could penalize Serbian exports produced with carbon-intensive processes and entail a substantial fiscal burden. It will also increase pressure on Serbia to introduce some form of domestic carbon pricing. Postponing these actions could result in greater fiscal costs for the state down the line.

Developing a sustainable and resilient economy is a smart economic and environmental choice. Failing to decarbonize will worsen health outcomes, threaten Serbia's EU accession process, and limit the country's economic modernization, leaving Serbia behind in terms of competitiveness. Developing a sustainable and resilient economy, on the other hand, will position Serbia as a regional hub for investment and trade, and allow the country to capitalize on opportunities in the green economy. Serbia could also leverage its comparative advantage in minerals that are key for the green transition and create new high value-added jobs, while ensuring that its mining sector grows in a transparent and socially sustainable and just manner.

Achieving net-zero emissions by 2050 will require significant contributions and participation by the private sector. Estimates from the 2024 World Bank Country Climate and Development Report suggest that, on the mitigation front, the incremental investments required for Serbia to meet net zero emissions by 2050 would be USD 10.4bn. This is equivalent to 1.6% of GDP per year. On the adaptation front, costs are estimated at USD 21.5bn by 2050, equivalent to 2.3% of GDP per year – focusing mostly on the water and transport sectors. In the absence of significant investments in adaptation, the impact of climatic events could reduce GDP by 16% by 2050, a lower-bound estimate. Considering the magnitude of these incremental investments, the role of the private sector is likely to be prominent and should be facilitated.

Serbia has prioritized digital transformation since 2017. This helped create the Office for IT and e-Government, consolidate digital infrastructure, and introduce digital services. Emerging as a regional leader, Serbia adopted the AI Strategy in 2019. Foundations were laid for biotechnology with the establishment of the Center for the Fourth Industrial Revolution and BIO4 Campus. Moving forward, it would be important to focus on: prioritizing user-centred design to tailor services to the users' needs and preferences; implement a 'digital talent strategy' to enhance the government's capacity to attract and retain skilled personnel; establish a robust framework for collecting, storing, and sharing government data while leveraging AI solutions; support the expansion of e-commerce to allow firms to grow; and strengthen cybersecurity

4. Focus on sectors and cross-cutting issues that are key for growth

Boosting growth will also require reforms and investments to boost productivity in specific sectors, spanning agriculture, industry and services. First, agriculture still contributes nearly 7% to GDP and accounts for 14% of formal employment. Yet, the sector has the potential to contribute more to growth and needs a reform plan that promotes policy predictability, improvements in land and labor productivity and the consolidation of climate-smart practices. Second, despite progress in promoting innovation, science grants, and entrepreneurship programs, budget allocations for R&D are still less than half of the EU average and will need to increase to achieve scale. Initiatives targeting SMEs should focus on increasing their productivity and growth and promoting market integration into regional and global value-chains by taking advantages of the current, increasing trends towards nearshoring production in the EU neighborhood.

Table 1. Selected Policy Reforms

	Policy Measure	ST	MT
	Macroeconomic Policies for Growth, Financial Sector, Governance (Briefs 1, 2, 3)		
· In	plement the Decree for Capital Projects, enhance the PIMIS: focus on priority, green, investments	х	
· D	evelop and coordinate pro-growth policies within the GDP council (in line with EU Growth Plan)	х	
· In	prove the legal and regulatory framework on payments and integration with the EU's SEPA	х	
· St	rengthen corporate governance, managerial capacity, and market orientation of SOEs		х
· B	post corporate financing through the corporate bond market on the supply and demand sides		х
· In	vest in capacity building for the High Judicial Council and State Prosecutorial Council		х
Busine	ss Environment and Innovation and Private Sector Participation in Public Infrastructure (B	riefs 4,	5)
· Id	entify and address gaps in PPP frameworks and expand hybrid financing for public infrastructure	x	
· A	tract quality investments (Investment Law, PPP framework, innovation, green lanes, National Single Window)	x	
· In	plement measures to spur innovation (public-private collaboration in R&D, post-doctoral studies, training)	x	
R	aise SME productivity and growth (R&D, GVC integration, business environment, training, AI)		х
	Energy and Mining, Environment and Green Transition (Briefs 6, 7)		
· A	pprove the NECP and ESDS, with the endorsement of a net-zero target by 2050 [low-carbon scenario]	x	
· In	plement legislation to tackle air pollution, municipal waste and factor-in the cost of env. Externalities	x	(x)
A	dopt carbon pricing, to modernize the energy sector and to address the CBAM		х
E	plore the potential of clean energy minerals under a modernized governance and legal framework		х
	Human Development (Briefs 8, 9, 10, 11)		
	Health Systems		
D	evelop a comprehensive strategy to tackle NCDs (prevention, early detection, case management)	x	
	rengthen primary health care (e.g., closing the gaps in infrastructure, equipment, and staffing)	x	
	eform the service delivery network (less in-patient care, more primary and new models of care)		x
	ontinue provider payment reforms in primary health care and hospitals to improve efficiency and quality		x
	Education		
E	nsure sustainability of ECEC reforms (access, equity, teacher training, outreach to children and families)	x	
	vest in primary education (infrastructure, quality of learning, single shifts, M&E, equity, digitalization)		x
	rengthen tertiary education (quality, equity, labor market relevance, system-level funding)		х
	Social Protection and Employment, Poverty and Inclusion		
In	prove the delivery of social assistance system to the poor (eligibility criteria, means-testing)	x	
	eform the pension system with a view to improving adequacy and financial sustainability		x
	dress the challenges of lagging regions (agricultural productivity, service delivery, infrastructure, connectivity)		x
74	Urban Development and Disaster Risk Management (Brief 12)		X
Δ	dopt the Spatial Plan of the Republic of Serbia, and Law on Disaster Risk Reduction and Emergency Management	v	
	evise the Law on Planning and Construction and bylaws to include climate change and resilience aspects	X	
		X	
ĸ	einforce the country's financial protection by improving ex post disaster risk financing mechanisms	Х	
	Transport (Brief 13)		
	aplement the transitional SLA and convert it to a permanent with budget allocation reflecting actual sector needs	X	
	nalize draft National Transport Strategy	Х	
	ecarbonize the sector (green fleets, subsidies for green vehicles, charging stations, waterways/river ports).		Х
In	nprove multimodality (platform integrating all modes of transport, single booking platform)		Х
	Agriculture (Brief 14)		
	ift to decoupled farm support, based on a flat rate of support per ha.	X	
	ddress regional and farm-size disparities (targeted investments, technological change, agrifood chains, credit)	х	
	evelop the new National Agriculture and Rural Development Strategy 2025-2034	х	
St	rrengthen the Serbia's Agriculture Knowledge and Information Innovation System		Х
	Gender (Brief 15)		
· S	upport female employment (affordable child/elderly care, workplace flexibility, gender biases/social norms)	x	
· P	omote women's role in STEM (early education, scholarships, mentoring programs, media awareness campaigns)		х

USD m **Project name** Focus **Closing Date Macro-Fiscal Framework and PFM Tax Administration Modernization** 52 Improve the effectiveness of tax collection and lower the compliance 31-Oct-2024 Project (TAMP) burden for taxpayers **Enabling Digital Governance Project** 50 Improve access, quality, and efficiency of selected administrative 30-Jun-2024 e-Government services (EDGE) **Green Transition Development Policy** 160 Develop 'green' fiscal management, accelerate the clean energy In preparation **Operation (GTDPO-2)** transition, align with EU on environment and climate action Improving PFM for the Green 75 Improve public finance, investment, and procurement to enable 31-Mar-2027 Transition PforR greener and more resilient growth Financial Sector, Private Sector Development and Innovation **Catalyzing Long-Term Finance** 30 Develop capital markets and deepen the corporate bond market, 31-Aug-2028 through Capital Markets including through green and other thematic issuances Accelerating Innovation and Growth 48 Improve the relevance of scientific research, and innovative 30- Sep2025 Entrepreneurship (SAIGE) entrepreneurship and access to finance for enterprise growth Additional Finance to SAIGE 26.7 Improve the relevance of scientific research, and innovative In preparation entrepreneurship and access to finance for enterprise growth **Energy and Environment** Scaling-Up Residential Clean 50 Increase households' uptake of energy efficiency, sustainable heating, 30-Nov-2027 Energy Project (SURCE) and rooftop solar PV in participating LSGs Human Development **Inclusive Early Childhood Education** 50 Improve access to quality ECEC services for children from 29-Nov-2024 and Care (ECEC) disadvantaged backgrounds **Inclusive Primary Education** 75 Improve the quality of learning conditions in selected primary schools In preparation Improvement Project in Serbia Noncommunicable Diseases (NCD) 75 Improve primary health care effectiveness in addressing 31-Mar-2029 **Prevention and Control Project** noncommunicable diseases **Emergency COVID-19 Response** 100 Respond to the threat posed by COVID-19 and strengthen the 30-June-2025 Project national health system for public health preparedness in Serbia **Transport and Urban Development** Local Infrastructure and 100 Improve LSGs capacity to manage climate-resilient sustainable 30-Nov-2028 Institutional Dev. Project (LIID) infrastructure and increase economic and social opportunities **Real Estate Management Project** 66.9 Improve the efficiency, transparency, accessibility, and reliability of 31-Jul-2024 Serbia's real property management systems Second Real Estate Management 32.5 Improve the transparency, accessibility, and reliability of Serbia's real In preparation Project property management systems 62.5 Enhance the efficiency and safety of railway assets and improve the 31-Dec-2026 **Railway Sector Modernization MPA** governance and institutional capacity of the railway sector Phase 1 Improve the efficiency and safety of the rail network and the **Railway Sector Modernization MPA** 65 In preparation Phase 2 environmental sustainability of the transport system Sava and Drina Rivers Corridors 85 Improve flood protection and enhance transboundary water 30-Jul-2026 Integrated Program* cooperation in the Sava and Drina Rivers Corridors Western Balkans Trade and 40 Reduce trade costs and increase transport efficiency 15-Dec-2025 **Transport Facilitation*** Agriculture **Competitive Agriculture Project** 50 Improve agri-food market linkages of targeted beneficiaries 31-Dec-2024 (SCAP) Improve climate resilience and agri-food market linkages of targeted **Additional Finance to SCAP** 108.4 In preparation beneficiaries.

Table 2. World Bank Portfolio in Serbia

1. Macroeconomic Policies for Growth

1. Overarching Messages

Serbia has achieved remarkable macroeconomic stability, which needs to be maintained. In the post-pandemic period, the authorities implemented a prudent macroeconomic policy mix, which reduced the fiscal deficit from 8% to 2.2% of GDP between 2020 and 2023. Public sector debt also declined from 57.8% to 52.6% of GDP during the same period. Lower regional energy prices and resilient exports supported a sharp narrowing of the current account deficit to 2.6% of GDP in 2023. Continued strong FDI inflows have pushed foreign exchange reserves to an all-time high, exceeding EUR 25bn. Inflation has peaked and has been on a declining path, maintaining financial stability. Going forward, policies should remain geared toward supporting external and fiscal sustainability and ensuring adequate buffers for future shocks.

The economic outlook remains positive. The Serbian economy is expected to grow at around 3.5% in 2024 and at around 3-4% annually in the medium term, supported by increases in consumption and investment, and a continued strong performance of exports. FDI is expected to continue to play a key financing role. Inflation is expected to decline gradually and to return to the NBS target band by mid-2024. Fiscal deficit will continue to decrease and stabilize at around 1.5% of GDP. The banking sector is expected to remain resilient, with NPLs stable at around 3%. This outlook depends on the implementation of policies – such as the reform of SOEs, improvements of skills and strengthening of institutions – which will further increase private sector investment in higher value-added sectors.

Bolder actions are needed to accelerate growth and achieve faster income convergence with EU peers. In recent years, Serbia's GDP growth has been between 2-3%, which falls below potential. At these levels of growth, convergence with the EU would happen only in the 2070s (Figures 1 and 2). Yet, Serbia's annual GDP growth rate could reach as high as 7% if reforms in key areas are implemented. These include boosting private investment, increasing labor force participation, upskilling workers to raise productivity, reducing barriers to competition, and improving governance practices. Additionally, Serbia must embark on successful green and digital transitions and enhance regional and trade and financial integration.

Indicator	2021	2022	2023	2024	2025	2026
Real GDP Growth, at constant market prices	7.7	2.5	2.5	3.5	3.8	4.0
Private Consumption	7.9	4.0	0.8	3.7	3.6	2.9
Government Consumption	4.3	0.4	0.1	2.8	1.6	4.0
Gross Fixed Capital Formation	15.7	1.9	3.9	2.9	7.0	7.0
Exports	20.5	16.6	2.4	4.0	6.5	6.1
Imports	18.3	16.1	-1.1	4.7	6.3	6.0
Real GDP Growth, at constant factor prices	7.7	2.2	2.6	3.5	3.8	4.0
Agriculture	-5.5	-8.3	4.8	3.4	3.4	3.4
Industry	8.9	0.1	-0.8	4.5	4.5	4.5
Services	8.8	4.5	4.1	3.0	3.5	3.8
Inflation (Consumer Price Index)	4.0	11.9	12.1	5.0	3.5	3.2
Current Account (% of GDP)	-4.3	-6.9	-2.6	-3.6	-3.9	-4.1
Net FDI (% of GDP)	6.9	7.2	5.5	5.3	5.5	5.1
Fiscal Balance (% of GDP)	-4.1	-3.0	-2.2	-2.0	-1.5	-1.5
Debt (% of GDP)	57.1	55.6	52.6	51.7	49.3	46.0

Table 1. Key Macroeconomic Indicators

Source: World Bank staff calculations



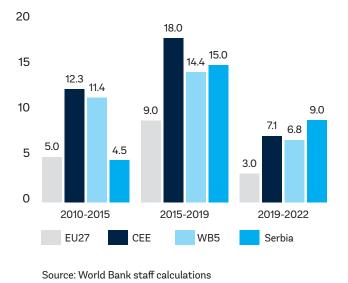
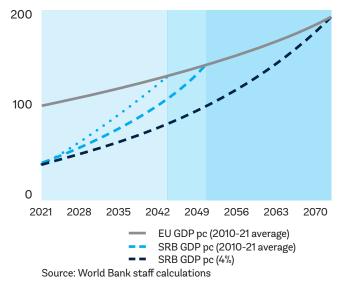


Figure 2. Convergence with EU GDP per capita: alternative scenarios



2. Key Challenges

Pressures to increase budgetary expenditures are mounting. The purchase of goods and services increased rapidly when the COVID-19 pandemic started and continues to remain, in proportion to GDP, above pre-pandemic levels (i.e., 9% of GDP in 2023, compared to 7.8% for the period 2015-19, on average). The high level of inflation, moreover, has increased the costs of goods and services procured by the government and used in infrastructure projects. Additional pressure stems from commitments to higher social spending, public sector wages, and subsidies to SOEs – such as the state-owned power utility EPS, which incurred losses equal to 1% of GDP during the energy crisis of 2022. The cost of borrowing has increased, putting further pressure on the government budget.

The management of public finances and capital investments remains suboptimal. The most recent PEFA assessment (2021) highlighted critical gaps, including shortcomings in the selection, and costing of public investment and limited linkages between policy plans and subsequent budget allocations. Many investment projects are managed according to exceptional rather than regular procedures. The "Leap into the Future – Serbia 2027" development plan envisages large public infrastructure investments in the coming years. These should be prioritized based on being climate-smart and generating robust economic returns. Other focus areas include enhancing revenue mobilization, planning and budgeting, and strengthening fiscal oversight, transparency, and accountability.

Business environment challenges still stifle domestic private investments. While Serbia has been remarkably successful in attracting sustained levels of FDI – averaging 6.6% of GDP between 2020-2023 – the rate of domestic private investment is significantly lower than in comparator countries, averaging 11% of GDP during the same period). Factors that prevent the mobilization of higher levels of domestic private investment and higher-quality FDI include institutional weaknesses, an incomplete competition policy framework, and limited availability of skilled labor. The transparency and predictability of services for citizen and businesses can be further improved building on government's digitalization drive.

3. Policy Responses for Consideration

Short-term measures:

• Limit increases in current budgetary expenditures. Spending on the wage bill needs to be monitored. The planned introduction of the new pay and grading system needs to be done so as not to annul benefits obtained from earlier restraints. At the same time, the public sector needs to fill crucial vacant positions, which will put additional pressure on the wage bill spending.

- **Prioritize green capital expenditures within the existing fiscal space.** The government would do well to focus on priority investments related to the green transition (i.e., environment and energy). New public investment should be thoroughly scrutinized for its social, environmental, and financial impacts and aligned with the country's strategic goals. Green and capital projects should be financed through transparent, competitive procurement processes and closely monitored implementation.
- Strengthen the coordination of pro-growth policies. The creation of the GDP Council has represented a good step toward focusing on pro-growth policies. However, the GDP Council's role could be strengthened by shifting its focus from project activities to more strategic discussions and plans related to the growth of the Serbian economy, and the oversight and coordination of the implementation of strategic sectoral reforms, as envisaged in the government's documents.

