European Bank
for Reconstruction and Development

Serbia country diagnostic
2023

Country diagnostics are a tool used by the European Bank for Reconstruction and Development (EBRD) to identify the main obstacles to entrepreneurship and private-sector development in the economies where it operates. They also help to shape the Bank's priorities and project selection in formulating new country strategies. Each diagnostic informs the EBRD's policy engagement with the authorities in that country. Each diagnostic assesses national progress and challenges in developing a sustainable market economy.

Private-sector development and entrepreneurship are at the heart of the Bank's mandate, but in all of the Bank's investee economies the private sector faces a range of problems and obstacles. The country diagnostic highlights the key challenges facing private companies and shows where each economy stands relative to its peers on the Bank's six transition qualities – competitive, well governed, green, inclusive, resilient and integrated – highlighting the main deficiencies and gaps in each.

The diagnostics draw on a range of methodologies and best practices for assessing how big certain obstacles are. Extensive use is made of the Bank's in-house expertise and surveys, such as the Business Environment and Enterprise Performance Survey (BEEPS) and the Life in Transition Survey (LiTS), as well as other cross-country surveys and reports from institutions such as the World Bank, the World Economic Forum and the Organisation for Economic Co-operation and Development (OECD). For some larger countries, the diagnostics also draw on specially commissioned studies of selected issues that are critical to private-sector development.

The EBRD's Country Economics, Strategy and Policy (CESP) team leads the diagnostics, drawing substantially on the expertise of sectoral, governance and political experts in the Policy Strategy and Delivery (PSD) department and consulting widely with experts across the Bank in preparing the final product. The diagnostics are shared with the EBRD Board during the country strategy process and published during the public consultation period.

The views expressed in the diagnostic papers are those of the authors only and not of the EBRD or its shareholders.

For more information, go to: https://www.ebrd.com/publications/country-diagnostics.

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Executive summary

Serbia has strong growth potential. It is the largest Western Balkans country, has significant natural resources and is located at the crossroads of several regional infrastructural corridors. The long-term goal of European Union (EU) accession remains a key external anchor for reform. Serbia's foreign policy remains multi-vectoral and the country has developed significant trade and investment links with non-EU states.

The economy weathered the Covid-19 pandemic and energy crisis well. Gross domestic product (GDP) shrank by less than 1 per cent in 2020, after a decade of major standard-of-living increases, job creation and improvements in the transport network. A robust recovery in 2021 and early 2022 was slowed by the global downturn and the energy crisis. A strong inflow of foreign investments has helped Serbia's traditionally large manufacturing sector, leading to higher exports and trade openness.

Productivity and living standards remain far below EU levels. Serbia's GDP per capita, adjusted for purchasing power parity, is less than half the EU average. In the past decade, Serbia and the Western Balkans-5 (WB-5)[1] countries have converged on EU-27 income levels at roughly the same speed as the EU-11,[2] despite their lower starting point and higher catch-up potential.

Serbia lags the EU countries on the EBRD's assessment of six transition qualities. The biggest gaps between Serbia and the EU-11 countries lie in the areas of "resilient" and "green". However, the country outperforms the other Western Balkans economies on all six transition qualities.

A large state sector holds back competitiveness, but foreign capital is helping to drive exports and improve complexity. State-owned enterprises (SOEs) remain prominent in nearly all sectors and are dominant in a few, hindering competition. But a more favourable cost structure for businesses compared with that of the EU has played a significant part in attracting foreign direct investment (FDI) in recent years, contributing to greater economic complexity. Further opportunities lie in creating new pockets of more complex and higher-value-added exports, as well as in better integrating foreign companies into domestic supply chains. The latter would be particularly beneficial for small and medium-sized enterprises (SMEs), as they face particular difficulties in accessing more developed export markets.

Governance problems remain pervasive. As in other Western Balkans countries, Serbia has a tenuous rule of law and high levels of corruption and informality. Civil servants frequently face political pressures, and its highly centralised public administration is accompanied by a lack of transparency in decision making. Fighting corruption and improving the rule of law are prerequisites for progress in EU approximation.

The energy crisis has exposed long-standing vulnerabilities and an urgent need to reform the lignite-dependent energy sector. Serbia's energy mix is insufficiently diversified, and the sector suffers from poor governance and prolonged underinvestment. The gap between the liquidity needs of the main energy SOE and available funds in the state budget widened in 2022 amid a worsening economic outlook and significant energy market uncertainty. The introduction of the EU's carbon border adjustment mechanism (CBAM) will, given the current energy mix, have a major impact on Serbian exports unless urgent steps are taken to reduce carbon emissions. Meaningful reform of the sector, accelerated investment in sustainable and less-polluting energy sources and greater energy efficiency measures are all needed to enhance energy security and drive a much-needed green transition.

Businesses are finding that inadequate skills in the workforce are hampering growth. Skills gaps are particularly challenging for the more innovative companies requiring "non-routine" skills, especially as workers with highly sought-after skills such as advanced digital skills tend to emigrate in large numbers. Serbia is facing negative demographic trends, including population ageing, which highlights the need to foster greater inclusion of women and youth in the labour market.

Greater access to finance is needed to increase business sophistication and scale. The financial sector has benefited in recent years from enhanced stability, resilience and good regulation, but tighter monetary conditions may slow credit growth in the short term, which may hurt SMEs in particular. Capital markets are relatively underdeveloped, domestic sources of long-term funding are limited, and the high rate of euroisation on banks' balance sheets remains a key risk.

The overall quality of infrastructure is often poor, holding back integration efforts. Municipal infrastructure and services such as water supply, solid waste and wastewater are frequently of low quality and cause pollution. Municipalities' uneven access to finance has held back progress in these areas.

[1] The WB-5 states are the Western Balkan countries excluding Serbia, namely, Albania, Bosnia and Herzegovina, Kosovo, Montenegro and North Macedonia.
[2] The EU-11 are Bulgaria, the Czech Republic, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia.

1. Political and economic overview

1.1 Political economy

Serbia is the largest country in the Western Balkans. Due to its role in various incarnations of the former Yugoslavia throughout the 20th century, Serbia has entered transition with a relatively well-developed public administration. It benefits from its location at the crossroads of several regional infrastructural corridors, which run through it from west to east and from north to south. It has significant, by regional standards, natural resources. Among its neighbours, Serbia is currently one of the frontrunners in the EU approximation process. It is also among the main champions of regional integration whose progress would make the country part of a wider Western Balkans market of 20 million people.

Serbia's economy was adversely affected by the disintegration of the former Yugoslavia, including the loss of traditional markets, the sanctions of the 1990s, and the overall toll of the armed conflicts. It has started transition in earnest later than some of its regional neighbours, not before the removal from power, in 2000, of Slobodan Milosevic. Some elements of the ex-Yugoslav legacy have persisted for many years, such as the state's continuing hold on the main economic assets and the system of trading seats on the boards of key state-owned companies between political parties,. Although the end of the Milosevic regime initially created political momentum for reform, in the first decade of the 2000s major structural reforms, including the privatisation of the key SOEs, were delayed by successive Serbian governments, regardless of the strength of their democratic credentials.

The current governing party, the centre-right SNS, has been in power since 2012. It came up with an ambitious programme to modernise the country, accelerate privatisation, and reform the labour market and legislature. Although its record of reform has been uneven and some economic assets remain in state hands, Serbia has become the regional leader in attracting FDI. While Serbia's "multi-vector" foreign policy (where the top objective of joining the EU is accompanied by a close strategic relationship with such countries as China and Russia) remains a contentious issue and Brussels insists on greater EU alignment of Serbian foreign policy, Serbia has benefited from diverse economic relations with the outside world.

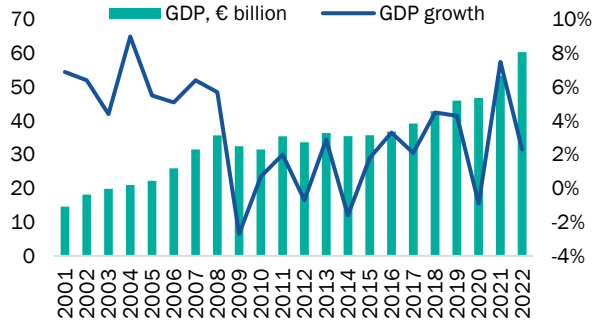
Serbia's continued EU approximation remains a key external anchor for reforms. Serbia obtained the status of EU candidate country in 2012 and formally opened EU accession negotiations on 21 January 2014. However, negotiations only started in earnest at the end of 2015. So far, Serbia has opened 22 of the 35 negotiating chapters for accession (for comparison, neighbouring Montenegro has opened all chapters). The last two years have seen a stagnation in the opening of new chapters. The breakthrough, partly thanks to the EU's new methodology for enhanced enlargement negotiations, came on 14 December 2021, when Serbia opened Cluster 4 (four chapters in one go, grouped under "Green Agenda and Sustainable Connectivity"). According to the European Commission, further progress towards EU accession will depend, among other things, on improving the quality of the rule of law and on the prospects for normalising relations with Kosovo.

Serbia's key political economy weaknesses are common to all Western Balkans countries: the tenuous rule of law, corruption and informality of the economy.

1.2 Economic background and outlook

Figure 1: GDP growth has been trending upwards in the past decade despite interruptions...

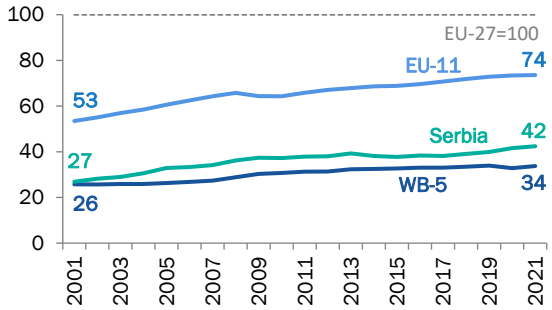
GDP in nominal € billion (LHS) and GDP growth in real terms (RHS)



Source: Statistical office of the Republic of Serbia.

Figure 2: ...but is the economy converging towards EU income levels fast enough?

GDP per capita, 2017 US$ at purchasing power parity (PPP)



Source: IMF (2022), authors' calculations.

In the past decade, Serbia has increased its standard of living by a third, turned a sizeable budget deficit into a surplus and slashed its unemployment rate by more than a half. After the economic slowdown following the global financial crisis, the Serbian economy grew by 3.6 per cent on average, and at the same rate cumulatively between 2016 and 2019. In the pandemic-induced recession, GDP fell by just 0.9 per cent in 2020, one of the mildest in Europe, and was followed by a robust expansion of 7.5 per cent in 2021. The country's public debt has fallen from a peak of 76 per cent of GDP at the end of 2015 to below 52.3 per cent at the end of 2023 on the back of timely fiscal consolidation, realised through adjustment on both the revenue and the expenditure sides.[3] The significant reduction of headline working-age unemployment, from nearly 26.2 per cent in 2012 to 9.8 per cent in 2021,[4] is due to the generation of nearly 400,000 jobs[5] and an increase in the labour force participation rate by 10 percentage points.[6]

However, as of 2021, GDP per capita remains around 42 per cent that of the EU-27 and 58 per cent of that of the EU-11, lagging by nearly the same proportion as in 2013. In the past decade, Serbia and the rest of the Western Balkans-5 (WB-5) countries converged towards EU-27 income levels at roughly the same speed as the EU-11, despite their lower starting point and greater catch-up potential. The improvement in growth performance from 2016 has shown that Serbia can achieve high growth rates when supported by careful structural adjustment. While macroeconomic stability underpins the new growth momentum, further structural reform is needed to boost the country's competitiveness and ensure it catches up economically with the EU through consistent outperformance of growth rates.

GDP is dominated by services which account for over a half of the country's output and two-thirds of total employment. The composition of Serbian output has remained broadly similar over the past decade, with trade, transportation, accommodation and food service activities being the most significant portion of services, followed by public administration, education and healthcare. The particularly large share of "essential services" such as retail and government services in the economy, alongside the agriculture sector, have contributed to the relatively small decline in output during pandemic-stricken 2020.[7]

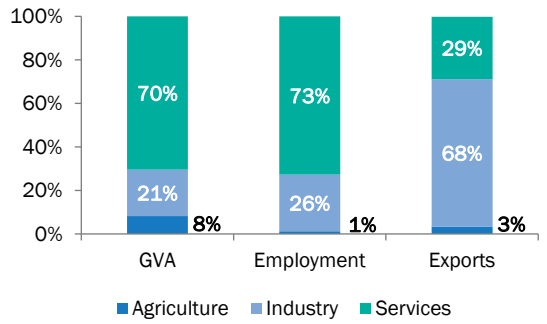
Serbia has a strong manufacturing and agricultural base. The significance of these two sectors reflects the availability of natural resources, strong industrial heritage from the past and increasing demand for relatively cheaper Serbian products in European export markets. Industry is a prominent growth driver and the second-largest employer in the country, contributing (without construction) nearly a fifth of GDP in 2022 and creating 26 per cent of total employment, some 22 per cent of which relates to manufacturing.[8] Manufacturing is a key contributor to the expansion of exports as its output accounted for 85 per cent of the country's goods exports in 2022. Agriculture remains a prominent primary sector, contributing around 7 per cent to GDP in 2022 and accounting for up to 13 per cent of working-age employment when

[3] See Ministry of Finance Public Debt Administration. Available at: https://javnidug.gov.rs/static/uploads/810_ENG%2020151231.xlsx and https://javnidug.gov.rs/static/uploads/Quarterly%20Report%2031.12.2023_ppreliminary.xlsx.
[4] See Statistical Office of the Republic of Serbia (n.d.a).
[5] The figure refers to the increased number of employed persons, See Statistical Office of the Republic of Serbia (n.d.b).
[6] See Statistical Office of the Republic of Serbia (n.d.a).
[7] See Fiscal Council (2020).
[8] See Statistical Office of the Republic of Serbia (2023a).

accounting for informality.[9] The sector holds twice the significance in terms of output within the Serbian economy compared with EU-11 countries.[10] Serbia is a net exporter of food, the only one among the Central European Free Trade Agreement (CEFTA) countries[11] and the only net exporter to the EU among the Western Balkans countries.

Figure 3: Services dominate the structure of the economy...

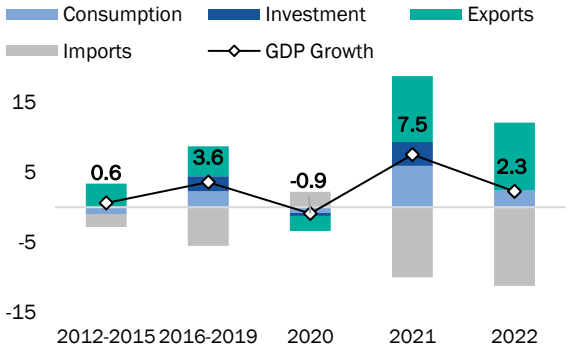
Share of total, in 2022



Source: SORS, NBS.

Figure 4: ...while growth is ultimately led by exports.

Contribution to GDP growth (pp), 2012-15 and 2016-19 are simple averages



Source: Eurostat.

Manufacturing has been driving exports. Exports have increased by more than two-and-a-half times in nominal terms, with total exports increasing from close to 36 to 64 per cent of GDP from 2012 to 2022, the biggest expansion in the Western Balkans region.[12] This burgeoning segment of the economy has further scope to lead growth, as it was more than 10 percentage points of GDP lower than in the EU-11 countries as of 2022. The expansion of exports comes on the back of higher manufacturing exports, often linked to the inflow of export-oriented FDI. These investments have boosted exports on the one hand, but on the other they came alongside a low level of integration into domestic value chains and a high reliance on imported inputs. The structure of Serbian exports is showing initial signs of diversification as its complexity rises and relatively technologically intensive pockets of the automotive industry start to form. The services portion of the export basket has seen more disruption to its traditional structure, with the highly productive information and communications technology (ICT) sector emerging as one of the country's fastest-growing sectors, increasing its export value nearly four-fold in the past decade.

Exports are one of the main growth drivers. Growth before the pandemic was driven by external demand. However, it was outstripped by, on average, nearly equal imports. Although the contribution of net exports was ultimately neutral, the country notably raised its export capacity multi-fold, primarily driven by goods exports which grew by, on average, 11 per cent annually during the 2012-22 period.[13] Contribution of consumption, the largest segment of GDP creation, has been positive since 2016 (with the exception of 2020), reflecting a low inflation environment as well as positive real wage growth.[14] The fiscal consolidation undertaken in 2015-17 allowed for increases in public investment while supporting private investor confidence, particularly in terms of FDI, resulting in a 20 per cent growth rate of investment in the peak two years before the pandemic.[15] While investment as a share of GDP, at 24 per cent in 2022, is comparable to EU levels in recent years, the share of domestic private investment is lower compared with the advanced comparators.[16]

The state continues to play a pivotal role in the Serbian economy. The state footprint has reduced as the country transitions to a market economy – SOEs contribute to less than half of the employment they did in the mid-2000s. Still, the SOE presence remains outsized, dominating certain sectors, despite being riddled with deep-seated challenges weakening their performance compared with their private sector peers. While

[9] Working age is defined as 15-64. When looking at the Labour Force Survey, agriculture appears to be a significant employer, at around 15 per cent, while official employment numbers are far smaller at around 1 per cent. See Statistical Office of the Republic of Serbia (2023b) and Statistical Office of the Republic of Serbia (2023c).
[10] See Eurostat (n.d.a) and Eurostat (n.d.b).
[11] The CEFTA countries are Albania, Bosnia and Herzegovina, Kosovo, Moldova, Montenegro, North Macedonia and Serbia.
[12] See World Bank (n.d.a) and authors' calculations.
[13] See World Bank (n.d.b).
[14] Ibid.
[15] Statistical Office of the Republic of Serbia (n.d.c).
[16] See Eurostat (n.d.c), Ministry of Finance of the Republic of Serbia (2024), World Bank (n.d.c), World Bank (n.d.d) and World Bank (n.d.e).

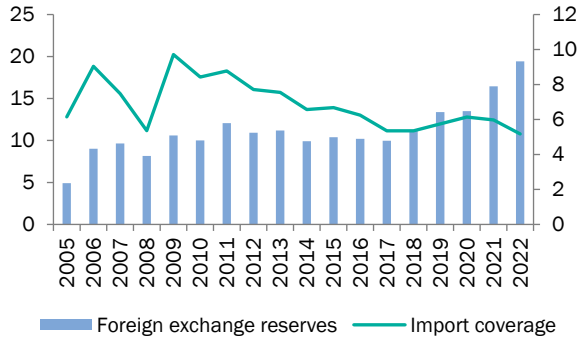
supporting political consistency, this inefficient resource allocation ultimately acts as a drag on the economy's productivity and competitiveness.

The private sector is dominated by entrepreneurs and SMEs. As of 2021, large enterprises made up only 0.3 per cent of enterprises, meaning that 99.7 per cent of registered companies were classified as SMEs according to number of employees.[17] In spite of this, large enterprises made up nearly half (45 per cent) of value added in the same year and 33 per cent of employment within companies.[18] The largest portion of registered companies – a third – belonged to the sector of wholesale and retail trade, followed by manufacturing at 15 per cent and professional, scientific and technical activities at 12 per cent. Companies registered in manufacturing accounted for the largest portion of both employment and value added, around a third for both metrics. In terms of number of registered companies, the fastest-growing sectors were ICT in 2020 and accommodation and food services in 2021.

Macroeconomic stability has been underpinned by the currency exchange regime, the *de facto* peg to the euro … One of the pillars of the country's growth in the past decade has been macroeconomic stability, supported by the National Bank of Serbia and its management of the floating, yet carefully crafted, exchange rate. A managed floating exchange rate regime, alongside inflation targeting, was introduced as part of the central bank's mandate in 2009. However, starting from 2019 the nominal exchange rate has *de facto* been maintained fixed against the euro. On the one hand, the decisive management of the exchange rate has been a key tool for preserving macroeconomic stability during the tumultuous past few years with uncertainty running high and various external shocks hitting the economy. On the other hand, the *de facto* fixed exchange rate regime has led to cumulative real effective exchange rate appreciation of 8.7 per cent in 2012-22, which could threaten the competitiveness of Serbian exports should the trend continue.[19] Be that as it may, the perceived stability, with the political aspect tying into the macroeconomic, has been a major contributor to the country's ability to attract FDI – as many as a third of foreign investors think of macroeconomic stability as a key consideration according to a survey conducted by the American Chamber of Commerce.[20]

Figure 5: Foreign exchange buffers remain high…

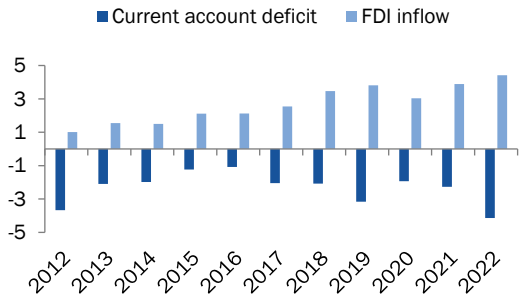
Foreign exchange reserves in € billion and import coverage in months



Source: National Bank of Serbia.

Figure 6: …supported by high FDI inflows which finance the current account deficit

In € billion



Source: National Bank of Serbia.

… backed by high foreign-currency buffers supported by consistently high FDI inflows. International reserves of the National Bank of Serbia have been consistently adequate in terms of import coverage throughout the past decade. They rose to record levels in July 2023 on the back of repeated access to external funding in 2020-22, including through the 24-month Stand By Arrangement (SBA) with the IMF agreed in December 2022, Eurobond issuance in January 2023 and consistently strong remittances and exports. Supporting the country's external position, inflows of FDI in Serbia have been higher than the WB-5 average since 2016 and on average equal to 7 per cent of GDP in 2017-22.[21] These inflows have more than financed the current account deficit which stood, on average, at 5.4 per cent of GDP in the same

[17] See Statistical Office of the Republic of Serbia database. SMEs include micro enterprises (0-9 employees), small enterprises (10-49 employees) and medium-sized enterprises (50-249 employees).
[18] See Serbian Business Registers Agency data.
[19] See CEIC. Available at: https://www.ceicdata.com/en/indicator/serbia/real-effective-exchange-rate. The cumulative real effective exchange rate is based on year-end figures for 2012 and 2022.
[20] See American Chamber of Commerce in Serbia (2021).
[21] Western Balkans national banks and authors' calculations.

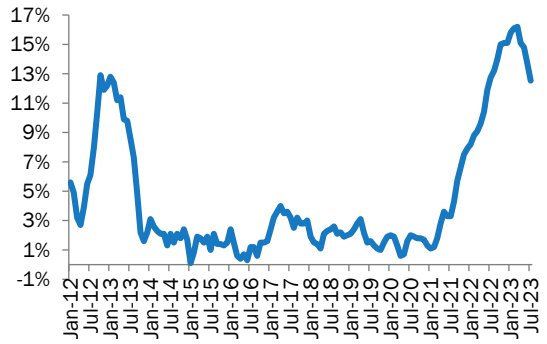
period, by our calculations.[22] The strong foreign investment pull has been a result policies specifically designed to attract FDI, macroeconomic and political stabilisation and the leveraging of a lower cost structure compared with the new EU countries, Serbia's main competitors.[23] In the decade from 2012 to 2022, the largest portion of FDI inflows, 33 per cent of the total, went into the manufacturing sector followed by investment in construction, which made up 18 per cent of the inflows.[24]

Effects of the Covid-19 pandemic on the economy were mild in 2020, followed by a robust recovery in 2021. The structure of the economy – a limited reliance on tourism as well as a relatively large share of basic goods and services, combined with large aid packages from the government and relatively less restrictive lockdown measures – made for a GDP contraction of just 0.9 per cent in 2020. As a response to the pandemic-induced economic downturn, the government implemented large aid packages in 2020-21 to cushion the impact and support recovery. The subsequent recovery of 7.4 per cent reflected a strong expansion of exports due to the rebound of the eurozone, Serbia's main trading partner, increased consumption on the back of pent-up demand, and continued investment supported by robust public investment.

Growth moderated in 2022 amid a difficult global environment. Serbia has limited direct economic links with Russia, with the exception of energy imports, but is not immune to the indirect effects of the war on Ukraine, reflected in increasingly adverse external conditions. GDP grew by 2.5 per cent in 2022, as elevated inflation rates, tighter financing conditions, surging energy prices and a general sense of uncertainty took their toll on the Serbian economy. Agricultural and construction activity contracted alongside muted industrial activity. Household consumption growth slowed but remained the primary growth driver despite rising inflation. The current account deficit widened from 4.2 per cent of GDP in 2021 to 6.9 per cent of GDP in 2022, largely on the back of the increased energy import bill and weakening external demand.

Figure 7: Inflation has been rising to decade highs...