Medium-term measures:

- Accelerate the EU accession process and deliver on commitments. The EU Growth Plan for the Western Balkans has provided the momentum for accelerating the enlargement process. It would be important to implement in a timely manner the policies envisaged by the Serbian Government in support of the Plan, focusing on the business environment, the green and digital transitions, human capital, and fundamentals – including governance, the justice sector, and rule of law.
- Evaluate the cost and prepare the policy response to manage the green transition. The green transition will entail a fiscal cost, which needs to be carefully quantified by the Government of Serbia – both on the mitigation and adaptation front. The implementation decarbonization policies will need to factor in, by and large, the support of the private sector.
- Resume the WTO accession process to increase Serbia's attractiveness as an investment destination and trade partner. WTO accession would create opportunities to strengthen capacities across various government bodies and institutions, thereby making Serbia more attractive for new investment and trade. The commitment to a predictable and internationally recognized trade policy, as advocated under the WTO, would also contribute to improving Serbia's competitiveness.

4. World Bank Engagement

Ongoing support	- Green Transition Programmatic Development Policy Operation Series (FY23 and FY25, co- financed with KfW and AFD, USD 420m per operation). The DPO series of 2 operations is articulated around 3 pillars: (i) aligning public finance management with the climate change agenda; (ii) accelerating the clean energy transition; and (iii) supporting the alignment of Serbia with the EU standards on environment and climate change.
	- New Public Finance Review. This report aims to provide analytical underpinnings for policy choices to ensure the medium- to long-term sustainability of public finances. The report will include macro-fiscal analysis, detailed revenue and expenditure policy reviews, and a special focus on fiscal risks stemming from SOEs. The PFR complements ongoing technical assistance provided by the World Bank to Serbia related to public investment and fiscal risks management. The PFR will also help to identify key reform priorities that can underpin a successor DPO Series.
Potential engagements	 Next generation Development Policy Operation Series (FY26+, with partners). A new programmatic series would aim to support critical reforms associated with Serbia's growth acceleration and alignment with EU standards to achieve faster EU income convergence. New Country Economic Memorandum. This report could investigate the drivers of faster, sustainable, and inclusive growth in Serbia for faster income convergence with EU peers.

2. Financial Sector

1. Overarching Messages

Serbia needs to deepen financial intermediation and diversification and provide greater options for longterm financing to boost growth. Capital markets can complement traditional intermediaries by providing local currency, long term finance to support productive investments in agriculture, infrastructure, and housing. In Serbia, financial sector intermediation, measured by domestic credit to the private sector by commercial banks, remained between 40.3-45.4% over the past decade, compared to over 84% in the EU. Moreover, financing sources beyond banks are limited with very few issuances happening. Factoring, leasing, the insurance sector, pension, and mutual funds are underutilized, with their assets comprising only 9% of overall financial sector assets. Since 2018, market capitalization on the stock exchange (BELEX) has decreased by 18.7%. Private equity, venture capital, and fintech companies are nascent, making the market more vulnerable to credit cycles.

Serbia's financial sector can play an active role in supporting the transition to a low-carbon economy and integrate faster with the EU. Financial markets can mobilize the resources needed for investments in climate mitigation and adaptation while offering protection through insurance and risk sharing mechanisms. Serbia is working toward full compliance with the EU Single Euro Payments Area (SEPA). If SEPA compliance is achieved, it is estimated that the country could save as much as USD 228m. These savings would accrue to both remittance-receiving families in Serbia and families that send money from other SEPA countries to Serbia. This would correspond to a reduction in the overall cost of remittances sent from 6.7% to 3%. Reform of the Forex Law to lift remaining restrictions on Forex transactions would help to unleash the full potential of SEPA integration, including for services trade.

2. Key Challenges

The contribution of capital markets to private sector financing in Serbia remains negligible. Serbia has the necessary preconditions for the development of capital markets (e.g., macro-economic stability, a sound banking sector, efficient market infrastructure and the existence of a broader legal and regulatory framework including corporate law, insolvency law, and overall tax framework). However, outside of the government bond market, other types of securities are not well developed. Constraints for the development of capital markets include the lack of companies capable and willing to issue securities and a shallow institutional investor base. There are only a few large, profitable, quality private issuers and state-owned enterprises that could be potential issuers. Considering the surplus of liquidity and competitive bank funding in the last 10 years, most companies in Serbia did not need to access capital markets. But this is likely to change in the current high-interest rate environment.

The Serbian financial sector faces physical and transitional challenges from climate and environmental risks, such as droughts and floods. Physical risks can materialize through the banking sector's exposure to agriculture, hydropower, energy, and mining; while transition risks through exposure related to construction, transportation, energy, and agriculture. These sectors make up nearly half of Serbia's GDP. In the banking sector, leading banks have offered financing for renewable energy and energy efficiency projects. The banking industry is also developing a sustainable finance roadmap that is expected to strengthen technical capacity and awareness of green finance in the market and ultimately accelerate green lending. The insurance sector also provides climate risk solutions, such as agriculture insurance to farmers, though uptake is limited. Still, supervisory and technical guidelines for financial entities need to be enhanced, and the development of a national green taxonomy could benefit and support green investments while maintaining market integrity by reducing greenwashing.

More work is needed to enable the quicker adoption and interoperability of digital payments, which can also support financial inclusion efforts. Serbia's financial infrastructure is one of the more advanced in the Western Balkans, with the existence of a fast payment system; nevertheless, legal and regulatory framework alignment work for the SEPA membership criteria is still underway. The adoption of digital payments (i.e., the percentage of adults who make or receive at least one digital payment over a year) is relatively high at 87% in Serbia. However, data shows 84% of adults are receiving payments, and only 49% made at least one payment.

This suggests the need for further developing electronic payments acceptance as well as improving the efficiency of retail payments, which can lead to more frequent usage of digital financial services and improve the inclusion of vulnerable segments of the population.

Serbia's credit infrastructure for the private sector remains inadequate. Serbia's credit infrastructure, supported by a Credit Bureau, is limited in scope, including only traditional banks, leasing companies, and a few government agencies. This constrains proper credit risk assessments and hampers the development of new lending products. To address these issues, broader private sector engagement is crucial. Non-bank financial service providers face challenges due to limited access to payment infrastructure and the dominance of major financial institutions. Implementing digital identification methods and increasing collaboration between the financial and e-government sectors can facilitate embedded services. Data exchange reforms like Open Banking are necessary to promote data sharing among financial institutions, preventing data silos, and improving processes like identity verification and transactional scoring.

3. Policy Responses for Consideration

Short-term measures:

- Improve the legal and regulatory framework on payments and integration with the EU SEPA. Full
 alignment of the few remaining EU core payment as well as SEPA regulation would support the further
 digitalization of payments. Supporting action should include the reform of the legal and regulatory
 framework for the Second Payment Services Directive (PSD2) and regulations concerning cross-border
 payments, interchange fee and SEPA regulation including through the associated foreign exchange law.
- Improving the legal and regulatory framework to deepen financial market penetration through digitalization. This involves achieving full alignment with EU regulations to facilitate the broader deployment of digital financial services by financial service providers. Enhancing the regulatory environment will promote competition and lead to further growth in financial inclusion and intermediation.
- **Monitor corporate vulnerability closely.** Given the challenging global macroeconomic environment, rising inflationary pressures, and the expiration of borrower relief measures, it would be prudent to closely monitor and remain vigilant of the accumulation of risks within the corporate sector – notwithstanding the robustness of Serbia's financial sector indicators.

Medium-term measures:

- **Boost corporate financing through the corporate bond market.** On the supply side, interest from corporates in issuing securities has increased with a streamlined issuance process and NBS's open market operations with corporate bonds. On the demand side, fixed income securities such as bonds are an attractive asset class, as they provide investors with fixed periodic interest payments involving less volatility and risk. The steady improvements to the government's yield curve also mean that they are now much easier to price. Corporate bond financing (including through green issuance) could be an attractive alternative source of long-term financing, especially for growth or innovation-focused companies that may not have significant assets to use as collateral. Consider innovative capital market instruments to support long term investment financing in local currency, including for sustainable agriculture and infrastructure.
- Develop a detailed strategy to address climate and environmental risks and management. This endeavor could include the establishment of: (i) a national green taxonomy, aligned with the EU taxonomy to support market integrity by reducing greenwashing and to support green finance instruments; (ii) an internal governance structure to define the roles and responsibilities of financial sector regulators and (iii) build targeted capacity and data infrastructure for assessing and monitoring climate and environmental risks. Building on these efforts, regulators could perform more granular climate risk assessments and stress tests for financial institutions. It would be also important to monitor the ECB's supervisory guide and environmental, social, and governance (ESG) disclosure requirements by the European Banking Authority (EBA).

4. World Bank Engagement

Ongoing Support	- The <u>World Bank</u> supports the implementation of the Capital Market Development Strate- gy (CMDS), approved in 2021, through the Catalyzing Long-Term Finance through Capital Markets Project (USD 30m) . This project complements the efforts required to strengthen an enabling environment for non-government bond issuances, including through a corporate bond issuer program.
	- On digital payment, support is provided through: (i) the Common Regional Market Project , focusing on technical assistance to harmonize the Western Balkans legal and regulatory frame- works on payments with the EU; and (ii) the Remittance , Payments , and Digital Financial In- clusion Program 2.0 , which provides TA to help Western Balkans government to design policies, legislative reforms and programs to improve the adoption and usage of digital payments, digital remittances and other digital financial services.
	- The <u>IFC</u> provides support through: (i) the Digital Financial Services Project , focusing on ad- justing the Serbian regulatory framework on digitalization in the financial sector to improve usage and deeper penetration of financial services and enable competition; (ii) the Credit Re- porting Systems Western Balkan Project to increase access to finance for individuals and MSMEs and support sustainable credit growth with reduced credit risks by strengthening the credit reporting industry with broader access to data.
	- Serbia is part of the <u>Joint World Bank and IFC</u> Capital Markets Program (JCAP) , which focuses on improving the enabling environment for capital market development and collaboration with the private sector. IFC supports demonstrative transactions to assist the non-government bond market.
Potential engagements	- A follow-up Financial Sector Assessment Program (FSAP) may be warranted to better un- derstand emerging risks. The last FSAP for Serbia was conducted in 2010 and in the meantime, the country's financial sector has significantly evolved.

3. Governance

1. Overarching messages

The provision of better services to citizens and businesses requires further inroads into strengthening institutions and governance. From a regional standpoint, according to the Worldwide Governance Indicators, the country lags its European peers in several governance dimensions, including regulatory quality, rule of law, control of corruption, and voice and accountability. Governance and institutional weaknesses, combined with an uneven playing field for businesses, deter the full mobilization of domestic and foreign investments, stifle innovation, and hinder the country's ability to deliver services efficiently and effectively to citizens and businesses. Addressing these challenges will be crucial for Serbia to unlock its full economic potential, foster a more dynamic and competitive economy, and ensure more inclusive and sustainable growth in the long term.

Deepening PFM and SOE reforms, accelerating the digital transition, and enhancing the capacity of the justice sector can unlock faster growth. Key PFM interventions include enhancing revenue mobilization, improving planning and budgeting, and strengthening fiscal oversight, transparency, and accountability. Implementing climate-smart public investment and asset management would also increase government efficiency and reduce climate-related costs. For SOEs, priorities include promoting operational efficiency, market orientation and corporate governance. Simplifying and digitalizing services for citizens and businesses will enable the government to overcome inefficiencies and improve service quality. Enhancing the capacity of the justice sector, in particular commercial justice, can create a conducive environment for investments and private sector development while increasing citizens' trust in government systems.

2. Key Challenges

While PFM fundamentals are in place, a more efficient allocation of resources and management of assets would be desirable. The existing misalignment between strategic priorities and the public budget stems from inadequate mid-term budget planning and budgeting processes. At the same time, insufficient performance monitoring hinders better resource allocation in future budget cycles. Additionally, sub-optimal management of capital investments, weaknesses in project selection and costing, limited linkages between policy plans and budget allocations, and the prevalence of exceptional procedures, undermine the effects of strategic government reforms. Lack of climate data consideration negatively impacts public investment returns and asset quality.¹ Fiscal transparency remains limited (Figure 3), hindering the trust of citizens and businesses in government actions.

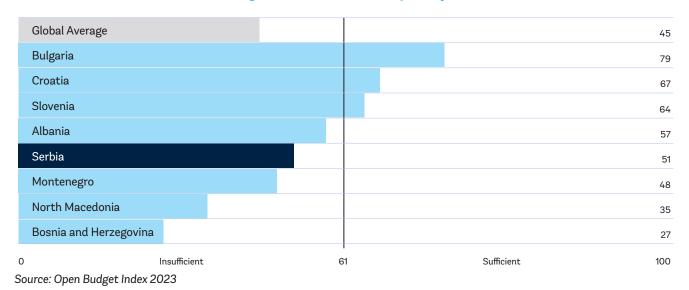


Figure 3. Serbia fiscal transparency

¹ According to World Bank estimates, incorporating climate considerations into new infrastructure projects require only a small increase in cost, estimated at 3%. However, the benefits of these investments far outweigh the initial expenses, with every USD 1 invested yielding USD 4 in return.

SOE governance and performance challenge the country's fiscal sustainability while hindering private sector development. SOEs employ 9% of the registered workforce in the country but contribute less than 6% of business sector revenue. These performance issues are accentuated by weak management, corporate governance challenges, and insufficient independence and capacity of SOE boards and management. Altogether, these factors lead to inefficiencies in resource allocation, reduced competition, and limited potential for private sector growth. Lastly, SOEs, particularly those in the energy and transport sectors, are already a significant burden on the budget, requiring unprecedented levels of financial support through subsidies, capital increases, and guarantees.

Even though the necessary digital infrastructure is in place (e.g., meta register, interoperability), progress in digitalizing services has been inconsistent. Existing digital interfaces often fall short on basic aspects such as accessibility, user-friendliness, and mobile device compatibility. This lack of focus on users' needs, coupled with the absence of critical digital skills within the government (e.g., user experience, product management, performance analytics), has hindered the uptake of digital services, lowering the return on government investments in its digital infrastructure. Failing to address these challenges in a rapidly evolving digital landscape may result in missed opportunities to harness emerging technologies like AI to enhance citizen services. This could widen the gap between citizens' experiences with public and private sector services, potentially eroding public trust and limiting the government's ability to meet the growing expectations of an increasingly digital-savvy population.

Despite progress in recent reform efforts, obstacles remain in enhancing the capacity, effectiveness and the inclusiveness of the judiciary. The High Judicial Council and the High Prosecutorial Council play an essential role in upholding the integrity and independence of the judiciary. These bodies can be further empowered through sustained support that enhances their autonomy and effectiveness. Challenges in commercial justice, such as prolonged bankruptcy and liquidation cases and limited e-justice adoption create legal uncertainty and deter potential investors. Commercial court judges and staff need improved training and capacity building to handle complex cases effectively in a modern economy. On the inclusion front, Serbia has taken important steps to strengthen access to justice for LGBTI people, but further action can be taken to strengthen legal and regulatory frameworks and raise awareness.

3. Policy Responses for Consideration

Short-term measures:

- PFM. Fully implement the Decree for Capital Projects and enhance the Public Investment Management Information System (PIMIS) by adding a climate-smart module to support resilient and sustainable public sector investments.
- Digital. Enhance the user experience of existing digital public services and begin prototyping AI for these services. This approach will improve the services provided to users while giving the government essential practical learning required for a more strategic deployment of AI in the public sector.
- SOEs. Establish a strong multi-disciplinary team in the SOE ownership entity under the Ministry of Economy. This will constitute a critical first step towards improved governance, operational efficiency, and financial sustainability of SOEs.
- Justice. Revise the commercial justice regulatory framework, enabling e-justice utilization and improving commercial courts' functioning while addressing capacity building and change management for judges and staff. These measures will enhance trust in the judicial system and help the government unlock assets trapped in lengthy bankruptcy procedures.

Medium-term measures:

• **PFM. Establish a single project pipeline for all public investments**, considering economic, social, and environmental aspects, and ensure alignment between budget, medium-term plans, and strategic priorities. This will allow the government to optimize resource allocation, promote fiscal discipline and

sustainable public finances, actively manage fiscal risks, and develop green budgeting practices that promote sustainable and environmentally conscious spending.

- **Digital. Restructure the Office for IT and eGovernment**, establishing clear and distinct leadership and teams for IT services (data hosting, networks) and digital service delivery. This separation nurtures specialization and ensures appropriate attention to users' needs, driving successful digital transformation.
- **Push for greater public sector efficiency through digitalization.** Serbia should ensure comprehensive digitalization of services and processes, maintain a value for money approach, and encourage effective collaboration among ministries, the Office for IT, and eGovernment to make this happen.
- SOEs. Strengthen corporate governance, board independence, and managerial capacity of stateowned enterprises (SOEs), with board and managerial tenure contingent on performance. This reform will enable SOEs' greater accountability, efficiency, and competitiveness, aligning their operations with market principles and commercial objectives.
- Justice. Invest in capacity building for the High Judicial Council and State Prosecutorial Council. Providing these councils with the necessary support will enable them to appoint better, promote, and oversee judges, fostering a more accountable and effective judicial system.
- Address the barriers still facing LGBTI people in accessing the justice sector in Serbia by strengthening legal and regulatory frameworks and develop awareness both among justice providers and LGBTI justice seekers.

4. World Bank Engagement

Ongoing Support	- Enabling Digital Governance (EDGE) Project (USD 50m) . This project focuses on strengthening essential digital infrastructure and digitalizing selected services for citizens.
	- Improving PFM for the Green Transition Project, PfoR (USD 75m). This project aims to improve core PFM functions and capabilities needed for fiscal resilience and green transition.
	- Tax Administration Modernization (TAMP) Project (USD 52m) . This project aims to improve the effectiveness of tax collection and lower the compliance burden for taxpayers.
	- Multi-Donor Trust Fund for Justice Sector Support in Serbia (USD 4.5m). This activity focuses on supporting justice reform in line with the EU accession process.
	- Strengthening Institutional Capacity for Fiscal Risk Monitoring and Management (USD 500K) . This activity focuses on strengthening fiscal monitoring and management.
Potential Engagements	Analytical and advisory support, as well as financing investments, could be provided in areas includ- ing: (i) enhancement of AI usage in the public sector and development of more effective Serbian language technologies , simultaneously promoting improved service delivery and private sector development; (ii) expanding the simplification and digitalization of services to the sub-national level , to improve the coverage and quality of services; and (iii) support to commercial justice re- forms and digitalization of the justice sector , to create a conducive environment for businesses and direct investment while also increasing citizens' trust in government systems.

4. Business Environment and Innovation

1. Overarching Messages

Serbia needs a new growth agenda to sustain increases in income and prosperity and to converge faster with the EU's standard of living. Determinants of previous growth and investment attraction, such as price competitiveness (cheap energy and labor) in lower value-added sectors, are eroding. Low productivity growth and negative demographic trends represent additional challenges. Economic growth in the 3 years before COVID-19 averaged 3.6% in Serbia, an insufficient rate for rapidly bringing the country to converge with EU countries. With an aging population, emigration pressures, a shrinking labor force, and eroding price competitiveness, a shift towards higher value-added activities and higher productivity can support a faster growth rate.

At the heart of this new growth agenda should be the focus on increasing productivity and improving skills. Making inroads on these important fronts will require a policy shift to attract foreign and domestic investment, utilize nearshoring and regional value chain consolidation opportunities, and provide a better environment for the domestic private sector to grow. At the same time, building back better after COVID-19 requires a strong focus on transitioning to a greener and more digitalized economy. Key levers include strengthening research and innovation capacities, making them more relevant and better integrated with the economy; attracting higher quality investments; and ensuring a conducive and predictable business environment, especially for SMEs and fast-growing companies.

2. Key Challenges

Serbia needs higher-quality volumes of domestic and foreign private sector investment. Investment attraction policies should shift towards targeting investments with higher technological content and innovation potential, as well as more linkages with the local economy. Some sectors, such as ICT, are performing well, but untapped potential lies in further upgrading other established sectors such as automotive, greening the sectors such as energy, agriculture, and food production, and advancing in emerging sectors such as biotechnology and artificial intelligence. Additionally, skills are a crucial factor in determining the location of higher-value activities and labor market mismatches should be addressed in coordination with the industry.

Despite progress, the business environment needs strengthening. Regulatory barriers and inefficient procedures still dampen new firm entry, investment, and job creation. Although progress has been made, the cost of administrative burdens on businesses is still estimated at 3% of GDP (according to the Standard Cost Model measurement). The state's role in the economy remains substantial with a sizeable presence of SOEs and through complex regulations in various sectors, reducing contestability and thus negatively impacting firm performance. SOEs employ nearly 9% of the workforce but contribute to only 6% of total business sector revenues. Several prominent SOEs, such as EPS and Srbijagas, remain significant contingent liabilities, creating fiscal risks and distorting markets.

Serbia's flat performance across the Global Innovation Index indicates that the R&D system needs further improvements. The country has done well in providing R&D incentives, science grants, and entrepreneurship programs. Still, gaps in entrepreneurial capacity, technology transfer, and R&D excellence and relevance remain. Further, budget allocations for R&D and private sector investment are less than half of the EU average, at 2.2% and 0.35% of GDP, respectively. The overall R&D system requires further reforms to reduce duplication of efforts, governance deficiencies, and a lack of linkages with the economy, resulting in lost economic opportunities.

SMEs need better support, including in taking advantage of the green transition. Current programs targeting SMEs are generally non-targeted and dispersed, with small amounts allocated to each firm. The Support Program for SMEs to Purchase Equipment allocates EUR 20m to nearly 1,000 companies, mostly on a `first-come, first-served basis'. Initiatives that provide only inputs (e.g., cheap loans, machinery) without improving the firm's ability to use them, usually do not substantially change SME performance. Private sector operators are still hesitant to back green projects in Serbia. This is due to the lack of: (i) open data on power transformation stations (i.e., location maps indicating where extra capacity generated by renewables can be fed back into the grid); and (ii) decision-making power at the local level for approving small projects.

3. Policy Responses for Consideration

Short-term measures:

- Develop a comprehensive investment strategy with clear targets to attract and retain quality investments.
 Key actions include:
 - Amending the Law and by-laws on Investments to align investment incentives with strategic priorities and switch from low-tech labor-intensive investments to green investment and technology transfer.
 - Strengthen the framework for Public Private Partnerships by establishing PPP investment guidelines and strategic pipelines, including capacity building for public authorities implementing PPP arrangements and raising awareness of PPP across the public/private landscape.
 - Updating the legal framework for innovation, focusing on amending the Law on the Innovation Fund, the Law on the Science Fund, and the Law on Institutional Financing.
 - Adopting the draft Law on Single Window for trade to allow the implementation of the new National Single Window (NSW) system.
- Implement additional measures to spur innovation. Such as:
 - Incentivize public-private collaboration in R&D to guarantee equitable IP sharing generated in public institutions and provide centralized as well as targeted support for technology transfer.
 - Create post-doctoral studies for researchers and industry internships for graduate students to spur innovation and reduce brain drain in R&D.
 - Introduce entrepreneurial, managerial, and financial training at the secondary and tertiary levels in the school system.
- Redress hesitation on the part of investors to back 'green' projects:
 - Simplify the transition process for consumers currently, nine separate steps are necessary for installing solar panels onto a private dwelling roof, for instance.
 - Provide tax incentives not only to consumers but also to producers, distributors, and installers of wind and solar hardware and storers.

Medium-term measures:

- Update the range of SME-support programs to focus on increasing SME productivity and growth:
 - Target SME support programs towards upgrading their capabilities and productivity, also focusing on fostering more investment in R&D to improve production cost, quality, and delivery.
 - Promote international market integration into regional and GVCs by helping local SMEs supply large companies, considering the increasing trends towards nearshoring in the region.
 - Implement next-generation business environment reforms, further digitizing and simplifying government-to-business services, focusing on the most frequent and costly processes.
 - Provide tailored training/access to information for the SMEs and support organizations (e.g., hubs, chambers of commerce, public innovation funds) on the green transition. This includes decarbonization, CBAM alignment, and green innovation to encourage energy and resource efficiency (green transition) and reduce the carbon footprint in select industries.
 - Invest in artificial intelligence (AI) and biotechnology, recognizing their transformative potential for innovation outputs over the long term a vision that can be realized through system reforms across these sectors.

4. World Bank Engagement

Ongoing Support	- Serbia Accelerating Innovation and Growth Entrepreneurship (SAIGE) Project (EUR 43m, IBRD, EUR 41.5m, EU IPA Grant). This project focuses on: (i) Science Fund research grants; (ii) training, mentoring, and co-investment grants for innovative start-ups through the Innovation Fund's Katapult program; and (iii) support for the transformation of Research and Development Institutes (RDIs), including in biotechnology and AI.
	- Joint World Bank and EU Improving Business Environment Project. This project includes actions geared at the simplification and optimization of administrative procedures and digita- lization of key government to business services based on the business episode approach.
	- Western Balkans Trade and Transport Facilitation MPA Project 1.0 (USD 40m). This project focuses on: (i) facilitating the movement of goods through trade facilitation reforms (NSW); (ii) enhancing transport efficiency and predictability through Intelligent Transport Systems; and (iii) supporting implementation of provisions to improve market access.
Pipeline	- SAIGE Project Additional Financing for Artificial Intelligence and BIO4 (EUR 25m). SAIGE AF focuses on: (i) the development and application of AI-centered programs administered by the Innovation Fund and Science Fund; (ii) building capacity of the AI Institute; and (ii) support- ing R&D Institutes and Faculties that will comprise the BIO4 biotechnology campus, while strengthening the capacity of BIO4 as a new institution.
	- Western Balkans Trade and Transport Facilitation MPA Project 2.0. This project focuses on reducing trade costs and improving transport efficiency between the Western Balkans and EU. Tentative components include: second generation of trade facilitation reforms to align with EU trade procedures; national quality systems for exports to meet EU market standards; transport logistics performance; and critical small-scale investments at key logistics nodes to address key transport/trade bottlenecks.

5. Private Sector Participation in Public Infrastructure

1. Overarching Messages

Serbia can mobilize a wide array of hybrid financing and exploit the synergy between public and private capital for public infrastructure. These options refer to the combination of different sources of funding, including public-private partnerships (PPPs), blended finance programs, and local currency facilities. This approach allows for the mobilization of resources from both the public and private sectors to finance infrastructure projects, such as roads, bridges, airports, and utilities.

In Serbia, there is room to increase private investment in public infrastructure, which has mainly relied on the national budget and loans and grants from International Financial Institutions (IFIs) and bilateral partners. The government's reliance on budget allocations and loans from third parties can be complemented by increased private investment and diversified sources of financing. Since the adoption of the Law of Public-Private Partnership and Concessions, there has been growing interest in Serbia for public infrastructure projects through PPPs. This is evidenced by two notable examples: Nikola Tesla Airport and Belgrade Waste to Energy (WtE) PPPs. Despite these examples, PPPs remain underutilized as a medium to attract private sector investment, efficiency and technological know-how to deliver critical infrastructure.

Greater private sector involvement can complement reliance on G2G and (BiTS) agreements play a crucial role in attracting FDI, fostering economic growth and facilitating international trade. These tools also provide important frameworks for investment and economic cooperation between Serbia and its partners. Serbia has signed numerous G2G agreements and Bilateral Investment Treaties with various countries, including China, Russia, Korea, Germany, France, Italy, and the United States. Nevertheless, overreliance on bilateral treaties means that alternative funding models through blended or concessional finance is commonly overlooked. Moving forward, attracting some of the funding for infrastructure from the private sector could lessen the impact on public finances and ensure consistency with the deficit and public debt targets under the new fiscal rule.

Overall, hybrid financing of public and private capital for public infrastructure offers several benefits. It allows for the mobilization of additional resources, reduces the burden on public finances, and promotes private sector participation in infrastructure development. By combining different sources of funding, governments can leverage private sector expertise and capital to deliver infrastructure projects more efficiently and effectively. For example, leveraging specialized capital market instruments would reduce foreign exchange risk and attract some capital in local currency – at present, over 95% of infrastructure financing is in hard currency (EUR and USD).

2. Key Challenges

The promotion of hybrid financing involves paying special attention to the following issues:

- **Risk Allocation**: Hybrid financing involves a combination of public and private funding, which requires careful allocation of risks between the parties involved. Determining who bears the construction, operational, and revenue risks can be a complex endeavor and may require negotiation and agreement between the public and private sectors.
- **Revenue Uncertainty**: Forecasting the revenue streams for infrastructure projects can be challenging, especially for projects with long gestation periods or uncertain demand. Hybrid financing relies on a mix of user fees, government subsidies, and private investments, making it crucial to accurately estimate future revenues to attract private investors.
- **Regulatory and Political Risks**: Infrastructure projects are subject to various regulatory and political risks, including changes in government policies, legal disputes, and delays in obtaining necessary permits and approvals. These risks can affect the financial viability of the project and create uncertainty for private investors.

- **Financing Costs**: Hybrid financing often involves a combination of debt and equity financing. The cost of borrowing, interest rates, and availability of financing options can impact the overall financial feasibility of the project. Limited access to affordable financing options can pose a challenge for attracting private investors.
- **Project Complexity**: Infrastructure projects are often complex and require coordination among multiple stakeholders, including government agencies, private investors, contractors, and operators. Managing the different interests and ensuring effective project management can be a challenge, especially in large-scale projects.
- **Public Acceptance**: Public acceptance and support for infrastructure projects are crucial elements for their success. Public perception, concerns about environmental impact, and community engagement can influence the implementation and financing of projects. Addressing public concerns and ensuring transparency in the financing process is essential for hybrid financing.

3. Policy Responses for Consideration

Short-term measures:

- Improve legal framework to address identified gaps in PPP governance frameworks (as defined in the Law on PPPs). In this respect, action is needed to increase transparency, improve the quality of risk management tools, reinforce contract management, build expertise and capacity in line ministries and SOEs, foster a more comprehensive stakeholder engagement, and strengthen project appraisal. By addressing these gaps, governments can improve their PPP projects and achieve better infrastructure development outcomes.
- Identify and prioritize viable infrastructure projects that are ready to be implemented and financed through hybrid financing. Prioritize projects with high economic and social returns to attract private investment. The prioritization exercise can involve splitting the costs and risk of projects carefully over different types of investors blended finance allows authorities to take advantage of the different risk profiles of different investors.
- **Promote public-private dialogue.** Encourage regular dialogue between the public and private sectors to address concerns, resolve issues, and improve collaboration. This can help build trust and foster a conducive environment for PPP investments.
- Leverage available public financing to attract private capital, through project structures and specialized instruments within the local capital markets. Attracting long term capital in local currency may require (amongst other actions), building instruments for currency hedging.
- Asset recycling. Use income generating infrastructure assets to attract and rotate capital.

Medium-term measures:

- Align infrastructure investments with the Paris Agreement to combat climate change and decrease emissions. Given the importance of infrastructure improvements for long-term sustainable economic growth, as well as planned infrastructure developments, sustaining high levels of investment will remain a fiscal policy priority going forward. As such, these investments will need to be green and sustainable besides generating robust economic returns.
- **Support capacity building and knowledge sharing.** Governments can invest in building the capacity in relevant institutions to effectively manage PPP projects. This can include training programs, workshops, and knowledge sharing platforms to enhance their understanding of PPP frameworks, project appraisal, negotiation, and contract management skills.
- Establish mechanisms to monitor and evaluate the performance of private sector participants in infrastructure projects. This can help identify areas for improvement, ensure accountability, and inform policy decisions for future projects.

4. IFC/World Bank Engagement

Ongoing Support	 Serbia Port of Bogojevo PPP (US\$45m) aims to attract a long-term private partner to build, finance, operate, and maintain the Port of Bogojevo for up to 50 years, improving efficiency and contributing to economic development. Serbia Port of Prahovo PPP (US\$45m) aims to attract a long-term private partner to build, finance, operate, and maintain the Port of Prahovo for up to 50 years, improving efficiency and contributing to economic development.
	- Belgrade WtE - SPV Vinca (US\$76m) combined a complete overhaul of the Vinča landfill and the management of its legacy pollution with the creation of sustainable, revenue-generating, environmentally conscious waste management – and circular economy transformation of 'waste-to-value' – infrastructure. Funded by €260 million in financing and guarantees from the IFC and the MIGA and complemented by other financiers, including a €20 million blended con- cessional loan from the Canada-IFC Blended Climate Finance Program.
Potential Engagements	 Serbia offers important opportunities for PPP partnerships in renewable energy projects, infrastructure development, and waste management. Serbia has potential for renewable energy projects, requiring partnerships for construction and operation. Infrastructure investment is necessary for roads, railways, airports, and ports, attracting private investment through PPP models. Waste management is a concern in urban areas, and PPP models can establish facilities and promote sustainable practices. The joint IFC-World Bank JCAP (see Policy Note on the Financial Sector) can work with the authorities to attract private capital, through project structures and specialized capital market instruments.

6. Energy and Mining

1. Overarching Messages

Serbia will need to reduce its reliance on fossil fuels to speed up EU accession plans and decarbonize its economy. Coal accounted for 46% of the country's total energy supply in 2022, followed by oil (24%) and natural gas (14%). Progress has been made on the renewable energy (RE) and energy efficiency (EE) front, with a package of new sector laws adopted in 2021 and the first RE capacity auctions launched in 2023. The updated Nationally Determined Contribution (NDC) under the Paris Climate Accord was submitted to the UNFCCC in August 2022, and the Low Carbon Development Strategy was adopted in June 2023. Despite commitments to decarbonize (including signing the Sofia Declaration in 2020 and the Declaration on Energy Security and Green Transition in the Western Balkans in 2022), the EU-mandated National Energy and Climate Plan (NECP) and National Energy Sector Development Strategy (ESDS) still need to be adopted. The cost of reaching 'net-zero' by 2050 is estimated to be in the order of USD 10.4 bn (Box 1).