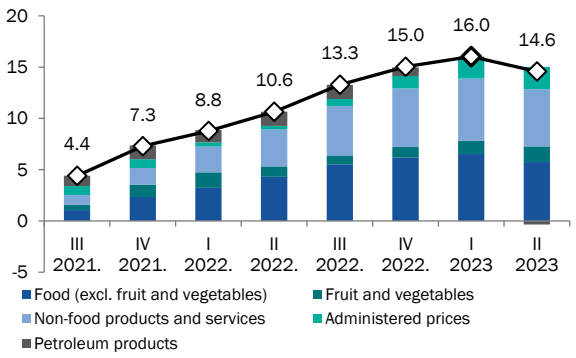
CPI index, annual growth rate in per cent



Source: National Bank of Serbia.

Figure 8: ...driven initially by higher food prices but becoming increasingly broad based

Contribution to inflation (percentage point)



Source: National Bank of Serbia.

Inflationary pressures, increasing since mid-2021, reached decade-high levels in 2023. The initial rise in energy and commodity prices, reflecting higher oil prices and the pandemic-related disruption of global value chains, was exacerbated by a major unpredicted shock: the war on Ukraine. As commodity shortages and high input prices spilled over across supply chains, annual inflation in Serbia reached 16.2 per cent in March 2023, the highest since 2007.[25] Inflation peaked later in Serbia compared with the other Western Balkans countries and the eurozone, and has decelerated at a more moderate pace, as the cost-induced price shock is continually passed through, spurred on by ongoing increases in regulated energy prices. Food prices have been the key contributor to inflation rates in the country due to their high share in consumption and a combination of domestic and global factors hampering domestic production. The comparatively higher inflation in Serbia than in the EU region, at nearly 10 per cent in March 2023, is largely explained by the difference in consumer spending patterns – food makes up 28 per cent of the Serbian consumer basket and only 15 per cent of that of the EU.[26] The relatively small contribution of

[22] See NBS key macroeconomic indicator spreadsheet.
[23] See World Bank (2020a).
[24] See National Bank of Serbia Balance of Payments data.
[25] Statistical Office of the Republic of Serbia records for annual inflation rates date back to 2007. See Statistical Office of the Republic of Serbia STAT database/Prices/Consumer prices/Consumer prices by COICOP/Consumer price indices. Available at: https://data.stat.gov.rs/?caller=03&languageCode=en-USdatabase.
[26] See Statistical Office of the Republic of Serbia (2022b) and European Central Bank (2023).

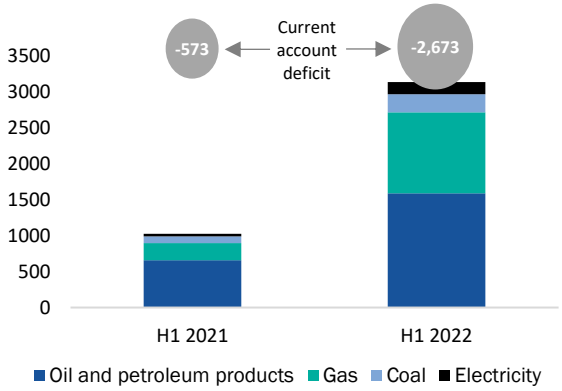
energy prices is because the public sector absorbed more of the impact of higher electricity and gas prices, as well as petroleum prices, to a degree. Electricity prices for households and the price of gas for public supply were hiked twice, first in September 2022 and then in January 2023, following the regulator's approval. Further increases in energy tariffs, a feature of reform measures outlined as part of the SBA with the IMF, are set to take place during 2023. As energy tariffs inch closer to cost recovery levels, inflation is set to continue becoming increasingly broad based and prices are likely to remain elevated in 2023. Core inflation, at 9.4 per cent in July, remains lower than the headline figure, reflecting somewhat lower medium-term inflation expectations.[27]

Poorer households are especially vulnerable to rising prices. Household consumption and private investment is set to moderate as inflation erodes real disposable income. With food and energy prices driving inflation, poorer households are disproportionally impacted as these essentials make up a larger portion of their expenditures. Food and non-alcoholic beverages make up around a half of final consumption for the poorest quintile of households, while the average share of food in final consumption is around a quarter.[28] At the end of 2021 and throughout 2022, the government implemented various policy responses to shield both consumers and producers from rising prices, which largely remain in place as of September 2023.

Risks to the near-term outlook remain. The expected economic slowdown in eurozone export markets, Serbia's most important export destination, and high price levels weighing on the budgets of households, firms and the state, dim the near-term outlook. Higher domestic and global interest rates are putting further pressure on domestic demand, as well as government finances, while a significant portion of the energy shock continues to be absorbed by the public sector. Serbia is expected to continue growing in 2023, albeit at a slower pace, while the medium-term outlook remains robust, underpinned by macroeconomic stability, a record of strong public and foreign investments and a commitment to reform anchored by the EU approximation process.

Figure 9: Worsening of the energy balance is widening the current account deficit

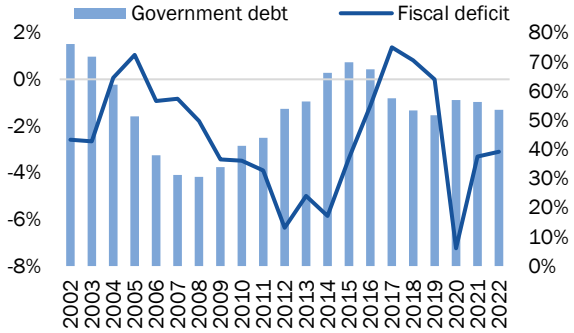
Energy imports in € billion



Source: National Bank of Serbia.

Figure 10: The energy sector is the main source of risk to government finances

General government debt (RHS) and deficit (LHS), percentage of GDP



Source: IMF World Economic Outlook, Ministry of Finance.

[27] See NBS statement: Key policy rate kept on hold, 7 September 2023, https://www.nbs.rs/en/scripts/showcontent/index.html?id=19199.
[28] See World Bank (2021a).

The energy crisis exposed long-standing vulnerabilities in the sector. As rising prices for gas and electricity were met by high consumption during an unusually cold winter on the continent, an energy crisis spread across European markets. Although Serbia's reliance on power generation from domestically sourced coal should have shielded the economy, December 2021 was marked by the breakdown of Serbia's biggest coal-powered thermal power plant, leading to an urgent ramp-up of electricity imports. Gas imports increased in parallel, driven by inadequate storage levels and insufficient storage capacity. As a result, both imports of electricity and gas increased significantly at a time of surging prices and high consumption, fuelling fiscal liquidity needs and widening the current account deficit. While unfavourable weather conditions and the poor quality of coal at a time of unusually high prices were cited as the immediate causes of the crisis, more structural problems – such as prolonged underinvestment in energy infrastructure, unclear decarbonisation commitments leading to the slow development of renewable energy generation capacity and poor governance of utility SOEs – emerged as key challenges. While electricity production has stabilised since then, the long-term structural issues of the energy sector will take a considerable amount of time to resolve, and the energy sector remains the key vulnerability and source of risk in the economy.

The fiscal position is sustainably managed, notwithstanding the risks. Serbia's fiscal strategy has been fairly prudent in recent years, allowing space for large capital investments and showing flexibility in times of shock that called for the prompt roll-out of large support schemes.[29] At 55.6 per cent of GDP at the end of 2022, public debt remains manageable. Serbia has been consistently engaged in IMF policy coordination programmes, though it has not needed a disbursing programme over the past decade, including during the pandemic, unlike other countries in the Western Balkans region. This points to the increased strength of public finances and improving fiscal and debt management. However, the energy sector is a significant source of risk in the near term, driving up liquidity needs and putting pressure on the government budget. Amid large external and fiscal financing needs at a time of globally tight financial markets, the authorities agreed a two-year SBA programme with the IMF in December 2022 for a total of €2.4 billion, centred on energy sector reforms. In January 2023, Serbia returned to the external market with two debt issues, a five-year Eurobond in the amount of US$ 750 million at 6.25 per cent and a 10-year Eurobond in the amount of US$ 1 billion at 6.50 per cent, hedging the issues against the euro. Significant oversubscription and good pricing given the market conditions demonstrate continued investor confidence in the Serbian economy.

[29] There is space to increase efficiency, according to the Fiscal Council, as government spending on anti-crisis measures was 55 per cent higher than comparable central and eastern European economies, due in part to persistent underinvestment in healthcare prior to the pandemic, and to insufficiently targeted support for citizens and businesses. See Fiscal Council (2020).

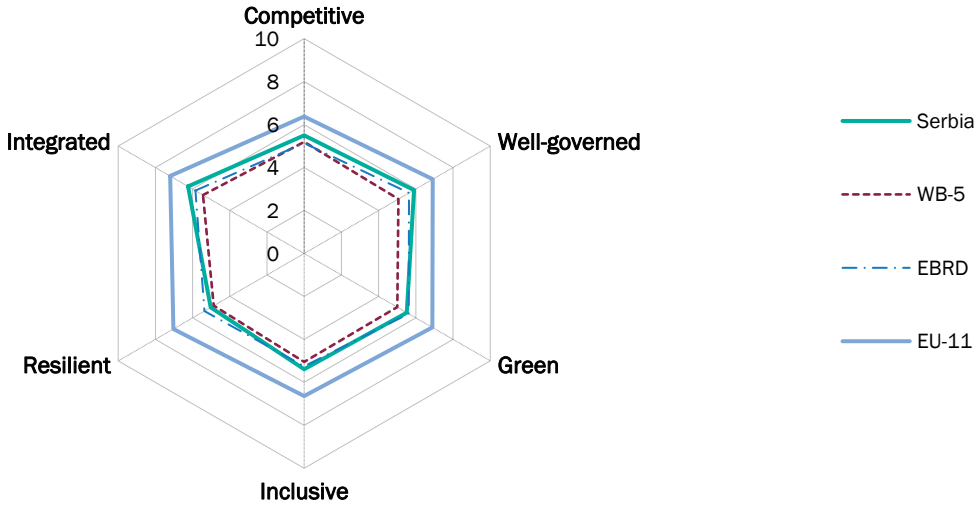
2. Qualities of a sustainable market economy

In the EBRD's 2022 Assessment of Transition Qualities (ATQs), Serbia ranks 15th out of the 36 economies where the Bank operates.[30] Based on a methodology developed by the EBRD in 2016, ATQs are a measure of six desirable qualities of a sustainable market economy: competitive, well governed, green, inclusive, resilient and integrated. Each quality is a composite index calibrated on a scale of 1 to 10 (best), obtained by combining information on a large number of indicators and assessments.[31]

Serbia outperforms the other Western Balkans country averages on all qualities, but lags the EU-11. It performs similarly to the other countries in the region on the inclusive and resilient qualities, but significantly outperforms the average on the well-governed and integrated qualities, leading by 0.8 index points on both. Serbia outperforms the EBRD average on all qualities but resilience. However, it trails the EU-11 significantly on all dimensions, but most notably, again, on the resilient quality (by 2 index points) and the green quality (by 1.4 index points). In the last five years, Serbia made the biggest improvement in the integrated quality (0.6 index points).

Figure 11: ATQs in 2022

1–10 (best)



Source: EBRD calculations.

[30] The score is calculated as a simple average of scores for the six transition qualities.
[31] For more detail, please see EBRD (2017), pages 105-116.

Long-standing challenges are stunting the competitiveness of the Serbian economy

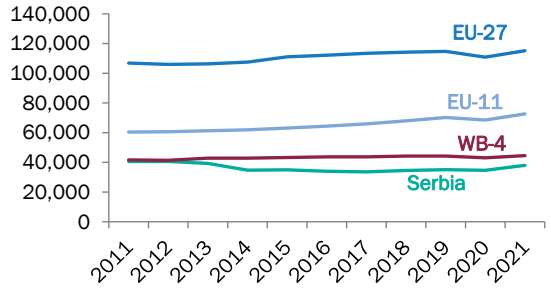
Competitive ATQ score = 5.49/10

The business environment is constantly improving, particularly in terms of digitalisation and a reduced administrative burden. This is evident in the persistently strong attraction of foreign capital, which is propping up exports. Strong growth in the export-oriented information technology (IT) sector is another good sign of economic development. However, overall productivity in the economy remains low, pointing to lingering challenges, including undue state involvement in markets, inadequate workforce skills and governance challenges. Opportunities lie in expanding and identifying new areas for more complex and higher-value-added exports, as well as for integrating foreign companies into domestic supply chains. Support for SMEs has been enhanced, but smaller companies continue to report greater vulnerability to structural challenges such as instability and informality, find it difficult to raise productivity levels and integrate into international markets, and encounter more difficulty in accessing finance compared with their large counterparts. Once introduced, carbon tariffs will deal a significant blow to the competitiveness of certain exports due to the high carbon intensity of Serbia's industrial production.

Serbia's labour productivity lags that of its peers and advanced comparators. Labour productivity, measured as output per worker, remained largely unchanged in the period from 2011 to 2021. It remains below the average of four other Western Balkans countries and trails even further behind the continually improving productivity of the EU-11.[32] This suggests that the economic growth that Serbia has experienced in the recent decade has been driven by increased employment rather than more effective ways of working. In addition, while the number of employed people expanded by nearly 25 per cent from 2012 to 2019, the significant rise in employment partly reflects an increase in lower-quality jobs, which generate lower output per worker.[33]

Figure 12: Labour productivity is low ...

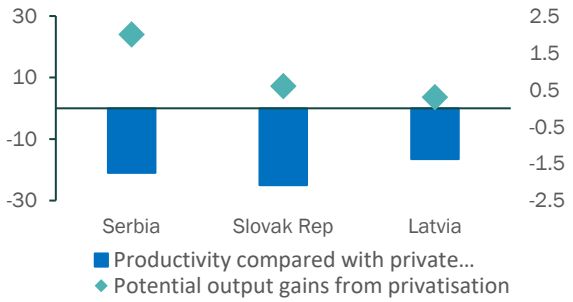
Output per worker in constant 2017 GDP terms, international $ at purchasing power parity



Source: International Labour Organization (ILO).
Note: Kosovo is not included in the Western Balkans average.

Figure 13: ... dragged down by the oversized and inefficient SOE sector

Percentage of average private firm productivity (LHS) and percentage of GDP (RHS)



Source: International Monetary Fund.
Note: Assessment based on 2014-16 data.

The state continues to play a pivotal role in the Serbian economy, stunting productivity growth. While the state's footprint has shrunk as the country transitions to a market economy, with SOEs accounting for less than half of the employment they did in the mid-2000s, SOEs loom large in terms of asset size and monopolistic presence in sectors such as gas, electricity, transport and telecommunications. In 2021, there were 575 public companies in Serbia, with some 314 at least partly owned by the central government, according to a consolidated list compiled by the Serbian Business Registers Agency at the end of 2021 in an effort to increase transparency.[34] SOEs and the public sector together account for around a quarter of employment among the working-age population.[35] Wages in the public sector remain higher than in the private sector, by 9 per cent as at January 2023, despite public companies' productivity being about 20 per cent lower than that of private companies.[36] Research by the IMF, based on a sample of private and public companies in 2014-16, shows that the potential enhancement of SOE resource allocation in Serbia

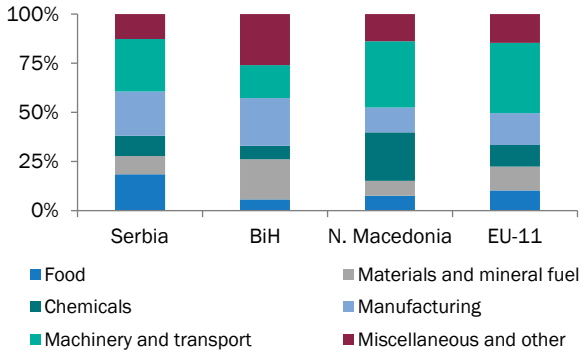
[32] See ILO database. Labour productivity data are unavailable for Kosovo.
[33] See UNICEF (2022).
[34] See APR (2021).
[35] See Statistical Office of the Republic of Serbia (2022c).
[36] See Statistical Office of the Republic of Serbia (2023d) and Richmond et al. (2019).

could permanently increase output by 2 per cent, one of the biggest potential gains among more than 20 economies in central, eastern and south-eastern Europe.[37]

High state participation in various economic segments hinders competition. State intervention affects market competition in various ways – such as regulatory barriers, subsidies and direct state participation – undermining the level playing field.[38] For example, some SOEs are exempt from bankruptcy procedures, removing a key incentive for them to undertake corporate improvements to avoid liquidation.[39] An OECD analysis of barriers to competition in 2018 found weak SOE governance, inadequate state-aid control and a relatively wide scope of public ownership in sectors where private ownership is viable to be among the main drivers of economy-wide regulatory restrictiveness in Serbia.[40] According to the European Commission, Serbia's track record of enforcing state aid rules, which aim to ensure that state equity financing is provided on market-consistent terms and does not distort competition, is patchy and lacking in transparency.[41] While most SOEs access financing on the market, they frequently do not do so on the same terms as private participants, thanks to implicit or explicit state guarantees.[42]

Figure 14: The bulk of exports is in manufacturing ...

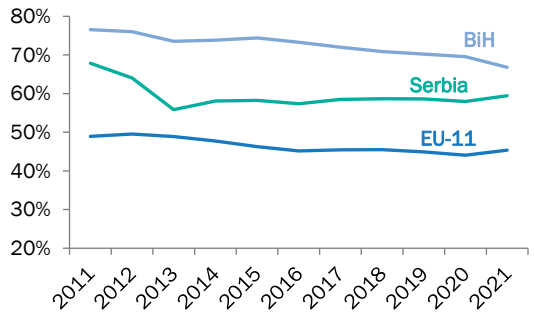
Share of all exports



Source: UNCTAD.

Figure 15: ... but is relatively unsophisticated

Share of primary products, resource-based and low-technology manufacturing in exports



Source: UNCTAD.

Serbia's goods export basket remains dominated by low-value-added products ... Serbia's top 10 export products are low in complexity. Ignition wiring sets, copper ores, tyres, maize, steel products, refined copper, frozen raspberries, washing or cleaning preparations, electric conductors and seat parts accounted for nearly a quarter of the country's goods exports in 2021.[43] Some 59 per cent of goods exports are primary products, resource-based or low-tech manufacturing. While this proportion has declined significantly over the past decade, from 68 per cent in 2011, it remains above that of the EU-11 (45 per cent).[44]

... but its complexity is increasing. At the same time, Serbia's exports include many more complex products, though these generally account for a lower share of exports.[45] These include products from the medium- to high-complexity segment of machinery and transport equipment, a sector whose exports grew from 6 per cent of GDP in 2012 to 11 per cent of GDP in 2021, accounting for the highest share of goods export growth in the period, upwards of a quarter. The economic complexity index, which measures both the diversity of the export basket and the distinctiveness of its products, increased from 0.57 in 2010 to 0.74 in 2021, placing Serbia 36th out of 131 countries globally.[46] This is a good sign, as countries whose exports are more complex than expected for their income level grow faster. Growth can, therefore, be driven by a process of diversifying knowhow to produce a broader and increasingly more complex set of goods and services.[47]

Export-oriented and digitally intensive services sectors are becoming more prominent. Computer programming's share of value creation has tripled in the past decade, from 0.8 per cent of GDP in 2011 to 2.3

[37] See Richmond et al. (2019).
[38] See World Bank (2019b).
[39] See OECD (2021).
[40] Ibid.
[41] See European Commission (2022a).
[42] See OECD (2021).
[43] See Statistical Office of the Republic of Serbia (2022d).
[44] See UNCTAD database: Merchandise trade matrix, annual, https://unctadstat.unctad.org/datacentre/dataviewer/US.TradeMatrix.
[45] See Atanasijevic, Vasiljevic, Nikolic and Pavlovic (2021).
[46] See Observatory of Economic Complexity (2021).
[47] Ibid.

per cent in 2021, with telecommunications, computer and information services now making up close to a quarter of Serbia's service exports.[48] More digitally intensive sectors (medium-high and high digital intensity) saw far stronger employment growth in 2011-19 than their less digitally intensive comparators: 41 per cent compared with 14 per cent, respectively. This effect was one of the most pronounced in the EBRD regions.[49] Serbia has become a regional IT hub and is home to a number of fast-growing local start-ups (one start-up, Nordeus, was acquired in 2021 for upwards of US$ 300 million [€245 million]), as well as the regional offices of foreign firms such as Huawei and Microsoft (the latter has based its regional development centre in Belgrade since 2005).

Diversification of the export basket has been accompanied by steady improvements in trade policy. In the 2018-21 period alone, the country's legal framework was improved by the introduction of a new trade facilitation body and expert groups, the strengthening of public-private consultations on trade policy and an increase in trade-related regulatory transparency.[50] Serbia's trade tariffs, with a weighted average applied rate of 1.44 per cent, are competitive compared with those of both the WB-5 (an average of 1.68 per cent) and the EU (a 1.84 per cent average).

Box: The EU's Carbon Border Adjustment Mechanism set to challenge the competitiveness of certain Serbian products on external markets

Emissions allowance trading is the cornerstone of the EU's climate policy. The EU Emissions Trading Scheme (ETS) covers CO_2 emissions from high-polluting sectors (energy and industry), putting a price on carbon to facilitate the replacement of fossil fuels with clean energy sources. A key challenge for the EU ETS has been to help carbon-intensive sectors reduce their emissions while avoiding the risk of shifting production to locations with less stringent carbon policies (so called "carbon leakage").

In response to the challenge, the European Parliament and the Council of the European Union adopted the regulation on the introduction of a Carbon Border Adjustment Mechanism (CBAM). This addresses carbon leakage at the border by putting a carbon price on imports equivalent to the price for similar goods produced within the EU and subject to the ETS. According to the proposal of 14 July 2021 and the regulation adopted on 10 May 2023, the CBAM will focus for the time-being on direct emissions from limited industrial sectors – iron and steel, cement and clinker, fertiliser, aluminium and electricity. According to the 2022 proposal, the CBAM will cover not only direct but also indirect (Scope 2) emissions from the organic chemicals, plastics, hydrogen, and ammonia polymers and chemicals sectors.

Table 1: Serbian exports from CBAM-impacted sectors to the EU
€ thousands

	2020	2021	2022
Exports to the EU-27, of which CBAM products:	10,725,514	13,996,477	18,181,435
Iron and steel	552,464	858,377	1,043,063
Fertilisers	60,946	94,347	203,376
Aluminium	131,094	225,625	82,087
Cement	2,788	1,464	9,855
Electricity	412,977	981,193	1,922,245
Total CBAM exports	1,160,269	2,161,006	3,260,626
CBAM as a percentage of total exports to the EU	**11 per cent**	**15 per cent**	**18 per cent**

Source: Eurostat.
Note: As per scope defined in the 2021 proposal. The 2022 proposal extends the scope to organic chemicals, plastics, hydrogen and ammonia.

A tight trading relationship with the EU and the carbon intensity of Serbia's economy make it vulnerable to the CBAM. The EU is Serbia's key trading partner, accounting for 64.1 per cent of overall exports in 2022. Exports of CBAM-affected products to the EU accounted for 18 per cent of all exports to the EU and 10 per cent of overall exports.[51] The most significant impact will be felt by the export-oriented iron and steel and aluminium

[48] See Statistical Office of the Republic of Serbia STAT database/National accounts/ National accounts by SNA 2008 / ESA 2010/ Annual national accounts/Gross domestic product by production approach/Gross value added by NACE Rev. 2 (Available at: https://data.stat.gov.rs/?caller=SDDB&languageCode=en-US) and National Bank of Serbia statistics (Available at: https://www.nbs.rs/export/sites/NBS_site/documents-eng/statistika/ino_ekonomski_odnosi/platni_bilans/services_2007_2023.xls).
[49] See EBRD (2021a).
[50] See OECD (2021).
[51] Assessment carried out per the scope of the 2021 proposal; exposure would be substantially higher if the extended scope of the 2022 proposal were considered.

industries, where EU exports account for more than 50 per cent of Serbia's overall production. While Serbia's exports of electricity are relatively insignificant compared with its overall production, electricity exports are relevant for their contribution to the trade balance.

Serbia is estimated to be among the countries worst hit by the CBAM. While it is difficult to estimate the likely loss of income due to the lack of a robust measuring, reporting and verification system to produce information on the carbon intensity of sectors, assessments of the impact of the initial implementation of the CBAM range from 0.2 per cent to 0.43 per cent of GDP annually by 2035, hitting Serbia's ferrous and non-ferrous metals exports the hardest.[52] Moreover, the indirect impacts will be felt the most by direct and indirect suppliers of inputs for the production of the CBAM-affected products.[53] The potential reduction in production puts at risk more than 2.5 per cent of the wage bill and close to 3 per cent of Serbia's employed population, according to preliminary estimates.[54]

Export growth is being propped up by persistently robust FDI inflows. Serbia has positioned itself as a regional hub when it comes to attracting FDI and ranks 17th among the top 20 European most attractive countries for FDI.[55] Inflows have increased steadily, from 2.9 per cent of GDP in 2012 to an estimated 7.1 per cent in 2022, with the highest portion (36 per cent) currently going to the manufacturing sector,[56] in particular, food, beverages and tobacco products, rubber and plastic products, and motor vehicles. Among these key segments, it is the automotive segment that has shown the most consistent growth over the years, accounting for 11 per cent of FDI inflows into manufacturing in 2011 and 24 per cent in 2022.