JSC EPS (Joint-Stock Company Elektroprivreda Srbije) underinvestment poses long-term risks and could slow the energy transition. In 2021-2022, EPS recorded cumulative net losses of EUR 831m. But in 2023, EPS reported a net profit of EUR 972m, driven mainly by the increase in electricity generation (especially hydro) and exports, several increases in regulated electricity tariffs in 2022-23, and lower coal and electricity imports. Despite its improved financial situation, EPS still faces hurdles to timely implement its investment plan. In 2023, JSC EPS invested about EUR 441m, compared to annual planned investments of EUR 982m (45% overall realization rate). Consistent underinvestment could increase the risk of new accidents, which could threaten JSC EPS's financial viability and Serbia's energy security and fiscal balance.

Serbia can continue to diversify its gas sources and tap into minerals key for the green transition. Stateowned Srbijagas dominates the market and imports about 80% of annual domestic gas consumption, at around 2.8bn cubic meters (bcm) annually. A long-term supply contract with Gazprom was re-negotiated for three years in May 2022 for a yearly supply of 2.2 bcm at USD 310-408 for 1,000cm indexed to crude oil prices (the previous price was USD 270 for 1,000cm). New gas pipeline interconnections and partnerships are being built. Serbia signed an agreement with Azerbaijan in November 2023 for the supply of 0.4 bcm of gas per year in 2024-2026 and up to 1 bcm from 2027. The gas Interconnector Serbia-Bulgaria was inaugurated in December 2023. Serbia is rich in minerals that are key to the green energy transition. Taking advantage of this potential is conditional on modern mine development with transparent environmental and social impact management and best-practice regulation and consultation.

Box 1. Cost of Reaching Net-Zero by 2050 -- Mitigation

The incremental investments required for Serbia to meet net zero emissions by 2050 would be USD 10.4bn (discounted) compared to a non-compliant scenario of unconstrained least-cost energy sector development without decarbonization, or 1.6% of GDP per year until 2050, on average. Data show that Serbia could meet its target of a 40.3% emissions reduction by 2030 (compared to 1990) by implementing all measures listed in the NECP. This is achieved through scaling up solar and wind capacities, and by building additional natural gas capacity to support the phase-down of coal in a transition period. Beyond 2030, significant transformations would be required to reach net-zero GHG emissions by 2050, including decommissioning of coal-fired generation by 2040, a substantial increase in the penetration of renewables, transformation of transport and buildings sectors, and significant shifts in industry, including the use of carbon capture and storage. Some 85% of total mitigation investments are expected to come from the private sector. The net zero scenario has a modest impact on economic growth: GDP per capita is only 0.3% lower in 2050 compared to the non-compliant scenario.

Source: Western Balkans CCDR 2024, Serbia Chapter.

2. Key Challenges

Immediate and coordinated actions are needed to achieve economy-wide net-zero GHG emissions by 2050. According to energy sector modeling the mitigation targets set out in the draft NECP require additional action and that a significant expansion of investments is required to achieve economy-wide net-zero GHG emissions by 2050. In the power sector, in a least-cost net-zero scenario, natural gas would be needed as a transition fuel in the short-to-medium term to support coal phase-out. In the longer term, hydropower, wind, and solar would be the main electricity sources in Serbia and there would be no role for natural gas. In addition, energy efficiency improvements would need to be scaled up and the use of electricity and zero-carbon energy carriers in end-use sectors, such as transport and industry, strongly incentivized. While the private sector is expected to play a significant role in the transition, additional focus on creating an enabling environment and reforming SOEs that dominate the market is essential.

Regional electricity market integration remains inadequate. Regional electricity market integration has emerged as a key policy priority for Serbia and other Energy Community (EnC) Contracting Parties (CPs). The ambitious electricity market package adopted by the EnC Ministerial Council meeting in December 2022, aims at integrating the electricity markets of EnC CPs with the rest of Europe, allowing for full reciprocity between the EnC CPs and EU member states. The package includes new legal and technical requirements (e.g., network guidelines and codes) to facilitate regional market integration and ensure cross-border cooperation among transmission system operators and regulatory authorities. Serbia will also need to comply with the EU's Large Combustion Plants Directive (LCPD), a commitment deriving from the Energy Community.

Serbia's energy sector needs to prepare for carbon pricing. The introduction of the CBAM in the EU (October 2023) increased pressure on Serbia to establish a form of domestic carbon pricing. This measure would expedite decarbonization by incentivizing changes in investment, production, and consumption patterns while raising public revenues for further modernization of the energy sector and mitigation of impacts on affected groups. Yet, introducing carbon pricing at the EU ETS level without adequate financial instruments for modernization of the energy sector would erode the financial situation of JSC EPS, which will need to prepare accordingly or face the consequences of CBAM. Introducing an Emission Trading Scheme (ETS) with a pricing structure similar to the EU ETS by 2030 is a prerequisite for integrating into the EU electricity market and exempting Serbia's electricity sector from CBAM.

SOEs in the energy sector need second-generation reforms. JSC EPS's operations are burdened by overstaffing, complex public procurement processes, and delayed investment in maintenance and modern generation capacity, including hydro. Restoring JSC EPS's long-term financial viability will require clear strategic direction, sound governance, management and business practices to implement ongoing and planned investments. The World Bank, KfW and AfD supported the transformation of EPS into a joint stock company and a gradual tariff increase for the guaranteed supply. The Government of Serbia committed under the IMF Stand-By Arrangement to increase tariffs, which are underway, and adopt a strategic restructuring plan (expected in 2024) to address the medium- to long-term viability of the company.

3. Policy Responses for Consideration

Short-term measures:

- Strengthen the policy and regulatory framework and upscale investments in support of decarbonization, by continuing RE auctions, supporting the rehabilitation of existing hydropower plants, taking key steps to initiate construction of new ones (such as Bistrica PSHPP), accelerating efforts towards regional electricity market integration, and strengthening prosumers regulations.
- Support scaling up of investments in energy efficiency and its market creation as well as loss reduction measures to strengthen decarbonization by involving private sector.
- Approve the NECP and ESDS, with the endorsement of a net-zero target by 2050 and an explicit policy approach for a gradual coal phase down.

• **Continue efforts to comply with the EU Clean Energy Package and LCPD**, as required by the membership to the Energy Community and for the alignment with the EU's Acquis Communautaire.

Medium-term measures:

- **Adopt carbon pricing** to incentivize changes in investments, production, and consumption patterns while generating public revenues for Just Transition and modernization of the energy sector.
- **Prioritize investments and plan for electricity supply adequacy** in view of gradual thermal capacity retirement and consider analysis for land repurposing and revalorization of idle mining lands. Consider scaling up integration of variable RE sources through competitive market mechanisms while ensuring adequate power system balancing.
- **Modernize the energy sector**, specifically focusing on ensuring the utilities' financial and operational sustainability and improving their management and commercial orientation. Improve the capacity and performance of the distribution system operator, Elektrodistribucija Srbije.
- **Explore the potential of clean energy minerals** under a modernized governance and legal framework for mining.

4. World Bank Engagement

Ongoing Support	- Scaling Up Residential Clean Energy (SURCE) Project (USD 50m). This project offers households partial grants (channeled through municipalities) for energy efficiency and distributed clean energy investments. Additional financing for SURCE is being discussed.
	- Green Transition Programmatic Development Policy Operation Series (FY23 and FY25, co-financed with KfW and AFD, USD 420m per operation). The DPO series of 2 operations is articulated around 3 pillars: (i) aligning public finance management with the climate change agenda; (ii) accelerating the clean energy transition; and (iii) supporting the alignment of Serbia with the EU standards on environment and climate change.
	- Assessment of the financial situation of EPS. This work provides advisory input into the tariff discussion in the context of the Green Transition DPO series.
	- Support to the regional electricity market agenda . This work assists MoME in the adoption of the electricity market integration legislative package adopted by the Energy Community in December 2022; and to strengthen its implementation by improving regional coordination among transmission system operators (TSOs).
Potential engagements	- Investment financing/co-financing could support: (i) hydropower rehabilitation and expansion (including PSHPP); (ii) EE, sustainable heating, decentralized RE, strengthening of the electric power distribution and transmission systems (stand alone or as part of the Additional Financing to the ongoing SURCE Project); and iii) modernization of the electric power distribution systems.
	- Analytical and advisory support, could be provided in following areas: (i) TA support to hydropower sector ; (ii) assessment of the energy storage solutions (PSHPP, BESS, other); (iii) additional TA to support regional electricity market integration (revision of primary and secondary legislation); and (v) TA to the electric power distribution and transmission system operators.

7. Environment and Green Transition

1. Overarching Messages

Serbia needs to improve the quality of its environment and align its domestic policies with the EU energy, environment, and climate legislation. Serbia has one of the highest death rates from pollution among European countries and is ranked 9th globally. Observed and anticipated climate change impacts affect disproportionately vulnerable communities and add to the cost of environmental degradation. The Fiscal Council of Serbia estimated that addressing climate change and environmental degradation would require an investment of around EUR 500m per year (1.3% of GDP) over the period 2020-2030. On the adaption front, recent simulations suggest that the cost of reaching 'net-zero- by 2050 could be around USD 9.4bn. The introduction of the EU Carbon Border Adjustment Mechanism (CBAM)², which started in October 2023, could penalize Serbian exports produced with polluting processes and entail a substantial fiscal burden. It will also increase pressure on Serbia to introduce some form of domestic carbon pricing.

The transition towards greener and more resilient growth needs to be a just one, notably for those communities that depend on polluting industries for their livelihoods. Besides aligning its legislation with the EU, the government needs to reduce the country's dependence on heavily polluting lignite, improve energy efficiency, and promote green and resilient development across sectors. Serbia is a signatory to the 2020 Sofia Declaration on the Green Agenda for the Western Balkans, which aims to help countries and regions move away from coal towards a carbon-neutral economy while ensuring that this transition is just. As such, a robust engagement with civil society, local government planning, and responses to assist those impacted by job loss, business closure, local revenue reduction, and social change at the household and community levels will be needed to manage the green transition.

Box 2. Cost of Reaching Net-Zero by 2050 -- Adaptation

Initial investment required to implement national adaptation programs are estimated at USD 21.5bn by 2050 (discounted), equivalent to 2.3% of GDP per year until 2050. Several policies and laws have been implemented over the past two decades to enhance disaster risk reduction and management. Thus, Serbia is equipped to provide fundamental disaster responses, but improvement in equipment, capacity, data availability, and implementation of missing DRM policies in the existing legal framework are still needed. A lack of funds for the integration of climate change adaptation measures in national and subnational strategies and policies threaten Serbia's ability to develop a resilient economy.

Source: Western Balkans CCDR 2024, Serbia Chapter.

2. Key Challenges

The Serbian economy is carbon and energy intensive, leading to the highest GHG emissions among Western Balkan countries and significant air pollution. If not addressed, high GHG emissions will expose Serbia to the adverse implications of the EU CBAM. Air pollution is a major environmental health concern in Serbia, causing thousands of premature deaths and substantial costs to the economy. The annual average PM_{2.5} concentration in Serbia is above the EU limit value, as well as the WHO guidelines. In 2019, PM_{2.5} pollution was responsible for an estimated 12,578 premature deaths, or 144 deaths per 100,000 population, and the annual costs of health damages amounted to 18.9% of GDP, the highest share worldwide. Air pollution is perceived as the most damaging aspect contributing to people's health (71%) and is amongst the top issues where government performance is considered inadequate.

The EU Progress Report for 2023 calls for increased investment in municipal waste reduction, separation, and recycling, including the continued closure of non-compliant landfills. Most municipal waste is disposed of in approximately 2,700 improper and often illegal dumps. In 2022, only 42% of the population was covered by services from sanitary landfills. Only 12 of the 27 landfills initially planned according to EU standards have so far been implemented (10 regional and 2 local). The recycling rate for municipal waste is meager at only 4% and is largely achieved by informal resource collectors. As a result, the potential of circular economy in waste management remains largely unused.

2 Currently in transitional phase with only reporting obligations and becomes mandatory from 1st Jan 2026.

Serbia's distorted price signals and policies on energy and other environmentally harmful activities drive its high environmental footprint. Prices that do not factor in environmental costs to society encourage businesses and households to waste energy, water, and other resources and decrease their own financial costs by increasing environmental costs, which are borne by society. For environmental incentives to be stronger, taxes and subsidies need to target the products or activities that are most harmful/beneficial to the environment. However, excise duties on fossil fuels are established without reference to their relative carbon content, and polluting fuels, such as oil and coal, are not covered by excises. As a result, these fuels are used without consideration of their environmental impacts.

Weak institutional capacity makes implementing policies and measures to address deteriorating environmental quality difficult. The key challenges cut across: (i) implementation of several key public policies and secondary legislation that have recently been adopted (e.g., the Low Carbon Development Strategy, the Rulebook on Monitoring and Reporting of GHG emissions from stationary installations); (ii) institutional aspects – in particular, low capacity that hampers poor coordination efforts at both central and local levels; and (iii) investment aspects – the current regulatory framework does not favor investments to address the key challenges such as air pollution and GHG emissions.

The planned but still not enacted closure of loss-making coal mines may result in loss of livelihoods and social unrest. Critical challenges include: (i) Creating support programs for workers directly employed in closing/ downsizing industries (e.g., coal) and related value chains, who could lose their jobs; (ii) thinking through invest- ment and incentives for new business activity and gap-filling local revenues as economic activity in communi- ties dependent on polluting industries will contract; and (iii) Enhancing support for services (e.g., psychosocial support, child and elderly care, women's empowerment, youth engagement) as social risks will increase (e.g., gender-based violence, alcohol abuse, etc.).

3. Policy Responses for Consideration

Short-term measures:

- Air pollution. Implement the newly adopted National Air Protection Program (NAPP), starting with tackling domestic heating, industrial, and transport emissions.
- Municipal waste. Adopt the by-laws envisaged in the Amendments to the Law on Waste Management (2023).
- Environmental externalities. Abolish the fee for protecting and improving the environment (the "ecotax"), as payments are not proportional to emissions.
- Institutional framework. Ensure adequate staffing for Serbia Environmental Protection Agency in line with the Action Plan for Administrative Capacity Development submitted by Serbia to the EU as part of Chapter 27 negotiations.
- Just transition. Set up a multi-stakeholder, government-led working group to enhance and operationalize just transition assessments, make public the key findings, engage civil society in dialogue, and develop location-specific, prioritized transition plans for mitigating social and economic impacts and generating new areas of economic activity.

Medium-term measures:

- Air pollution. Continue to implement measures in the NAPP to address the major sources of air pollution and monitor and report on the improvement in air quality.
- Municipal waste. Amend the Law on Waste Management to include Extended Producer Responsibility in alignment with the EU Waste Framework Directive, amend the Law on Packing and Packaging Waste and establish a Deposit Refund Scheme for packaging waste, and step-up investments in waste infrastructure, including the closure and remediation of unsanitary landfills.

- Environmental externalities. Amend the Law on Taxes on the Use, Holding and Carrying of Goods to ensure that motor vehicles are taxed to favor better environmental performance.
- Carbon Pricing.³ Introduce carbon pricing instrument(s) in carbon intensive sectors likely to be impacted by the EU CBAM, such as ferrous metal. Carbon pricing would help reduce GHG emissions³, enable Serbia to prepare for the EU CBAM, and generate domestic revenues.
- Institutional frameworks. Transpose the EU Soil Strategy till 2030 into national legislation and adopt a soil protection program. Establish a national information system to support nature protection and biodiversity preservation.
- Just Transition. Developing local and regional transition plans in partnership with communities that are likely to be most affected by the green transition; and design and implement social services, infrastructure upgrades, and economic diversification activities.

4. World Bank Engagement

Ongoing Support	- Green Transition Analytics. Analytics on Serbia's green transition focused on: (i) the role of price signals, including environmental fiscal reforms and CBAM; (ii) key sectoral reforms to address energy efficiency, air pollution, waste management, the circular economy, and water and wastewater treatment; and (iii) institutional strengthening.
	- Green Transition Programmatic Development Policy Operation Series (FY23 and FY25, co-financed with KfW and AFD, USD 420m per operation). The DPO series of 2 operations is articulated around 3 pillars: (i) aligning public finance management with the climate change agenda; (ii) accelerating the clean energy transition; and (iii) supporting the alignment of Serbia with the EU standards on environment and climate change.
	- Enabling the implementation of the National Air Protection Program (FY24 and FY25). Technical assistance is being provided to the Ministry of Environmental Protection to develop key secondary legislation required to implement the NAPP.
Potential engagements	- Reducing GHG and air pollutants emissions. Support could be provided for investments that reduce both GHGs and air pollutants. Financing innovations that leverage concessional resources could be explored.
	- Strengthening waste management through Extended Producer Responsibility scheme. Support could be provided for design of the EPR scheme, including ex-ante analysis of it impacts on stakeholders, and the economy.
	- TA support could be provided to develop a Soil Protection Program to align with the EU strategy and achieve zero soil degradation by 2050 and to establish a Nature Protection and Biodiversity Information System would help connect public entities to track and manage ecologically significant areas.

³ Simulations suggest that carbon pricing could reduce annual GHG emissions in Serbia by 40% in 2035 compared to a business-as-usual scenario, which is up to 5 times more emissions reductions than CBAM alone by 2035.