An attractive environment for FDI has emerged from several simultaneous trends. Improvements in investor perception were initially led by the macroeconomic and political stabilisation of the country and the broader Western Balkans region. Serbia boasts close geographical proximity to and strong trade ties with the EU, while maintaining bilateral trade agreements with Türkiye and Russia. Its cost structure, in particular, for basic inputs such as energy and labour is favourable compared with that of its main competitors, such as the EU-11 countries. It is the largest market in the Western Balkans, one with a rich industrial legacy, with the biggest workforce in the region, characterised by high rates of educational achievement, foreign-language skills comparable to those of the EU, and an abundance of vocational educational graduates and engineering skillsets. The Serbian government has designed a proactive investment-promoting policy[57] and FDI attraction is among its key priorities, with large investors having access to the top political levels.

In the absence of carbon tariffs, a favourable cost structure for businesses compared with the nearby EU has played a part in attracting FDI. In 2021, labour costs in Serbian industry, construction and services were lower than in any EU country and about a quarter of the EU average in per-hour terms.[58] Moreover, its labour force skills, knowledge and flexibility appear to be relatively high, with the ratio between productivity and labour costs frequently more favourable in Serbia than in comparable EU countries.[59] As of the second half of 2021, businesses in Serbia paid one of the lowest prices in Europe for electricity, a key production input. Electricity prices for non-household consumers were some 20 per cent lower in Serbia than in the EU average in 2021.[60] However, as the economy's living standards slowly converge on EU levels, Serbia's labour supply will become more constrained. Energy sector reform will become imminent due to unsustainably low prices, and the introduction of the EU's CBAM will weaken the pull of low costs.

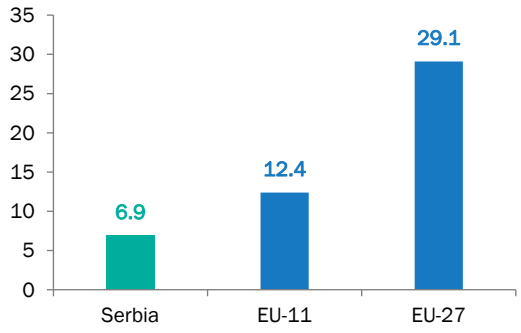
To maintain its competitiveness in the long run, Serbia needs to attract more investment to higher-value-added sectors of the economy. This can be done by adapting its educational system, investing in innovative pockets of the economy and tilting its array of incentives to investors offering more complex products. The good news is that this transition has begun. Since the 2003-08 period, greenfield FDI inflows (new investment rather than changes in ownership) have shifted away from low-skilled services (such as construction) towards high-skilled manufacturing (in particular, motor vehicles and computer equipment), which accounted for the bulk of employment generated by FDI in the 2009-19 period. Furthermore,

[52] See World Bank (2022a), Chapter 2.1, The Role of Pricing Signals.
[53] See AFD (2022).
[54] Ibid.
[55] See EY (2022).
[56] See more detail on FDI trends in the "Integrated" section of this report.
[57] This features 15 "free zones" offering advantages such as a streamlined process for obtaining land, ready-to-use infrastructure and tax privileges. Financial incentives of up to 50 per cent of investment costs are available for greenfield and brownfield projects in manufacturing and services, with a 10-year profit tax holiday offered to companies with investment and employment over a certain threshold. Payroll tax incentives and the acquisition of public construction land on favourable terms are offered under certain conditions. See wiiw (2021a).
[58] Labour costs include compensation of employees plus taxes minus subsidies, as estimated by Eurostat.
[59] See World Bank Group (2019c).
[60] See Eurostat database: Electricity prices by type of user, Non-household, medium size consumers (Online data code: ten00117), https://ec.europa.eu/eurostat/databrowser/view/ten00117/default/table?lang=en&category=t_nrg.t_nrg_indic.

greenfield FDI inflows have shifted towards more digitally intensive services: from 2009 to 2019, the highest portion of FDI went to medium-digital-intensity sectors, compared with 2003-08, when low-digital-intensity sectors were more attractive to foreign investors.

Figure 16: Low labour costs attract foreign investment ...

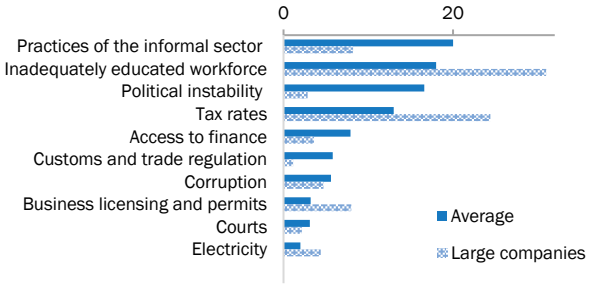
Hourly compensation of employees plus taxes minus subsidies in euros in 2021



Source: Eurostat.
Note: In industry, construction and services.

Figure 17: .., but this advantage is bound to ebb as workforce skills becomes a challenge

Top 10 obstacles to doing business; share of firms identifying it as such



Source: BEEPS VI.

Employers cite poor workforce skills as one of the largest obstacles to doing business. According to the last wave of the EBRD-World Bank-European Investment Bank Enterprise Survey conducted in 2019, 18 per cent of businesses think an inadequately educated workforce is their main obstacle to doing business in Serbia, making it the second-biggest challenge after practices of the informal sector (19.7 per cent). The size of this challenge increases with the size of the company; workforce skills are the most significant issue for large companies, according to nearly one-third of respondents. This contrasts with the previous wave of the survey conducted in 2013, when workforce skills were not seen as such a big challenge, which pointed to both an improving business environment and the evolving needs of businesses. Skills gaps are particularly challenging for more innovative companies requiring "new economy" and "non-routine" skills.[61] Such skills include creativity, complex problem solving, social skills such as teamwork and communication, and the ability to learn new skills and adapt to new challenges. The poor offering and uptake of on-the-job training may be an additional constraint on workforce skills, with just a quarter of employers providing training and 6.2 per cent of Serbian employees saying they had recently attended training in 2021 compared with 14.4 per cent in the EU.[62] Additional constraining factors are an outdated educational curriculum, which does not equip young people with adequate workforce skills, and the relatively higher emigration rate among workers with highly sought-after skills, such as advanced digital skills.[63]

[61] See World Bank Group and wiiw (2020).
[62] See Eurostat database and World Bank Group and wiiw (2020).
[63] See more detail in the "Inclusive" section of this report.

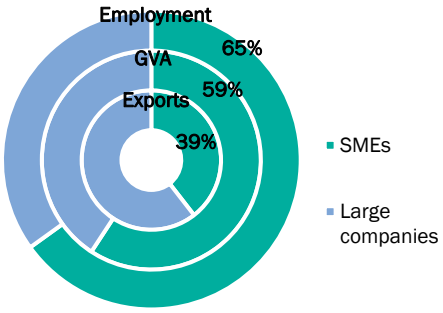
Figure 18: Investment and trade policy are competitive

Competitiveness Index 2021 policy scores across dimensions; 0–5 (best)

Source: OECD.

Figure 19: SMEs are poorly integrated into global value chains

Share of total in 2020



Source: Ministry of Economy of the Republic of Serbia (2022).
Note: The figure for SMEs includes entrepreneurs.
.

The business environment for SMEs has advanced. Serbia is continuously improving the business environment for SMEs and ranks first among the Western Balkans economies on the OECD's SME Policy Index, performing best in terms of operational environment, support services and public procurement. Over the 2019-21 period, Serbia centralised and digitalised business licensing procedures, scaled up the scope of SME support services offered by the development Agency of Serbia, introduced two sovereign guarantee funds to facilitate access to finance, and introduced a new customs law to simplify procedures.[64]

Nonetheless, major challenges persist. The most notable gaps, according to the OECD SME Policy Index, remain in the areas of green economy, where awareness of environmental concerns remains low and access to green financing is ad hoc, and insolvency prevention, as bankruptcy procedures remain difficult to predict and lack the efficiency needed for entrepreneurs to subsequently reintegrate into the market.[65] While these administrative challenges remain to be resolved, it is deep-rooted structural problems, such as the unequal application of rule of law and corruption, that remain most difficult to tackle.[66] SMEs are particularly vulnerable to the challenges of the business environment, with far more small firms than large ones citing the practices of the informal sector and political instability as their biggest obstacles to doing business.[67] This suggests large potential gains in SME productivity if governance standards and institutional quality are improved. The government has been taking steps to decrease the scale of informality in value creation, including the recent Programme to Suppress the Grey Economy for 2023-25, adopted in early 2023.

Smaller companies find it difficult to participate in international markets, highlighting the opportunities of better integrating FDI into domestic supply chains. If Serbian SMEs are to achieve significant growth, they must increase their integration into global value chains and boost their competitiveness in international markets. Serbia's share of exporters among SMEs was just 3.8 per cent in 2020 and the total share of exports in SME turnover was 9.2 per cent, falling short of targets set in the national SME Development Strategy 2015-2020.[68] Inevitably, the main obstacle to increasing exports to the EU are competitive pressures and higher product and production requirements, which involve additional, often excessively burdensome, costs. Other barriers to SME entry and continual access to international markets are low productivity and regulatory barriers (such as a lack of clear export procedures).[69] An additional opportunity lies in better integrating FDI into domestic supply chains, as foreign companies in Serbia import approximately 60 per cent of inputs.[70]

There is a gap in access to finance for Serbian SMEs compared with large corporations. Lending standards for SMEs are often more restrictive, as demonstrated by the relative share of such loans. Loans to SMEs

[64] See OECD (2022a).
[65] Ibid.
[66] These challenges are expended on in more detail in the "Well-governed" section of this report.
[67] See BEEPS VI.
[68] In 2020, the share of exporters was 3.8 per cent against a target of 7 per cent, while exports as a share of total SME turnover were 9.2 per cent against a target of 14 per cent. See OECD (2022a).
[69] See OECD (2022a).
[70] See Atanasijevic, Vasiljevic, Nikolic and Pavlovic (2021).

account for only a third of the country's overall corporate loan portfolio, despite SMEs accounting for almost two-thirds of total gross value added, employment and turnover.[71] The interest-rate spread between SME loans and large corporate loans often exceeds 1.5 percentage points on both FX-indexed and dinar loans. The reasons behind the more stringent lending standards for SMEs in Serbia are present in other, similar markets too: their volatile cash flows and inherent riskiness,[72] insufficient collateral, poorer financial management skills and higher level of informality. Nonetheless, the loan rejection rate in Serbia has tended to be higher than in OECD countries, on average,[73] pointing to more stringent credit constraints. Equally, SMEs in Serbia seem to lack interest or are discouraged from borrowing from banks, as evidenced by the 15 per cent loan application rate, which is significantly lower than the 31 per cent median in the OECD and other countries considered in the OECD report.[74] The authorities, supported by international financial institutions, the EU and other donors, are trying to mitigate this issue by providing concessional finance through specialised institutions and programmes. During the Covid-19 crisis, the authorities substantially expanded support to SMEs, including through policy rate cuts, deferral of loan payments and credit guarantee schemes, leading to a 12 per cent increase in the stock of bank loans to SMEs in 2020 alone and a further 10 per cent increase in 2021.[75] A new SME development strategy for 2023-27 is in the making, with access to finance as one of the focus areas.

[71] See OECD (2022b).
[72] The NPL ratio for the SME portfolio is equal to 4.6 per cent, compared with 2.8 for the whole corporate sector. See IMF (2022a).
[73] See OECD (2022b).
[74] The publication considers 48 countries, the majority of them OECD members. See OECD (2022b).
[75] See IMF (2022a).

Jumpstarting public-sector governance reform could bring substantial gains

Well-governed ATQ score = 5.90/10

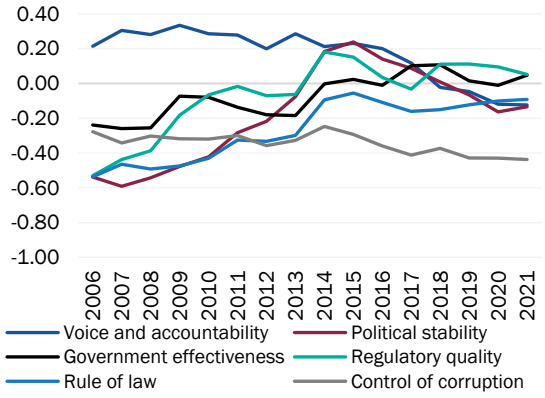
Improvements in the quality of national governance have stalled in recent years, despite the significant catch-up required to reach EU standards. Institutional quality suffers from civil servants' lack of insulation from political pressures, the excessive centralisation of the institutional set-up, and a lack of transparency and predictability. Public administration capacity is fairly strong compared with the rest of the Western Balkans region, although there is scope to improve efficiency. Decisive steps to fight corruption and improve the rule of law have yet to be taken. Material advances have been made on alleviating the administrative burden and improving the business environment, and the digitalisation of various processes is ongoing. However, the continually high level of informality attests to lingering bureaucratic red-tape bottlenecks. The corporate governance of SOEs is in need of significant improvement and the initiated reform of SOEs is the subject of close scrutiny.

Governance standards and the quality of the policymaking would benefit from improving impartiality, institutional quality, capacity and transparency.

Serbia has some way to go before reaching the EU's level of governance standards. The country's public governance standards have undergone an overhaul in recent decades. According to the World Bank's Worldwide Governance Indicators, there was notable progress between 2006 and 2021 in the areas of political stability, quality of regulation that permit and promote private-sector development, and government effectiveness.[76] While Serbia performs similarly to the Western Balkans average when it comes to the quality of governance, it trails significantly behind the EU. Its reforms have largely stalled or reversed in recent years, according to the same index. The rule of law and control of corruption remain the areas most in need of improvement.

Figure 20: Limited improvement in governance standards in recent years

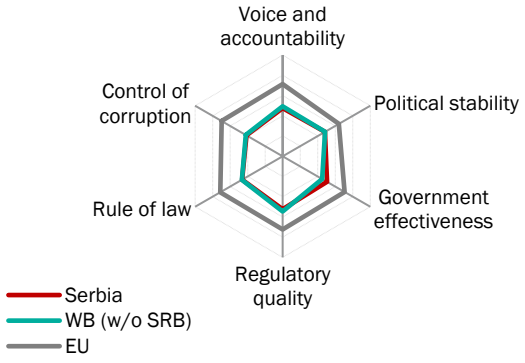
On a scale of -2.5 (worst) to 2.5 (best)



Source: World Bank Worldwide Governance Indicators (WGI), authors' calculations.

Figure 21: Serbian governance continues to lag that of the EU countries

On a scale of -2.5 (worst) to 2.5 (best), 2021



Source: World Bank WGI, authors' calculations.

Institutional quality is suffering, as civil servants are insufficiently isolated from political pressures. Despite political stability and the continuity of the ruling coalition over the past decade, frequent elections have resulted in ministerial reshuffles, slow government formation and a perception of political interference in civil service appointments. According to the European Commission, more than half of senior civil servant positions are filled on an acting rather than a permanent basis. This reduces transparency, diminishes the space to create a long-term vision and is conducive to political pressure.[77]

Political patronage is etched into the culture and mindset of the population, as it is in the rest of the Western Balkans region. According to the EBRD's Life in Transition Survey (LiTS) of 2016, 42 per cent of randomly chosen individuals in Serbia believe "political connections" are the most important factor for

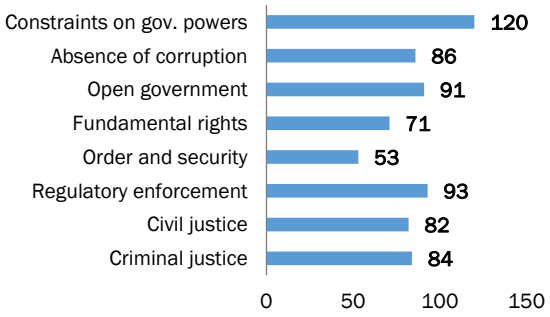
[76] See: World Bank Worldwide Governance Indicators. Available at: https://www.worldbank.org/en/publication/worldwide-governance-indicators.
[77] See European Commission (2022a) and Moody's Investor Service (2022).

success in life.[78] This is the fourth-highest result among the EBRD economies, after North Macedonia, Bosnia and Herzegovina, and Albania, and in stark contrast to the responses of Western European comparators, which lend more weight to "effort and hard work" and "intelligence and skills".

The quality of policymaking would be strengthened by better transparency, predictability, coordination and capacity. Rating agencies believe that the ongoing centralisation of the institutional set-up could undermine long-term policymaking predictability and weaken investor confidence.[79] The constitutional and institutional means by which the government and its officials are contained and held accountable under the law, as well as non-governmental checks on government power, such as a free and independent press, are deemed to be very weak by the World Justice Project's Rule of Law Index. In 2022, Serbia ranked 120th out of 140 countries when it comes to constraints on government powers.[80] Business predictability is affected by insufficient transparency in the adoption of legislation, with advice from independent state bodies, such as the Fiscal Council, often not taken into account and government decisions frequently made without proper consultation with all stakeholders.[81] Domestic enterprises complain of being insufficiently represented in public-private dialogue, in particular compared with large foreign multinationals which have access to various business associations and their respective embassies, in addition to direct communication with government. Ultimately, this leads to a perception that various measures and reforms implemented by the government are at times either influenced by vested interests, insufficiently well designed or skewed towards targeted beneficiaries.

Figure 22: Weak constraints on government power lower Serbia's rule-of-law ranking

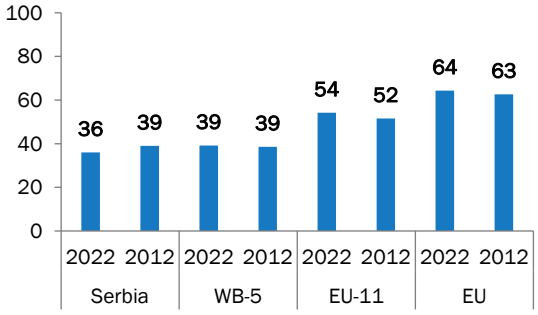
Rule of Law Index by sub-index, rank out of 140 countries, in 2022



Source: World Justice Project.

Figure 23: Corruption is perceived to be widespread with no improvements over time

Corruption Perception Index, score on a scale of 0 (worst) to 100 (best), in 2022



Source: Transparency International, authors' calculations.

Perception of corruption remains widespread. Serbia ranked 101st out of 190 countries in Transparency International's Corruption Perception Index 2022 – a historically low score. According to Transparency International, the main reasons for the worsening score are: a continued weakening of the rule of law; growing autocracy; failure to produce a new anti-corruption strategy since 2018; a lack of transparency; keeping the managers of most SOEs in "interim" status, which increases corruption risk; political influence on the judiciary; and pressure on those who disclose potentially corrupt practices.[82]

Decisive steps to tackle corruption and implement strong safeguards have yet to be taken. According to the EU, Serbia has undertaken some level of preparation in the fight against corruption, but needs to step up measures for the prevention and repression of corruption. At a local level, the EU estimates that there have been no tangible improvements in anti-corruption efforts. As a member of the Group of States against Corruption (GRECO) since 2003, Serbia has undergone five evaluation rounds focusing on different topics related to the prevention of and fight against corruption, with an uneven track record when it comes to implementation.[83] In its latest report, GRECO's recommendations focus on the top executive functions of

[78] Thirty-two per cent of those surveyed chose "effort and hard work" and 17 per cent chose "intelligence and skills". See EBRD (2016).
[79] See S&P Global Ratings (2022).
[80] See World Justice Project (2022). The World Justice Project Rule of Law Index measures how the rule of law is experienced and perceived around the world from different aspects (Figure 22). In 2022, Serbia ranked weakest in the area of constraints on government powers, in particular, on the indicator measuring whether government officials were sanctioned for misconduct (136th out of 140 countries).
[81] See European Commission (2023a).
[82] See Transparency International (2023).
[83] Group of States against Corruption and Council of Europe (2022).

central government and law enforcement. Serbia has adopted an operational plan for the prevention of corruption in particularly vulnerable sectors, covering public procurement, police, customs, local self-government and the privatisation process. However, it has yet to adopt an overarching national strategy and action plan, which should not just cover prevention but also tackle corruption in a systemic manner.[84]

Large foreign investors based in Serbia perceive improving judicial efficiency and the rule of law as the key reforms for long-term growth. In the annual business climate and investor confidence survey conducted by the American Chamber of Commerce in Serbia,[85] more than half of Chamber members cited the judiciary as having an adverse impact on their business. The primary issues related to the length of court cases, lack of adequate knowledge and specialisation of judges, and inconsistent application of case law.[86] The current legal framework does not provide sufficiently strong guarantees against potential political influence of the judiciary,[87] and the appointments and promotion of judges and prosecutors suffer from similar perception challenges to the civil service: a lack of transparency and merit-based system of appointments and career advancement.

Increasing the use of commercial mediation as a dispute resolution mechanism could alleviate some pressure on the courts. Efficiency of the courts in resolving the backlog of cases has improved significantly since the implementation of the National Strategy for Reforming the Judiciary 2013-18 and a programme for resolving backlogs of court cases. However, the pace of the Serbian judicial system still lags the EU average, particularly when it comes to resolving criminal cases of first instance, the average time needed to resolve administrative cases of first instance and digitalising processes, data management and communication.[88] Few avail of commercial mediation as a dispute resolution mechanism. For every 3,121 cases received by the commercial courts in Serbia, only 1 dispute is resolved in mediation (that is, 0.03 per cent).[89] The Serbian courts received 4.2 civil and commercial cases per 100 inhabitants in 2016, compared with an average of 2.5 cases in the 47 member states of the Council of Europe.[90]

The persistently high informality rate attests to unresolved bureaucratic complexities and a high administrative burden.

The government has taken important steps to improve the business environment by alleviating the administrative burden in recent years. These include issuing construction permits, starting a business, reporting and paying certain taxes and contributions, shortening the time for value-added tax refunds and better enforcing contracts. A strong focus on reducing informality in recent years has added significantly to budget revenues by increasing tax collection and improving the efficiency of business inspections through the establishment of e-Inspector, a digital platform to ease the work of all business inspections. Inspection control has been enhanced and the reporting of irregularities made easier by the establishment of a unique, effective and user-friendly contact centre for reporting irregularities.

Digitalisation played a big role in cutting red tape; advancing the digital agenda remains a top priority for government. Digitalisation holds great potential when it comes to improving governance, as digital solutions help boost transparency and efficiency, can help diagnose and resolve potential bottlenecks in public services and can drastically reduce the scope for informal payments. The government's most recent attempts to simplify administrative procedures were supported by strong digitalisation efforts in parallel. An important milestone was achieved in mid-2021 with the establishment of an online registry of all business-related administrative procedures at central level. The registry comprises more than 2,200 administrative procedures, each with detailed information. As a result, the provision of digital government services in Serbia has increased dramatically since 2015 and Serbia is now among the regional leaders in e-government.[91] The reform continues with a view to further optimisation, streamlining and simplification of administrative procedures, including digitalisation, which should cut time and costs significantly for businesses. Despite its good progress, however, Serbia still needs to adopt and harmonise a number of regulatory acts to support its reforms and enable full implementation.

Serbia's persistently high level of informality attests to lingering bureaucratic red tape. Estimates of the size of the shadow economy in Serbia range from 15 per cent to 30 per cent of GDP,[92] the latter being

[84] See European Commission (2022a).
[85] See American Chamber of Commerce in Serbia (2022). The 10th Lap Time Survey includes responses from 160 member companies, of which 33 per cent are large companies, 30 per cent are medium-sized companies, 20 per cent are small firms and 8 per cent are micro enterprises.
[86] See American Chamber of Commerce in Serbia (2022).
[87] See European Commission (2021).
[88] See Council of Europe European Commission for the Efficiency of Justice (2022).
[89] See EBRD and International Development Law Organization (2021).
[90] Ibid.
[91] See EBRD (2021a).
[92] See Arsić, Ranđelović and Altiparmakov (2018).

around one-sixth higher than the central and eastern European (CEE) average and nearly 50 per cent higher than the European average.[93] According to survey data, Serbian businesspeople estimate that every fifth company is unregistered and that 10 to 30 per cent of revenues are untaxed.[94] The International Labour Organization (ILO) estimated in 2019 that informal employment accounted for close to 20 per cent of employment.[95] While this is partly due to the still fairly large agricultural sector, the construction industry is also seen as particularly vulnerable to informality. This has repercussions for Serbia's private sector – on average, every fourth medium-sized company and every fifth smaller company perceives practices of competitors in the informal sector to be the top constraint on the business environment, while large companies are not as affected.[96] Continuous work on institutional quality, governance and business climate, as well as improvements in the quality and accessibility of public goods and services, are needed to reduce the relative profitability of working in the shadow economy and increasing the willingness of firms to comply with regulations.[97]

Labour legislation seems to be a particularly problematic area. Administrative procedures associated with the obligatory registering of workers remain overly complex, time-consuming and insufficiently transparent. Fiscal levies on salaries are high: while the average level of taxes and wages in Serbia is below that of its regional comparators, tax contributions on average and below-average salaries are significantly higher. Furthermore, tax relief for dependent family members is not well regulated.[98] Addressing this disparity would help to bring down the level of informality and deal with other socioeconomic consequences, such as income inequality.

Unresolved property ownership rights are another challenge within the business environment and a major obstacle to investment. These tend to involve difficulties in legalising certain property assets, prolonged property disputes, extremely complex procedures on the conversion of land due to outdated urban and spatial planning, and inefficiency and a lack of transparency when it comes to the cadastre. In addition, privatised (formerly state-owned) businesses face major issues, as they are only allowed to use, rather than own, privatised property. This creates numerous risks related to expropriation and an inability to obtain construction permits, limiting (domestic) business investment.

The unpredictability of para-fiscal charges are a significant problem for both domestic and foreign investors. Despite improvements to the tax environment, para-fiscal charges remain numerous and non-transparent, undermining the predictability and stability of Serbia's tax system.[99] Resolving the problem will require a holistic approach to strengthening public institutions and bolstering overall policy coordination.

Governance of SOEs needs to be improved

The regulatory framework governing SOEs in Serbia is complex and fragmented. The primary laws that apply to SOEs are general corporate law (Law on Business Entities) and the Law on Public Enterprises. These apply to public enterprises, non-corporatised SOEs and, to a certain extent, SOEs incorporated as joint stock or limited liability companies that perform services in the public interest. These two laws set different rules on certain key governance issues, such as the authority of the state as owner, the powers and responsibilities of the (supervisory) board and the appointment of the chief executive officer (CEO) and senior management.

The responsibilities of supervisory boards do not seem to be defined in line with best practices and boards seem to lack certain key functions. All SOEs subject to the Law on Public Enterprises are required to establish a supervisory board. However, there does not seem to be a well-regulated process for identifying suitable candidates for board membership, and the authorities do not tend to adhere to nomination policies to ensure the most appropriate board composition. Board responsibilities do not seem to include oversight of environmental, social and governance (ESG)/climate-related risks and opportunities. The law requires SOEs to establish audit committees. However, with just one committee member coming from the board, they cannot necessarily be seen as board committees thus not contributing to better oversight decision-making of the boards.

The process for appointing CEOs of SOEs is rarely used in practice and is in need of an overhaul. SOE boards have no role in identifying and appointing the CEO of their institution. Rather, the Law on Public Enterprises includes a public selection process, with the final decision on the appointment made by the

[93] Ibid.
[94] See Government of the Republic of Serbia (2023).
[95] ILO (2019).
[96] See World Bank, EBRD and EIB (2019).
[97] See Arsić, Ranđelović and Altiparmakov (2018).
[98] See Fiscal Council (2021).
[99] See OECD (2022).

government. In practice, however, this process rarely plays out,[100] and CEOs of key SOEs are appointed by the government for interim mandates, with a tenure exceeding the limits set by the law. The share of acting senior positions in public administration, including directors of SOEs, was 55 per cent per cent as of June 2022.[101] This issue has been widely recognised as one of the key deficiencies of the current framework.[102]

The internal control frameworks and non-financial disclosures of SOEs could be improved. SOEs are required to have internal audit units but the head of unit is appointed and dismissed by the CEO. Only a minority of companies disclose their articles of association, the minutes of the general shareholders' meeting, supervisory board members' qualifications, and board and audit committee activities on their websites or in their annual reports.

SOE reform is an important policy objective for the Serbian authorities. In April 2021, the government of Serbia adopted the ownership and management strategy of business entities owned by the Republic of Serbia SOE Ownership and Governance for the period 2021-27, which sets out Serbia's state ownership policy, as well as a path for the reform of SOE ownership and governance arrangements.[103] Referencing international best practices and, in particular, the OECD Guidelines on Corporate Governance of State-Owned Enterprises,[104] the strategy recognises weaknesses in the existing regulations and practices and specifies the reform measures needed to align with best practices. An action plan for implementing the Strategy in 2021-23 was adopted by the Serbian government in June 2021, setting out reform activities in more detail.[105]

Box: Main characteristics of the Strategy for SOE Ownership and Governance 2021-27

To address identified issues, the Strategy is based on three key pillars. It adopts a multi-pronged approach focusing on institutional design for state ownership, the harmonisation of laws, and improvements in governance standards and practices of SOEs. It hones in on the following key topics:

- **Centralisation of the ownership function at the Ministry of Economy.** In addition to acting as the representative of the owner at shareholder meetings (except for electricity and gas generation companies), the ministry will have a proactive coordinating role (between SOEs, line ministries and other ministries) in intragovernmental decision-making processes, to make SOEs more efficient and coherent. It will also have monitoring responsibilities, which will require the strengthening of current ministry resources.
- **Development of a unified legal framework for all SOEs and the gradual corporatisation of public enterprises.** The new legal framework should provide harmonised rules on exercising the ownership function, as well as minimum governance for both corporatised SOEs and public enterprises. The country's remaining public enterprises are expected to be corporatised by 2027.
- **Strengthening governance requirements for all SOEs**, including rules on the appointment of CEOs (general managers) and supervisory boards, harmonised requirements for audit committees and internal control functions, and setting key performance indicators and clear expectations for all SOEs.

The details and full effects of these reforms, however, have yet to be seen. The action plan ran until the end of 2023. So far, there is little information on the progress of these measures, with the centralised database and establishment of coordination mechanisms within government the only tangible measures so far. The authorities are currently working on the new law on ownership management for SOEs, which is also a structural benchmark under the IMF SBA.

[100] See Šemić (2022).
[101] See European Commission (2022a).
[102] See European Commission (2021).
[103] See Government of the Republic of Serbia (2021a) (in Serbian).
[104] See OECD (2015).
[105] See Government of the Republic of Serbia (2021b) (in Serbian).

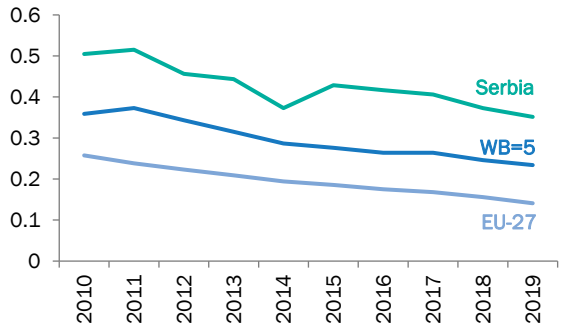
A green transition hinges on the reform of the coal-dependent energy sector

Green ATQ score = 5.51/10

In Serbia, a green transition hinges on the reform of the lignite-dependent energy sector. As both domestic and global risks challenge the status quo, the country will need to accelerate investment in sustainable and less-polluting energy sources while enhancing energy efficiency measures to ensure a lower carbon footprint, better health outcomes and compliance with EU standards. Development of a cohesive strategic framework on decarbonisation and a regulative environment conducive to investment in renewables is in progress. Pollution is exacerbated by an outdated district heating system dependent on fossil fuels, as well as underdeveloped waste and wastewater management practices. In terms of climate change impact, Serbia is especially prone to drought and flooding, with agriculture the most vulnerable sector.

Figure 24: The carbon intensity of the economy is high ...

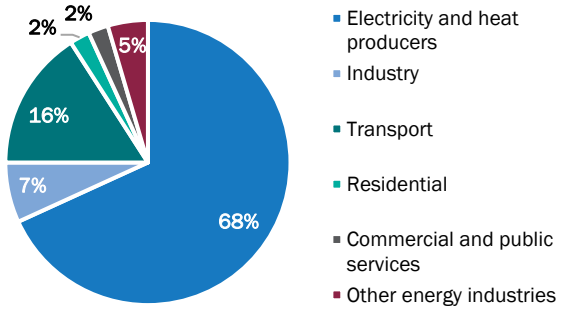
CO_2 emissions in kg per ppp $ of GDP



Source: Climate watch.

Figure 25: ... driven by electricity and heat producers...

CO_2 emissions from fuel combustion by sector, 2019



Source: IEA.

High levels of greenhouse gas emissions are a serious, long-standing concern. Total greenhouse gas (GHG) emissions have changed little over the past 20 years and, in per capita terms, were some 13 per cent higher than EU levels in 2019.[106] Carbon dioxide emissions – with carbon the most common GHG emitted by human activity – are the main culprit. CO_2 emissions per capita were, as of 2020, 23 per cent higher than EU levels, making Serbia one of the top 10 most carbon-intensive economies in the EBRD regions. This stems from the high emissions of electricity and heat producers, which accounted for over two-thirds of carbon emissions in 2019.[107] Though broadly declining in line with global trends, CO_2 emissions remain high, fuelled by higher economic output. In GDP terms, the carbon intensity of the Serbian economy is more than twice that of the EU, indicating that its economic growth contributes significantly more to emissions, as its economic output has a higher carbon impact.[108]

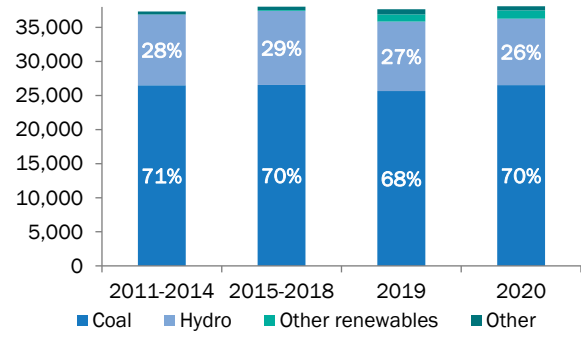
Carbon emissions are driven by electricity and heat generation. Serbia's energy supply is dominated by coal due to its lignite-based electricity and heat production. Electricity generation from coal inevitably harms the environment, as the combustion process emits highly polluting agents, which in turn affect air, soil and water quality. Serbian coal generation capacity is largely outdated, with the bulk of capacity dating from the 1970s, and powered by high-sulphur-content lignite, meaning that sulphur dioxide (SO_2) and particulate matter (PM) emissions are, by default, higher than similar plants in the EU.[109] These factors, exacerbated by persistent underinvestment, a lack of pollution-controlling technology and increased usage of other energy-generating products, such as heavy oil, to offset the declining quality of coal, have resulted in Serbian thermal power plants being significantly worse pollutants than those in the EU. In 2019, a single Serbian thermal power plant, TPP Nikola Tesla, emitted more than three times more sulphur oxide in 2021 than Bulgaria, a country with the same population as Serbia and some of the most intense levels of SO_2

[106] See World Bank Word Development Indicator database (WDI).
[107] See International Energy Agency data.
[108] Climate Watch data, sourced from the World Bank WDI.
[109] See Jovanović, Popović and Berishaj (2021) and European Union (2022).

pollution in the EU.[110] To date, only one out of 17 coal plants, Kostolac B1-B2, has a flue gas desulphurisation facility in place, used to remove sulphur oxides (SO_x) from the exhaust gases of fossil-fuel power plants. Though the installation had started to show some results in 2021, four years after the works had been declared finished, it has not yet been granted an operating permit by the regulator and the plant's emissions are still well above the National Emission Reduction Plan (NERP) ceiling.[111]

Figure 26: ... which are largely coal based ...

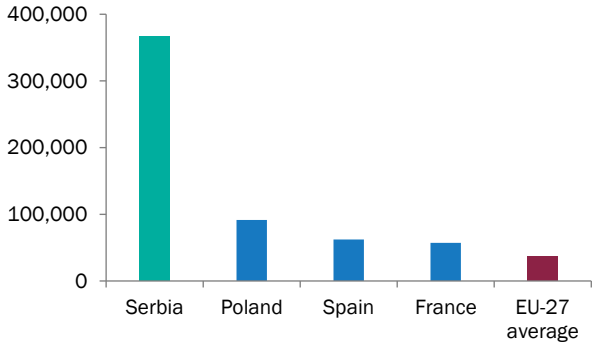
Electricity generation by source, GWh



Source: IEA.

Figure 27: ... and, together with industry, significantly more polluting than in the EU

SO_x emissions of largest industrial complexes and power plants on a national level, 000s of tonnes, 2020



Source: EEA.

Pollutant emission levels regularly breach limits agreed with the Energy Community Secretariat.[112] The NERP represents a transition from the Large Combustion Plants Directive (LCPD)[113] to the new Industrial Emissions Directive,[114] whereby emission limit values are determined at national level rather than at power-plant level, giving the energy sector flexibility to align with the standards and plan the dynamics of necessary investment. The Serbian NERP sets out annual emission ceilings for SO_2, nitrogen oxides (NO_x) and dust for each year to 2027 (when levels should harmonise with the limits set out under the Industrial Emissions Directive) for the 14 Serbian plants included in the plan. In 2021, Serbia's emissions under the LCPD were 4.6 times higher than the ceiling prescribed by the NERP adopted at the beginning of 2020.[115] Due to the country's repeated non-compliance with the NERP ceilings and lack of clear trend towards compliance in the coming years, the Energy Community Secretariat launched infringement procedures against Serbia in March 2021. Out of the four large combustion plants operating under the opt-out regime, TPP Morava has already reached its limit of 20,000 hours, for which the Secretariat also opened infringement proceedings. The end of 2023 marks the end of this implementation alternative for all other opted-out plants. These units cannot be operated after 1 January 2024.[116]

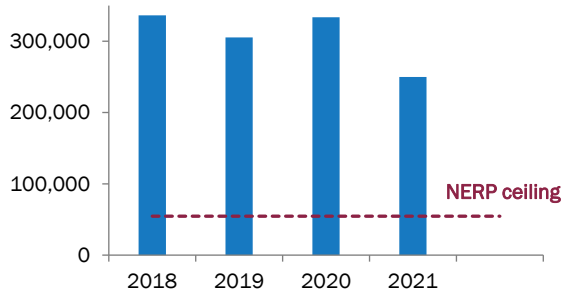
Ambient air pollution is a leading environmental health risk in Serbia, as it is in all of the Western Balkans countries. A combination of coal-powered thermal power-plant emissions, a transport sector dominated by out-of-date vehicles, waste dump sites and poorly regulated industrial activity contribute to a high concentration of $PM_{2.5}$, often far exceeding World Health Organization guideline values.[117] Serbia's annual mortality rate, measured as premature deaths per 100,000 inhabitants, attributable to $PM_{2.5}$, the particulate matter causing the brunt of the harm, is more than double the EU-27 average and the second highest among the Western Balkans countries, alongside North Macedonia and below Bosnia and Herzegovina, as of 2019.[118]

[110] See EIONET Central Data Repositoryc, available at: https://cdr.eionet.europa.eu/ and the Eurostat database available at: https://ec.europa.eu/eurostat/databrowser/view/env_air_emis/default/table?lang=en&category=env.env_air.env_air_ai.
[111] See CEE Bankwatch Network (2022).
[112] The Energy Community Secretariat is an international organisation established by the EU and a number of non-EU countries, largely in south-eastern Europe, which aims to create an integrated energy market in compliance with the EU acquis and in line with environmental standards.
[113] The Large Combustion Plants Directive was introduced by the European Commission in 2001 and specifies emission limit values for large combustion plants. Each plant can individually comply with a ceiling, or an overall emission reduction can be achieved through a NERP. In case of non-compliance, the Energy Community Secretariat takes legal action.
[114] Adopted in 2010, the Industrial Emissions Directive sets out, among other measures, stricter EU-wide emission limits for selected pollutants and introduces inspections.
[115] See CEE Bankwatch Network (2022).
[116] See Energy Community Secretariat (2023).
[117] See World Health Organization Regional Office for Europe (2019).
[118] See González Ortiz, Gsellla, Guerreiro, Soares and Horálek (2021) and European Union (2022).

The overall vision for decarbonisation remains unclear. The energy transition process has yet to be determined through the government's adoption of key strategic documents, such as the National Energy and Climate Plan (NECP) and the Energy Development Strategy. The NECP is a comprehensive scenario-based plan adopted by EU member states, outlining specific policies and measures on energy efficiency, renewables and GHG emission reductions for 2021-30, alongside projections to 2050. The preparation of the NECP has been subject to multiple delays due to the energy crisis that began in the 2021-22 heating season, as well as national elections in 2022. In parallel, Serbia is developing its national Energy Development Strategy to 2040. The country committed to decarbonisation in its updated Nationally Determined Contribution, submitted to the United Nations Framework Convention on Climate Change in August 2022, in which it set the goal of reducing GHG emissions by 33 per cent from 1990 levels by 2030, reaffirming the commitments it made as a signatory of the Paris Agreement and the Sofia Declaration. While the country's commitment to a carbon-neutral economy by 2050 is welcome, the anticipated set of strategic documents will determine the trajectory to this goal.

Figure 28: Serbian power plants regularly breach emission ceilings ...

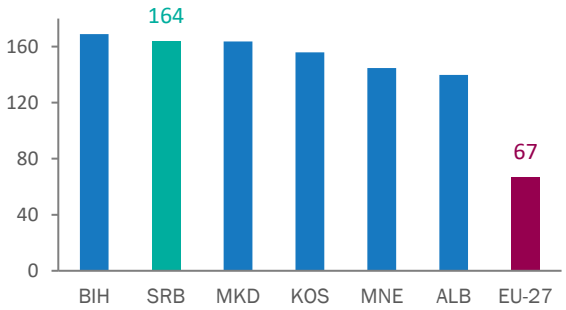
SO_2 emissions of 14 large combustion plants under the NERP, tonnes



Source: EIONET and CEE Bankwatch.

Figure 29: ... causing air pollution and affecting human health.

Mortality rate attributed to $PM_{2.5}$ particles per 100,000 people in 2019



Source: EEA (2022).

While estimates of potential power generation from renewables are significant, current levels are low. As of 2021, around 60 per cent of the available hydro, wind and solar potential (non-combustible renewables) that could be securely absorbed by the electric power grid in its current form is utilised for electricity production. Out of the 35,656 GWh of electricity produced in Serbia in 2021, some 13,000 GWh was produced from renewables (largely hydro), while the official estimate of technically usable electricity generation from renewables is around 21,000 GWh.[119] This means that electricity production from renewables could rise by 40 per cent from current levels without significant further investment in renewable energy grid capacity.[120] Estimates of potential electricity generation from renewables increase considerably when potential investments in additional storage facilities and pumped storage hydropower plants (Bistrica and/or Djerdap 3) are factored in.[121] Although the electricity sector has been scaling up supply from renewable sources since 2016, electricity from coal continues to account for the lion's share of supply, at 70 per cent, followed by hydropower at 26 per cent and other renewables (including wind, biofuels, solar) at just 3 per cent. Electricity is also the sector that has seen the most investment in renewables. As of 2020, two-thirds of all heat was generated from natural gas, 90 per cent of which was imported, followed by coal and oil, at 22 per cent and 10 per cent, respectively, despite the significant biomass potential recognised in the government's strategic documents.[122]

Scaling up renewables is a matter of energy security, not just green transition. While power generation from domestic coal was seen as an advantage during the energy security crisis triggered by Russia's invasion on Ukraine, its reliability as a core source of energy came into question during the energy crisis of winter 2021-22, caused by the mismanagement of the state-owned electricity company Elektroprivreda Srbije (EPS). The scaling up of investment in renewables and energy efficiency measures became central to achieving energy security, creating a greater sense of urgency in finalising the NECP and national energy

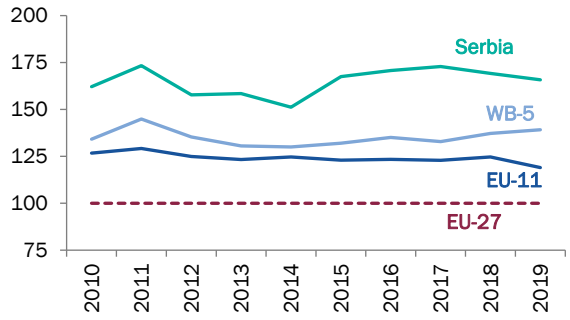
[119] See Energy Agency of the Republic of Serbia (2022) and Ministry of Mining and Energy of the Republic of Serbia (2016) for estimates of potential electricity generation from renewables.
[120] See Ministry of Mining and Energy of the Republic of Serbia (2016).
[121] See Dragović, Milovan and Riznić (2019).
[122] See IEA (n.d.) and Ministry of Mining and Energy of the Republic of Serbia (2016).

strategy to clarify the long-term vision. The development of a legislative framework for renewables has been particularly lengthy, as balancing significant renewable electricity capacity poses a challenge for the financially stretched electricity-generating SOE, EPS.

A just transition should be integral to the country's green transition. Serbia has a long tradition of coal mining, with most coal production centred in two basins, Kostolac and Kolubara, which produce lignite and supply domestic thermal power plants. In 2021, as many as 14,190 people worked in coal mining, while a total of 20,642 were employed by state-owned power company EPS, which manages the country's largely coal-based electricity generation.[123] The transition to a low-carbon economy is set to bring major social, economic and environmental benefits to Serbia. A "just transition" means that both the benefits and associated costs should be distributed equally across society. Workers in coal mines and power plants, in addition to entire communities living in towns nearby, are set to be negatively affected as decarbonisation efforts advance. While various mitigation options are available, such as early retirement and compensation schemes, a particular focus should be on regional economic diversification efforts and the reskilling of affected workers to ensure minimum job losses.

Figure 30: Energy intensity is high …

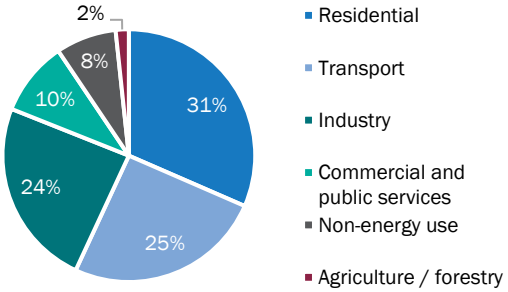
Total energy supply, in ppp $ of GDP



Source: IEA, authors' calculations.

Figure 31: … and energy efficiency is part of the solution, particularly in the residential sector

Total final energy consumption by sector, 2019



Source: IEA.

Energy efficiency is a big cost-saving opportunity for Serbia, particularly in the residential sector. The Serbian economy is 53 per cent more energy intensive than the EU economies, on average, suggesting substantial potential for efficiency gains.[124] Since 2008, the residential sector has been driving energy consumption, accounting for nearly a third of total final consumption in 2019 compared with less than a quarter, on average, in EU countries.[125] The energy efficiency of the residential sector is impaired both by a high share of poorly insulated older buildings[126] and insufficient incentives for better insulation in new builds, driven by low utility prices. Electricity prices for households in Serbia were less than a third of those in the EU in the first half of 2022. After the residential sector, the transport sector and industry together make up half of total final energy consumption.[127] An out-of-date vehicle fleet increases the energy intensity of the transport sector, while the inefficiency of industry is most frequently attributed to poor regulation and insufficient enforcement of environmental standards.[128]

Rehabilitation and decarbonisation of the district heating sector is needed to achieve energy savings and reduce air pollution. The district heating sector in Serbia consists of 58 operating systems with a total installed capacity of 6,975 MW and 6,663 GWh of supplied heat annually, of which 81 per cent is distributed to households and 19 per cent to commercial and public buildings. Heat losses on individual district heating systems range from 7 per cent to 30 per cent. The average age of heat production plants in Serbia is 28 years. The district heating sector is almost entirely (99.2 per cent) dependent on fossil fuels (75 per cent natural gas, 8.5 per cent heavy oil, 15.5 per cent coal and only 0.8 per cent biomass). The sector emits over 1.7 million tonnes of CO_2e annually and a significant amount of air pollutants (2,833 tonnes of SO_2 and 364 tonnes of PM). [129]

[123] Statistical Office of the Republic of Serbia (n.d.b) and EPS (2022).
[124] As of 2019. The energy efficiency of the economy is measured as total energy supply by GDP in ppp terms. See IEA database.
[125] See IEA database and Eurostat.
[126] See Šumarac, Todorović, Đurović-Petrović and Trisovic (2010).
[127] See IEA database.
[128] See European Commission (2021).
[129] See KeepWarm (n.d.).