8. Poverty and Inclusion

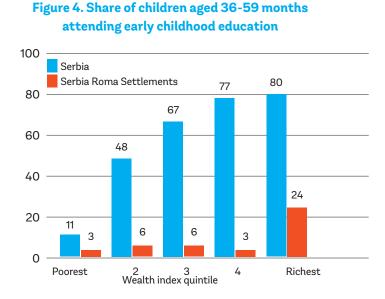
1. Overarching Messages

Serbia has made good progress in reducing the incidence of poverty. Poverty, defined as income under USD 6.85/day in 2017 PPP, fell from 28.3% in 2013 to an estimated 7.1% in 2023. However, the share of the population considered at risk of poverty and material deprivation (i.e., unable to afford basic needs like housing, food, and durable goods) is higher in Serbia than in comparator EU countries. While Serbia's economy is expected to continue to grow, a stubbornly high inflation rate can limit purchasing power. In addition, rising energy prices can disproportionately affect the poor. As the share of the poor shrinks, lifting out of poverty those who remain in poverty and are excluded from markets will become more difficult and will require the implementation of targeted programs.

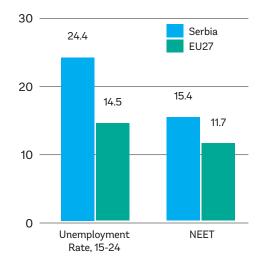
Greater efforts are needed to talk and educate about inequality and exclusion. Disparities across gender, location, ethnicity, and income in accessing basic infrastructure, services, and jobs represent unequal opportunities, undermine the social contract, and jeopardize Serbia's human capital formation. For instance, in Serbia's Roma settlements, 20% of the population lack access to reliable, safe drinking water, over 55% lack sewer networks, and 14.5% lack access to electricity. Looking forward, the pace of labor market recovery will be critical for faster poverty reduction. With a declining workforce and aging population, efforts will be needed to promote socio-economic inclusion and strengthen skills to expand the pool of potential workers and entrepreneurs.

2. Key Challenges

Serbia's poor and disadvantaged groups face inequality and unequal opportunities. Income inequality is higher than the EU average: the Gini coefficient was 32.0 in 2022, reflecting unequal access to opportunities by women and girls, Roma, and young adults. Children from Roma communities are underrepresented at all education levels from early childhood (Figure 4), have lower educational attainment, and fewer opportunities to earn a good income later in life. Several structural barriers limit Roma access to education ranging from affordability, accessibility and legal constraints to discriminatory practices and social norms. Additional factors include the cost for textbooks, clothes, and transport; and legal barriers: Serbia's law requires both parents to be employed for a child to be guaranteed admission to early childhood education, which is often not the case in Roma families. Youth unemployment and the share of youth not in education or training (NEET) are also high (Figure 5).







Source: Serbia MICS 2019.



Persisting gender gaps in the labor market are costly for the economy and affect the Roma disproportionately. In 2022, there was a 13.2 percentage point difference in the Labor Force Participation (LFP) rate, with 63.4% for women and 76.6% for men. This gender gap is wider than that observed in the EU-27, which hovers around 9.8% (See Policy Note on Gender on the factors behind these disparities). Roma women's participation rates are particularly low, while their unemployment levels are very high. Among the reasons behind the low activity of Roma women are living in poverty and isolation, low levels of education and vocational training, early marriage and patriarchal principles of family and community, limited access to basic infrastructural services, such as childcare, and low expected wages.

Low labor market attachment hinders sustained poverty reduction. Job opportunities are the most important and sustained way to reduce poverty in the long run. Yet, many people in Serbia are not working or searching for a job, particularly among the poor (over 45% of the total adult population and 38% of the poor are inactive). Furthermore, over 50% of the poor are unemployed. A larger share of the poor has less than secondary education (14% compared to under 6% for the country), live in rural areas, are unemployed or self-employed, or work in lowskilled jobs. Labor taxes in Serbia are high at lower wage levels, while social assistance is deducted for each dinar earned in employment, limiting incentives for formal jobs for fear of losing benefits. The position or Roma in the labor market is jeopardized in that they are more likely to have shorter (informal) contracts with less benefits.

Spatial inequalities result in lagging regions. The share of households at risk of poverty ranges from 4.8% in Novi Beograd in Belgrade to 66.1% in the municipality of Tutin (Šumadija and Western Serbia region). Lagging low-income regions have high levels of poverty, lower human development outcomes, and poor quality of infrastructure and municipal service delivery (particularly water and wastewater treatment).

Rising prices and the energy transition have a disproportionately negative impact on low-income families. The current inflationary pressures are squeezing purchasing power, with the brunt of the burden falling on the most vulnerable in Serbia. Prices in 2023 increased by an average of 12.3% (compared to average prices in 2022), driven by rising food (18.7%) and energy (19.6%) prices. As poor households allocate a larger share of their income to food, they are hit hardest by the high food prices, exacerbating their financial strain.

High energy prices, when passed onto household tariffs, could worsen energy poverty and hurt poor and vulnerable households unless safeguarded by compensatory schemes. Even though poor households allocate a more significant portion of their income to electricity (9% for the poorest decile compared to under 5% for the richest group), the lowest income decile contributes only a smaller fraction to the overall electricity consumption (a share of 4% vs 19%). Consequently, better-off segments of the population with higher electricity spending benefit substantially more from the implicit subsidy resulting from the price caps. While Serbia has a relatively well-targeted last resort social assistance program (Financial Social Assistance) and a bill discount program for energy-vulnerable customers, the coverage of these programs is relatively small considering the poor and energy-vulnerable population.

3. Policy Responses for Consideration

Short-term measures:

• **Protect the vulnerable from food and energy price increases. Prioritize targeted social assistance** such as income support or cash transfers targeted to poor and vulnerable groups—over across-the-board subsidies or price caps.

Medium-term measures:

• Enhance equal opportunities for human development and strengthen social protection. Promote early childhood development and access to quality education, healthcare, and sanitation for all. Increase the low coverage of targeted social assistance and build adaptive social protection for better resilience to shocks. Reduce barriers and disincentives to work for vulnerable and disadvantaged groups (e.g., reduce labor tax and contribution burden, notably for low-wage, low-skill workers and those with dependents). Consider equity besides efficiency in the tax and transfer system (e.g., more progressivity in labor tax, more equitable and efficient social spending).

- **Promote gender equality and Roma inclusion.** Continue to promote gender equality through improving access to child and elder care and promoting workplace arrangements and flexibility to facilitate care duties. Continue efforts to reduce disincentives and barriers to women's work in labor taxation and regulation and support social norms around gender equality to reduce barriers women face in practice. Continue efforts to address the multiple barriers that the Roma population faces through evidence-based policy making in the areas of education, health, work opportunities.
- Address the challenges of lagging regions. Enhance agricultural productivity and competitiveness and promote backward and forward linkages with non-farm activities, which is key to poverty reduction in rural areas. Also, strengthening equitable service delivery, basic infrastructure in lagging regions, and local transport and digital connectivity can boost access to markets and jobs. Invest in place-based approaches in marginalized communities, with an explicit but not exclusive focus on Roma, to address the complex, multi-sectoral infrastructure, basic services, and socio-economic inclusion needs. Strengthen voice and participation of people living in marginalized communities, through support to participatory investment planning and implementation to improve the impact and sustainability of investments.

Ongoing Support	- The World Bank supports the poverty and distributional angle of the green transition under the Green Transition Programmatic Development Policy Operation Series (co-financed with KfW and AFD, USD 420m per operation) – e.g., electricity tariff adjustments and the protection of vulnerable households and communities – providing analytic and advisory support on the poverty and equity impacts and mitigation measures. As part of the Public Finance Review, the World Bank will provide analytical support to evaluate the poverty and inequality impacts of the fiscal system.
Potential engagements	- The World Bank could provide analytical and advisory support to Serbia in: (i) monitoring and addressing spatial disparities by analyzing the subnational level of well-being (poverty and household welfare mapping with the 2022 Census) and informing the targeting of investments; (ii) analyzing the poverty and distributional effects of carbon pricing to inform policy options; and (iii) strengthening gender equity in Serbia , following a country gender assessment currently under finalization.

9. Health Systems

1. **Overarching Messages**

Despite progress in the last two decades, the health system in Serbia faces challenges arising from the large burden of noncommunicable diseases and the shock caused by the COVID-19 pandemic. The government has shown strong leadership in steering the health system. Over the last two decades, it has adopted several framework documents to guide the future direction of the health sector. Considerable progress has been achieved in the areas of infrastructure investment, strengthening primary health care, and the development of eHealth. The government's response to COVID-19 was fast, determined, and strategic, but it did cause significant strain on the health system and staff working in it. However, more efforts will be needed to improve the health system's performance to achieve value for money and deliver better outcomes for the entire population.

2. **Key Challenges**

Figure 6. Level of economic development

Despite improvements, Serbia does not compare well with peers and aspirational peers in terms of health outcomes.⁴ Life expectancy at birth is lower than in several Western Balkan countries (Figure 6). At 10 per 100,000 live births, the maternal mortality ratio in 2020 was close to double the average among countries in the European Union (EU). At the qualitative level, 16% of the population perceived their health as 'bad' or 'very bad' in 2018, higher than in nearly all comparator countries. Although most of the population thinks that public health services are accessible, dissatisfaction remains regarding waiting times, facility conditions, patient communication and privacy, and the practice of 'asking for favors'.

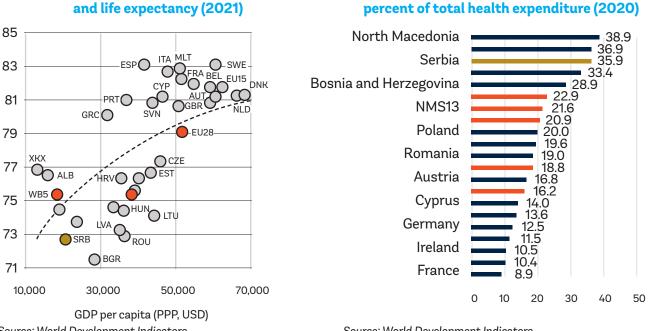


Figure 7. Out-of-pocket health expenditures as

Source: World Development Indicators

Serbia has a high prevalence of NCDs risk factors while utilization of preventive services at the PHC level is limited. Smoking, alcohol consumption, unhealthy diet, and high body mass index are the leading risk factors for NCD-related death and disability. Heavy smoking is almost three times higher than in most comparable countries. The prevalence of overweight and obesity among adults and children has been increasing since 2000, with over 50% of adults and 23% of children classified as overweight or obese. Screening for NCDs is critical to reduce morbidity and premature mortality. However, results from a survey commissioned by the World Bank

Source: World Development Indicators

⁴ Peers and aspirational peers include: (i) other countries in the Western Balkans (WB5); (ii) 28 countries in the European Union (EU28), notably the 13 New Member States (NMS13), Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovak Republic, and Slovenia; and (iii) Seven Small Transition Economies of Europe (STEE7): Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovak Republic, and Slovenia.

in 2021 demonstrated that only about one in five Serbians reported using screening services for cancer, diabetes, blood pressure, and heart and liver disease in the public healthcare sector. Increasing screening services requires strong PHC institutions accessible to the entire eligible population. The current low use of screening and preventive services underlines the need for a proactive approach that facilitates access to these services.

Despite the existence of social health insurance, a comprehensive health network, and a generous benefits package, Serbia has not achieved universal coverage in its full meaning. Universal coverage implies that services are not only physically accessible but also of high quality and effectiveness, not imposing a financial burden on the population or leaving certain groups behind while being delivered efficiently and sustainably. In this regard, the system's performance shows weaknesses in financial protection, effectiveness, efficiency, and equity.

Specifically, Serbian households shoulder a remarkable financial burden of health care, while the effectiveness of care can improve. Citizens bear 35.9% of total health expenditure (Figure 7). Nearly 5% of households experienced catastrophic health spending in 2019 (defined as health spending higher than 25% of total nonfood consumption expenditure), higher than any other country in the Western Balkan except Albania. Serbia's cancer death rate in 2022 was the highest among comparator countries with similar incidence levels, pointing to weaknesses in the effectiveness of care (Figure 8). In general, 489 per 100,000 deaths from different causes in 2020 could have been averted with better prevention and treatment (Figure 9).**The high in-patient length of**

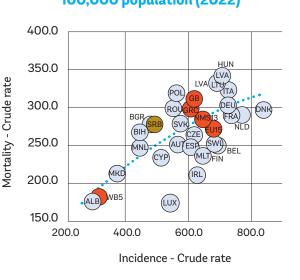
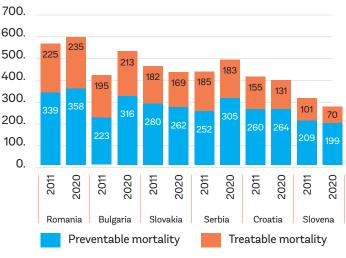


Figure 8. Cancer incidence and death rate per 100,000 population (2022)

Figure 9. Amendable mortality rate per 100,000 population (2011 and 2020)



Source: World Development Indicators

Source: EUROSTAT

stay indicates inefficiency (Figure 10), while equity concerns persist (Figure 11). The adoption and provision of day surgeries, which could deliver services at lower cost while offering quality and convenience for the patients, only recently picked up. This is further exacerbated by the fact that Serbia still relies heavily on provider payment systems that do not incentivize efficiency and effectiveness of inpatient management. On equity, although there is no clear evidence of rich-poor gaps in the utilization of basic services, wide differences exist in health outcomes across districts and between Roma and the general population.

3. Policy Responses for Consideration

Short-term measures:

- **Develop a comprehensive strategy to tackle noncommunicable diseases,** which includes a full spectrum of health promotion, prevention, early detection, and case management.
- **Strengthen primary health care** through better provider competence and accountability and closing infrastructure, equipment, and staffing gaps.

Figure 10. In-patient average length of stay in days (2021)

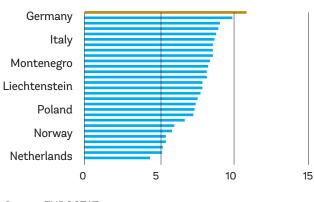
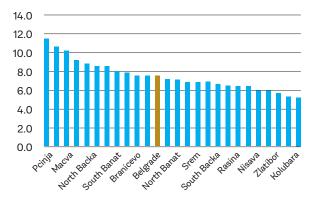


Figure 11. Low birth weight across districts, percent (2018)



Source: EUROSTAT

Source: EUROSTAT

Medium-term measures:

- Reform the service delivery network to rely less on inpatient care and more on primary and new models of care.
- Solidify recently initiated provider payment reforms in primary health care and hospitals to improve efficiency and quality.
- **Implement a health quality improvement plan** that includes implementing clinical guidelines and care pathways, developing quality measurement methods, and enforcing quality data collection, monitoring, and reporting.
- Strengthen interventions targeting the population and providers aimed at rational drug use and prescription control to reduce pharmaceutical spending.
- **Fill remaining sector gaps**, including oversight of the private health sector, quality of care, use of data for decision-making, and targeted strategies to support disadvantaged populations.

Ongoing Support	- COVID-19 Emergency Response Project (USD 100m) . This project focuses on strengthening the national health system for public health preparedness, including on pandemics, and the establishment of a BSL-3 laboratory at the Torlak Institute.
	- Serbia NCD Prevention and Control Project (USD 75m) . This project aims to (i) improve health outcomes through better NCD prevention and management, (ii) enhance competencies and accountability of health service providers for better NCD prevention and management, and (iii) continuation of the initiated reforms in health care financing and improvement of quality of care.
Potential engagements	- New areas of engagement could include targeted interventions to address primary health care effectiveness, hospital sector efficiency, stewardship over the private sector, and use of data for decision making.

10. Education

1. Overarching Messages

Serbia has made significant progress in human development but still lags its EU peers while facing a rapid population decline. A child born in Serbia today will be only 68% as productive as they could be with complete education and full health. According to the World Bank's Human Capital Index, the average child can expect to complete 13.3 years of school by the age of 18, but after factoring in learning outcomes, this drops to 9.8 years, one year behind the EU average. Serbia's population is declining and aging due to low birth rates and outmigration. With over 21% of its citizens being over 65 in 2020, Serbia has one of the highest proportions of elderly people globally and faces a declining school-age population. The youth population aged 15–24 has declined by about 15% since 2011, and the younger age group of 0-14 by 5%. With a low fertility rate and high outmigration, the labor force could decline by up to 20% by 2050.

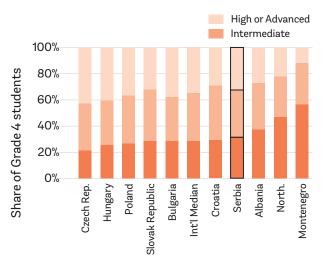
Investing more in education and boosting human capital will steer Serbia toward a more sustainable and inclusive growth path. Public funding for education has declined from a high of 4.5% of GDP in 2009 to 3.9% in 2019, the latest year with available comparable data. This is relatively low vis-à-vis comparator countries and below the EU average of 4.6% of GDP. Primary education expenditure per child in Serbia is USD 6,363 (PPP), 27% below the average for the ECA region. Going forward, for Serbia to converge with the EU on human capital outcomes and economic growth, it would be prudent to pursue initiatives that foster quality education, promote inclusion of poor and vulnerable students, and protect education spending while promoting efficiency and equity.