Water pollution is also high. There are many causes of water pollution, with pollution by nitrogen and phosphorus coming from the energy sector, public waste and wastewater companies, and the chemical and mineral industries.[130] Inadequate storage and the disposal of industrial by-products, untreated industrial and municipal wastewater, drainage water from agriculture and leachate from landfill are difficult to curb, as technology is frequently outdated and pollution abatement installations are scarce, thanks to a dearth of public investment in environmental infrastructure. Anti-pollution legislation is limited, ineffective and lacking administrative capacity for enforcement, so does not provide incentives for economic agents to make the necessary investment. While its surface-water resources are relatively substantial, Serbia relies on water sources from outside its national territory, that is, large international rivers (the Danube, the Tisa and the Sava), and only 8 per cent of its surface water originates on its territory, lending even more importance to better alignment with EU environmental standards.[131]

Greening the economy requires improvements to municipal infrastructure, such as developing an adequate waste management system. In addition to major deficits in solid waste management infrastructure, Serbia lacks infrastructure for the treatment, disposal and storage of hazardous waste. Only six landfill sites out of around 3,500 comply with EU requirements, while more than 140 landfills and dumpsites have been deemed to pose high risks to the environment.[132] A lack of waste treatment and disposal infrastructure contributes to air, soil and river pollution. River pollution is further exacerbated by poor wastewater management.

Serbia is vulnerable to climate change impact, most notably drought and flooding. Serbia, like the rest of the Western Balkans region, faces a high likelihood of temperature increases. Climate change is most likely to affect Serbia in the form of drought, flooding and wildfires.[133] According to Serbia's Nationally Determined Contribution, updated in 2022, damages caused by climate change and extreme weather events in 2000-20 are estimated at a minimum of €6.8 billion, with the bulk of damage caused by drought and high temperatures. Individual events that wrought the most damage were the drought of 2012 (€2 billion) and the floods of 2014 (€1.7 billion), which displaced some 30,000 people.[134] The primary channel for the economic impact of climate change is agriculture, but energy production and water supply are set to be affected as well.

Much effort and financing is needed to make Serbia into a climate-resilient society and economy. Some of the most urgent measures include the construction of new irrigation systems; more efficient use of existing systems and the use of small multipurpose water accumulations; reforestation using climate-adaptable tree species and increasing the efficiency of water supply systems. [135] The draft Low-Carbon Development Strategy currently awaiting adoption aims to make Serbia a climate-resilient society, setting out the roadmap for reaching climate neutrality by 2030, with a view out to 2050. Improving the adaptability of the most vulnerable sectors – agriculture, forestry and water management – is both vital to achieving resilience to climate change impact and to achieving set GHG emission reduction targets.

[130] See European Commission (2022a).
[131] See Government of the Republic of Serbia (2020).
[132] See Embassy of Belgium in Serbia (2017).
[133] See USAID Climatelinks (2017).
[134] See European Union, Government of Serbia, United Nations Country Team in Serbia and World Bank (2014).
[135] See Government of the Republic of Serbia (2020).

Steady improvements in labour market outcomes in sharp contrast to inclusion challenges

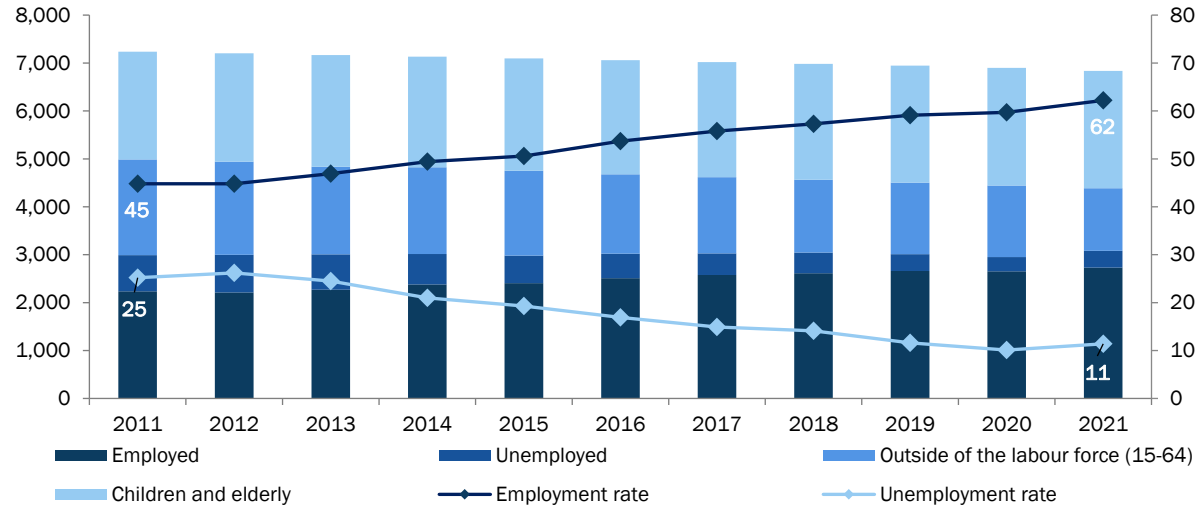
Inclusive ATQ score = 5.39 / 10

The labour market in Serbia has gone through marked structural improvements, with the country halving its unemployment rate and creating half a million jobs since 2011. Its steep population decline continues, however, driven by poor demographic trends, placing a burden on the working age population. Labour market outcomes for youth, though much improved, remain hampered by gaps in education, skills mismatches and a difficult transition from school to work. Though women are increasingly joining the labour market, there is still a stark difference between men's and women's labour force participation. To ensure no one is left behind in Serbia's transition to a market economy, better access to childcare services, digital infrastructure and municipal infrastructure is needed for all.

Labour market trends

Figure 32: Structural improvements in the labour market have been accompanied by a steady decline in population

Population (000s, left-hand side); employment and unemployment rate (percentage of working-age population, right-hand side)



Source: Statistical Office of the Republic of Serbia.

Serbia's labour market has seen impressive improvements over the past decade. The unemployment rate among the working-age population (15-64) was more than halved in the 10 years to 2021 (from 25.2 per cent to 11.4 per cent), with the labour force participation rate increasing by 10 per cent and the employment rate by 17 per cent. Labour market outcomes for women improved significantly, too, during the same period, with an increase in both labour force participation and employment led by women. Though the positive results are, to a certain extent, down to the shrinkage of the working age population as Serbian society ages, the structural improvements are illustrated by the creation of nearly half a million new jobs in the period from 2011 to 2021.[136] Still, structural challenges continue to plague the labour market, notably the persistent gender gap in employment and labour market participation and high youth unemployment.

The pandemic does not appear to have left a permanent mark on the labour market. The effects of the pandemic and subsequent economic rebound were reflected in an annual increase in both the employment and unemployment rates in 2021. In 2020, individuals who were unable to search for jobs or to start working due to preventative measures during the pandemic were not considered unemployed, but temporarily outside the labour force (inactive). Unwinding this temporary adjustment resulted in an annual increase in the unemployment rate in 2021.[137] The employment rate, too, increased as pandemic-related measures tapered off and economic activity recovered. The sizeable package of measures implemented by

[136] From 2011 to 2022, the number of employed people increased by 493,800.

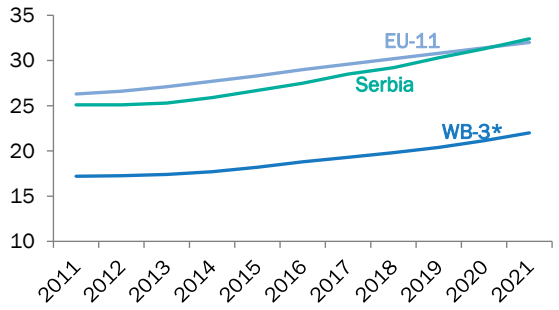
[137] See Statistical Office of the Republic of Serbia (2022a).

the Serbian government in 2020 to protect the economy from the effects of the pandemic included direct aid totalling a minimum net salary per employee for micro, small and medium-sized companies and half of a minimum salary per employee for large companies, as well as the deferral of income tax and social security contributions. These measures were given to companies on the condition that they did not lay off more than 10 per cent of their workforce during the state of emergency. These support measures, alongside a relatively minor pandemic-induced GDP contraction of just 0.9 per cent, appear to have minimised damage to the labour market, as 2021 and 2022 saw continual improvements in Serbia's activity, employment and unemployment rates compared with 2019. In contrast, unemployment rates in two of five Western Balkans countries (Bosnia and Herzegovina and Montenegro) and in the EU-27, on average, were higher in 2021 than they were in 2019.[138]

The share of long-term jobseekers is high. Half of Serbia's unemployed have been looking for a job for over a year. The long-term unemployment rate was 4.9 per cent in 2021, compared with 2.8 per cent in the EU.[139] Regional inequalities are evident, with the long-term unemployment rate for regions south of Belgrade at 7 per cent compared with 3 per cent in the capital and northern region. Women are more likely to be unemployed for longer periods than men. The long-term unemployment rate is highest among those with low levels of educational attainment.[140]

Figure 33: The old age dependency ratio has converged on EU-11 levels

The ratio of people aged 65+ compared with the working age population, per cent

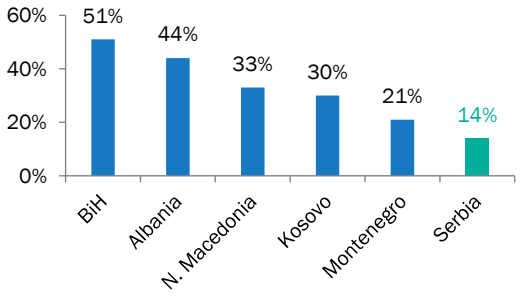


Source: Eurostat.

Note: *WB-3 refers to Albania, Montenegro and North Macedonia.

Figure 34: Serbia has the lowest estimated emigrant stock in the Western Balkans

Share of population, per cent



Source: United Nations Department of Economic and Social Affairs.

The population is declining … According to the United Nations, Serbia's population has declined by 0.4 per cent annually on average over the past decade and is expected to shrink by a fifth from the end of 2021 to 2050. The projected decline is the highest in the Western Balkans region, with the populations of the other five countries expected to decline by 9 per cent on average over the same period.[141] The net migration rate is estimated to have been mildly positive over the past decade, with the population increasing 0.8 per cent on the back of immigration. The United Nations expects this the trend to have turned since 2022.[142] The population decline to date, therefore, has been natural (more deaths than births) rather than due to emigration, with the population naturally declining by 6 per cent in the past decade alone.[143]

… and ageing at a similar speed to richer European countries. Serbia's aging population has caused the working age population to shrink by 12 per cent in the period, with the old age dependency ratio[144] increasing from 25.2 per cent in 2011 to 33 per cent in 2021 compared with 21-24 per cent in North Macedonia, Albania and Montenegro and 32.5 per cent in the EU.[145] The Serbian population has become older than its European neighbours, while still not reaching comparable living standards. As the population

[138] Labour force survey results from national statistics offices and Eurostat. Please note that for Kosovo, results for the first half of 2021 were compared with the first half of 2019 due to the unavailability of annual data for 2021.
[139] The long-term unemployment rate refers to the share of the workforce aged 15-74 that has been searching for work for 12 months or more. See Eurostat.
[140] See Eurostat.
[141] See UNDESA (2022).
[142] See Statistical Office of the Republic of Serbia database and United Nations Population Division data portal.
[143] See Statistical Office of the Republic of Serbia database.
[144] The ratio of the number of people aged 65 and over (the generally economically inactive population) to the number of working age people (aged between 15 and 64).
[145] See Statistical Office of the Republic of Serbia (2022) and Eurostat database.

ages, fewer workers are entering the labour force, while more workers are retiring. A rise in accumulated pension obligations has necessitated increases in taxation and public debt, placing a burden on the working age population and reducing the economy's competitiveness. Alleviating some of the economic burden of the ageing population and increasing the standard of living for the older population would require raising pensioners' savings ahead of retirement, boosting labour productivity, increasing labour force participation, attracting more immigration, promoting lifelong learning or increasing the retirement age.[146]

Although Serbia faces emigration challenges similar to the other Western Balkans countries … About 500,000 Serbians emigrated to OECD countries between 2008 and 2017 and some 14 per cent of people born in Serbia live abroad. While all of the Western Balkans countries face emigration pressures to a certain degree, the estimated share of emigrant stock to total population varies widely from country to country, ranging from 51 per cent in Bosnia and Herzegovina, 44 per cent in Albania, 33 per cent in North Macedonia and 30 per cent in Kosovo to 21 per cent in Montenegro and 14 per cent in Serbia.[147] In 2016, Serbia had the highest proportion of elderly emigrants (65+) in the region, at 17 per cent, evidence of the long-standing nature of its emigration patterns. Similarly to the other Western Balkans economies, migrants from Serbia are more likely to have a lower level of education than the average population; the share of migrants with low and medium educational achievement levels is 78 per cent, with men most likely to be working in construction and related trades and women in the services sector.[148] At a fairly consistent 5 per cent of GDP, on average, over the past 15 years, remittances are substantial, though relatively low compared with other countries in the Western Balkans.

… the country benefits from its position as a regional hub. While there are no official figures on recent migration flows, studies have found the popular public perception of "brain drain", or high emigration rates of highly skilled youth, not to be supported by facts. Rather, evidence from 2015-19 suggests a "brain gain" in Serbia, as a large portion of graduates return after completing tertiary education elsewhere, alongside a sizeable inflow of university students and skilled workers from other Western Balkans countries thanks to Serbia's position as the largest regional economy.[149] Per the population census of 2011, the largest share (89 per cent) of immigrants to the country came from the other countries of the former Yugoslavia. Recent migration patterns, in turn, show an increase in medium-skilled vocational education and training (VET) graduates emigrating relative to other skill levels, owed to an especially high wage premium for such qualifications in EU countries.[150] EU countries are consistently the most popular destination for Serbian nationals, attracting roughly two-thirds of emigrants. As at 2021, 38 per cent of migrants headed to Germany, although this figure includes a sizeable portion of seasonal workers.[151]

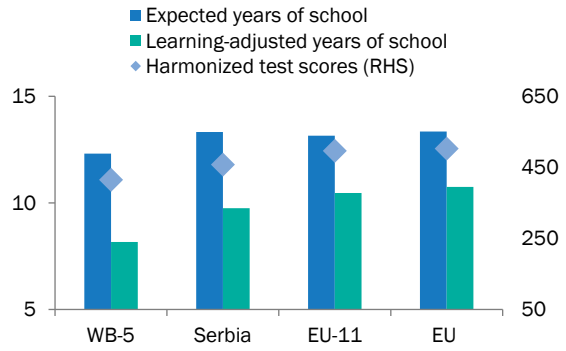
The war on Ukraine has resulted in higher-than-usual immigration. After the start of the war on Ukraine in February 2022, Serbia's open borders to Russia have made it a destination for thousands of Russians, including some fleeing sanctions or conscription and others opposed to the Russian government.[152] As of September 2023, Serbia remains one of the few European countries not to have imposed sanctions on Russia and to have maintained direct flights to and from the country. While Russian citizens' arrivals are estimated around 123,500 in 2022 (close to 70 per cent more than in 2021), their overnight stays increased two and half times year on year in the same period to nearly 600,000 nights.[153] In 2022, 1,034 companies and 3,244 entrepreneurs founded by Russian owners were registered in Serbia, compared with just 83 companies and 76 entrepreneurs in 2021.[154] The highest portion of these companies offer information and communications technology (ICT) services. The government of Serbia decided in June 2022 to offer tax rebates to companies that hired foreign workers earning more than RSD 300,000 before tax (upwards of €2,500, over four times the average wage) who register their residence in Serbia and perform jobs in which there are labour shortages. The Commissariat for Refugees and Migration has estimated the inflow of Ukrainian refugees applying for residence at some 26,000 people in the first year after the start of the war on Ukraine.[155]

[146] See EBRD (2018).
[147] See United Nations Population Division (2020).
[148] See OECD (2022c).
[149] See wiiw (2021b) and OECD (2022c).
[150] See Arandarenko (2021).
[151] See Eurostat database. The figure is based on the residence permits.
[152] See Ernst (2023).
[153] See Statistical Office of the Republic of Serbia (2023e).
[154] See Tanjug (2023).
[155] See Commissariat for Refugees and Migration of Serbia (2022).

Education and youth

Figure 35: Education gaps are reflected in test results despite high attainment …

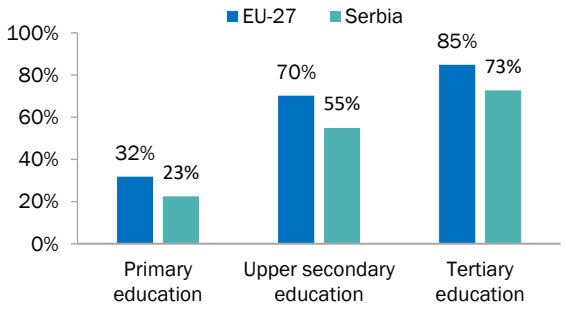
Years of schooling and harmonised TIMSS-equivalent test scores, 0-650, 2020



Source: World Bank.

Figure 36: … and in the difficult transition from school to work

Employment rates of young (15-34) recent graduates (1-3 years) based on educational attainment, 2021



Source: Eurostat.

Quality of education trails that of the EU, putting youth at a disadvantage. Educational attainment is high in Serbia, with 79 per cent of the working age population having completed upper secondary education or more, above the EU average of 75 per cent.[156] However, while expected years of schooling for Serbian students are nearly the same as for those in the EU, learning-adjusted years of schooling are lower, despite being above the WB-5 average.[157] Taking into account the country's income level, Serbia performs well on international student assessments such as the Trends in International Mathematics and Science Study (TIMSS) and the Programme for International Student Assessment (PISA), scoring highest among the Western Balkans countries, but again trailing EU comparators. Evidence, therefore, suggests that the quality of education lags that of EU comparators, despite the relatively high educational attainment levels. There are also significant disparities in performance across different subgroups of the population, with disadvantaged groups, such as students from a lower socioeconomic status, from rural areas[158] and minorities[159] performing significantly worse in standardised tests.

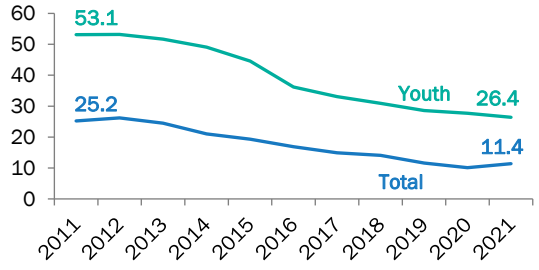
VET programmes are a frequent choice for the Serbian youth. Enrolment in VET programmes is higher across the Western Balkans countries than in the EU (56 per cent compared with 49 per cent). VET programmes are especially popular in Serbia, where they account for 74 per cent of total enrolment in upper secondary schooling. Evidence from OECD countries suggests that while students enrolled in vocational programmes underperform those enrolled in general programmes, in standardised tests such as PISA, employers say the skills of VET graduates are significantly more relevant.[160]

Better education outcomes adjusted to workforce needs are key to unleashing private sector potential. The employment rate of young people in Serbia who graduated one to three years ago was 60 per cent in 2021, compared with 74 per cent in the EU, according to Eurostat, suggesting that education does not equip youth with the skills required to make the transition from school to work.[161] Evidence further suggests that a lack of relevance in the educational curriculum contributes to skills mismatches. In the World Bank 2015-16 STEP survey, half of Serbian businesses agreed that education and training systems did not meet the skills needs of businesses.[162] Employers emphasised the need for "soft" skills linked to educational outcomes in addition to cognitive skills.[163] The international competitiveness of higher education is lacking, with curricula poorly linked to labour needs (the secondary school curriculum had not been updated for two decades prior to 2018), limited opportunities to gain practical skills and insufficient

[156] See Eurostat database.
[157] See World Bank (2020b). This is a symbolic illustration of the challenge, as the differences have not been tested.
[158] See World Bank (2019a).
[159] See OECD (2020) and World Bank and wiiw (2020).
[160] Ibid.
[161] See Eurostat.
[162] See World Bank (2019a).
[163] See World Bank and wiiw (2020).

Figure 37: Youth unemployment is more than double the working age unemployment rate

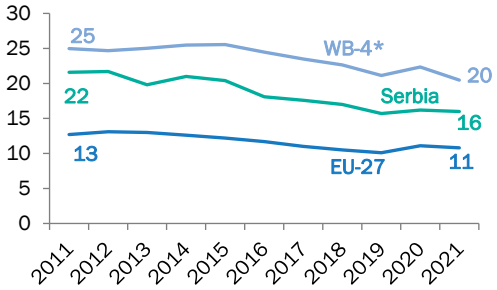
Percentage of youth (15-24) and working age (15-64) population



Source: Statistical Office of the Republic of Serbia.

Figure 38: The NEET rate is slowly converging on the EU level

Percentage of youth not in employment, education or training (15-24)



Source: Eurostat.
Note: The WB-4 average does not include Kosovo.

integration of universities into research and innovation.[164] On the private sector side, a dearth of on-the-job training may be an additional constraint.[165]

Emigration patterns are exacerbating the problem. Differences in education and employment patterns are more pronounced for ICT specialists than for other highly skilled professionals (such as lawyers or teachers) whose qualifications are less likely to be recognised abroad. This pattern is noticeable across emerging economies, including Serbia, where ICT students made up nearly 10 per cent of all graduates in the 2021-22 school year, but where ICT professionals accounted for less than 4 per cent of employment in 2021.[166] Across the EBRD regions and in Serbia, workers with disruptive tech skills are more likely to emigrate to advanced economies than those with business or specialised industry skills.[167]

The consequences of adverse trends are felt most strongly in labour market outcomes for youth. Although youth unemployment has fallen faster over the past decade than overall unemployment, it remains more than twice as high, with over a quarter of youth aged 15-24 unemployed in 2021 compared with less than 17 per cent in the EU. The not in education, employment and training (NEET) rate was 16.4 per cent in 2021 compared with an EU average of 10.8. Key challenges driving youth unemployment and the NEET rate, in addition to education gaps and skills mismatches, include a lack of support for young entrepreneurship, the prevalence of temporary jobs, a revolving door of internships and a difficult transition from higher education to work.

The government is taking important steps to improve educational and labour market outcomes for young people. The National Employment Action Plan for 2020 recognised youth unemployment as an issue and introduced a number of programmes to support the transition to the world of work, including "My first salary", whereby wages of workers entering the labour force with at least upper secondary education are paid out of the state budget for a nine-month period. Serbia endorsed the Western Balkans Declaration of 8 July 2021 on ensuring the sustainable labour market integration of young people, committing to take concrete steps to gradually establish and implement the Youth Guarantee scheme. Serbia prepared to establish the scheme by setting up an inter-ministerial task force in May 2021. The Strategy for the Development of Education in Serbia by 2030, adopted in 2021, establishes a plan of reforms to improve accessibility, quality, relevance and equity in higher education, including adult education institutions.

Unequal labour market outcomes

Serbia has improved its regulatory framework on gender equality. On paper, Serbia's laws and regulations on women's economic inclusion are very good. According to the Women, Business and the Law index, Serbia scores perfectly on all dimensions of the index, with the exception of pensions, as women can retire earlier than men.[168] A new law adopted in May 2021 requires state agencies to perform gender budgeting

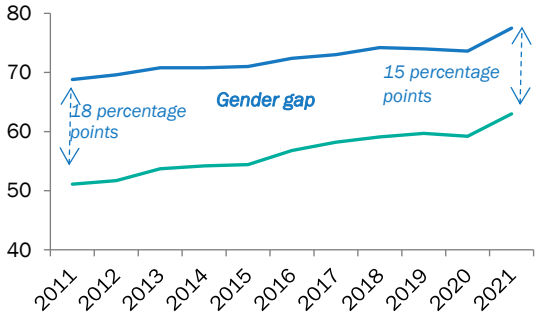
[164] See Kriechel and Vetter and (2019), World Bank (2019c).
[165] See more the "Competitive" quality in this report for more detail.
[166] See Statistical Office of the Republic of Serbia (2022f).
[167] See EBRD (2021a).
[168] See World Bank (2022b).

and places several obligations on public- and private-sector employers in terms of assessing their gender balance and identifying specific measures to achieve and monitor gender equality goals.

In practice, however, women have poorer labour market outcomes. Women have accounted for the bulk of labour-force growth over the past decade, with the female activity rate going from 51 per cent in 2011 to 63 per cent in 2021 and the gender gap shrinking by 3 percentage points. Despite women increasingly joining the labour market, however, there remains a stark difference between men's and women's labour-force participation, at 77 per cent and 63 per cent, respectively – a 14 percentage point gap. Women's lower participation rate explains the persistent gender gap in employment (calculated as the share of the employed working age population), which has remained at 14 per cent over the past decade.[169] The gender pay gap (spanning both the public and the private sector) was estimated in 2019 to be around 11 per cent, in line with the EU average, suggesting that, controlling for similar levels of education and work experience, women have to work an additional 40 days a year to earn as much as men.[170] Women held 40 per cent of parliamentary seats and 43 per cent of ministerial positions in 2021, according to the World Economic Forum's 2022 Global Gender Gap Report.[171] Under-representation is significant in the professional world, where women account for 44 per cent of professional and technical workers, but just 31 per cent of legislators, senior officials and managers.[172] Fourteen per cent of firms are majority female owned, while just 18 per cent have a female top manager, although 29 per cent have a stake in ownership.[173]

Figure 39: The gender gap in labour market participation persists

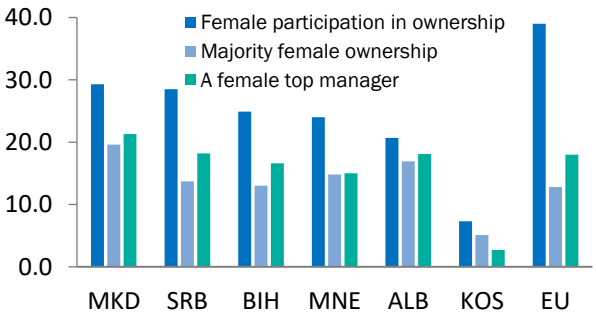
Labour-force participation, per cent



Source: Statistical Office of the Republic of Serbia

Figure 40: Women are still less represented in business

Percentage of firms, in 2019-20



Source: BEEPS VI

Social norms and gender stereotypes hamper gender equality in the workforce. Lower educational attainment is particularly pronounced in the older female population, with the proportion of women aged 55 and over having completed at least upper secondary education some 8 percentage points lower than men's.[174] Women undertake a disproportionate amount of unpaid work in the household, including childcare and care for the elderly and unwell, with inadequate support to reconcile work- and family-related responsibilities, including childcare facilities. As many as 96 per cent of women, compared with just 4 per cent of men, cite care for children and other dependants as the main reason for taking part-time jobs.[175] This compares with 29 per cent of women and 6 per cent of men in the EU.[176] Although the regulatory framework grants both maternity and paternity leave, gender-based stereotypical preconceptions persist, with childcare and household work considered a woman's responsibility. A recent European Commission analysis put the annual monetary value of unpaid care work performed in Serbian households, mostly by women, at €9.2 billion, or 21.5 per cent of the country's GDP, based on data from 2015-18.[177]

Improving accessibility, affordability and quality of care facilities could help increase women's participation in the labour market. Serbia's goal of increasing participation in pre-school programmes is inspired by an EU target set in 2002, aiming for coverage of at least 33 per cent for children under the age of 3 and of 90 per cent for children between the age of 3 and the mandatory school age (the EU has since

[169] See Statistical Office of the Republic of Serbia (n.d.a).
[170] See ILO (2019).
[171] See World Economic Forum (2022).
[172] Ibid.
[173] See World Bank, EBRD and EIB (2019).
[174] See Eurostat database.
[175] See UN Women (2020).
[176] See EIGE (2020).
[177] See European Commission (2021).

raised this benchmark to 95 per cent).[178] Childhood education and care is provided in nurseries, kindergartens and year-long preparatory preschool programmes, with the latter being mandatory and entirely state funded. The majority – 85 per cent – of nurseries and kindergartens are public and largely financed by the state. Private facilities are self-funded, with some local governments offering partial reimbursements for parents, depending on circumstance. Overall, however, the bulk of childcare needs in Serbia are met by informal care, with 41 per cent of women with children aged 0 to 14 relying solely on informal care, according to a report by the United Nations Economic Commission for Europe (UNECE) and UN Women.[179] In 2018, 26 per cent of children aged 0-3 were enrolled in nurseries (against the EU target of 33 per cent) and 64 per cent of children aged 3-6 were enrolled in kindergarten (against the EU target of 90 per cent).[180] Reasons for the low level of childcare coverage lie in both supply- and demand-side factors. On the supply side, preschool capacity is insufficient (with facilities frequently running at overcapacity and children being denied state-provided care), costly for some parents and geographically patchy, with children aged between 3 and 5 in rural areas less than half as likely to be enrolled in kindergarten than those in urban areas, largely due to infrastructural gaps.[181] In terms of demand, general attitudes towards and understanding of preschool education are a barrier to participation, with formal preschool education frequently considered unnecessary when other options are available.[182]

Unequal access to digital infrastructure could exacerbate inequalities. Digitally intensive sectors are gaining importance in the Serbian economy, particularly in terms of employment growth.[183] While digitalisation has the potential to greatly benefit the economy, it also risks leaving disadvantaged groups behind through unequal access to digital skills and digital infrastructure. Despite rising demand for digital skills, especially in highly productive firms, digital literacy remains a constraint, with the share of people in the EU with at least basic digital skills some 10 per cent higher than in Serbia (the best performer in the Western Balkans region, with 46 per cent of the population digitally literate) in 2019.[184] Across the Western Balkans, younger, better-educated and wealthier individuals are more likely to have better digital skills.[185] Less than 30 per cent of ICT graduates are women.[186] When it comes to access to infrastructure, 82 per cent of Serbian households have access to the internet, less than in North Macedonia and Albania and 10 per cent below the EU average of 92 per cent. The divide is particularly pronounced for rural households, of which 75 per cent have an internet connection compared with 85.6 per cent in urban areas.[187]

The structure of labour tax discourages the disadvantaged. Labour taxes and contributions are relatively competitive in Serbia, at 20 per cent of commercial profits compared with 26 per cent in the EU.[188] However, its structure is characterised by two important features: a reliance on social security contributions as the main component of labour taxes and the low progressivity of labour taxation. Additional income tax rates only affect earners above exceedingly high thresholds, affecting only 1 per cent or so of taxpayers.[189] Analysis of effective tax rates compared with income shows that low-income workers bear a tax burden a few percentage points higher than that of above-average earners, while the opposite is true for EU countries, which have much greater levels of progressivity.[190] A lack of tax-free family allowances (commonplace in the EU) and high taxes for part-time workers discourage parents and those who would prefer to work part time from joining the labour market.[191]

Municipal infrastructure improvements could help improve regional disparities. Serbia is divided into four regions: the northernmost region, the region surrounding the capital, Belgrade, and two regions south of Belgrade. There is a clear north-south divide when it comes to economic outcomes: GDP per capita in the two southern regions is 38 per cent that of Belgrade, while the unemployment rate is 3-4 per cent higher. In Belgrade and the northernmost region, 95 per cent and 97 per cent of the population are covered by public water supply, respectively, with this figure at just 70 per cent and 80 per cent in the two southern regions. While 89 per cent of households in Belgrade are connected to the sewerage system, this figure

[178] See UNECE and UN Women (2021).
[179] Forty-one per cent of women with children aged 0 to 14 rely solely on informal care, while 34.5 per cent use a combination of formal and informal care.
[180] See UNECE and UN Women (2021).
[181] Ibid.
[182] Ibid.
[183] See more detail in the "Competitive" quality section of this report.
[184] See Eurostat database.
[185] See EBRD (2021a).
[186] See World Economic Forum (2022).
[187] See Statistical Office of the Republic of Serbia (2021a).
[188] As of 2019. See World Bank database.
[189] See World Bank and wiiw (2020).
[190] See World Bank and wiiw (2020) and World Bank (2019c).
[191] See World Bank (2019c).

ranges from 51 per cent to 59 per cent of households in other regions.[192] A systematic assessment of water supply in rural areas in 2016 showed that up to 41 per cent of individual supplies were a high or urgent priority for improvement actions to prevent water contamination and protect public health (high and very high risk level).[193] The proportion of samples of publicly supplied water not compliant with the rulebook of the Institute for Public Health varied greatly from district to district, with the capital Belgrade registering 8.2 per cent of non-compliant samples and the northern North Banat and Central Banat districts, home to some 350,000 people, registering as high as 77.3 per cent and 80.7 per cent, respectively.[194]

[192] See Statistical Office of the Republic of Serbia (2022g).
[193] See World Health Organization (2017).
[194] See Institute for Public Health "Dr Milan Jovanovic Batut" (2021).

Energy challenges weigh on economic resilience, despite a strong financial sector

Resilient ATQ score = 5.03 / 10

Thanks to a stronger regulatory environment, substantial improvements in profitability and asset quality, and further increases in capital adequacy, the resilience of Serbia's financial system has improved in recent years, helping the system to weather the Covid-19 crisis with only a moderate impact. However, the full effects of high inflation, the war on Ukraine and the Covid-19 crisis have yet to materialise. In the medium term, tighter monetary conditions may cause credit growth to decelerate, which may hurt SMEs, in particular. In the longer run, the main risks remain an insufficient volume of domestic long-term funding and the credit risk arising from the high rate of banks' balance-sheet euroisation, despite visible improvements in this regard. Capital markets are underdeveloped, illiquid and shallow, though the authorities are putting effort into creating a supportive environment. While the current energy crisis in Serbia relates directly to the broader European energy crisis, it is primarily home grown. Structural challenges that have been accumulating in the energy sector over many years, in combination with the European energy security crisis, have led to a full-blown energy crisis. Government-supported SOE reform and a meaningful tariff reform, together with significant scaling up of energy assistance, are key to improving both the short- and longer-term outlook for the Serbian energy sector and ensuring affordability for the most vulnerable users. Regulatory improvements would go a long way to reducing bottlenecks to renewable generation and diversifying natural gas provision, both of which are needed to improve energy security and resilience to shocks.

The financial system is robust and resilient, notwithstanding its underlying vulnerabilities

Serbia's financial system is composed of banks, insurance companies, investment funds, leasing companies, pension funds, payment institutions and factoring companies. As is common in the EBRD regions, banks dominate the system, with moderately sized institutions holding assets equivalent to 81 per cent of GDP[195] and accounting for 91 per cent of assets of financial institutions supervised by the National Bank of Serbia as at the end of 2021.[196] The rest of the country's financial intermediation is done by insurance companies (6 per cent), leasing firms (2.2 per cent) and pension funds (0.9 per cent). Seventeen of the country's 22 banks are foreign owned, holding 83 per cent of total sector assets. The number of state-owned banks is down to just two, which hold only 7 per cent of total sector assets. The larger one, Poštanska Štedionica, is undergoing reforms to refocus it commercially towards retail and SME clients and improve its corporate governance. Basel III rules, including Pillar 2, have been implemented. Aside from monetary and exchange rate policy, the National Bank of Serbia is in charge of the payment system, financial stability, supervision and regulation of the banking sector and most other financial institutions, as well as bank resolution.

Banking sector consolidation is nearly finalised. As in other central, eastern and south-eastern European jurisdictions, the Serbian banking sector has undergone significant consolidation sparked by the great financial and Greek sovereign debt crises, whereby banking groups that mainly dominate in the region are taking over the subsidiaries of large French and Greek banks. Using its resolution toolkit for the first time since it was introduced in 2015, the National Bank of Serbia successfully orchestrated the takeover of Russian-owned Sberbank's Serbian subsidiary by AIK Banka in 2022, following significant deposit outflows amid the threat of international sanctions at the start of the war on Ukraine in late February 2022. The number of commercial banks fell from 30 in 2016 to 22 in 2022, with two additional takeovers awaiting finalisation. This process has led to reduced competition and the departure of some of the largest and most sophisticated banks. On a more positive note, the consolidation will improve the efficiency and profitability of the remaining players in a market that was relatively overbanked for its size and growth opportunities.

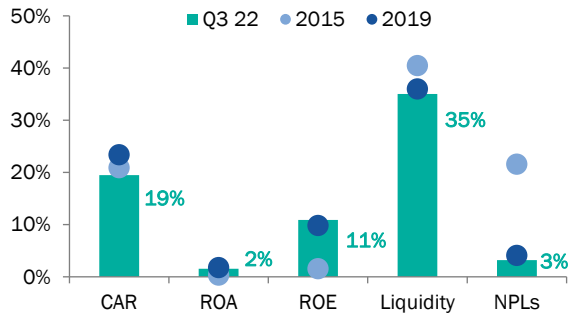
The sector remains well capitalised and liquid. Serbia's capital adequacy ratio stood at 19.5 per cent as of September 2022, well above both the regulatory minimum and the fully phased-in Basel III requirement (both 8 per cent), as well as the Western Balkans average of 18 per cent. Bank profitability is satisfactory, with the return on assets and return on equity in line with levels preceding the Covid-19 crisis (1.8 per cent and 9.8 per cent, respectively, in 2019, and 1.5 and 10.9 per cent in the third quarter of 2022). Liquidity remains ample, with 35 per cent of aggregate sector assets being liquid assets.[197] Macro stress tests show

[195] See Moody's Investor Service (2022).
[196] See NBS (2023a).
[197] See NBS (n.d.c).

that both capital adequacy and liquidity should remain resilient, even under the most severe shocks.[198] A recent Supreme Court ruling confirmed the legality of credit fees that alleviated risks to financial stability and bank capital arising from a high number of court cases initiated by households.[199]

Figure 41: Macroprudential indicators point to a healthy banking sector

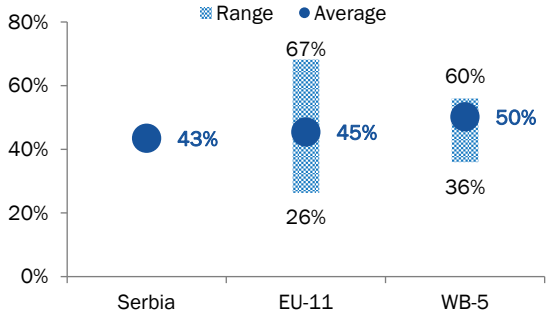
Per cent



Source: IEA.
Note: CAR = capital adequacy ratio; ROA = return on assets; ROE = return on equity. Liquidity is expressed as liquid assets to total assets. NPLs = non-performing loans.

Figure 42: Credit penetration is similar to regional averages

Domestic credit to the private sector provided by banks, percentage of GDP, 2021



Source: World Bank World Development Indicators, EBRD *Transition Report 2022-23*.

Despite the strong capitalisation and liquidity of the banking sector, as well as low interest rates thus far, credit to private sector relative to GDP remains low compared with the region. At 43 per cent of GDP in 2021[200] and steady for many years, credit penetration is below the average penetration rate for the Western Balkans region, EU-11 and economies where the EBRD operates in general (as of 2020 at 50 per cent or above, Graph 2). This dynamic reflects Serbia's simultaneous high growth rates of both credit and nominal GDP, as well as a complementary effect of the high and growing stock of cross-border loans to Serbian corporates from foreign creditors and holding companies which exceeded 20 per cent of GDP (€13 billion) at the end of 2021.[201] The credit-to-GDP ratio increased significantly in 2020, to 46 per cent of GDP from 42 per cent in 2019, helped by the GDP contraction and crisis support measures that led to significant credit growth. This brought the credit penetration in Serbia closer to the EU-11 median briefly, before the figure came down again in 2021, in line with economic recovery.

The banking sector's balance sheet exhibits maturity mismatches ... The aggregate balance sheet reflects a simple business model based on a large loan portfolio majority funded by deposits. At the end of 2014, deposits outstripped the loan book and this trend continued until the end of 2021 with deposits now exceeding loans by 20 per cent.[202] Initially this regional trend was driven by parent banks' deleveraging[203] to reduce the overall credit exposure, which then turned into replacement of parent funding with local deposits. Even though the loan growth has remained healthy, including during the Covid-19 crisis when supported by various measures from the National Bank of Serbia it was still slower than that of the deposits. Loans now account for only 58 per cent of assets, with a large share of liquid assets amounting to 39 per cent (23 per cent is cash or cash equivalents and the remainder are government bonds). Loan portfolio is dominated by corporate (50 per cent) and household loans (45 per cent).[204] Deposits make up

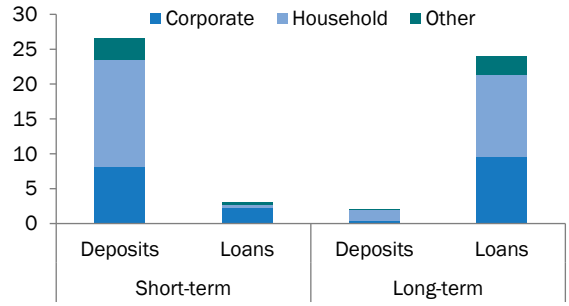
[198] See National Bank of Serbia (2020).
[199] Based on a previous ruling by the same court in 2018, more than 250,000 retail clients sued their banks, claiming that fees for loan applications and mortgage insurance expressed as a percentage of the loan amount rather than a fixed amount were illegal. The courts were overwhelmed by the number of cases, while potential damages could have caused massive losses for several banks that dominated mortgage lending. Even though the precise amounts are not available, the overall damages claimed could have been as high as several hundred million euros. See Association of Serbian Banks (2021, 2022), IMF (2021) and Andrić (2021).
[200] Authors' calculations, based on World Bank methodology.
[201] NBS /Statistics/External debt of the Republic of Serbia/External debt of the Republic of Serbia, by Type of Debtor. Available at: https://www.nbs.rs/export/sites/NBS_site/documents/statistika/ino_ekonomski_odnosi/SBE0I10.xls.
[202] NBS/Statistics/Monetary sector/Balance sheet of banks. Available at: https://www.nbs.rs/export/sites/NBS_site/documents/statistika/monetarni_sektor/SBMS03.xlsx.
[203] See Vienna Initiative (2021). CESEE Deleveraging and Credit Monitor, June 7, 2021. Available at: https://vienna-initiative.com/assets/Uploads/2021/48ddaa9f7c/dcm-june-7-2021.pdf.
[204] NBS Statistics/Monetary statistics/Balance sheet of banks (Available at: https://www.nbs.rs/export/sites/NBS_site/documents/statistika/monetarni_sektor/SBMS03.xlsx).

around 75 per cent of the balance sheet, with household deposits accounting for almost half of banks' liabilities.[205] This restructuring of the banking sector balance sheet has improved resilience to sudden-stops of foreign funding. However, given that the vast majority of deposits are short term (up to one year) and sight deposits, it also shortened the maturity of banks' liabilities and further aggravated asset-liability maturity mismatches.

... and high exposure to the public sector. Exposure to the public sector has remained steady in the past seven years, at around 20 per cent of total banking sector assets (of which 16.5 per cent are government bonds while the remainder are loans to SOEs, and central and local governments) reflecting a solid risk-return profile driven by high yields and an improving sovereign credit rating . However, this is a relatively high exposure as banks hold around 50 per cent of the overall stock of dinar-denominated government bonds,[206] and at the same time it is nominally larger than aggregate banking sector capital.

Figure 43: Banking sector balance sheet exhibits maturity mismatches as deposited short-term while loan demand is predominantly long-term ...

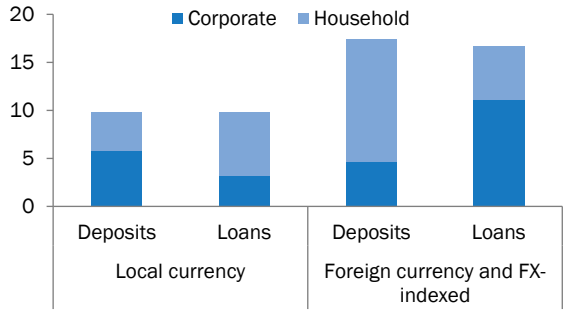
Total amount in June 2022, in € billion



Source: National Bank of Serbia and authors' calculations.

Figure 44: ... and is highly euroised, raising concerns over credit risk due to currency mismatches between real sector's income and expenses.

Total amount in June 2022, in € billion



Source: National Bank of Serbia and authors' calculations.

Note: Corporate includes only private sector, without SOEs. Loans include other claims such as securities and claims on interest and fees, which make up less than 2 per cent of the total category.

The high level of euroisation of banks' balance sheets is the primary risk to financial stability. First, it acts as a constraint on efficient monetary policy as its transmission relies on local currency base. Second, high euroisation carries a significant credit risk due to currency mismatches between the incomes and expenses of Serbian households and corporates. This has the potential to infect the balance sheets of borrowers and, consequently, the entire banking sector, as seen during the great financial crisis. Lastly, the *de facto* fixed exchange rate regime that the National Bank of Serbia uses as the main mitigant against this challenge limits the automatic stabiliser role of the exchange rate during economic cycles, demotivates the real sector to hedge its FX risk. However, the strict rules in place to safeguard the currency also impede its ability to do so. Credit rating agencies view the high level of euroisation as a significant factor of "susceptibility to event risk" or rating constraint whose improvement would contribute to a credit rating upgrade.[207] For more details on this topic, see the box below.

Euroisation, combined with underdeveloped capital markets, limits the capacity of banks to lend in local currency. The stable dinar-euro exchange rate is a double-edged sword – it alleviates households' rush to convert their excess liquidity into foreign currency, but at the same time it lulls the real sector into cheaper foreign currency borrowing, which holds seemingly low risk, thereby withholding dinar loan demand. At the same time, generations-long memory of hyperinflation impedes the accumulation of longer-term dinar deposits that would finance dinar lending. The slowly evolving dinar deposit base combined with lower demand for dinar loans puts a lid on the banks' capacity to increase lending in local currency.

The availability of long-term dinar financing is also limited by the state of the capital markets, which determines the pricing environment – an undeveloped bond market and interbank lending market (BELIBOR) hold back the development of a robust dinar yield curve and its use for credit pricing.

[205] Ibid.

[206] Around 28 per cent of general government debt was dinar-denominated at end 2021, up from 19.5 per cent in 2012. See Moody's (2022).

[207] See Fitch Ratings (2023) and Moody's Investor Service (2021).

Box: The challenging path to increasing dinarisation

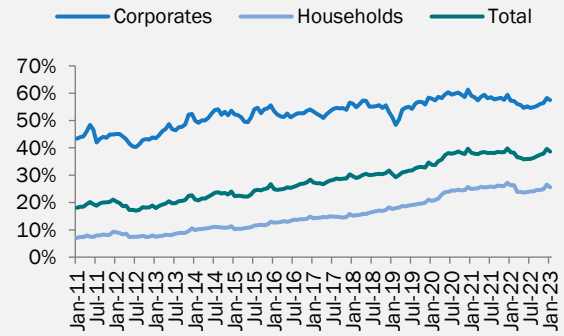
The main reason behind the high presence of foreign currency in the financial system makes it difficult to reduce it quickly. The root cause was decades-long public debt monetisation and macroeconomic instability in the form of high inflation, including the hyperinflation that peaked at 116 trillion per cent in January 1994, persistent exchange rate depreciation that forced households to save in foreign currencies, primarily in deutschmarks and later in euros, and huge bank defaults on dinar savings. The economic shocks caused by this level of macroeconomic mismanagement is deeply ingrained in the Serbian population and has led to excessive caution and distrust in local currency, even after years of demonstrated macroeconomic stability.

Over the past decade the Serbian authorities have recognised the importance of dinarisation – the process of increasing the use of local currency in Serbia's financial system to create financial stability. The share of local currency in the system has been actively managed by the National Bank of Serbia since 2012, necessitated by a very high level of euro-denominated bank loans and deposits that exceeded 80 per cent in 2010. The dinar's almost 60 per cent depreciation against the euro between 2008 and 2014 caused widespread loan defaults and the accumulation of non-performing loans, which dragged several banks into bankruptcy and temporarily depleted the deposit insurance fund along the way. To prevent this happening again, the authorities recognised the importance of de-euroising the financial system and introduced the dinarisation strategy in 2012,[208] updating it in 2018.

Dinarisation has been gradually increasing following the implementation of the strategy. The strategy is based on several principles: macroeconomic stability; the development of a dinar securities market and dinar yield curve; and the development of FX hedging instruments. Significant, albeit gradual, success has been achieved under the strategy so far,[209] primarily due to macroeconomic stabilisation on the back of a rigidly managed euro-dinar exchange rate and falling inflation since 2015. The share of dinar-denominated corporate and household deposits increased from 44 per cent and 9 per cent, respectively, in 2012, to 58 per cent and 27 per cent in the third quarter of 2021. The share of dinar-denominated household loans increased from 35 per cent in 2012 to 55 per cent in the third quarter of 2021. Most de-euroisation progress was made in the area of consumer cash lending, which makes up 14 per cent of the overall loan portfolio, given that since 2011 the regulator has strongly discriminated against euroised loans by requiring downpayment of at least 30 per cent. The dinar share of public debt rose from 19 per cent in 2012 to 28 per cent in 2020. International financial institutions (IFIs) were able to issue dinar-denominated bonds and extend dinar loans, and the EBRD was the first to issue bonds totalling RSD 2.5 billion in 2016.