2. Key Challenges

Despite progress in ensuring access to education, inequities in early learning opportunities persist into primary education and beyond. Access to early childhood education and care (ECEC) increased from 50% to 68% between 2014 and 2022 but is below the EU 2030 goal of 96%. Equity of access remains a challenge: only 10.5% of children from the poorest quintile and 7% of children from the Roma population are enrolled in ECEC. Net enrolment in primary school has remained historically high, at 96.6% in 2022. However, the number of children out of school is 2 percentage points higher than the average for ECA and for upper middle-income countries. While primary school completion rates are nearly 100% on average, in Roma settlements the rate is only 64%, reflecting broader equity concerns.

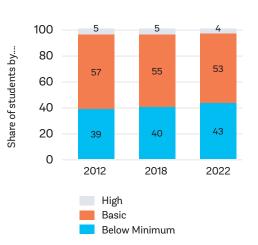
Serbia maintains relatively high average learning outcomes in early grades, but significant learning disparities appear early in the cycle. Learning assessment results from 4th grade students show that their average performance in mathematics (Figure 12), science, and reading is above the international average. In 2021, Serbia's average performance in the Progress in International Reading and Literacy Study was 514, comparable to the ECA average of 517 and above the global average of 503. Similarly, in 2019, Serbia's 4th grade students performed above the international average on the Trends in International Mathematics and Science Study. Despite this encouraging data, many students fall behind quickly: 27% of Serbian primary students fail to exceed the lowest international benchmark for reading, and 32% for mathematics.

International assessment results at the transition between primary and secondary education, at age 15, indicate that Serbia performs well but below OECD standards. The 2022 PISA results (Figure 13 shows student performance result by proficiency level) reveal a performance gap of 30-40 points below the OECD average, equivalent to 1.5-2 years of schooling. Proficiency levels in math, reading, and science have stagnated since 2012. Notably, 43% of 15-year-olds in Serbia fall below the minimum math proficiency (Level 2), compared to 31% in the OECD. Poor learning outcomes are strongly linked to socioeconomic status and geographic location: functional illiteracy among the poorest students is 20 percentage points higher than the overall population. PISA 2022 data shows an 81-point gap in math performance between students in the bottom and top socio-economic quartiles, equivalent to over 3 years of schooling. Urban-rural disparities and gaps in learning outcomes for ethnic minorities are also significant.



(TIMSS 2019)

Figure 12. Grade 4 mathematics performance Figure 13. Student performance by proficiency levels for PISA 2012-2022



Source: TIMSS scores (2019) and PISA scores (2022).

The reforms to improve primary school teaching and learning must be accelerated to complete the curricular transition and shift to single-shift schooling. Serbia launched reforms in primary education in 2018, with a phased introduction of a competency-based curriculum for Grades 1, 5, and 8, and has since expanded. However, this curricular transition is incomplete. The average instructional time in Serbian primary schools is 628 hours, compared to an average of about 739 hours per year in the EU28, a difference of about 4 school weeks per year. Further, the use of dual shifts in some Serbian schools, particularly in urban areas, further limits instructional time and the ability to offer extracurricular activities. The declining school-age population presents an opportunity to enhance educational quality by transitioning to single shift schooling and offering more diverse and enriched learning programs.

The digital divide and lower quality of remote teaching during the pandemic likely exacerbated existing learning inequities. While coverage of remote teaching and learning was high overall, coverage of vulnerable students was less favorable: 17% of Roma students in primary schools were not able to access distance learning, and only about 54% of students with disabilities were able to participate in online platforms. The main obstacles were lack of internet connectivity, lack of digital devices, and weak digital literacy among teachers and parents.

Demand for tertiary education is high and growing, but access for vulnerable students remains limited and the quality of instruction lags EU standards. Tertiary enrollment has increased from around 40% to nearly 70% since 2000, increasing the stock of skills in Serbia. However, equity in access is a challenge: poor and marginalized students face more obstacles because equity considerations do not receive due attention in admission processes. Moreover, Serbia lags the EU in terms of tertiary attainment: 34% of the adult population aged 30-34 have successfully completed tertiary education, compared to 41% in the EU, and only 69% of recent tertiary education graduates between the age of 20-34 are employed, 17 percentage points lower than the EU average.

3. **Policy Responses for Consideration**

Short-term measures:

- **Ensure sustainability of ECEC reforms**
 - Expand further the access to quality ECEC and reinforce existing pro-poor policies to stimulate the enrollment of poor and vulnerable children.
 - Continue providing training, mentorship, and peer-learning support to ECEC teachers using established processes to increase quality.

• Support outreach to young children and families locally, focusing on parental awareness of the benefits of sending their children to preschool and improving the family environment.

Medium-term measures:

- Invest more, and more effectively, in primary education to ensure no one is left behind:
 - Improve schools' infrastructure and the quality of the learning environment, including by deploying modern teaching/learning approaches.
 - Transition to single-shift schools (where feasible) and increase extracurricular learning programs.
 - Enable teachers and schools to provide high quality services for students and their families, including school self-evaluation and improvement processes.
 - Build a stronger framework to monitor and evaluate national progress in education through sample-based assessments for primary education students, focusing on key competencies.
 - Support underperforming schools through a school improvement grant mechanism that could help to equalize resources between schools and promote greater inclusion.
 - Invest in digitalization by enhancing infrastructure, skills, and assets to establish a flexible and resilient education delivery system capable of responding effectively to future shocks.
- Strengthen tertiary education on quality, equity, labor market relevance, system-level funding:
 - Introduce mechanisms to support the enrollment of students from lower socioeconomic backgrounds (introduce equity as an explicit objective for universities in the admission process).
 - Improve labor market relevance and internationalization of higher education by expanding dual model programs, international study programs, internationally accredited study programs, entrepreneurship modules, and mobility programs for teaching staff.
 - Enhance key steering mechanisms, namely quality assurance frameworks and more competitive funding mechanisms, to incentivize innovation and faculty collaboration.

Ongoing Support	- Inclusive Early Childhood Education and Care (ECEC) Project (USD 50m) to improve access to ECEC services for disadvantaged children and support the adoption of a new ECEC curriculum.
	- Read@Home . A program delivering reading and learning materials to vulnerable families to support children's learning.
	- Advancing Education Systems in the Western Balkans Study , which aims to support Serbia with policy recommendations for expanding access to short-cycle higher education programs.
	- Country Climate Development Report (CCDR) , which highlights the role that education can play in the green transition, identifying skill gaps that could emerge.
Pipeline	- Inclusive Primary Education Improvement Project. This project aims to: (i) support extracur- ricular learning; (ii) improve learning conditions, notably for disadvantaged schools and students; and (iii) support schools that have transitioned to single shifts or are ready to do so.
Potential engagements	- Higher education steering mechanism. Provision of TA on higher education funding models and simulations, quality assurance, and other incentives for universities.

11. Social Protection and Employment

1. Overarching Messages

The social protection system needs modernization to face the challenges posed by aging, low productivity, and unequal opportunities. Social assistance programs remain out of reach for most of the poorest households. The provision of social services is still limited and varies in availability and quality across the country. A rapidly aging population, together with rising informality, affects the coverage of the pension system and makes the trade-off between pension adequacy and financial sustainability complex. Labor Market Programs (LMPs) are limited in reach and impact, especially among vulnerable groups. The labor market faces skills gaps and mismatches. Going forward, further prioritizing the poor in social assistance can reduce poverty and strengthen the efficiency of public spending. Improving the quality and availability. Expanding LMPs and services to job seekers, strengthening the human and technological capacity of the National Employment Service (NES), and developing the skills ecosystem could make Serbia's skill pool more responsive to changes in labor demand.

2. Key Challenges

Spending on social assistance is inefficient, and its coverage of the poor is low. Serbia spends close to 2% of GDP, mostly on categorical programs. More than half of the population in the poorest income quintile does not have access to any social assistance benefits. Recent reforms, including the expansion of pro-natality benefits, further risk crowding out spending on poverty-targeted benefits. While being well-targeted, the main poverty targeted program (the Financial Social Assistance, FSA) covers only 3.5% of the population vis-à-vis an absolute poverty rate of close to 7%. The number of beneficiaries has declined over the years, limiting the impact of the FSA's poverty reduction. Social assistance delivery systems have several limitations in terms of performance at each stage of the delivery chain and lack the capacity and flexibility to adjust and scale up to help households with weather shocks.

The quality and availability of social services varies significantly. Social services are expanding with programs provided by the central government, local self-governments (LSGs), NGOs, and the private sector. The provision of services is uneven across LSGs, many of which do not provide key services. The coverage for children and youth with disabilities is low, and public care for the elderly is limited despite aging population. The central government is deinstitutionalizing accommodation services as a key reform objective, but progress is uneven, and quality problems persist. High caseloads at the Centers for Social Work, fragmented delivery systems, and lack of standardized referral procedures limit coordination and adequate service provision. Earmarked financing from the central to the local level is intended to boost LSG service provision, but weaknesses in targeting and substitution effects limit its effectiveness.

The sustainability of the Serbian pension system continues to be a challenge. Almost one-in-ten Serbians aged above 65 is not covered by a pension scheme. While the total number of contributors in 2022 reached 90% of the labor force, 1.24m Serbian citizens of working age remain outside the labor and pension systems. Since 2023, a new *"fiscally conditioned"* pension indexation formula aims to automatically adjust pensions depending on economic conditions. However, this has the potential to introduce volatility to pension adequacy. Alternative and voluntary retirement savings schemes to stimulate savings among the better-off remain underdeveloped. Further, there are no targeted measures to protect the elderly poor, who are less likely than non-poor to receive pensions in the contributory system. Going forward, Serbia would do well to review the parameters of its pension system, foster higher savings among those currently employed, and consider non-contributory options for the elderly poor.

The labor market displays skills gaps and mismatches and is unprepared for the digital and green transitions. Employers highlight an inadequately educated workforce and a lack of relevant skills, including soft and cognitive skills, as the main obstacles to hiring. Almost a quarter of workers with higher education levels are employed in semi-skilled occupations. These gaps are driven by multiple factors including limited interactions between employers and the skills development ecosystem (e.g., TVET institutions and universities) and inadequate labor market information systems to identify labor demand and training needs. Lifelong learning systems to reskill working and unemployed adults are underdeveloped and uneven. Recent efforts, including the Law on Dual Education, the introduction of sector skills councils, and the setting up of a National Qualifications Framework, are aimed at addressing some of these challenges but further action is needed.

LMPs suffer from underfunding and quality and coverage issues, especially for vulnerable groups (Figure 14). Spending on unemployment benefits is around 0.3% of GDP, and on active LMPs is approximately 0.1% – well below the country's peers in the EU. Consequently, the coverage of these programs is also low. Only 6% of registered unemployed receive unemployment benefits, and participation in Active LMPs among those registered with the National Employment Service is very low. Among ALMPs, the availability of training programs is restricted, primarily emphasizing on-the-job training for recent university graduates rather than adequately addressing the needs of more vulnerable populations or facilitating the reskilling of adults essential for closing skill gaps and modernizing the workforce. Members of the Roma community face additional barriers, requiring targeted LMPs that address their specific constraints.

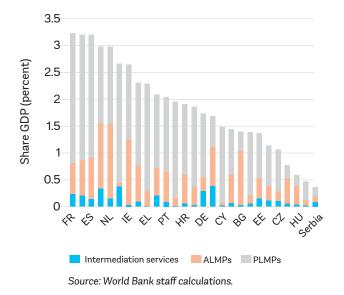
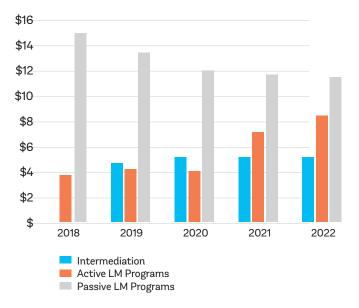


Figure 14. Spending on labor market policies (EU [2022] and Serbia [2018-2022])



3. Policy Responses for Consideration

Short-term measures:

- Improve the delivery of social assistance system and coverage of the poor.
 - Re-evaluate the eligibility criteria to improve coverage and take-up of FSA and the Child Allowance program. Measures could include: (i) removing or relaxing eligibility criteria (such as land ownership and housing size criteria for older persons applying for FSA); and (ii) relaxing income and asset tests for Child Allowance.
 - Revisit the spending objectives on categorical benefits and introduce means-testing for programs such as the Parental Allowance through the Law on Financial Support to Families with Children.
 - Regularly monitor and evaluate the Social Protection Information System and the Social Card Registry to improve the efficiency and shock responsiveness of the social assistance system.

Medium-term measures:

- Improve the quality and availability of social services.
 - Accelerate deinstitutionalization reform, reduce the caseload of social workers, develop effective case management, and ensure adequate staffing and training for the Center for Social Work staff. Revisit eligibility criteria for earmarked transfers.
- Reform the pension system to improve adequacy and financial sustainability.
 - Simulate and review the interaction of the new indexation pattern with other pension system parameters to improve its financial viability and adequacy.
 - Review the age requirement for general early retirement, early retirement for hazardous and arduous occupations, and options to raise the retirement age as the population ages.
 - Support voluntary savings mechanisms, such as (i) occupational pension plans; (ii) voluntary savings plans, including the national autoenrollment voluntary savings system; and (iii) voluntary low-cost interventions, which can be appealing to self-employed.
 - Phase out the Farmers Pension and integrate it into the general pension system, either as a social pension or as designated elderly social assistance for the uncovered elderly poor.
 - Promote policies on active aging and delayed exit from working life to foster longer productive careers in the context of population shrinking and demographic aging.
- Strengthen the labor market by addressing skills gaps and mismatches.
 - Build on recent reforms by upgrading the Labor Market Information System and developing profiling tools to better link job seekers to training programs and vacancies.
 - Build stronger links between employers and the skills development ecosystem to make programs offered by universities, TVETs, and private training providers more responsive to labor demand.
- Boost services provided to the unemployed and underemployed.
 - Increase funding for active LMPs, improve the efficiency of procuring quality private active LMP providers, and reduce the caseload burden of NES counsellors.
 - Develop targeted LMPs for the Roma community.

Ongoing Support	 Improving the efficiency of the social assistance delivery system (TA). This TA focuses on (i) improving support to returnees and other vulnerable groups through delivery and digitalization of the social assistance system (an analysis on how to improve the system and make it more efficient will be shared with the Ministry soon) and (ii) improving access to employment of vulnerable women. Pension reforms. This is TA supported through Western Balkans Pensions activity.
Potential engagements	- Support reforms to the SP system through: (i) improvements in the efficiency and shock-respon- siveness of social assistance programs; (ii) strengthening labor markets by addressing skills gaps and mismatches; and (iii) reforming the pensions system with a view to improving its adequacy and financial sustainability.

12. Urban Development and Disaster Risk Management

1. Overarching Messages

Serbian cities have the potential to contribute more to foster sustainable economic growth. Serbia's 28 cities account for approximately 60% of the country's total population and 74% of all jobs while contributing an estimated 75% of the national gross value added (GVA). However, Serbia's cities are underperforming. Despite its status as the economic hub of the country, Belgrade's economy grew slower between 2010 and 2017 relative to the metropolitan areas with similar demographic trends in the region. Economic growth in Serbia's secondary cities was also lackluster – and productivity has decreased in nearly all cities. However, with the adoption of the first-ever Sustainable Urban Development Strategy (SUDS), the government has a unique opportunity to implement far reaching urban policy reforms and investment programs.

Cities are particularly prone to natural hazards (Figure 15). In May 2014, Serbia experienced its most severe flooding and landslides in 120 years, affecting over 1.6m people and causing over USD 1.7bn in damages, losses, and recovery expenses. In May and June 2023, heavy rainfall and floods affected more than 56 municipalities and cities, causing landslides, damaging essential infrastructure, such as roads and bridges, agricultural land, and impacting more than 15,000 people – with estimated damage of USD 2.3m. Overall, emergency and reconstruction costs after flooding events between 2017-2023 have amounted to more than USD 17.7m. Having a proactive disaster risk management approach that includes cities and sufficient access to financial instruments and resources to respond to disasters is thus crucial for building financial resilience and containing the negative impact of natural disasters.

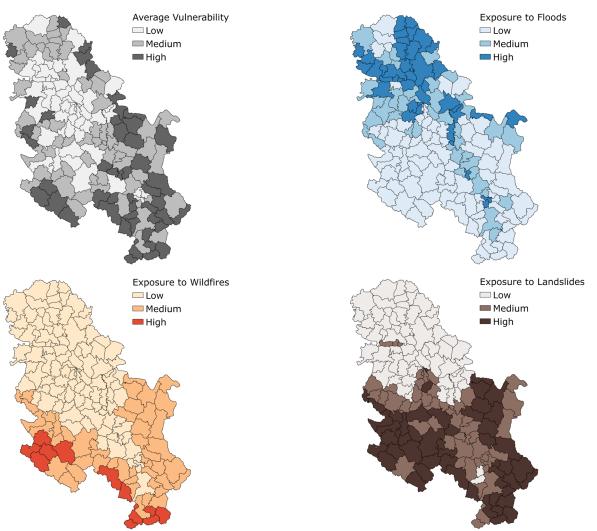


Figure 15. Overlapping vulnerabilities in Serbian municipalities

2. Key Challenges

Serbia underinvests in critical infrastructure and public services at the local level, while local capacities in urban development remain insufficient. Cities across Serbia need significant improvements in infrastructure, including solid waste management, urban regeneration, drinking water supply and wastewater treatment, clean energy, energy efficiency, urban mobility, and related public services. Yet, LSGs' capital investment expenditures are only 1% of GDP (a third of which go to Belgrade and Novi Sad), lower than the EU-27 average of 1.4%. Meanwhile, local capacities in planning, financing, and delivering urban infrastructure and public services, including operations & management (O&M) practices, remain limited. Scaling-up investment would require LSGs to strengthen institutional capacities and enhance the efficiency of their investments. Furthermore, local revenues could be raised through improved property taxation based on a more up-to-date, reliable, and transparent property valuation system.

While several national strategies advocate for fostering a greener, more resilient development pattern, local implementation mechanisms need to be strengthened. The EU Green Deal and the 2021–27 Multiannual Financial Framework requirements offer an opportunity for cities to step up their engagement on sustainable urban development, as well as on climate mitigation and adaptation fronts. However, there are limitations to addressing this 'next generation' set of urban development challenges, including the need to focus on urban areas in an integrated manner and target investments through "place-based" development approaches. Building capacity and aligning policies and regulatory frameworks with the EU Green Deal requirements is crucial for LSGs to absorb and implement EU financial flows, positioning cities as "engines of economic growth" while promoting Serbia's green transition.

Disaster risk preparedness and financing in Serbia remain insufficient. Emergency response should be strengthened by improving disaster information management systems, hazard-specific response capacities (e.g., wildfire surveillance and response remains insufficient), and communication protocols across local and national levels. Gaps remain in preventing and effectively managing wildfire risk through early detection technologies and adequate fire equipment. Sufficient resources should be allocated for local-level preparedness and/or contingency planning. Strengthening flood risk reduction at the municipal level can protect communities from the impacts of floods. This can be achieved by strengthening critical infrastructure, advancing risk-sensitive land use planning, and constructing robust embankments. Lastly, enhancing hydrometeorological monitoring, forecasting, and early warning systems is also necessary.

Coordination for effective Disaster Risk Management (DRM) is still inadequate. Since the 2014 floods, policymakers focused on strengthening the institutional and legal framework for DRM. They have improved capacities at the central and local levels and developed the infrastructure for national geospatial data, enabling better sharing of information, planning, and informed decision-making. Despite this progress, there is room for improvement, notably in the capacity of LSGs to assess and mitigate risks and disaster preparedness and response. Further efforts will also be needed to reinforce preparedness capacities and coordination mechanisms on DRM and risk prevention between the national and local levels.

3. Policy Responses for Consideration

Short-term measures:

- Support the implementation of the SUDS and its Action Plan, which focuses on improved urban planning and investments at the local level.
- Finalize and adopt the Spatial Plan of the Republic of Serbia (SPRS), currently under development.
- Revise the Law on Planning and Construction and bylaws to include climate change and resilience.
- Finalize and adopt the new Disaster Risk Reduction Strategy and Law on Disaster Risk Reduction and Emergency Management, which is currently being drafted.
- Support flood risk management planning and river basin management planning by adopting the First Flood Risk Management Plan.

- Increase local capacities to cope with disaster risks and hazards by incorporating disaster risk and climate change aspects into mandatory planning documents.
- **Support the development of a municipal finance system** that is more reliant on own-source revenues, including through property taxes.

Medium-term measures:

- **Launch a local infrastructure and service improvement program** focusing on secondary and medium-sized cities and lagging regions, facing the most significant capacity constraints.
- Improve consistency across the legally binding local planning documents for LSGs, thereby becoming more effective in implementing sectoral strategies and allocating resources.
- **Reinforce the country's financial protection** by improving ex-post disaster risk financing mechanisms, partly by reforming existing contingent budgetary reserves or developing new approaches, such as a Development Policy Loan with Catastrophe Deferred Drawdown Option (CAT-DDO).
- Strengthen emergency preparedness and response by upgrading infrastructure and equipment to respond to disasters and proactively plan for and reduce natural hazards and climate change risks.
- Develop wildfire risk profiles and municipal wildfire management plans.
- Support the launching and implementation of the National Climate Change Adaptation Program.
- **Improve public real estate asset management** by updating the asset registry, linking it with other registries, and preparing the ground for establishing an efficient public asset disaster risk insurance.

Ongoing Support	- Local Infrastructure Institutional Development (LIID) Project (USD 100m and USD 200m AfD co-financing). The project has a focus on transport but will gradually strengthen technical capacity at the LSG level for future investments across a broader set of sectors to support cities' sustainable development.
	- Real Estate Management (REM) Project (USD 66.9m). focused on improving the efficiency, transparency, accessibility, and reliability of the government's property management systems.
	- Serbia Green, Livable, Resilient Cities Technical Assistance (TA) Program (USD 3.8m funded by SECO). The Program supports the government in operationalizing the SUDS with an emphasis on strengthening the capacities of selected LSGs to better plan, prepare, and implement green and climate resilient investments.
Pipeline	- Local Infrastructure Institutional Development (LIID) Project, Phase II. A planned LIID II project would build on the implementation of LIID I and the SECO funded TA and broaden the engagement in support of LSGs beyond the transport sector to a broader set of next generation of urban development challenges in line with the EU Green Deal.
	- Second Cat DDO . Building on the policy actions advanced by the first Serbia Cat DDO (2017-2020), a proposed second Cat DDO would provide a line of credit for budgetary support in case of a disaster and advance DRM policy actions related to climate change, flood risk management, environmental protection, and energy sector reform. All policies are also within the realm of actions linked to the country's EU accession process.
	- Second Real Estate Management Project (USD 32.5m). This project is under preparation, aim- ing to provide continued support to improved spatial data infrastructure, and further digitization of the real estate management system processes and services.

13. Transport

1. Overarching Messages

The transport sector would benefit from further modernization and alignment with EU standards. Progress has been achieved: the fiscal support for the sector has decreased in the last decade. The Public Enterprise Roads of Serbia (PERS) has signed a transitional Service Level Agreement (SLA) with the Government, which will significantly improve road management and maintenance and establish clear accountability and responsibility roles. Moreover, Serbia's vision for the transport sector – connecting communities in a safe, reliable, and sustainable manner while reducing air pollution, noise, and GHG emissions – is consistent with its ambition to access the EU. But reforms are needed to further reduce the reach of transport SOEs, improve maintenance practices, decarbonize the sector, and address non-physical barriers. These issues, if not addressed, could jeopardize the sustainability of the sizable sector's investments and Serbia's convergence with international standards.⁵

The decarbonization of the sector would go a long way to address climate change and the vulnerabilities of the network. Besides energy, the transport sector is the main contributor to GHG emissions and a significant cause of air and noise pollution in urban areas.⁶ The motorization rate in Serbia has increased by 22% in the past 5 years, and the rising demand for road mobility is being met with an old, highly polluting vehicle fleets. Between 2015 and 2018, Serbia was among the top 5 importers worldwide of secondhand light-duty vehicles from the EU. Addressing the carbon intensity of the road sector and promoting a modal shift to greener modes of transport are therefore essential to revert these trends. Additionally, improving the resilience of transport infrastructure to climate change is necessary to reduce network vulnerabilities arising from the increasingly more frequent floods, flash floods, and landslides.

2. Key Challenges

A large maintenance backlog and poor maintenance capacity threaten the sustainability of transport infrastructure investments. Serbia's geographic position opens significant opportunities to increase regional trade, deepen economic integration, and improve regional connectivity by making transport a key enabling factor to domestic and regional economic activity. But decades of underinvestment means that over 50% of conventional TEN-T roads are in 'medium-to-poor condition', and almost 50% of the railway network is in 'poor or very poor condition', allowing for a maximum speed of just 50km/h. Considering significant investment needs but limited resources in the sector, transport SOEs should use road and rail asset management systems to inform annual and multiannual budgets and define priorities while including considerations like resilience, climate impacts, and safety.

The reform agenda on key transport SOEs remains unfinished. In the current investment cycle, the Government is planning to invest EUR 4bn in the rail sector. In parallel, substantial funding has been destined for the completion of new highway links. The sustainability of these investments calls for a sharp focus on maintenance, with special attention on the Railway companies and PERS. To ensure their commercial orientation and financial sustainability, transport sector SOEs should continue to reform by embracing asset management systems, improving capacities, modernizing their practices, and insisting on transparent and clear contractual arrangements.

While current mobility depends, by and large, on road-based transport, environmentally friendly modes of transportation are less developed. Road transport accounts for 85% of all transport in Serbia. Due to aging and poorly maintained assets, rail services are not dense or reliable enough to attract greater demand. For example, around 80% of the cargo wagon fleet has over 40 years of service. At the local level, green transport could drive increased economic activity and create more livable spaces. However, human and financial capacities are still insufficient, and citizens could be more directly engaged in reshaping the urban environment.

Despite Serbia being prone to floods, infrastructure resilience is not embedded into the day-to-day operation of transport subsectors. Some 12,000 km of road infrastructure and 900 km of railways are directly exposed to potential flood risk. Floods, flash floods, and landslides pose a threat to the transport network and the ability of

⁵ The 2018 Logistics Performance Index ranked Serbia 65th out of 160 economies. The 2019 Global Competitiveness index ranked Serbia 98th on the quality of roads and 82nd on the efficiency of train services out of 141 countries.

⁶ Serbia's CO2 emissions per unit of GDP are about twice those of the EU average.

the Government to respond to emergency events. National and local roads are critical to enable a two-way flow of goods and people: access to and evacuation of affected people and ensuring uninterrupted supply chains. It is thus important to consider resilience in designing, constructing, rehabilitating, and maintaining the existing infrastructure. Failure to do so will result in higher costs to build back better, as well as in disruption of critical supply chains.

Despite improvements, road crashes continue taking a high toll on human lives in Serbia. The country has reduced the road traffic death rate from 9 to 7 per 100,000 people between 2010 and 2021. Yet, this progress is still short of the targets put forward by the UN Decade of Action (i.e., halving the number of fatalities) and still well above the average EU level (5.1 deaths per 100,000 population). The total number of road fatalities in 2023 decreased by 8.3% compared to 2022. A key area of concern in traffic accidents is the safety of children: 6,800 children were injured in traffic accidents over the past 5 years.

3. Policy Responses for Consideration

Short-term measures:

- **Ensure the recently adopted transitional SLA is implemented** and that PERS expenditures are recorded against the new SLA framework as of next year. Convert the transitional SLA to a permanent one along with the redefined budget allocation to meet the actual sector needs.
- **Finalize the draft National Transport Strategy,** which, in its current form, lacks substance in several key areas and needs a rewrite. The Bank stands ready to support that strategy, which meets the sector's needs.
- Improve the effectiveness of SOE spending and secure the sustainability of investments, including revising Public Service and Multi-Annual Infrastructure Contracts with railway companies, and mandatory use of road and rail asset management systems to inform annual and multiannual budgets and define priorities while considering resilience, climate impact, and safety.
- **Finalize the decision on the restructuring of the rail freight company,** this should include a transition to greater commercialization and decision on ownership composition.

Medium-term measures:

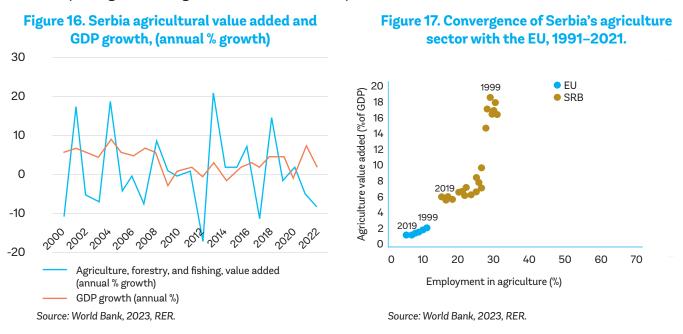
- **Finalize the interplay between various modes of transport and the sector's decarbonization agenda** and inform a robust investment pipeline through the adoption of a Multimodal Transport Strategy.
- **Improve multimodality** by establishing a platform that integrates all modes of transport. This would provide a better control mechanism for the Government, while providing passengers with a single booking platform.
- Continue the efforts to **meet decarbonization requirements** (transition to public transport green fleets, subsidies for green vehicles, and further increase of the charging stations along the network).
- Ensure sufficient budget allocations for the maintenance of road and rail infrastructure.
- **Foster economic development and livability at the local level** by strengthening the capacity for planning, implementing, and managing sustainable transport solutions.
- **Expand green logistics operations** by supporting investments in inland waterways and river ports, including through public-private approaches.

Ongoing Support	- Local Infrastructure Institutional Development (LIID) Project (USD 100m and USD 200m AfD co-financing). LIID aims to improve LSGs' capacity to manage infrastructure and increase access to economic and social opportunities in a climate aware manner (initial focus: roads and mobility).
	- Railway Sector Modernization Multi Phase Program, Phase 1 (USD 125m) [total USD 465m], co-financed with AfD on equal share). Phase 1 finances systematic changes in asset manage- ment, human capital, modal shift, safety management, and investments in important regional and suburban lines.
	- Regional Trade and Transport Facilitation Project (Phase 1 allocation to Serbia USD 40m). Phase 1 focuses on improvements in border crossings, automatization of customs and trade procedures, improving railway safety, and development of the national multimodal transport strategy.
	- Regional Sava and Drina Rivers Corridors Integrated Development Program (Phase 1 allo- cation to Serbia USD 85m, transport component USD 18m, co-financed pari passu by EIB, with an additional contribution of the national budget in the amount of USD 11.5m). Phase 1 aims to improve navigability and flood protection in the Sava and Drina corridor. The only Phase 1 transport sector activity in Serbia is the modernization and expansion of the multimodal con- nectivity of the Sremska Mitrovica port. Implementation of this intervention is ongoing, with the civil works contractor expected to be mobilized by the summer of 2024.
	- Framework for Infrastructure Policy Decision Making . This framework informs policy decisions at the local level to improve the livability in cities and municipalities.
	- Policies to Improve the Environmental Performance of Road Vehicles in the Western Balkans. This work summarizes the main priority policy actions in this area and informs the dialogue with counterparts.
	- Railway MPA 2 (USD 65m) . The Phase 2 of the Railway MPA project, with AfD co-financing of USD 65m, will focus on ensuring the sustainability of the investments in the subsector by supporting the maintenance of the network including maintenance equipment purchases, facilities and training. The aim is to increase the efficiency of the railway sector companies operating the network recently built and rehabilitated.
Pipeline	-TTFP 2.0. The next generation of the TTFP will build on investments made during the first phase and focus on facilitating trade and accelerating convergence with the EU single market. On the transport side, the project will support activities to facilitate digitalization of multimodal transport and expand the green lanes initiative throughout the region. These include implementation of the e-freight system, expansion of ITS to Corridor VIIII, and upgrading of priority BCPs with EU neighbors.

14. Agriculture

1. Overarching Messages

The growth of the agricultural sector in Serbia needs to be underpinned by a novel strategic vision that promotes transformation and alignment with the EU. Agriculture contributes 6.8% of GDP and 14% of formal employment. However, the sector's average growth rate in the last 10 years has been around 1.5%, well below its potential.⁷ In 2023, agri-food exports accounted for EUR 4.16bn (14.5% of total exports), 13.3% lower compared to 2022 but 38% higher than the 2017-2021 average. Capital investment and the expansion of knowledge and Climate Smart Agriculture (CSA) innovation are critical factors to increase labor and land productivity, strengthen the sector's forward and backward linkages, and accelerate the transformation of the sector into a more competitive and climate resilient model. Serbia should also update and accelerate implementation of the action plan for EU acquis alignment in agriculture and rural development.



Increasing the productivity and competitiveness of the agri-food sector requires renewed efforts to strengthen public and private sector services. Public support for business-driven capital investments can crowd-in private sector investment in capital intensification, knowledge, and innovation. Policy could focus on improving access to agricultural finance, strengthening the aggregation capacity across agri-food value chains, improving the functioning of land markets while ensuring productive inclusion of small and medium farms, and providing risk management and agribusiness development advisory services.

2. Key Challenges

The productivity and competitiveness of the agri-food sector remain low. Issues that persist and deserve attention include an aging farm labor force, low efficiency and use of technology, high labor intensity, a poorly functioning land market, low financial liquidity, low access to credit, and underinvestment, as well as the limited participation of very small and fragmented landholders (78% of them operate on less than 5ha) in higher value agri-food value chains. Furthermore, inadequate irrigation systems,⁸ advisory services, and phytosanitary controls limit the sector's contribution to added value and off-farm jobs. Other challenges include low institutional capacity, weak linkages among agri-food value chain actors, and food supply vulnerabilities caused by climate change.

The alignment between spending and service delivery with sector goals needs strengthening. 70% of agricultural public expenditures during 2019-2021 were used as subsidies and direct transfers in the form of headage,

⁷ In 2022, Serbia's average value addedv per worker (current prices) was USD 10,395, compared to USD 30,386 in the EU-27.