Figure 45: Deposit dinarisation has been steadily increasing on both corporate and household sides

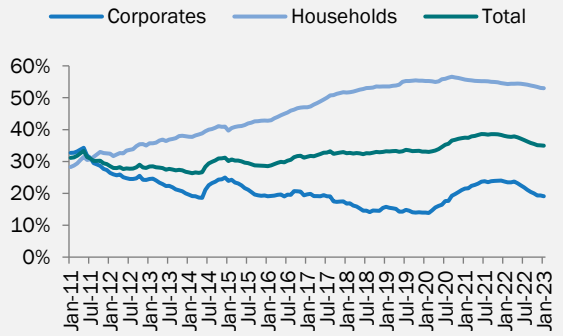
Share of deposits in RSD of total deposits



Source: National Bank of Serbia and authors' calculations.

Figure 46: Improvements in loan dinarisation are more patchy and dragged down by the corporates

Share of loans in RSD of total loans



Source: National Bank of Serbia and authors' calculations.

The main mitigant of this risk is contributing to the complacency of the private sector, making it difficult to change the status quo. Indirect credit risk caused by the open currency positions of various economic agents is mitigated by Serbia's long-standing strict regime of capital controls, which safeguards the stability of its balance of payments and foreign debt, leading to a stable exchange rate between the dinar and the euro. While this regime leads to a private sector that is not motivated to naturally hedge its positions and reduce risk by

[208] See National Bank of Serbia and Government of the Republic of Serbia (2018).
[209] See National Bank of Serbia (2023b).

borrowing in local currency (on more expensive terms), the rigid policies that are in place to keep the exchange rate stable also impede the real sector's ability to hedge the foreign currency risk in its existing loan obligations. According to the Law on Foreign Exchange Operations, companies are permitted to hedge their open foreign exchange position only against specific transactions that are narrowly defined by law, while most borrowers remain unhedged. Furthermore, the business community widely considers the same law to be too restrictive in its design, complicating its daily FX transactions, and too unpredictable in its application.[210] Further efforts to stimulate dinarisation depend on the country maintaining hard-won macroeconomic stability while gradually liberalising foreign exchange transactions, but also on progress in other areas, such as the development of local currency bond and derivatives markets.[211]

Asset quality, perceived in the past as the main threat to financial stability, has improved significantly on the back of write-offs and sales of non-performing loans (NPLs), facilitated by the resolution strategy of 2015. The NPL ratio declined significantly from a peak of 22 per cent in 2015 to 3 per cent in December 2022 and has stayed around that level since then. This is well below the 5 per cent threshold considered to be high and below the 4.1 per cent average of the other five Western Balkans countries in the same period. In contrast, as of June 2023, Serbia's coverage ratio was 58 per cent, 7 percentage points below the average of the other five Western Balkans countries, at 65 per cent.[212] The impact of the Covid-19 pandemic on NPLs was largely mitigated by large and comprehensive government aid measures, both on the monetary and supervisory policy side and on the fiscal side. Along with improvements in the institutional, organisational and legal environment resulting from the NPL resolution strategy, these measures helped banks to keep the level of NPLs under control.

Rising real estate prices should be monitored as a potential source of risk to asset quality. Due to a dearth of investment opportunities in the undeveloped capital markets, coupled with a low interest rate environment, Serbia, like many other countries in the EBRD regions, has experienced a continuous increase in real estate prices in large urban areas, especially during the recent period of fast economic growth.[213] This has affected many prospective property buyers, in particular, young families. Furthermore, this may have a negative impact on banks' NPL recovery rates if the currently strong loan-to-value ratio[214] is distorted by these price dynamics. While mortgage lending saw sluggish growth up to mid-2018, it then accelerated suddenly above 10 per cent per annum, underpinning further real estate price increases. Monetary policy tightening in the near term may put a lid or even reverse this dynamic.

Capital markets are developing gradually

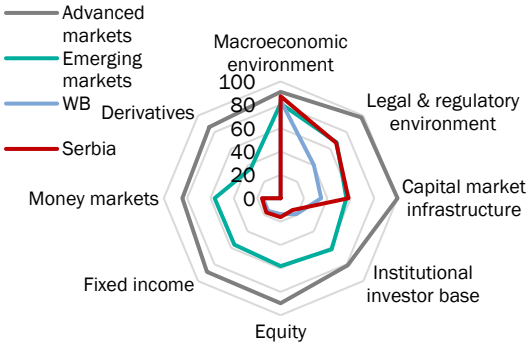
Capital markets make only a limited contribution to financing the economy, as they are underdeveloped, illiquid and shallow. According to the EBRD's Financial Markets Development Index, while Serbia's macroeconomic, legal and infrastructural conditions for capital markets are at fairly good levels, market outcomes – reflecting the depth, diversification and liquidity of markets across four asset classes: equities, fixed income, money markets and derivatives – are underdeveloped.[215] There are few issuers on the primary market other than the government, with only three corporate bonds issued in the last decade. Secondary market liquidity increased marginally and communication improved with the regular publishing of a public debt management strategy. The total turnover of government securities on the secondary market in 2022 amounted to €1.6 billion (RSD 186.4 billion), of which a large majority related to the turnover of dinar securities. As of 30 June 2021, JP Morgan has included Serbia's dinar government bonds in its indices. However, in the equity-focused MSCI and FTSE Russell classifications, Serbia remains a frontier market. In October 2021, Clearstream, the international central securities depository of Deutsche Börse Group, included the Serbian capital market in its global network. Clearstream is the first international central securities depository to enable foreign investors to conduct direct settlement of dinar

[210] American Chamber of Commerce in Serbia (2022).
[211] See IMF (2017), Annex IV.
[212] Vienna Initiative (2023).
[213] As at June 2022, prices had risen 50 per cent from June 2019 and nearly doubled since the end of 2010, according to National Statistical Office data on the average price of newly constructed dwellings.
[214] The loan-to-value ratio shows the maximum secured loan amount based on the market value of the asset pledged as collateral against that loan. It is calculated as the ratio of a loan to the value of the property.
[215] The Financial Markets Development Index (FMDI) 2021 measures local financial market development based on publicly available quantitative and qualitative criteria. The FMDI score is derived from 54 individual indicators split across two equally weighted sub-indices covering (i) the necessary conditions for sustainable market development (capital market conditions) and (ii) asset class-specific indicators reflecting the extent of such development (depth, liquidity and diversification). Each of these sub-indices contains four pillars. See EBRD (2021a).

government securities and, thus, boost foreign investors' participation in and the liquidity of the domestic capital market. Serbia finalized the legal framework for auctioning dinar-denominated securities through Euroclear, and plan to launch the first auction through this system in 2024,[216] further facilitating foreign capital access to the domestic market. Moreover, in mid-September 2021, for the first time in its history, Serbia issued a green bond worth €1 billion. To support the development of the country's capital markets, the authorities adopted the Law on Capital Markets in December 2021, in line with the Strategy for Development of the Capital Market for the Period 2021-26 and the wider process of Serbia's accession to the EU, aligning with relevant regulations governing markets in financial instruments.

Figure 47: Capital markets conditions in Serbia lag more developed markets

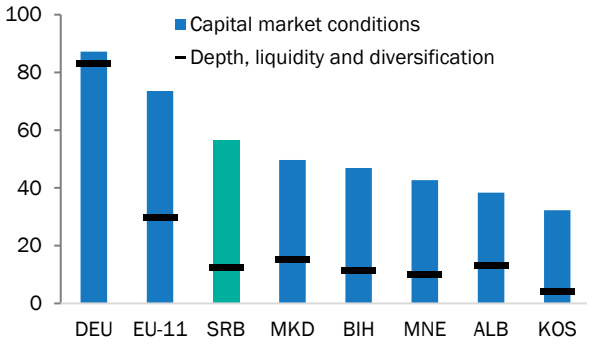
Financial Markets Development Index, scores are from 0 (least developed) to 100



Source: EBRD *Transition report 2021-22.*

Figure 48: Overall score is dragged down by the poor market outcomes across assets classes

Financial Markets Development Index, scores are from 0 (least developed) to 100



Source: National Bank of Serbia and authors' calculations.

The government remains the primary (and almost only) issuer of bond instruments in the market, and does so successfully on a frequent basis. The stock of sold dinar government bonds, all with a maturity of two years or more, amounted to €8.4 billion (RSD 990.6 billion) at the end of 2021, 8.5 per cent more than at the end of 2020. The average maturity of dinar securities has significantly increased over the past decade. Seven-year bonds made up the dominant share (29.9 per cent of total) at the end of 2021, followed by five-year government bonds (23.2 per cent). The main investors in domestic government securities are commercial banks and foreign investors. Local commercial banks accounted for nearly 60 per cent of demand for domestic government securities at the end of 2021, while foreign investors held 18 per cent in the same period, down from an average 30 per cent in 2016-19. Debt securities trading is very shallow, with most trades conducted over the counter. This makes price discovery and the pricing of risk challenging for many non-bank institutional investors. Non-bank institutional assets, while growing steadily, are still small. Pension fund assets under management are only 0.86 per cent of GDP, while the asset management sector is only 0.95 per cent of GDP (the majority of which is invested in bank deposits). This limits the amount of active investment capital that can be invested in debt capital markets. Further diversification and strengthening of the base of domestic institutional investors will remain an important factor in improving the government bond market and reducing the vulnerability of this market segment to movements in the international environment.

The stock exchange is not an important funding source for companies, mainly due to its low level of activity. Before Fintel Energija in 2018, there had not been a true initial public offering (IPO) in Serbia for 40 years. In 2021, the total turnover of the Belgrade Stock Exchange (BELEX) amounted to around €320 million (RSD 37.7 billion), the majority of which was turnover of bonds. There were only 14,003 transactions overall, 700 of which were bonds. Market capitalisation stood at 8.5 per cent of GDP in 2021 (€4.5 billion).[217] The relative lack of success of the "IPO Go" programme run by BELEX since early 2018 might indicate a lack of desire by companies to increase transparency, largely due to a lack of people, education and systems to support the ongoing requirements of listing. In an effort to increase the trading

[216] IMF (2023).
[217] See National Bank of Serbia (2021).

volume by enabling trading on multiple regional markets, BELEX joined the SEE Link in December 2016.[218] BELEX trading turnover has not significantly increased so far. In early August 2021, the Athens Stock Exchange acquired a 10.24 per cent shareholding in BELEX, making BELEX a member of the largest stock exchange in eastern and south-eastern Europe, which may contribute to the further development of the domestic capital market.

Unlisted forms of corporate finance, including private equity, venture capital and crowd funding, are in the nascent stages. The National Bank of Serbia has prepared a draft law on crowdfunding, acknowledging that it could have a meaningful impact on the micro and small companies seeking financing in Serbia and may enable them to reach the next stage of venture capital and private equity. The Law on Digital Assets, which came into force in June 2021, created a regulatory framework for digital assets, providing a clear framework and legal certainty for investors and users of digital assets, including provisions for crowdfunding through the issuance of digital tokens. The Action Plan of the Ministry of Finance's Capital Market Development Strategy recommends introducing a regulatory framework for crowdfunding,[219] recognising that crowdfunding is likely to have a low impact on the capital market, as it is mainly associated with retail investors, but should not be dissuaded.

The current energy crisis has revealed long-standing issues in the energy sector

Serbia suffers from an acute energy crisis, with severe economic and security of supply implications. In the winter of 2021-22, Serbian electricity generation fell significantly short of requirements, due to equipment failures in the country's ageing thermal power stations,[220] reduced lignite supply (of as much as 20 per cent year on year in the midst of peak December demand) and serious lignite fuel quality issues. Accordingly, Serbian power generation failed to service up to half of national electricity demand on certain peak days in December, forcing it to import expensive electricity and gas from regional markets at record prices. The combined losses of state-owned electricity company EPS and state-owned gas company Srbijagas in 2021-22 amounted to around €1 billion, or as much as 2 per cent of Serbia's GDP. Roughly half of these costs have already been assumed by the Serbian government in the form of direct transfers to Srbijagas,[221] placing a burden on the state budget and Serbian taxpayers amid a worsening economic outlook. EPS's costs were covered by liquidity loans, increasing the company's debt by some 40 per cent, amid growing solvency concerns.[222]

The Serbian energy crisis relates directly to the European energy security crisis of the past year, but is primarily home grown. Structural weaknesses that have been accumulating over many years have resulted in undue cost pressures. This primarily relates to EPS's legacy of an undiversified and insufficient electricity generation mix, with a heavy dependence on unreliable lignite generation and a lack of understanding of and willingness to mitigate the risks (including both energy security and cost risks) associated with it. Furthermore, EPS suffers from a lack of independence and continued use by the Serbian authorities as a tool of costly government and social policy. Among other things, this manifests itself in the form of EPS's lack of corporatisation, problematic capacity and efficiency, below-cost tariffs and other issues. Lastly, the continued dominance of EPS in the electricity sector (and, similarly, of Srbijagas in the natural gas sector) as a result of poor market design that hinders market competition, regional market integration and renewables growth undermines opportunities to access more competitive energy supply options for Serbian consumers.

Long-standing technical issues and underinvestment add to the financial cost and quality of service. System reliability is poor and out of line with regional peers, impacting both quality of service for Serbian consumers and financial sustainability for the energy sector as a whole. Electric power transmission and distribution losses, which comprise both technical and commercial losses (theft), are estimated to stand at 12-15 per cent in Serbia, compared with 9 per cent in Bulgaria, 8 per cent in Greece and 4 per cent in Austria. Unplanned outages were as high as 6 per year, with a total duration of 10 hours in Serbia, compared with only 2 outages and a 2.5-hour duration in central and eastern Europe.[223] Insufficient

[218] The SEE Link was set up by three regional stock exchanges with the support of the EBRD in 2014: the Bulgarian Stock Exchange, the Croatian Stock Exchange and the Macedonian Stock Exchange. Since the launch of the network, five more stock exchanges have joined, including two stock exchanges from Bosnia and Herzegovina, the Ljubljana Stock Exchange, the Belgrade Stock Exchange and the Athens Stock Exchange.

[219] Ministry of Finance of the Republic of Serbia (2021).

[220] The Serbian thermal power stations are, on the whole, coming towards the end of their lifetimes, with an average age of more than 45 years. For more information, see Friedrich Ebert Stiftung (2021).

[221] Srbijagas has been generating losses for many years, at times accruing losses in excess of the company's own capital, draining the public finances through direct government transfers or sovereign guarantees.

[222] See Fiscal Council (2022).

[223] See World Bank (2022c) and Fiscal Council (2022).

investment below the amortisation level over many years, poor prioritisation and delays in the implementation of realised investments has led to the gradual deterioration of coal and power generation capacities. These challenges exacerbate the decoupling trend evident in Serbian power demand, with demand continuing to grow in line with economic growth and domestic power generation from coal falling since its peak in 2013.

Government-supported SOE reform is key to addressing the cost side of the crisis and improving both the short- and longer-term outlook for the Serbian energy sector. EPS, in particular, needs to urgently improve its corporate governance structures and review key cost and performance areas, such as human resources policy, skill-set composition and the wage bill, restructure its ineffective procurement policy[224] and develop suitable risk management and corporate strategy functions. The focus of the new strategy should be on substituting unreliable lignite-fired capacity, which is already at the end of its lifetime and at imminent risk of significant carbon costs, with new, competitive renewable sources. For this to happen, the government needs to finalise and endorse key strategic documents, such as the NECP, the updated Nationally Determined Contribution and the Energy Development Strategy (see more in the "Green" quality chapter). EPS will also need to rapidly develop an appropriate operational response to dealing with the needs of the ongoing crisis, including by improving auditing and data availability for identifying maintenance needs, as well as prioritising funds and ensuring that all necessary maintenance does indeed take place in a timely manner. Srbijagas and other Serbian energy SOEs should follow suit, targeting governance, efficiency and performance improvements.

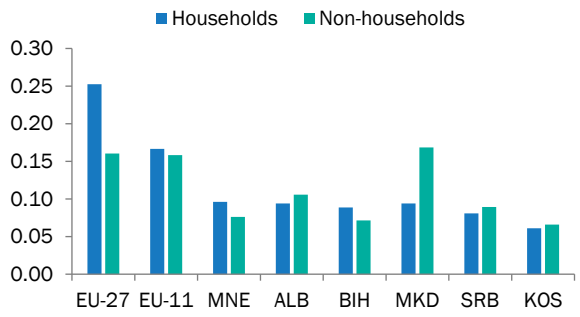
A meaningful tariff reform is required to address the revenue side of the problem and safeguard SOE liquidity. The revenue of SOEs, and EPS in particular, will need to improve in parallel to ensure sufficient liquidity for maintenance and capital expenditure. This is hampered by the current tariff regime in Serbia, which is seriously hurting EPS's liquidity. Residential tariffs were around the third of that in the EU in the second half of 2021 and among the cheapest in Europe.[225] Electricity prices for industry were deregulated in 2013 and have generally followed market trends since. They were capped at €75 per MWh in the second half of 2021 and have been gradually increasing since September 2022. On a broader level, below-cost tariffs, coupled with the dominance of EPS as the country's universal supplier, are also undermining the development of competition in the retail market, keeping real costs high for the Serbian economy and consumers. Gas prices, estimated to be some 70 per cent below purchase costs for both households and industry,[226] were fixed during the 2021-22 energy crisis and saw their first increase since 2017 in August 2022.

Key structural benchmarks in the 2022 IMF SBA programme relate to the energy sector. These include four consecutive increases in electricity (8 per cent each) and gas (11-10 per cent each) tariffs. The first rounds of increases came in the first quarter of 2023. The authorities developed an investment plan for the energy sector, with key projects to enhance energy security, stabilise electricity generation and conserve energy, that can be implemented over the next two to five years, identifying which entity will bear the costs of these investments and how they will be financed. A costed restructuring plan for EPS is being developed.[227]

[224] The number of bidders per tender has fallen to as low as 1.7 at EPS, less than half of regional norms and down on the company's own past performance. This is potentially having a negative impact on EPS's procurement costs. See Fiscal Council (2022).
[225] See Eurostat and Fiscal Council (2022),
[226] See Fiscal Council (2022).
[227] See IMF (2022b).

Figure 49: Electricity prices are significantly lower than in the EU and the second lowest in the Western Balkans

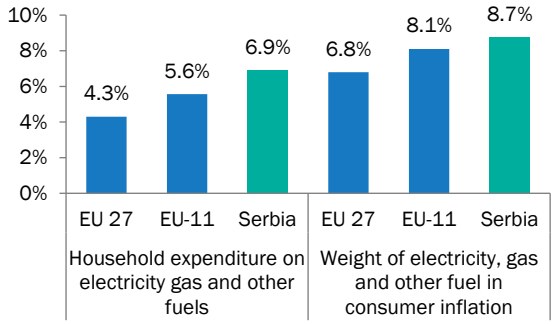
Electricity prices for medium-sized households and non-households, in kilowatt-hours, in H1 2022[228]



Source: Eurostat and authors' calculations.

Figure 50: Households' ability to absorb higher energy prices is more limited due to the larger share of expenditure on energy

2020



Source: Eurostat and authors' calculations.

An overhaul of the Energy Vulnerable Customers Programme will be necessary to ensure the fairness and practical feasibility of tariff reform, by ensuring sufficient support is in place for people who need it most in this high price environment. Despite subsidised electricity prices, households in Serbia spend a significantly higher share of their income on energy. Affordability concerns are particularly high for poorer households and for single elderly households, which, while often not the poorest in terms of income, tend to be at significant risk, as they also spend a large share of their income on their electricity bill.[229] According to the Fiscal Council, the current energy assistance programme will likely need to be expanded in scope to cover district heating bills and quadrupled in terms of participant numbers, from around 70,000 beneficiary households now to as many as to 250,000-300,000 under the proposed reform. This would increase the costs of the programme from the current €10 million to anything between €50 million and €80 million.[230] Under the umbrella of the IMF SBA, the authorities declared their intention to expand the energy-vulnerable consumer protection programme by increasing the eligibility criteria, with the expectation that in 2023, about 10 per cent of all households would benefit from a reduced energy bill.

Energy market reform in line with Serbia's Energy Community obligations and targeting improvements in market competition and regional integration holds significant energy security and cost-saving potential. Serbia is a Contracting Party of the Energy Community, an international organisation established in 2005 with the aim of bringing together the EU and its neighbours to create an integrated pan-European energy market. The Serbian electricity market is reasonably advanced in certain aspects of the target model, with bilateral, day-ahead, balancing markets and a power exchange (SEEPEX) already in place. In contrast, it remains in breach of a number of other core Treaty obligations, which is negatively affecting competition and regional energy trading.[231] Remedying these breaches will allow the country and Serbian consumers to tap into more competitive supply sources than what is currently available to them, boosting energy security and financial sustainability.

In the electricity sector, the focus should be on completing the unbundling process, regional market coupling and establishing an intra-day market. The Serbian transmission system operator, EMS, albeit formally unbundled from EPS, is not yet fully independent in its decision-making process,[232] calling into question its ability to provide a level playing field for the participation of new private sector entrants to the Serbian market and to ensure the efficient and non-discriminatory development of the electricity grid, both

[228] Eurostat defines electricity prices for non-household consumers the following way: Average national price in euros per kWh without taxes applicable for the first semester of each year for medium-sized industrial consumers (consumption band Ic with annual consumption between 500 and 2000 MWh). Electricity prices for household consumers are defined as follows: Average national price in euros per kWh including taxes and levies applicable for the first semester of each year for medium-sized household consumers (consumption band Dc with annual consumption between 2500 and 5000 kWh).
[229] See Vasquez, Begolli, Van Gelder and Shukla (2018).
[230] See Fiscal Council (2022).
[231] See Energy Community Secretariat (2021).
[232] Ibid.

of which will be key to private renewables penetration. On the positive side, the Energy Law already sets out a procedure for implementing market coupling with neighbouring countries in the Western Balkans as contracting parties to the Energy Community Secretariat, which will boost market liquidity and increase supply optionality and risk mitigation for Serbian consumers. These conditions include the designation of the Nominated Electricity Market Operator (NEMO) role to the Serbian power exchange, SEEPEX, the responsibilities with regard to the coupling of the day-ahead and intraday markets, and the principles of cost sharing. Nevertheless, the specific conditions, principles and responsibilities for market coupling will need to be further defined by a government act, while the establishment of an intra-day market is similarly still pending. The establishment of an intra-day market with sufficient liquidity (to be achieved through market coupling) is a precondition to debottlenecking renewable deployment under the balancing decree and should lend further support to the competitiveness and resilience of energy supply in Serbia.

Dependence on Gazprom is the key risk to the natural gas sector in Serbia, aggravated by regulatory failures and breaches of Energy Community law. Serbia is dependent on imports for around 90 per cent of its total gas needs, primarily from Russia's Gazprom.[233] The problem is being exacerbated by Gazprom's control over Serbia's sole gas storage facility; a lack of third-party access (through capacity hoarding) to the gas interconnection points with Bulgaria and Hungary, which favours Gazprom as the dominant supplier; a lack of transmission capacity allocation and congestion management procedures, as well balancing rules not being in line with the network code; and conflicted and unbiased transmission system operators. On the latter, Srbijagas's subsidiary, Transportgas Srbija, is still not unbundled and certified in accordance with the Third Energy Package, nor is Gazprom's subsidiary, YugoRosGaz Transport. At the same time, another Gazprom subsidiary, Gastrans, which is tasked with the development and operation of the Serbian section of the TurkStream pipeline extension project,[234] has been exempted from third-party access, ownership unbundling requirements and the obligation to apply regulated prices,[235] in disregard of the Energy Community's Secretariat's opinion.[236] The issues are serious breaches of Energy Community law, stifling competition and entrenching the grip of the dominant natural gas supplier.

Supply optionality and seasonal flexibility will in the first instance be better served by energy efficiency and cost-neutral regulatory reform, rather than investment in new midstream infrastructure. Serbia needs to diversify its natural gas supply away from the dominant supplier and ensure competitive supply to meet its flexible seasonal requirements, as peak heating season demand exceeds contracted natural gas quantities. Against this backdrop, Srbijagas and the Serbian authorities have been mulling new investment to expand the Banatski Dvor underground gas storage facility (with Gazprom), a potential independent second gas storage facility at Itebej and the construction of new gas interconnections (beyond the one being completed with Bulgaria) with Romania and Croatia to help Serbia access liquefied natural gas (LNG) from Greek and Croatian terminals. The focus should rather be on cost-neutral regulatory solutions that can unlock diversified supply from existing infrastructure, in line with Serbia's obligations to the Energy Community. These should, as a priority, include third-party access to Banatski Dvor and the Hungary-Serbia interconnection, and avail fully of opportunities under the REPowerEU plan and other EU initiatives, such as the EU Energy Platform for the voluntary common purchase of gas, LNG and hydrogen (which has been opened up to the Energy Community Contracting Parties),[237] in addition to the use of regional gas storage in Hungary, as the Serbian authorities are already planning. There is also a clear need to rationalise demand for natural gas across the board and thus limit Serbia's exposure to the dominant supplier, including through energy-efficiency improvements and co-generation in the country's expansive and largely inefficient district heating sector.