⁸ Only 2.6% of arable land is equipped for irrigation in Serbia (3-year average of 2017-2019).

price support for milk, and area-based payments. In 2023, the agricultural budget reached RSD 116bn (EUR 976.2m), with a nominal increase of 46% from 2022. However, the budget structure reflects its orientation toward direct payments to producers (with recent increases in area and livestock headage payments, milk price support premiums, and input subsidies) and with a notable downtrend in its rural development component, accounting for only 7% of the total budget (RSD 8bn) in 2023 (compared with 15.9% in 2022). When the above is combined with the low level of funds dedicated to the provision of public goods (e.g., agricultural infrastructure, R&D, and agricultural education), they constrain the potential of small and medium farms and do not facilitate farm restructuring.

The allocation of productive resources in the agricultural sector is inefficient. Subsidized farms display lower technical efficiency compared to non-subsidized ones. For instance, farms receiving coupled (to output) subsidies (such as milk premia) have suffered significant losses in efficiency. Coupled supports are distortive, reduce farm productivity, and contribute to GHG emissions. There is an inverse relationship between the effect of subsidies on technical efficiency and the holding size, signaling a misallocation of productive resources and farm support. Coupled support funds crowd out capital investments, undermining competitiveness and climate resilience.

Agriculture is adversely impacted by the increased occurrence of extreme weather events. The impact of the 2021 drought compares with those of 2012 and 2017, which caused significant economic losses: in 2021, EUR 2bn was lost in agriculture alone. Average temperatures are rising, causing vegetative seasons to start earlier and end later but also intensifying the incidence and severity of pest and disease outbreaks. Maize is considered the most vulnerable crop: yield production of maize could decrease by 50% in 2030 without adaptation measures, while wheat production could decline by 16%.

3. Policy Responses for Consideration

Short-term measures:

- Shift to decoupled farm support based on a flat support rate per ha. The recent trend of reducing rural development funds in favor of direct payments should be reversed to allow farmers to make decisions based on competitive advantage, increase farm investment, strengthen production specialization, adopt climate-resilient farm innovations, and shift land use towards high-value production. Combined with cross-compliance (where farmers are encouraged and supported to comply with high EU standards), a decoupled farm support policy would promote sustainable and resilient farming practices, making Serbian products more competitive and climate-resilient.
- Strengthen targeted investment and provide incentives for technological change through ongoing and pipeline projects (e.g., national measure program, SCAP, IPARD III). Support younger farmers and small to medium-scale producers in the agri-food chain by improving access to credit and promoting cooperation within value chains. Smaller farms could be supported in implementing more inclusive CSA technologies.
- Develop the new National Agriculture and Rural Development Strategy (NARDS) 2025-2034, to achieve green and resilient economic development goals. As the current NARDS ends its implementation in 2024, the new NARDS should meet climate and market challenges and refrain from ad hoc/ distortive trade and policy measures (e.g., export bans/limitations, mandatory domestic price regulations and payment interventions, and increase of price support) that lead to resource misallocation and introduce instability (hardly compatible with the EU Common Agricultural Policy). Institutional capacity should continue to be strengthened for the Strategy's development and effective implementation.

Medium-term measures:

• Develop a rural development policy that stimulates public-private partnerships focused on climate change adaptation and mitigation. The rural development budget should be increased, green and resilient agricultural diversification should be targeted, and incentives for technology adoption and agri-food innovations should be provided. Accelerating support for the broad adoption of CSA practices

to mitigate GHG emissions, increase climate adaptation, and facilitate EU market access, should be a priority for public policy.

• Strengthen public and private cooperation to develop Serbia's Agriculture Knowledge and Information Innovation System (AKIS). Increasing public investment in well-targeted R&D to a quarter of the R&D gap relative to EU level would increase agricultural productivity by 6% in Serbia. Complementarily, enabling the environment for innovation in digital agriculture could promote capital accumulation and knowledge sharing at lower cost. Aligning the knowledge agenda with climate resilience and improved access of farmers to agroclimatic information will further improve the sustainability of investments.

Further convergence with the EU acquis related to agriculture and rural development. Priorities for action include the adoption of measures to improve implementation of IPARD and the preparation of new measures for entrustment.⁹ Specific action could include updating and adopting the 2022-2024 National Program for Agriculture and Rural Development and improving its complementarity with IPARD III. Serbia could also accelerate the establishment of the Integrated Administration and Control System and the Land Parcel Identification System. The Farm Accountancy Data Network sample size and data quality could be further improved. In the area of Common Market Organization, the adoption of implementing legislation on marketing standards, storage and producer organizations is still pending. For both quality policy and organic production legislation aligning with the *acquis* must be adopted. Further priorities include the adoption of a comprehensive strategy and action plan for alignment on food safety, veterinary and phytosanitary policy.

Ongoing Support	- Serbia Competitive Agriculture Project (SCAP, EUR 45.8m). This project aims to improve agri- food market linkages by increasing the productivity and efficiency of farmers through improved access to technical support, CSA innovations, and private capital mobilization (PCM).
	- Technical Assistance focusing on: (i) Strengthening Agriculture Sector Capacities for Evi- dence-based Policy Making , (PHRD Grant; USD 1.8m; closing July-2024), and (ii) Transforming Crop Residue Management for Improved Air Quality (CSF Grant; USD 0.35m; closing Dec-2024).
Pipeline	- SCAP Additional Financing (EUR 100m). This project aims to scale up the results of SCAP and improve the enabling environment for green, resilient, and inclusive agribusiness development and PCM.
Potential Engagements	- Analytical and advisory support to help assess: (i) the impacts of agriculture policy measures on the economic performance of the sector and identification of options for policy reforms, and (ii) the challenges and opportunities to develop the AKIS.

⁹ Agri-environment-climate and organic farming; Implementation of LEADER; Investments in rural public infrastructure.

15. Gender

1. Overarching messages

Serbia has made progress in promoting gender equality, but significant gaps remain. While progress has been made in gender equality over the past decade, with reduced educational disparities, improved life expectancy, and increased political engagement, significant gaps remain. These include disparities in employment, business ownership, wages, gender-segregated jobs, and unpaid domestic work.

Among the Western Balkan countries, Serbia stands out with the highest education scores for both boys and girls. Nevertheless, when compared to EU member states, these results are lower. Marginalized groups, such as the Roma, face significant challenges, with women having lower completion rates in primary and secondary education and almost no access to tertiary education. High costs and societal norms hinder access to education at all levels. Compared to OECD average scores for learning, the findings show a need for investment in enhancing education quality and narrowing gender disparities in learning outcomes. This will better equip the country's youth to face the challenges of the global economy.

Enduring disparities persist in labor force participation between men and women, despite Serbia having a narrower gender gap than other Western Balkan countries. Women are underrepresented in science, technology, engineering, and math (STEM)¹⁰ and senior positions, reflecting ongoing gender stereotypes in employment. These challenges are exacerbated by intersecting factors, such as the low workforce participation of Roma women, and by poverty, isolation, limited education and vocational training, early marriage, patriarchal norms, and inadequate access to essential services such as childcare.

2. Key challenges

Gender parity has been achieved in pre-primary, primary, and secondary education enrollments (Figure 18). However, women predominate in tertiary education with a gross enrollment rate of 81.8% in 2021, compared to 57.3% for men (Figure 19). Women also constitute most graduates in bachelor's programs (58.8%) and doctoral studies (56.6%). Dropout rates are generally low for female students (0.7%), while boys have a higher likelihood of leaving high school prematurely (1.4%).

Despite these achievements, women are significantly underrepresented in STEM fields in tertiary education, with only 25.8% of women enrolled compared to 47.4% of men. Women are more likely to pursue studies in health, education, and arts and humanities, accounting for 34.9% of enrollments (compared to 18.2% for men), mirroring EU trends. Currently, no government policies aim to increase female participation in STEM fields.

Women with lower formal education are 14 percentage points less likely than men to possess basic or higher-level digital skills. This gender gap is wider than in the EU, where it stands at 5 percentage points. This disparity diminishes or even reverses among those with higher education levels. The gender gap in digital skills persists among prime working-age and older individuals but not among youth.

Girls from minority groups face higher educational barriers. Marginalized groups, such as the Roma, face significant barriers to education and skills training due to high costs associated with purchasing books and transportation, societal norms and early marriage, which hinders the education opportunities for girls.

¹⁰ Includes ISCED-F group 5 (Natural sciences, mathematics, and statistics), ISCED-F group 6 (Information and Communication Technologies), and ISCED-F group 7 (Engineering, manufacturing, and construction).

Figure 18. Gender parity index for gross enrollment rates by education level (2000-2021)

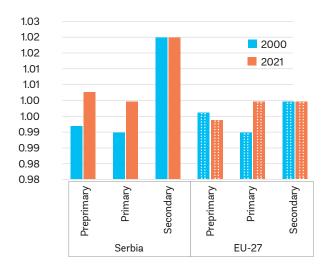
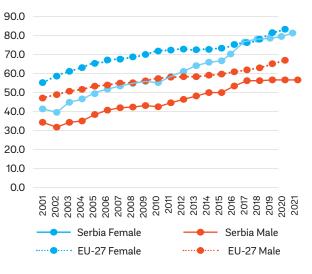


Figure 19. Gross enrollment rates in tertiary education (2000-2021)

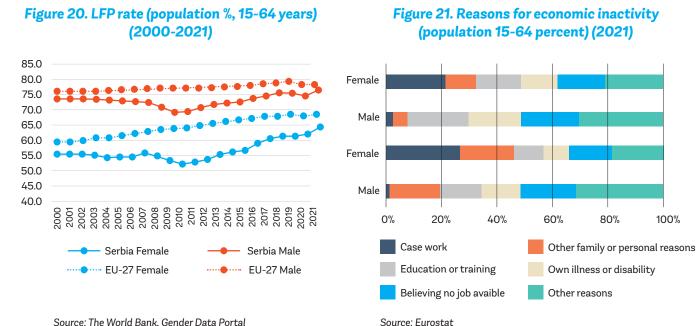


Source: The World Bank. Gender Data Portal.

Source: The World Bank. Gender Data Portal.

Female LFP has been slowly increasing since 2010, but remains significantly below that of men, with a 13.2 percentage point difference in 2021 (Figure 20), reflecting wider gender gaps compared to the EU-27. Women face greater household and caregiving responsibilities, impacting labor market outcomes. In Serbia, 64% of inactive women cite caregiving as their main reason for inactivity, compared to only 1.4% of men (Figure 21). Limited car ownership and reliance on public transport, where women feel less secure, also hinder women's economic opportunities, reducing their job prospects and economic independence.

Gender disparities in participation rates are especially noticeable among older individuals aged 55-64, with female participation at 43.4%, resulting in a 21.6 percentage point gap, likely due to earlier retirement among women. Motherhood also contributes to lower female activity, particularly during peak reproductive years, and limited access to childcare services worsens this trend. Consequently, the proportion of female parttime workers in Serbia is notably higher than that of men (18.4% of women compared to 13.2% of men in 2022), especially in formal employment



Source: The World Bank. Gender Data Portal

Gender stereotypes persist in employment, with men more active in traditionally male-dominated industries, and occupational segregation remains evident. Women are less likely to hold positions as managers, legislators, and administrative officials, despite their higher levels of education. In occupational categories requiring lower skill levels, women are less likely to work as craft workers or plant/machine operators.

3. Policy recommendations

Short-term measures:

- **Invest in expanding affordable and quality childcare and elderly care services.** Expanding access to comprehensive childcare and long-term elderly care services will allow women to participate more fully in the labor market without compromising their caregiving responsibilities.
- **Promote workplace flexibility to facilitate care duties.** Continue efforts to reduce disincentives and barriers to women's work in labor taxation and regulation and support social norms around gender equality to reduce barriers women face in practice.
- Address social norms to support productive female employment. Implement training programs for teachers to raise awareness about gender biases and equip them with strategies to promote gender equality. Review and update curricula to eliminate gender stereotypes and biases. Provide career counseling services to guide female students toward success in traditionally male-dominated fields.

Medium-term measures:

- **Develop Early Education Initiatives.** Implement programs in primary and secondary schools that promote STEM subjects as exciting and viable for all students. This includes after-school programs, STEM clubs, and workshops that specifically aim to engage young girls. Train educators to encourage a non-biased approach to teaching STEM.
- **Establish scholarships and grants for women in STEM**. Partner with corporations and nonprofits to fund these scholarships, including internships and mentoring opportunities.
- **Create Mentoring programs.** Connect female students with women mentors in STEM industries. Involve women in STEM in outreach programs to speak at schools and community centers to raise awareness and showcase career diversity.
- Launch Media and Awareness Campaigns. Develop materials and stories that showcase women as innovators, emphasizing their work's impact on society and the environment.

Ongoing - Gender Report on the Western Balkans. The report analyzes the state of gender equality and disparities in the region and includes specific policy notes for each country. support - The Serbia Accelerating Innovation and Growth Entrepreneurship AF retains focus on encouraging the participation of women entrepreneurs and women-owned businesses engaged in innovative activities. - The Competitive Agriculture Project AF addresses the gender gaps in agribusiness by fostering female participation, access to finance and training - In the context of the Serbia Inclusive Primary Education Improvement Project, gender entry Potential engagepoints may include facilitating transitioning to STEM-related education among female stuments dents and addressing social norms related to gender, including through outreach and engagement with parents. - Analytical and advisory support could assess the impact of factors that prevent women to participate in the labor force, such as tax policy and care needs for the elderly and children.

Key References

European Commission, 2023, Commission Staff Working Document – Serbia 2023 Report, European Commission: Brussels.

Global Alliance on Health and Pollution (GAHP) and The Lancet Commission on Pollution and Health, 2019, Pollution and Health Metrics: Global, Regional, and Country Analysis, GAHP: Geneva.

Government of Serbia, 2019, MICS 6 Multiple Indicator Cluster Survey, Belgrade: Serbia.

IMF and World Bank, 2021, Guidance Note on Developing Government Local Currency Bond Markets, The IMF and World Bank: Washington DC.

IMF, 2023, Republic of Serbia: Second Review Under the Stand-By Arrangement, and Request for Modification of Performance Criteria-Press Release; and Staff Report for Republic of Serbia, IMF: Washington DC

ISPOS, 2022, Public Opinion Poll on Environmental Issues in Serbia, IPSOS: New York.

National Bank of Serbia, 2024, Macroeconomic Development Report, Belgrade: Serbia.

OECD, 2020, Review of Evaluation and Assessment of Education: Serbia, OECD: Paris.

OECD, 2022, PISA Scores, OECD: Paris.

Open Budget Survey, 2023, Global Report 9th Edition, International Budget Partnership: Washington DC.

TIMSS, 2019, International Results in Mathematics and Science, Boston College, Lynch School of Education and Human Development: Boston.

UNDP, 2019, Climate Change Impacts on Serbian Agriculture, UNDP-GEF-Ministry of Environmental Protection, Belgrade: Serbia.

World Bank, 2018, Exploring the Potential of Agriculture in the Western Balkans: A Regional Report, The World Bank: Washington DC.

World Bank, 2019, Serbia Agriculture Sector Public Expenditure Review, The World Bank: Washington DC.

World Bank, 2020, Country Economic Memorandum: Serbia's New Growth Agenda, The World Bank: Washington DC.

World Bank, 2022, Country Partnership Framework for the Republic of Serbia, FY22-26, The World Bank: Washington DC.

World Bank, 2022, Serbia: Financial Sector Climate and Environment Risk and Opportunities assessment, The World Bank: Washington DC.

World Bank, 2022, The Global Health Cost of PM₂₅ Air Pollution, The World Bank: Washington DC.

World Bank, 2022, Supporting Serbia's Transition to greener and More Resilient Growth, The World Bank: Washington DC.

World Bank, 2022, Barriers to LGBTI People Accessing Justice in Serbia, The World Bank: Washington DC.

World Bank, 2022, Serbia - Ready 2 Respond: Emergency Preparedness and Response Assessment, Country Report, The World Bank: Washington DC.

World Bank and UNICEF, 2022, Building Human Capital for Long Term Prosperity: Serbian Human Capital Review (Health, Education and Social Protection), The World Bank and UNICEF, Belgrade: Serbia.

World Bank, 2023, Serbia: Learning Poverty Brief, The World Bank: Washington DC.

World Bank, 2023, Serbia Policy Notes, The World bank; Washington DC.

World Bank, 2023, Western Balkans RER No. 24. Spotlight on Greening Agriculture, The World Bank: Washington DC.

World Bank, 2023, Cost of Exclusion Based on Sexual Orientation, Gender Identity and Expression, and Sex Characteristics in the Labor Market in the Republic of Serbia, The World Bank: Washington DC.

World Bank, 2024, Western Balkans RER No. 25. Spotlight on Greening Cities, The World Bank: Washington DC.

World Bank, 2024, Country Climate and Development Report for the Western Balkans, The World Bank: Washington DC.

World Bank, 2024, Greening the Economy of Europe and Central Asia, ECA in Focus, Office of the Chief Economist, the World Bank: Washington DC.

World Bank, 2024, Unleashing the Power of the Private Sector, ECA Economic Update Spring 2024, Office of the Chief Economist, the World Bank: Washington DC.

¹¹ Key data bases used by the authors in the drafting of these Policy Notes include Eurostat, and the World Bank's World Development Indicators and Gender Data Portal.