[233] A 10-year preferential gas import contract with Gazprom expired in 2021. The authorities subsequently operated on a six-month extension. Following a phone call between Serbian President Aleksandar Vucic and Russian President Vladimir Putin, the gas contract was renewed for three years in mid-2022, with prices linked to an oil-price formula and expected to fluctuate in a US$ 310-408 range for up to 2 bcm in annual deliveries. District heating is nearly fully dependent on imported gas, as is an increasing share of industrial production, especially large foreign direct investment-financed companies.
[234] The TurkStream pipeline extension project is a new pipeline that crosses Serbia to connect the Bulgarian and Hungarian gas grids.
[235] See Energy Agency of the Republic of Serbia (2019).
[236] See Energy Community Secretariat (2021).
[237] See European Commission (2022b).

A comprehensive investment and reform agenda is underway to enhance integration

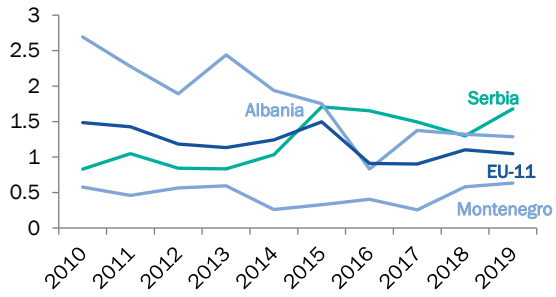
Integrated ATQ score = 6.24/10

Significant infrastructural needs, the legacy of years of underinvestment, are being addressed as infrastructural investment becomes a carefully planned policy priority. While the well-developed road network dominates the transport sector, the railways are set to gain in popularity amid reforms in the sector and the expansion of the high-speed network. The quality of infrastructure, including water supply and digital infrastructure, requires improvement and varies from region to region, in line with municipalities' uneven access to finance. Serbia's openness to trade has risen exponentially over the past decade, with trade strongly tied to the nearby EU countries. While portfolio investment remains limited, the country is enjoying a continued broad-based increase in FDI inflows.

Infrastructure

Figure 51. Inland infrastructure investment has been scaled up ...

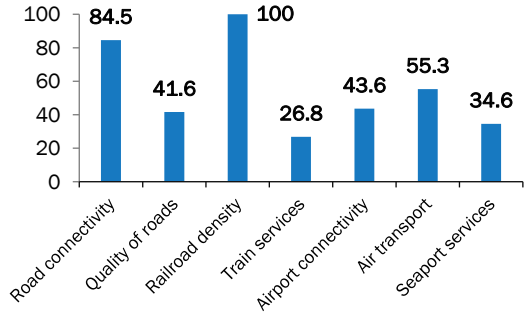
Inland investment in infrastructure, percentage of GDP



Source: OECD.

Figure 52: ... but gaps remain amid sizeable needs, particularly in terms of quality

Perception of quality, score 0 (worst) to 100 (best)



Source: WEF (2019).

Infrastructure investment has become a priority for the Serbian government. Inland infrastructure investment in Serbia picked up from 0.9 per cent of GDP on average in 2010-14 to 1.6 per cent of GDP in 2015-19, the latter some 80 per cent higher than the average inland infrastructure investment in the EU in the same period.[238] This increase represents a shift in government policy, enabled by the growth in fiscal space that followed the country's 2015-17 fiscal consolidation, facilitating an increased budget for public capital investment. Public-private partnerships (PPPs) became an increasingly popular option throughout the period, with the value of PPP investment climbing from 0.05 per cent of GDP in 2010-14 to 0.5 per cent of GDP in 2015-19.[239] The scaled-up investment in infrastructure reflected on Serbia's "integrated" ATQ score, which improved from 5.69 in 2016 to 6.24 in 2021. Despite notable improvements, serious infrastructure gaps remain, however, particularly in terms of quality, largely the result of underinvestment in prior decades.[240] Data from the World Economic Forum, referencing both a survey of executives and a quantitative assessment, point to a very positive perception of railroad density and road connectivity, but a poor perception of the quality of roads and train services.[241] According to EBRD estimates, Serbia's infrastructure needs in the 2018-22 period amounted to some 8.3 per cent of GDP per year, largely due to the need for repair and maintenance of outdated infrastructure.[242]

Investment priorities and a comprehensive transport reform agenda have been compiled. In 2019, the government published a €14 billion investment programme named "Serbia 2025", focused on road, rail and urban transport, with financing mainly relying on the state budget and loans from international creditors. Some €5 billion will be directed to building new and upgrading existing road infrastructure, with another €3 billion for the development of a high-capacity rail network and €1 billion committed to the introduction of a metro system in the country's capital, Belgrade. Alongside investment priorities, there is a

[238] See OECD database. Four EU countries (the Netherlands, Portugal, Malta and Estonia) are excluded from the average due to a lack of data. Data are unavailable for 2019 for Denmark and Romania.
[239] See IMF investment and capital stock dataset.
[240] See European Commission (2022a).
[241] See World Economic Forum (2019).
[242] See EBRD (2017).

well-defined transport sector reform agenda in accordance with Serbia's integration into the Western Balkans and wider European transport network and acquis. The agenda is largely set out in the 2017 Transport Community Treaty (TCT) and its associated definition of Trans-European Networks Transport (TEN-T) corridors,[243] as well as in separate action plans for rail, road, road safety, waterborne transport and multi-modality and transport facilitation, alongside region-wide initiatives such as Connecta.[244] Of the countries within the TCT (the Western Balkans countries), Serbia is relatively advanced in its progress on implementing the treaty, mainly with regard to sectoral reform. The EU has said that there is a "good level of preparation" for accession in the field of transport, but noted that further progress is required in some areas, such as road safety, rail reform, and project preparation and selection.[245]

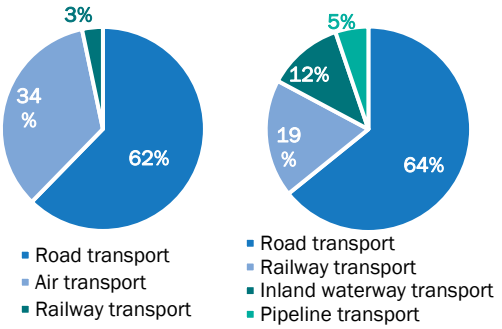
Public companies dominate the transport sector. Enterprises fully or partially owned by the state dominate the country's infrastructure sectors and networks, including electricity, gas, telecommunications, post, banking, insurance and all facets of transport, such as roads, passenger and cargo rail services.[246] A socialist legacy, SOEs in the transport sector, as in other segments of the economy, fall short when it comes to governance standards, are less productive than the private sector, are often reliant on state subsidies and may inhibit competition. From 2009 to 2018, the railways were the largest beneficiaries of direct central government budget subsidies, while local governments, the largest source of subsidies for SOEs, frequently funded public transportation. Inefficiencies in service SOEs frequently arise from poor user fee collection, as well as low prices for services.[247] Some 470 local-level SOEs are engaged in the provision of infrastructure services, employing around 60,000 employees. The revenues of these companies was €1.9 billion in 2019, with assets worth €5.2 billion, and €170 million of annual depreciation investment needed to maintain the capital base.[248]

The railway sector has seen marked improvements. In line with the TCT, in 2015, Serbia achieved the unbundling of the railway sector from a vertically integrated operator into three separate infrastructure, cargo and passenger companies to align with the EU railway market liberalisation package. Overall, in the 2021 Monitoring Report, Serbia was assessed as having achieved 83 per cent of rail market opening objectives, compared with 14 per cent in Bosnia and Herzegovina and 22 per cent in Albania. The process created new requirements for the regulation of the sector, such as the management of track access, charging frameworks and capacity allocation processes, which may create the need to strengthen regulatory capacity for competition management. Nonetheless, several operational and regulatory issues remain for the sector, including the need for further legal and regulatory reforms to improve the interoperability, safety and openness of the market.[249] The EU noted a need to strengthen the role and capacities of the Railway Directorate and to adopt the European Railway Management System.[250] A legacy of low investment in railway maintenance has resulted in low operating speeds and a lack of attractiveness for passengers and rail operators alike. The state-owned national carrier, Srbija Voz (Serbia Trains), remains the only passenger rail operator, with rail use per capita very low at around 6 per cent of the EU average.[251] This figure is bound to increase, however, as in 2022, Serbia opened its first high-speed railway for passenger and freight traffic. The railway connects two of Serbia's largest cities, Belgrade and Novi Sad, bringing the travel time down to half that of road transport. The track is part of a broader project to connect Belgrade with the Hungarian capital, Budapest. An overhaul of the railway network between Belgrade and Nis, the third-largest city, in the south of Serbia, is set to begin in 2023, as financing has been secured.

[243] The TEN-T is a planned set of road, rail, air and water transport networks in the European Union, including multimodal transport.
[244] Connecta is an EU-funded technical assistance facility, providing support for the preparation and implementation of regional connectivity reform measures in the transport sector. Among other things, Connecta has supported the creation of a five-year road maintenance plan, various impact assessments and technical documentation to improve infrastructure capacity at border crossing points.
[245] See European Commission (2023b).
[246] See World Bank (2020a).
[247] See IMF (2019).
[248] See World Bank (2021b).
[249] See Transport Community (2021).
[250] See European Commission (2021).
[251] Since 2020, Cyprus and Malta have not been included in the EU average. See Independent Regulators' Group – Rail (2022).

Figure 53: Road is the most popular mode of transport ...

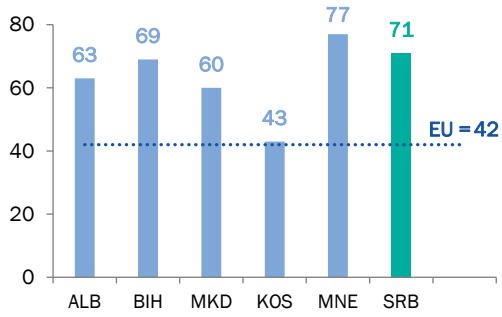
Passenger transport (left) and freight (right), share of total kilometres per passenger/tonne in 2021



Source: Statistical Office of the Republic of Serbia.
Note: Excluding urban transport.

Figure 54: ... but a high fatality rate calls for improvements in road safety

Fatalities per million inhabitants in 2020



Source: Transport Community.

Serbia's road transport network is relatively fast and well developed. Road travel times are only around 27 per cent longer than potential (what a perfectly straight road would be) between the largest cities, compared with an average of 66 per cent across the EBRD regions and 72 per cent across south-eastern Europe.[252] Average speeds on this portion of the network are estimated at around 94 kilometres per hour. However, improvements in road safety are necessary, as Serbia has 71 road-accident fatalities per million people compared with 64 in the Western Balkans and 42 in the EU-27.[253] Serbia has established a coordination authority for road-traffic safety, but has not yet developed a road-safety strategy and action plan or set targets.[254] Similar reforms to those planned for railways are underway in the road sector, in line with TCT action plans, with the main objectives being to establish a functional and efficient road maintenance system (80 per cent complete), deploy intelligent transport systems (64 per cent complete), and enhance climate resilience and the use of alternative fuels (42 per cent complete). Serbia has introduced a toll-road system on major highways, reportedly generating substantial funding of some RSD 26 billion (€240 million) for the sector in 2021. Several priority road projects were identified by the Transport Community, including the construction of the Novi Sad-Ruma expressway, the Pojate-Prelina motorway, the Belgrade bypass, the Nis-Merdare highway and the Preljina-Pozega motorway. The projects are aligned with the (indicative) TEN-T corridors and estimated to cost some €2.7 billion.

Cross-border air transport is well developed. Since the 2006 agreement of a Common Aviation Area between the EU and the Western Balkans, Serbia has been an active participant in the EU Single European Sky (SES) initiative. The European Commission's 2023 Serbia Report indicates that Serbia completed its alignment process.[255] The Serbian and Montenegrin Air Navigation Provider is one of the most cost efficient in Europe, with a cost per composite flight of €294, compared with an EU average of €508 in 2019.[256] Air Serbia is the largest airline operator in the country, operating to around 60 destinations with 28 aircraft. The company carried about 1.5 million passengers in 2021, down from 2.8 million in 2019 due to the Covid-19 pandemic. The company is also the largest operator out of Belgrade's Nikola Tesla Airport, the largest airport in the country, with a market share of around 50 per cent. The company is majority state owned, with a minority share held by Etihad Airways as part of an alliance. Nikola Tesla Airport hosted some 6.1 million passengers in 2019 and was linked to 62 destinations. The airport serves several airlines including Air Serbia, Wizz Air, Turkish Airlines and Air France. In 2018, VINCI Airports signed a 25-year concession contract with the Serbian government, with overall financing and development during the period set to cost €732 million. Plans for the concession include the development of a new integrated terminal, new aircraft stands, a new runway, a new taxi-way and the rehabilitation of the existing runway.

There is scope for improvement in the network to sustain the provision of utilities such as electricity and heating ... Outdated infrastructure, leading to inefficiency in the utilities segment, is the result of continued underinvestment, as fees charged remain lower than levels necessary to sustain provision. Transmission and distribution losses measured as a proportion of electricity introduced into the grid dropped from 14

[252] Based on an EBRD network analysis based on Google Maps data. SEE includes Albania, Bosnia and Herzegovina, Bulgaria, Kosovo, Montenegro, North Macedonia, Romania and Serbia.
[253] See Transport Community (2021).
[254] Ibid.
[255] See European Commission (2023b).
[256] See Performance Review Commission (2022),

per cent in 2010 to 11 per cent in 2018, lower than the WB-5 average of 12.4 per cent but above the average of 16 EU economies, at 5.1 per cent.[257] Unplanned electricity outages were as high as 6 per year, lasting for a total of 10 hours, compared with just 2 outages of 2.5 hours' duration in central and eastern Europe.[258] The average age of fossil fuel-dependent heat production plants in Serbia is 28 years, with heat losses in individual district heating systems ranging from 7 per cent to 30 per cent.[259]

… water supply … Water is supplied directly from groundwater, with the supply network unable to filter harmful substances. As groundwater quality varies, there are significant regional inequalities when it comes to the quality of water supply, with quality particularly poor in the northern region.[260] This is the result of underinvestment over the past three decades, with investment in the water sector amounting to some €300-€350 million a year during that period, less than half of sector needs (annually estimated at €450 million for development and €550-€660 million in operating expenses). Fees paid for water supply are assessed relative to inflation, not operating requirements, including maintenance, making it difficult to raise the necessary funds.[261] Serbia suffers from high water wastage, as low tariffs discourage savings and losses are high due to poor or outdated facilities and equipment and limited water conservation mechanisms. Belgrade's water system posted a real loss of 25 per cent in 2020, equivalent to almost 18,000 Olympic-sized swimming pools.[262]

… sewage and wastewater treatment … Wastewater treatment is at an early stage of development, lacking in both capacity for collection and number of available treatment plants.[263] While some two-thirds of the population are connected to a sewerage system, only about 14 per cent were connected to at least a secondary wastewater treatment system as of 2020.[264] The largest cities –Belgrade, Novi Sad and Niš – are still discharging wastewater straight into rivers, directly affecting the availability of clean drinking water and the health of citizens. Following decades of underinvestment, the government's goal is for 80 per cent of the population to be connected to sewage infrastructure in the next five years and to build wastewater treatment plants as part of utility infrastructure. This translates into a very ambitious investment target of more than €4 billion over the next five years to build 7,000 kilometres of sewage network and more than 250 wastewater treatment plants.[265] Institutional capacity for dealing with waste water, as well as the planning and implementation of measures to eliminate its negative impacts, is considered inadequate.[266]

… and solid waste management infrastructure. There are major deficits in Serbia's solid waste management infrastructure in terms of levels of collection, treatment, recovery and disposal. Sanitary landfill sites currently in operation cover less than 25 per cent of the population, and just 3 per cent of municipal waste is recycled.[267] Only six landfills out of around 3,500 waste dumpsites comply with EU requirements, posing environmental risks.[268]

Digital infrastructure is adequate. In terms of the mobile network, 98 per cent of the population is covered by 4G technology.[269] The deployment of 5G has stalled, having initially been delayed due to Covid-19, with Serbia now among the minority of European countries not to have adopted the technology.[270] On the other hand, access to fixed broadband has scope for improvement, with some 81 per cent of Serbian households enjoying broadband access compared with 91 per cent in the EU.[271]

Municipal infrastructure is frequently of poor quality … Serbia is a unitary state, with the central government the supreme authority and local governments in place for 27 cities and 117 municipalities. Local infrastructure management, maintenance, local service delivery and the implementation of local investment is done by local self-governments (LSGs). LSGs face a multitude of challenges when it comes to infrastructure provision, including: a largely outdated infrastructural base, insufficient and unstable access to financing, an underdeveloped framework for PPPs, largely outdated infrastructure, legacy and ineffective public utility companies and services, and a lack of sound asset and investment management frameworks. In response, the government, on the proposal of the Ministry of Construction, Transport and Infrastructure,

[257] See Council of European Energy Regulators (CEER) (2020).
[258] See World Bank (2022c) and Fiscal Council (2022).
[259] See KeepWarm (n.d.).
[260] See the "Inclusive" quality section of this report for more details on water quality.
[261] See Ministry of Agriculture and Environmental Protection of the Republic of Serbia, Water Directorate (2016).
[262] See Demeski (2021).
[263] See NALED (2021).
[264] See Statistical Office of the Republic of Serbia (2021b).
[265] See Balkan Green Energy News (n.d.),
[266] See NALED (2021).
[267] See EBRD (2021b).
[268] See more detail in the "Green" quality section of this report.
[269] See Statistical Office of the Republic of Serbia database.
[270] See USAID (2021).
[271] See Eurostat. As of 2021. The EU average includes 24 of the 27 member states.

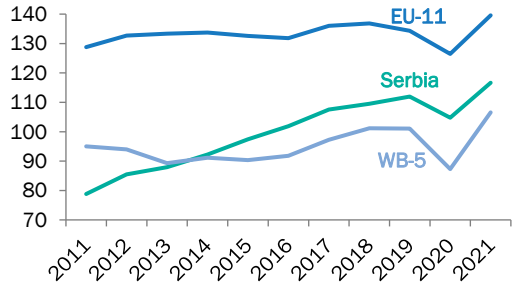
adopted in 2019 a Sustainable Urban Development Strategy 2030, recognising these challenges and aiming to contribute to the EU accession process by harmonising urban development policy with the EU's and wider best practices.

… and characterised by a high level of inequality. Regional inequality is pervasive, with Zaječar, Pomoravlje, Jablanica and West Bačka identified as the most deprived areas infrastructure-wise.[272] According to the World Bank, while the regulatory framework for managing local government finances is relatively well developed, implementation is poor, with levels of municipal financing below legal limits and generally in favour of more developed municipalities. The share of public funds assigned to LSGs is 5.9 per cent of GDP, compared with 9.9 per cent in the EU and 15.9 per cent in Organisation for Economic Co-operation and Development countries, on average.[273] Capital investment in the two biggest cities, Belgrade and Novi Sad, accounts for around a third of all LSG capital expenditure.

Trade and investment flows

Figure 55: Openness to trade has increased substantially since 2011.

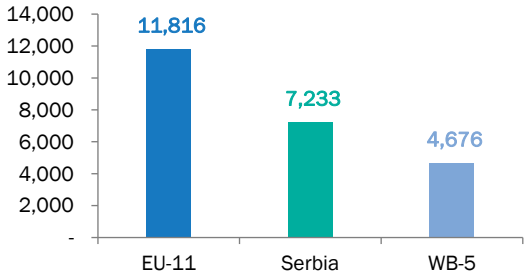
The sum of exports and imports as share of GDP



Source: World Bank WDI.

Figure 56: The FDI stock is substantial

FDI stock per capita in 2021 in US$



Source: UNCTAD, authors' calculations.

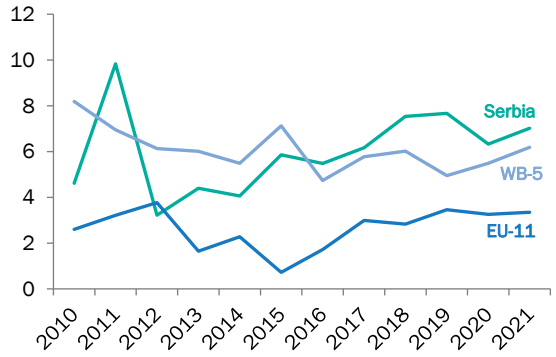
Serbia's openness to trade has increased substantially over the past decade. Trade openness, measured as the sum of exports and imports as a share of GDP, increased from 79 per cent in 2011 to 117 per cent in 2021, the biggest growth in the Western Balkans and the second-highest openness-to-trade score in the region after North Macedonia at 148 per cent.[274] Despite the robust increase, however, there remains substantial scope for catch-up with the new EU member countries, the EU-11, where average openness to trade stood at 140 per cent in 2021. Serbia entered a new phase of trade-led development in 2010, when the Interim Agreement on Trade and Trade-related Matters with the European Union entered into force. In 2013, the context for developing a free trade area between Serbia and the EU was defined in a Stabilisation and Association Agreement, unlocking gradual market opening and legislative approximation.[275]

The EU is Serbia's largest trading partner. Germany alone accounts for the largest portion of Serbia's imports and exports of goods, at some 13 per cent.[276] Serbia has been a member of the Central European Free Trade Agreement since 2006 and the Organization of the Black Sea Economic Cooperation since 2004. The country has had a bilateral free-trade agreement with Türkiye and a free-trade agreement with the Eurasian Economic Union since 2019, which includes Armenia, Belarus, Kazakhstan, the Kyrgyz Republic and Russia. Serbia, Albania and North Macedonia, as founding members of the Open Balkans initiative, agreed in July 2021 to create a single market by opening national borders to free trade and movement between citizens from January 2023.[277] In December 2021, the three countries agreed to work towards free labour market access between the countries.[278]

[272] See World Bank (2019d).
[273] See World Bank (2021).
[274] See World Bank World Development Indicators.
[275] See UNECE (2021).
[276] See Statistical Office of the Republic of Serbia (2022d).
[277] See Chamber of Commerce and Industry of Serbia (2021).
[278] See Albania, North Macedonia and Serbia (2021).

Figure 57: Serbia is increasingly attracting FDI ...

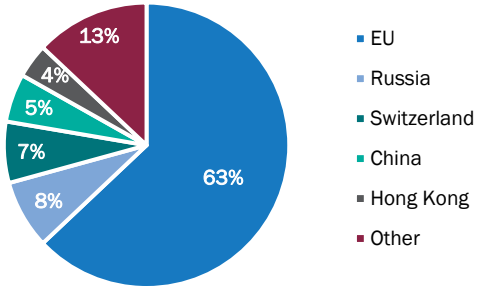
FDI inflows as a percentage of GDP



Source: UNCTAD.

Figure 58: ... primarily from the EU.

Share of FDI inflows in 2011-21



Source: National Bank of Serbia.

Serbia has been successful in attracting FDI. FDI inflows into Serbia as a percentage of GDP have been on an upward trajectory, increasing 59 per cent between 2010 and 2022, surpassing the WB-5 average in 2016 and consistently attracting more foreign investment than the EU-11 countries.[279] FDI inflows reached €4.4 billion in 2022, a record for Serbia in nominal terms.[280] While large, one-off investments, such as the €933 million acquisition of Serbia's biggest retailer in 2011, have played a part in the country's success, an increasing trend of FDI inflows into nearly all economic segments suggests a broad-based expansion.[281] While the EU countries have consistently been the largest investors in Serbia, with these investments steadily increasing in the 2010-21 period, Asian investors are also increasingly taking advantage of Serbia's position as the largest and most sophisticated market in the Western Balkans.[282] As investments from the EU have ebbed, with their share of overall FDI declining from 63 per cent in 2010 to 33 per cent in 2022, previously near non-existent investments from China have risen, to 32 per cent of inflows in 2022.[283] Portfolio inflows remain largely limited to government debt.

[279] Figures for 2010 to 2021 for all countries refer to the United Nations Conference on Trade and Development (UNCTAD) database, while the figure for Serbia in 2022 is the authors' calculation based on national statistics, including quarterly GDP figures.
[280] See NBS Statistics/Balance of payments/ Foreign direct investments, by country, 2010-2022 (BPM6). Available at: https://www.nbs.rs/export/sites/NBS_site/documents-eng/statistika/ino_ekonomski_odnosi/platni_bilans/fdi_by_country_2010_2022.xls.
[281] See Udovički (2021). For details on the acquisition of Serbia's biggest retailer, see Ahold Delhaize (2011).
[282] See Udovički (2021).
[283] See NBS Statistics/Balance of payments/ Foreign direct investments, by country, 2010-2022 (BPM6). Available at: . https://www.nbs.rs/export/sites/NBS_site/documents-.

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